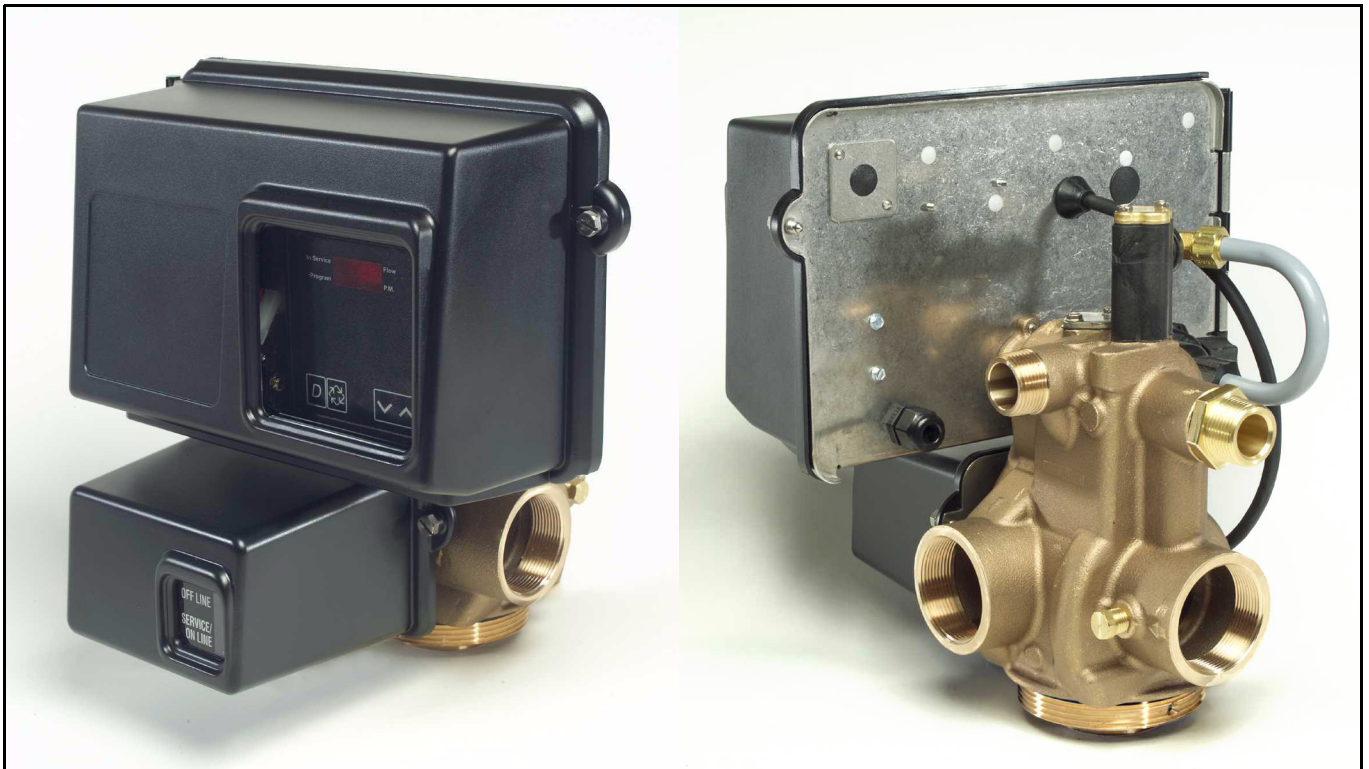


# MODEL 2900 Downflow

## *Service Manual*



**IMPORTANT:** Fill in pertinent information on page 3 for future reference.

# MODEL 2900

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**IMPORTANT:** The information, specifications and illustrations in this manual are based on the latest information available at the time of printing. The manufacturer reserves the right to make changes at any time without notice.

# MODEL 2900

## Job Specification Sheet

- JOB NO. \_\_\_\_\_
- MODEL NO. \_\_\_\_\_
- WATER TEST \_\_\_\_\_
- CAPACITY PER UNIT \_\_\_\_\_ MAX. \_\_\_\_\_ PER REGENERATION
- MINERAL TANK SIZE DIA. \_\_\_\_\_ HEIGHT \_\_\_\_\_
- BRINE TANK SIZE & SALT SETTING PER REGENERATION:  
\_\_\_\_\_

### • 2900 CONTROL VALVE SPECIFICATIONS

#### 1) Type of Timer (see pages 18-21)

- A) 7 day or 12 day
- B) \* 1,250 to 21,250 gallon meter or  
\* 6,250 to 106,250 gallon meter  
\* Other \_\_\_\_\_

#### C) Meter Wiring Package

- 1) System #4 - 1 tank; 1 meter; immediate or delayed regeneration
- 2) System #5 - 2 tanks; 2 meters; interlock
- 3) System #6 - 2 tanks; 1 meter; series regeneration
- 4) System #7 - 2 tanks; 1 meter; alternator

#### 2) Timer Program Settings (see pages 18 and 19)

- A) Backwash \_\_\_\_\_ min.
- B) Brine & Slow Rinse \_\_\_\_\_ min.
- C) Rapid Rinse \_\_\_\_\_ min.
- D) Brine Tank Refill \_\_\_\_\_ min.

#### 3) Drain Line Flow Controller gpm

#### 4) Brine Line Flow Controller - \_\_\_\_\_

#### 5) Injector Size # \_\_\_\_\_

- 6) A) Hard Water By-Pass
- B) No Hard Water By-Pass

# MODEL 2900

---

## *General Commercial Pre-Installation Check List*

---

**WATER PRESSURE:** A minimum of 25 pounds of water pressure is required for regeneration valve to operate effectively.

**ELECTRICAL FACILITIES:** A continuous 110 volt, 60 Hertz current supply is required. Make certain the current supply is always hot and cannot be turned off with another switch.

**EXISTING PLUMBING:** Condition of existing plumbing should be free from lime and iron buildup. Piping that is built up heavily with lime and/or iron should be replaced. If piping is clogged with iron, a separate iron filter unit should be installed ahead of the water softener.

**LOCATION OF SOFTENER AND DRAIN:** The softener should be located close to a drain.

**BY-PASS VALVES:** Always provide for the installation of a by-pass valve.

**CAUTION:** Water pressure is not to exceed 120 p.s.i., water temperature is not to exceed 100° F, and the unit cannot be subjected to freezing conditions.

---

## *Installation Instructions*

---

1. Place the softener tank where you want to install the unit making sure the unit is level and on a firm base. (Maximum 4 feet apart for twin units.)
2. All plumbing should be done in accordance with local plumbing codes. The pipe size for the drain line should be the same size as the drain line flow control female connection. Water meters are to be installed on soft water outlets. Twin units with (1) one meter shall be installed on common soft water outlet of units.
3. Solder joints near the drain must be done prior to connecting the Drain Line Flow Control fitting. Leave at least 6" between the DLFC and solder joints when soldering when the pipes are connected on the DLFC. Failure to do this could cause interior damage to the DLFC.
4. Teflon tape is the only sealant to be used on the drain fitting. The drain from twin units may be run through a common line.
5. Make sure that the floor is clean beneath the salt storage tank and that it is level.
6. Place approximately 1" of water above the grid plate (if used) in your salt tank. Salt may be placed in the unit at this time.
7. On units with a by-pass, place in by-pass position. Turn on the main water supply. Open a cold soft water tap nearby and let run a few minutes or until the system is free from foreign material (usually solder) that may have resulted from the installation.
8. Place the by-pass in service position.
9. Manually index the softener control into "service" position and let water flow into the mineral tank. When water flow stops, open a cold water tap nearby and let run until air pressure is relieved.
10. Electrical: All electrical connections must be connected according to codes. Use electrical conduit if applicable. Remote meter systems and Twin meter system wiring diagrams are on pages 26-29.
11. Plug into power supply.

# MODEL 2900

## 3200 Timer Setting Procedure

### How To Set Days On Which Water Conditioner Is To Regenerate:

Rotate the skipper wheel until the number "1" is at the red pointer. Set the days that regeneration is to occur by sliding tabs on the skipper wheel outward to expose trip fingers. Each tab is one day. Finger at red pointer is tonight. Moving clockwise from the red pointer, extend or retract fingers to obtain the desired regeneration schedule.

### How To Set The Time Of Day:

Press and hold the red button in to disengage the drive gear.

Turn the large gear until the actual time of day is at the time of day pointer.

Release the red button to again engage the drive gear.

### How To Manually Regenerate Your Water Conditioner At Any Time:

Turn the manual regeneration knob clockwise.

This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration program.

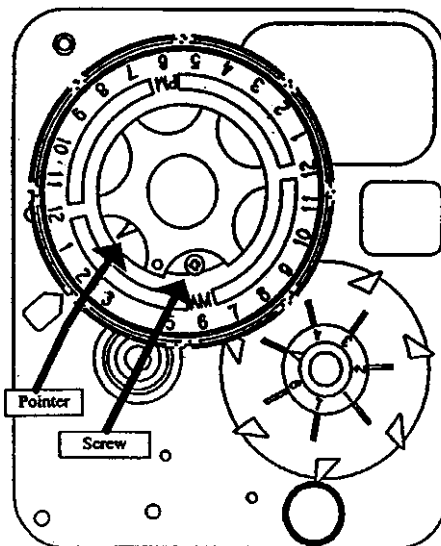
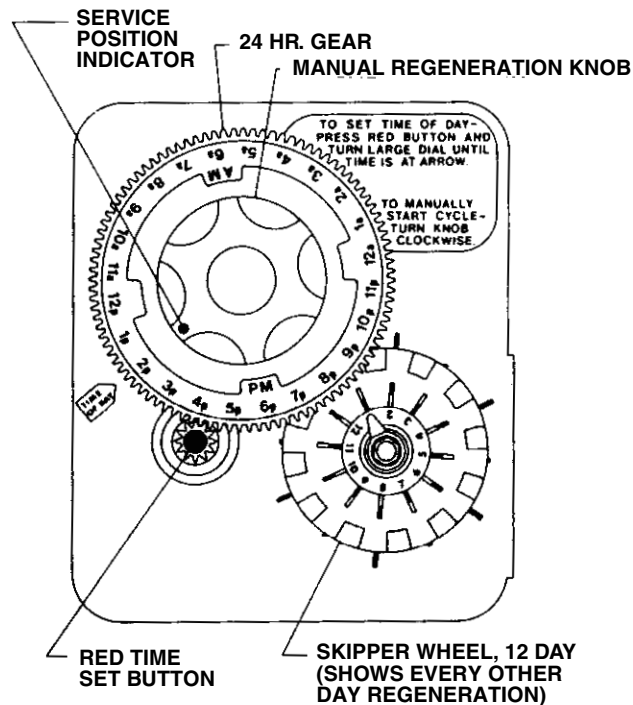
The black center knob will make one revolution in the following approximately three hours and stop in the position shown in the drawing.

Even though it takes three hours for this center knob to complete one revolution, the regeneration cycle of your unit might be set only one half of this time.

In any event, conditioned water may be drawn after rinse water stops flowing from the water conditioner drain line.

### How to Adjust Regeneration Time:

1. Disconnect the power source.
2. Locate the three screws behind the manual regeneration knob by pushing the red button in and rotating the 24 hour dial until each screw appears in the cut out portion of the manual regeneration knob.
3. Loosen each screw slightly to release the pressure on the time plate from the 24 hour gear.
4. Locate the regeneration time pointer on the inside of the 24 hour dial in the cut out.
5. Turn the time plate so the desired regeneration time aligns next to the raised arrow.
6. Push the red button in and rotate the 24 hour dial. Tighten each of the three screws.
7. Push the red button and locate the pointer one more time to ensure the desired regeneration time is correct.
8. Reset the time of day and restore power to the unit.



3200 ADJUSTABLE REGENERATION TIMER

# MODEL 2900

## 3210 Timer Settings

### Typical Programming Procedure

Calculate the gallon capacity of the system, subtract the necessary reserve requirement and set the gallons available opposite the small white dot on the program wheel gear. Note, drawing shows 8,750 gallon setting. The capacity (gallons) arrow denotes remaining gallons exclusive of fixed reserve.

### How To Set The Time Of Day:

Press and hold the red button in to disengage the drive gear.

Turn the large gear until the actual time of day is opposite the time of day pointer.

Release the red button to again engage the drive gear.

### How To Manually Regenerate Your Water Conditioner At Any Time:

Turn the manual regeneration knob clockwise.

This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration program.

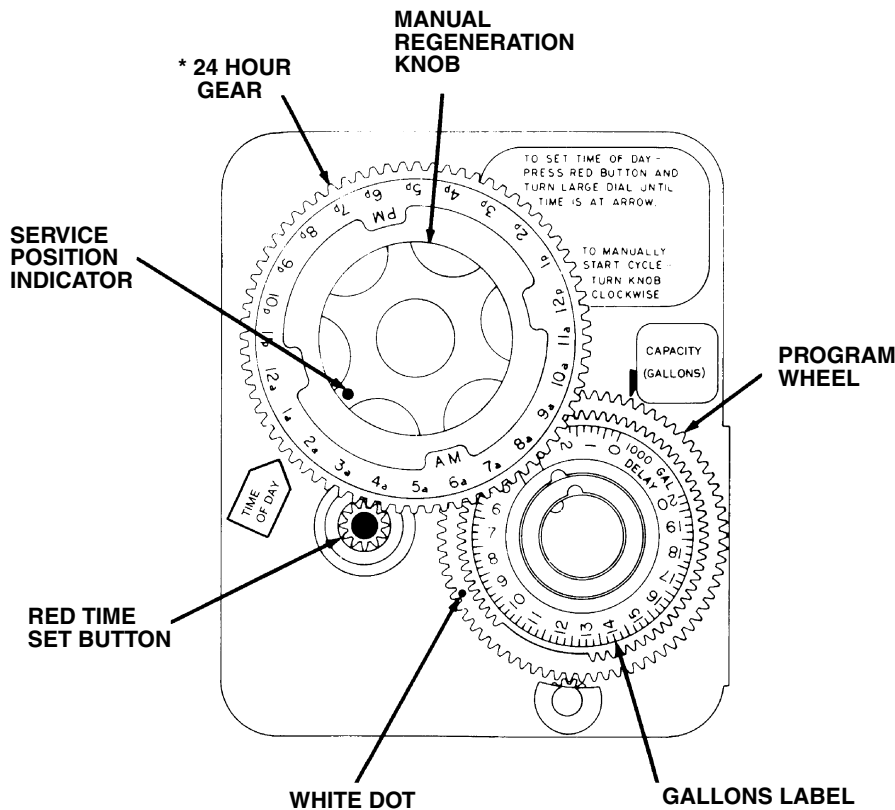
The black center knob will make one revolution in the following approximately three hours and stop in the position shown in the drawing.

Even though it takes three hours for this center knob to complete one revolution, the regeneration cycle of your unit might be set for only one half of this time.

In any event, conditioned water may be drawn after rinse water stops flowing from the water conditioner drain line.

### Immediate Regeneration Timers:

These timers do not have a 24 hour gear. Setting the gallons on the program wheel and manual regeneration procedure are the same as previous instructions.



### NOTE:

To set meter capacity rotate manual knob one - 360° revolution to set gallonage.

\* Immediate regeneration timers do not have 24 hour gear. No time of day can be set.

# MODEL 3200 & 3210 TIMER SERIES

## Regeneration Cycle Program Setting Procedure

*(Brine Tank Refill Separate From Rapid Rinse)*

### How To Set The Regeneration Cycle Program:

The regeneration cycle program on your water conditioner has been factory preset, however, portions of the cycle or program may be lengthened or shortened in time to suit local conditions.

### 3200 & 3210 Series Timers (Figure to Right)

To expose cycle program wheel, grasp timer in upper left-hand corner and pull, releasing snap retainer and swinging timer to the right

To change the regeneration cycle program, the program wheel must be removed. Grasp program wheel and squeeze protruding lugs toward center, lift program wheel off timer. (Switch arms may require movement to facilitate removal.)

Return timer to closed position engaging snap retainer in back plate. Make certain all electrical wires locate above snap retainer post

### Timer Setting Procedure for 3200 & 3210 Timer

#### How To Change The Length Of The Backwash Time:

The program wheel as shown in the drawing is in the service position. As you look at the numbered side of the program wheel, the group of pins starting at zero determines the length of time your unit will backwash.

FOR EXAMPLE: If there are six pins in this section, the time of backwash will be 12 min. (2 min. per pin). To change the length of backwash time, add or remove pins as required. The number of pins times two equals the backwash time in minutes.

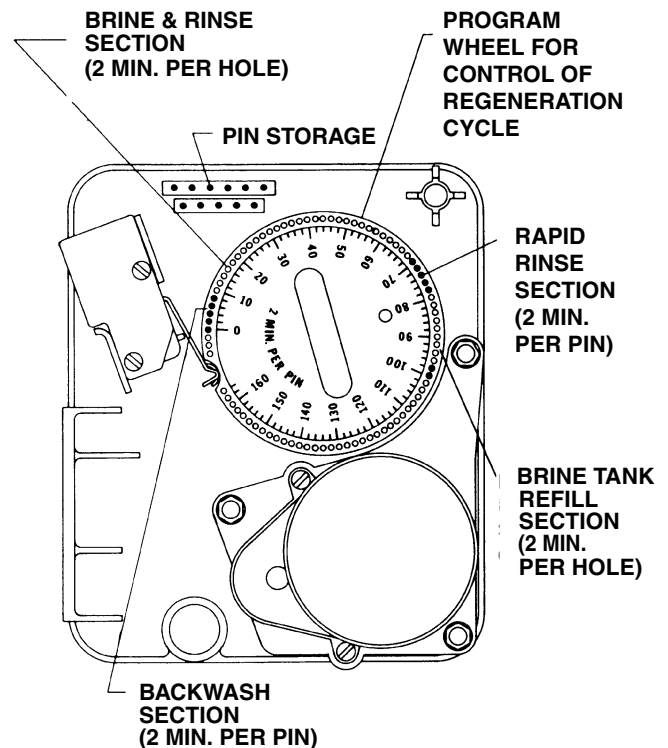
#### How To Change The Length Of Brine And Rinse Time:

The group of holes between the last pin in the backwash section and the second group of pins determines the length of time that your unit will brine and rinse (2 min. per hole.)

To change the length of brine and rinse time, move the rapid rinse group of pins to give more or fewer holes in the brine and rinse section. Number of holes times two equals brine and rinse time in minutes.

#### How To Change The Length Of Rapid Rinse:

The second group of pins on the program wheel determines the length of time that your water conditioner will rapid rinse. (2 min. per pin.)



To change the length of rapid rinse time, add or remove pins at the higher numbered end of this section as required. The number of pins times two equals the rapid rinse time in minutes.

#### How To Change The Length Of Brine Tank Refill Time:

The second group of holes in the program wheel determines the length of time that your water conditioner will refill the brine tank (2 min. per hole.)

To change the length of refill time, move the two pins at the end of the second group of holes as required.

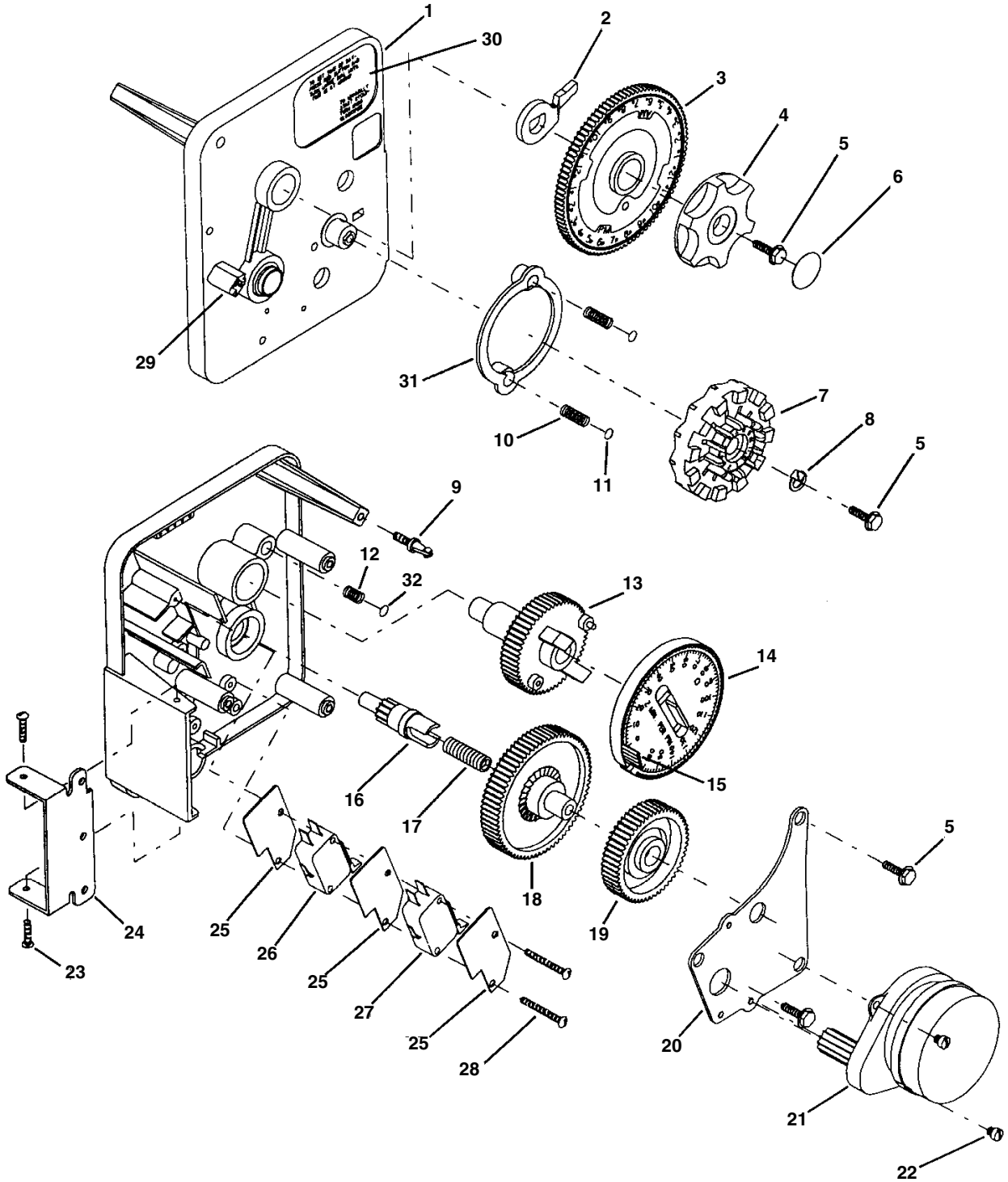
The regeneration cycle is complete when the outer microswitch is tripped by the two pin set at end of the brine tank refill section.

The program wheel, however, will continue to rotate until the inner micro-switch drops into the notch on the program wheel.

# MODEL 2900

## 3200 Timer Assembly

(See opposite page for parts list)





# MODEL 2900

## 3200 Timer Assembly

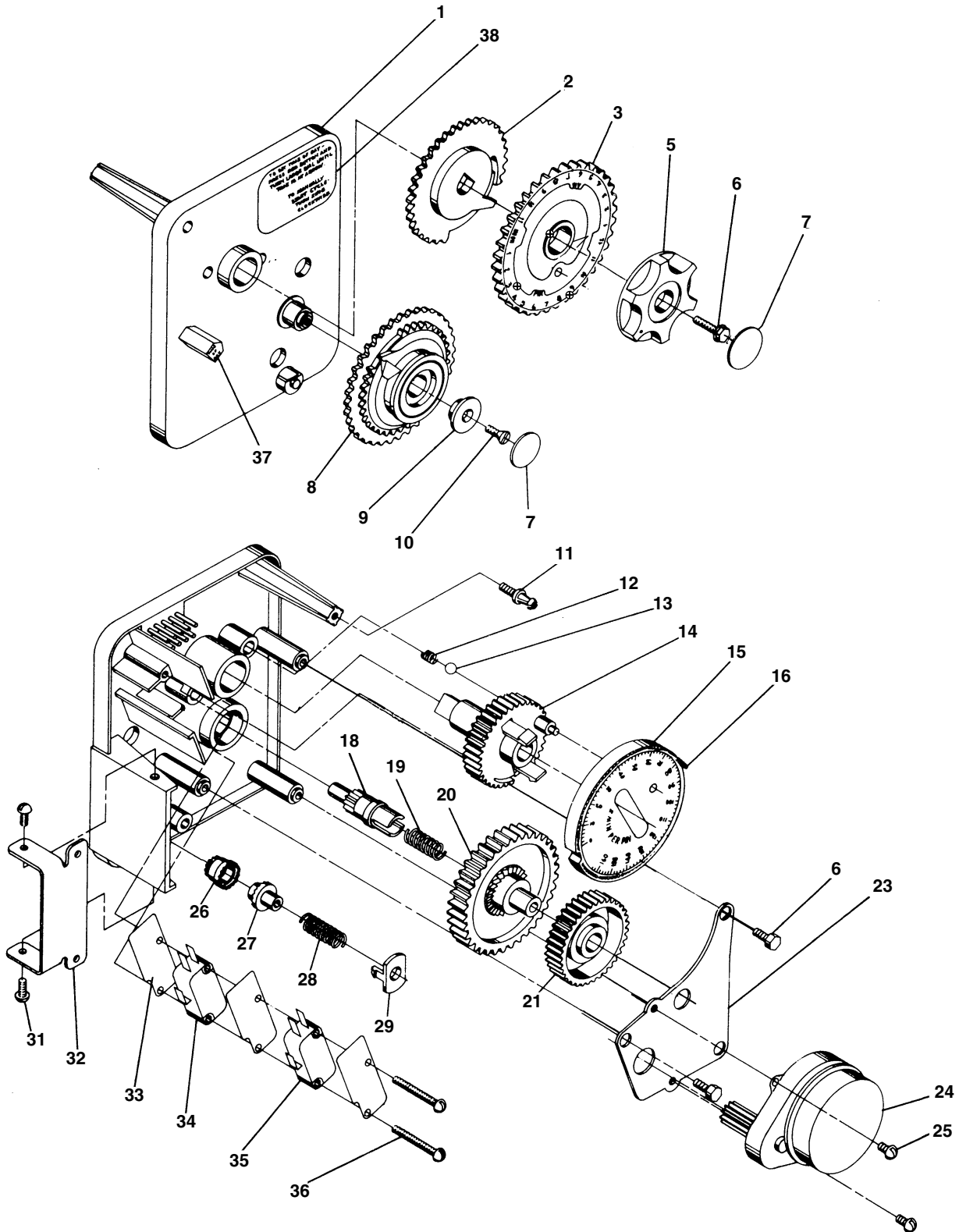
### Parts List

Item No.	No. Req'd	Part No.	Description
1	1	13870	Timer Housing
2	1	13011	Cycle Actuator Arm
3	1	40096-24	24 Hour Gear Assembly, 12 Midnight
		40096-02	24 Hour Gear Assembly, 2 a.m.
4	1	13886-01	Knob
5	5	13296	Screw - Timer Knob and Motor Mtg. Plate
6	1	11999	Button Decal
7	1	14381	Skipper Wheel Assembly - 12 Day
		14860	Skipper Wheel Assembly - 7 Day
8	1	13014	Regeneration Pointer
9	1	14265	Spring Clip
10	2	13311	Spring - Skipper Wheel Detent
11	2	13300	Ball - 1/4 in. Dia. Skipper Wheel
12	1	15424	Spring - Main Gear Detent
13	1	13911	Main Drive Gear
14	1	19210	Program Wheel
15	21	15493	Roll Pin
16	1	13018	Idler Shaft
17	1	13312	Spring - Idler
18	1	13017	Idler Gear
19	1	13164	Drive Gear
20	1	13887	Motor Mounting Plate
21	1	18743	Motor - 120V., 60 Hz.
		19659	Motor - 24V., 60 Hz.
22	2	13278	Screw - Motor Mounting
23	3	11384	Screw - Timer Hinge & Ground Wire
24	1	13881	Hinge Bracket
25	3	14087	Insulator
26	1	10896	Switch
27	1	15320	Switch
28	2	11413	Screw - Switch Mounting
29	1	14007	Decal - Time of Day
30	1	14045	Decal - Instructions
31	1	13864	Skipper Wheel Ring
32	1	15066	Ball 1/4 in. Dia. Main Gear
Not Shown	1	13902	Harness
Not Shown	2	12681	Wire Connector
Not Shown	1	15354-01	Ground Wire

# MODEL 2900

## 3210 Timer Assembly

(See opposite page for parts list)



# MODEL 2900

## 3210 Timer Assembly

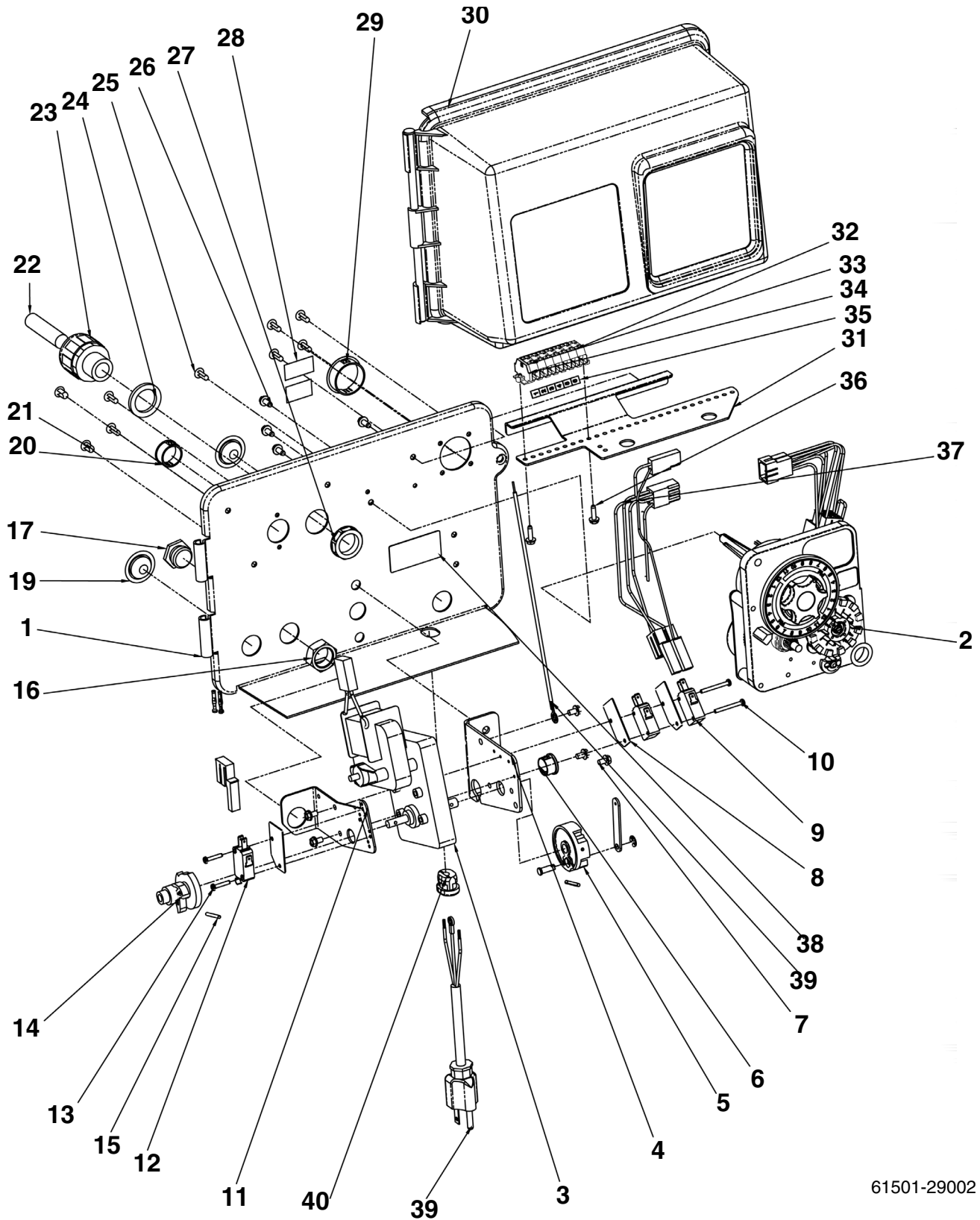
### Parts List

Item No.	Quantity	Part No.	Description
1	1	13870-01	Timer Housing Assembly
2	1	13802	Cycle Actuator Gear
3	1	40096-24	24 Hour Gear Assembly, 12 Midnight
		40096-02	24 Hour Gear Assembly, 2 A.M.
5	1	13886-01	Knob
6	4	13296	Screw - Timer Knob & Motor Plate Mtg.
7	2	11999	Button Decal
8	1	60405-50	Program Wheel Assembly, 0-21,000
9	1	13806	Program Wheel Retainer
10	1	13748	Screw - Program Wheel Mtg.
11	1	14265	Spring Clip
12	1	15424	Spring-Detent
13	1	15066	Ball - 1/4 in. dia.
14	1	13911	Main Drive Gear
15	1	19210	Program Wheel Assembly
16	21	15493	Roll Pin
17			Not Assigned
18	1	13018	Idler Shaft
19	1	13312	Spring - Idler
20	1	13017	Idler Gear
21	1	13164	Drive Gear
23	1	13887	Motor Mounting Plate
24	1	18743	Motor - 110V., 60 Hz.
		19659	Motor - 24V., 60 Hz.
25	2	13278	Screw - Motor Mounting
26	1	13830	Drive Pinion - Program Wheel
27	1	13831	Clutch - Drive Pinion
28	1	14276	Spring
29	1	14253	Spring Retainer
30			Not Assigned
31	3	11384	Screw - Timer Hinge & Ground Wire
32	1	13881	Hinge Bracket
33	3	14087	Insulator
34	1	10896	Switch
35	1	15320	Switch
36	2	11413	Screw - Switch Mounting
37	1	14007	Decal - Time of Day
38	1	14045	Decal - Instructions
39	1	13902	Harness - Not Shown
40	2	12681	Wire Connector - Not Shown
41	1	15354-01	Ground Wire - Not Shown
42	1	15465	Caution Label - Not Shown
43	1	14198	Capacity Label - Not Shown

# MODEL 2900

## Environmental Power Head

(See opposite page for parts list)



61501-29002

# MODEL 2900

## Environmental Power Head

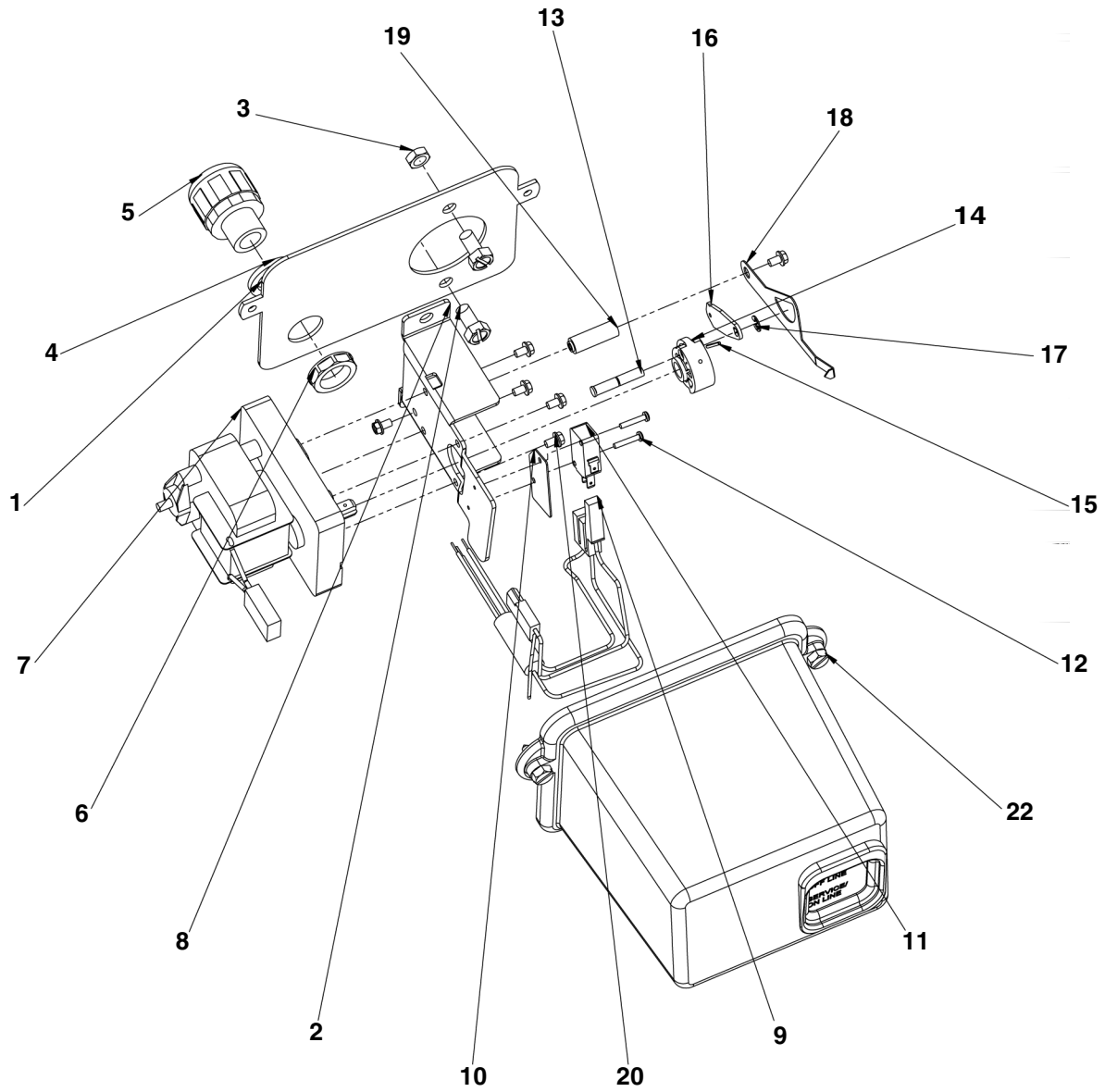
### Parts List

Item No.	Quantity	Part No.	Description
1	1	18697-15	Back Plate, Hinged, 2900
2	-	3200 Clock Timer Assy	3200 Clock Timer Assy
2	1	3200 Meter Timer Assy	3200 Meter Timer Assy
3	1	40384	Motor, Drive, Shaded Pole, 115V, 60Hz, Fam
4	1	10774	Bracket, Motor
5	1	60160-10	CAM Drive Assy, STF, Black
6	1	17904	Bushing, Heyco 1/2, Heyco #2073
7	5	10872	Screw, Hex Wsh, 8-32 X 17/64
8	3	10302	Insulator, Limit Switch
9	2	10218	Switch, Micro
10	2	14923	Screw, Pan Hd Mach, 4-40 X 1
11	1	11826-02	Bracket, Motor, Aux Switch
12	1	10896	Switch, Miniature
13	2	11805	Screw, Rd Hd, 4-40 X 5/8 Type 1
14	1	12777-02	Cam, Shut-off Valve
15	2	10338	Pin, Roll, 2900/3900
16	1	10269	Nut, Jam, 3/4-16
17	1	10712	Fitting, Brine Valve
18	1	14822	Harness, 2900
19	2	19691	Plug, .750 Dia. Hole, Flush
20	1	15806	Hole Plug, (Heyco)
21	1	19801	Plug, .190 Hole
22	1	18693	Conduit, Interdrive
23	1	18691-01	Fitting, Conduit
24	1	18692	Washer, Sealing - 3/8"
25	7	19800	Plug (Hole Size: Dia .140)
26	4	10300	Screw, Slot Hex Wsh, 8-18 X 3/8
27	1	18691-02	Nut, Conduit Fitting, 1/2IN
28	1	40038-03	Label, Voltage, 120V
29	1	17421	Hole Plug, (Heyco)
30	1	60219-02	Cover Assy, Environmental, Black W/Clear Window
31	1	19772	Bracket, Terminal Block
32	1	40174	Terminal Block, Green/Yellow
33	6	40184	Terminal Block, Segment, Gray
34	1	41085	Endplate, Terminal Block, Gray
35	2	15250	Label, Terminal Strip
36	2	13296	Screw, Hex Washer, 6-20 X 1/2
37	1	40400	Harness, Drive, DesignR/Envirmtl
38	1	40175-01	Wire, Ground, 7.5 Long
39	1	40084-12	Power Cord, 12' US, Round, 120V
40	1	13547-02	Strain Relief, Round Cord
41	-	17967 (Not Shown)	Fitting Assy, Liquid-Tight, Black

# MODEL 2900

## Lower Environmental Power Head

(See opposite page for parts list)



61501-29003

# MODEL 2900

## Lower Environmental Power Head

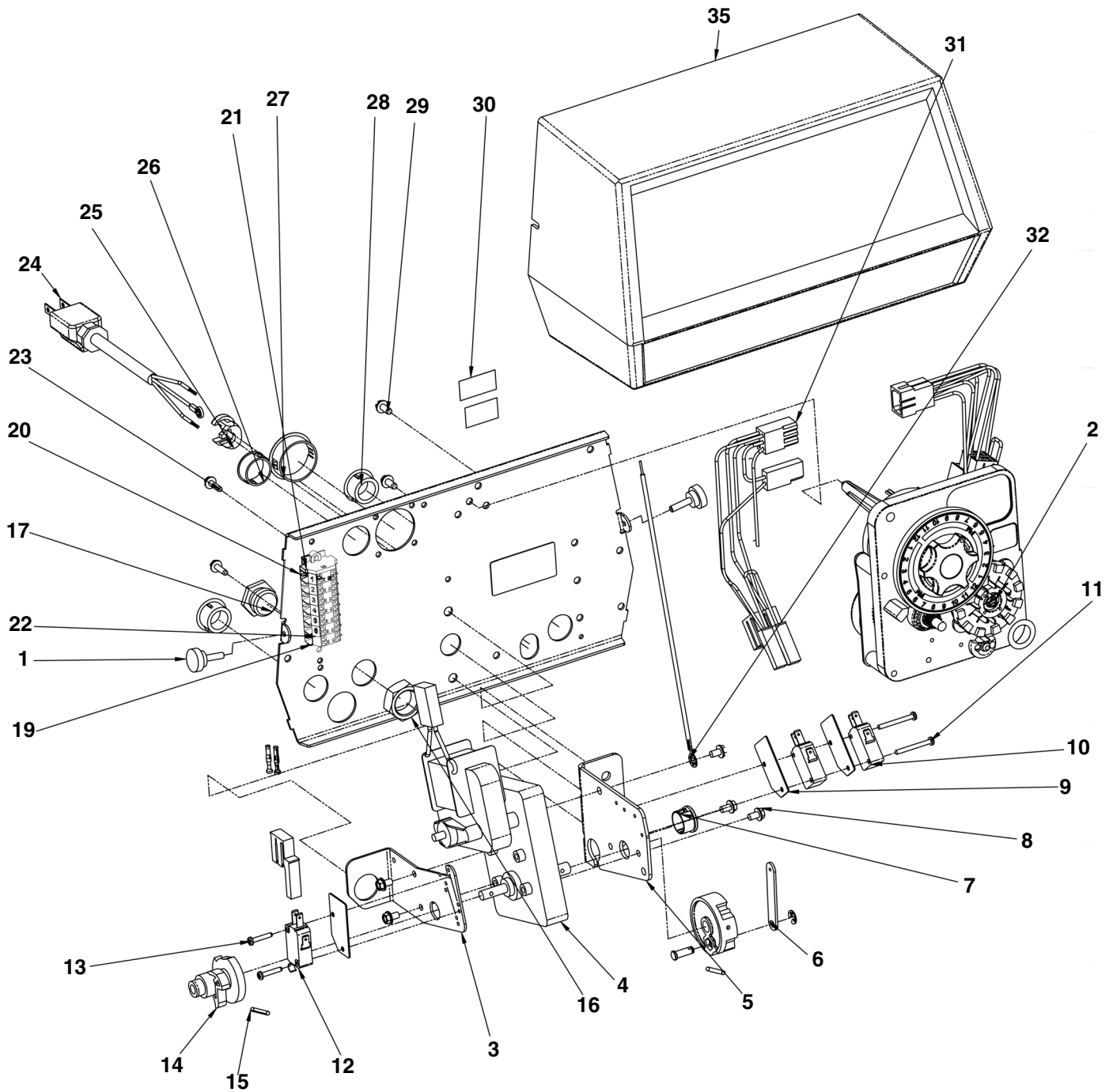
### Parts List

Item No.	Quantity	Part No.	Description
1	1	18709	Back, Plate, Lower
2	2	11224	Screw, Screw, Slotted Hex Head, 5/16 - 18 X 5/8
3	2	16346	Nut, Hex, Jam, 5/16-18, 18-8 S.S.
4	1	18692	Washer, Sealing - 3/8"
5	1	18691-01	Fitting, Conduit
6	1	18691-02	Nut, Conduit Fitting, 1/2in
7	1	40387	Motor, Drive, 115v, 60hz, Sp, Fam 2
8	1	14769	Bracket, Motor, 2900
9	1	40405	Harness, Lead, Sys#4, Designer
10	1	10302	Insulator, Limit Switch
11	1	10218	Switch, Micro
12	2	19849	Screw, Pan Hd, 4-40 X 5/8
13	1	18746	Pin- Connecting Rod
14	1	14775	Cam, Main Drive, 2900 Lower
15	1	41022	Pin, Roll, 2900/3900
16	1	14759	Link, Piston Rod
17	1	10250	Ring, Retaining
18	1	18725	Indicator, Service/Standby
19	1	18726	Spacer, Indicator
20	6	10872	Screw, Hex Wsh, 8-32 X 17/64
21	6	14044 (Not Shown)	Tie, Cable, Heyco, Vnt#4-18
22	1	60217-02	Cover Assy, 2900, Lower, Black, Environmental

# MODEL 2900

## Designer Power Head

(See opposite page for parts list)



61501-29001



# MODEL 2900

## Designer Power Head

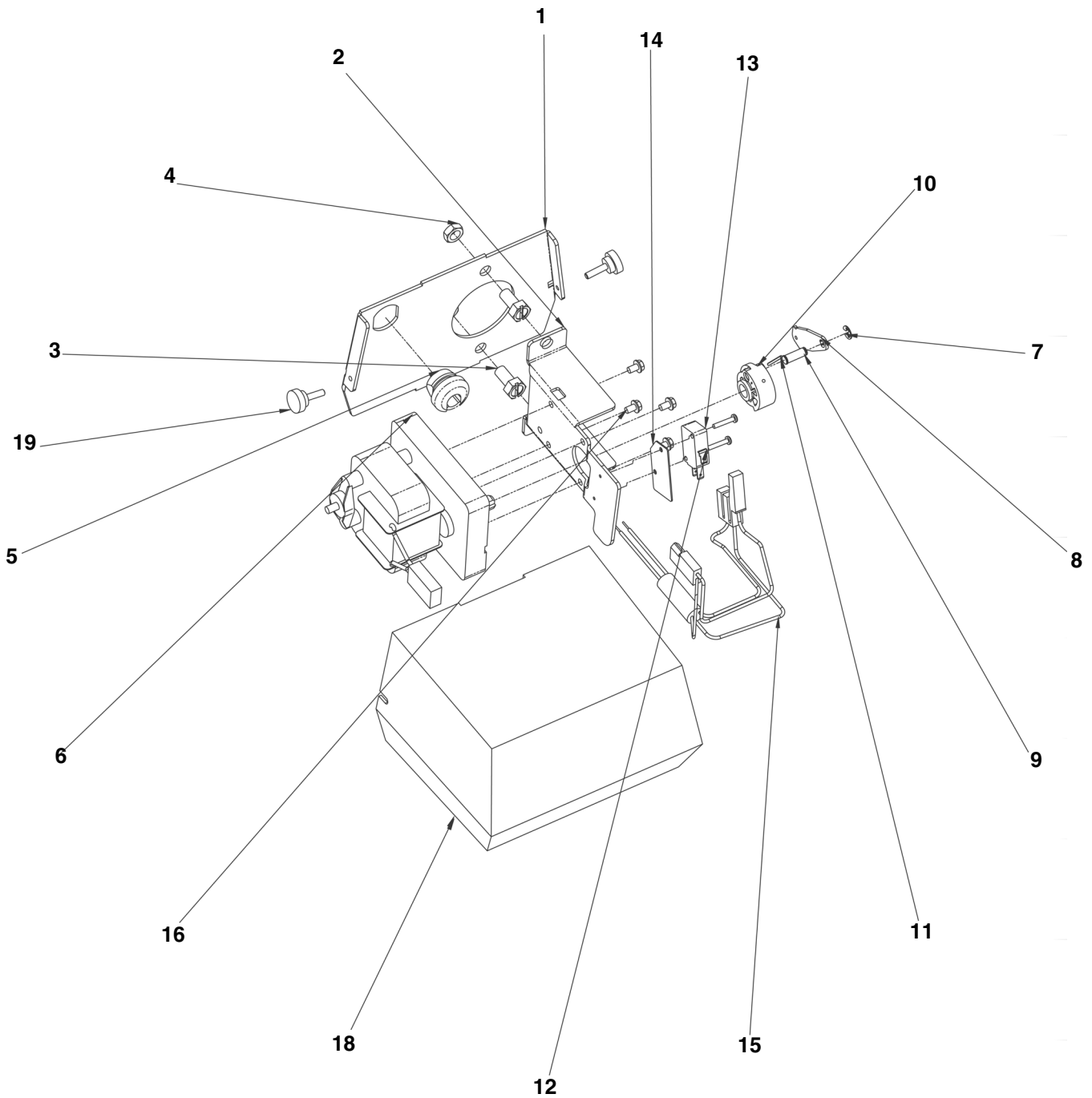
### Parts List

Item No.	Quantity	Part No.	Description
1	1	40264	Backplate, SS/SVO, W/T-Screws, 2750,2850,2900
2	1	3200 Meter Timer Assy	3200 Meter Timer Assy
2	-	3200 Clock Timer Assy	3200 Clock Timer Assy
3	1	11826-02	Bracket, Motor, Aux Switch
4	1	40384	Motor, Drive, Shaded Pole, 115V, 60Hz, Fam
5	1	10774	Bracket, Motor
6	1	60160-10	CAM Drive Assy, STF, Black
7	1	17904	Bushing, Heyco 1/2, Heyco #2073
8	5	10872	Screw, Hex WSH, 8-32 X 17/64
9	3	10302	Insulator, Limit Switch
10	2	10218	Switch, Micro
11	2	14923	Screw, Pan HD Mach, 4-40 X 1
12	1	10896	Switch, Miniature
13	2	11805	Screw, RD HD, 4-40 X 5/8 Type 1
14	2	12777-02	Cam, Shut-off Valve
15	1	10338	Pin, Roll, 2900/3900
16	1	10269	Nut, Jam, 3/4-16
17	1	10712	Fitting, Brine Valve
18	1	14822	Harness, 2900
19	1	40174	Terminal Block, Green/Yellow
20	6	40184	Terminal Block, Segment, Gray
21	1	41085	Endplate, Terminal Block, Gray
22	2	15250	Label, Terminal Strip
23	2	13296	Screw, Hex Washer, 6-20 X 1/2
24	1	40084-12	Power Cord, 12'US, Round, 120V
25	1	13547-02	Strain Relief, Round Cord
26	1	15806	Hole Plug, (Heyco)
27	1	17421	Hole Plug, (Heyco)
28	1	13741	Plug, 3/4", Knock-out, Heyco #2683
29	2	10300	Screw, Slot Hex Wsh, 8-18 X 3/8
30	1	40038-03	Label, Voltage, 120V
31	1	40400	Harness, Drive, Designr/Envirmtl
32	1	40175-01	Wire, Ground, 7.5 Long
33	1	17967 (Not Shown)	Fitting Assy, Liquid-Tight, Black (Meter)
34	1	15158 (Not Shown)	TD Cable Guide (Meter)
35	1	19291-020	Cover, Designer

# MODEL 2900

## Lower Designer Power Head

(See opposite page for parts list)



61501-29003

# MODEL 2900

---

## *Lower Designer Power Head*

---

### *Parts List*

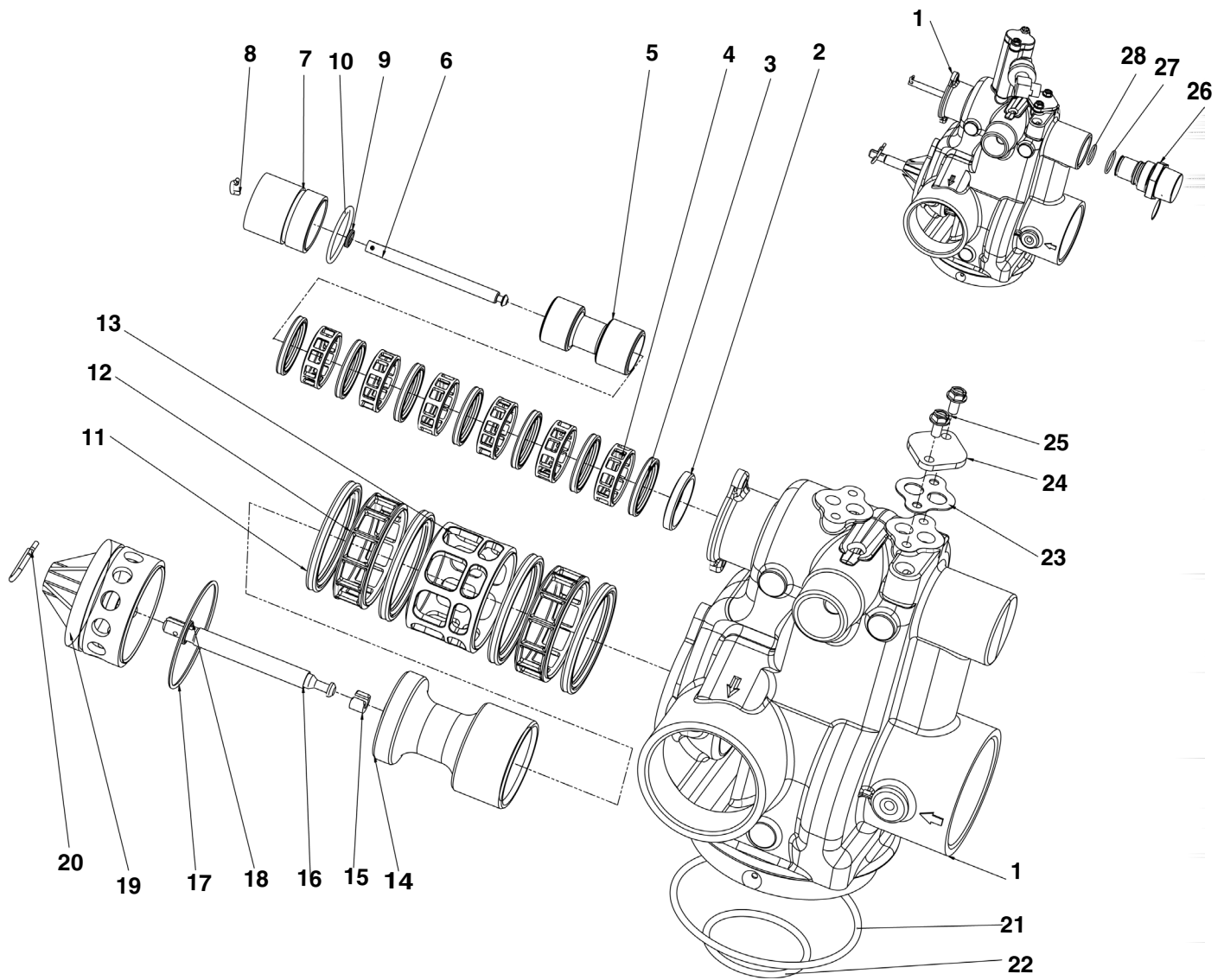
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<b>Item No.</b>	<b>Quantity</b>	<b>Part No.</b>	<b>Description</b>
1.....	1 .....	14770 .....	Backplate, Lower 2900
2.....	1 .....	14769 .....	Bracket, Motor, 2900
3.....	2 .....	11224 .....	SCREW Slotted Hex Head, 5/16 - 18 x 5/8
4.....	2 .....	16346 .....	Nut, Hex, Jam, 5/16-18, 18-8 S.S.
5.....	1 .....	14924 .....	SR 7W-2
6.....	1 .....	40387 .....	Motor, Drive, 115V, 60HZ, SP, Fam 2
7.....	1 .....	10250 .....	Ring, Retaining
8.....	1 .....	14759 .....	Link, Piston Rod
9.....	1 .....	14784 .....	Bearing, Connecting Rod
10.....	1 .....	14775 .....	Cam, Main Drive, 2900 Lower
11.....	1 .....	41022 .....	Pin, Roll, 2900/3900
12.....	2 .....	19849 .....	Screw, Pan Hd, 4-40 X 5/8
13.....	1 .....	10218 .....	Switch, Micro
14.....	1 .....	10302 .....	Insulator, Limit Switch
15.....	1 .....	40402 .....	Harness, Lead, Sys#4, Designer
16.....	4 .....	10872 .....	Screw, Hex Wsh, 8-32 X 17/64
17.....	1 .....	14044 (Not Shown) .....	Tie, Cable, Heyco, Vnt#4-18
18.....	1 .....	14800-02.....	Cover, Dust, Lower, 2900, Black
19.....	2 .....	19367 .....	Screw, Designer Cover, Thumb

# MODEL 2900

## Control Valve Body

(See opposite page for parts list)



61500-290019454

# MODEL 2900

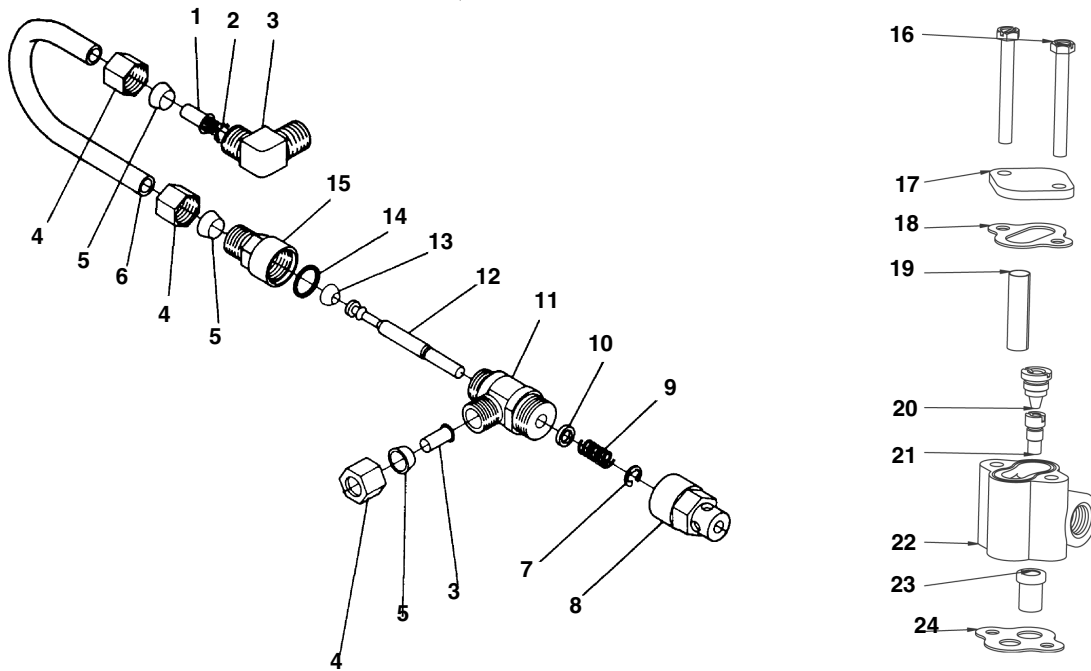
## Control Valve Body

### Parts List

Item No.	Quantity	Part No.	Description
1	1	41428	Valve Body, 2900 CPI, Machined
1	-	41428-xx	Valve Body, 2900 CPI, Machined, W/Soft Water Adapt
2	1	10757	Spacer, End
3	7	10545	Seal, Piston
4	6	11451	Spacer, 1 2 Hole
5	1	41425	Piston, 2900 CPI, Upper, D/F
5	-	14451	Piston, 2750
6	1	14309	Retainer, Piston Rod
7	1	41424	Rod, Piston
8	1	41131	End Plug
9	1	10909	Ppin, Connecting Rod Spring
10	1	10209	Quad Ring, -010
11	1	40078	O-ring, 28MM X 2MM
12	4	11720	Seal, Piston, 2900/3150
13	2	10369	Spacer, 2", 2900/3150
14	1	14753	Spacer, 2900
15	1	14757	Piston No HWBP 2900
16	1	14818	Ring, Piston Rod, Snap
17	1	14758	Piston Rod
18	1	14922	O-ring, -035
19	1	14926	Quad ring "O" ring-012
20	1	14813	Connecting Link Pin
21	1	13575	O-ring, -240
22	1	13577	O-ring, -226
23	1	14805	Gasket, Injector Body
24	1	11893	Cap, Injector, SS
25	2	15137	Screw, Hex Washer Head, #10 - 24 X 3/8
26	-	41448	Adapter, Softwater Regen, 2900
27	-	16924	O-ring, -018
28	-	19292	O-ring, -020

# MODEL 2900

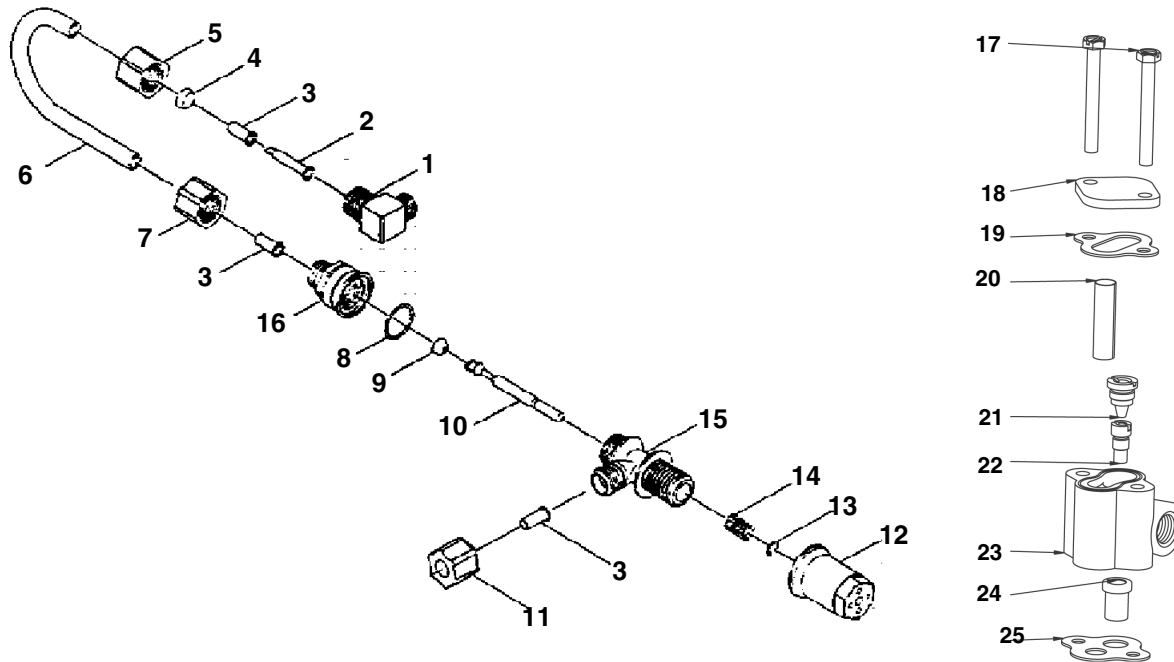
## 1600 Brine System



Item No.	Quantity	Part No.	Description
1	1	10328	90° Elbow - ¼ Pipe Thd. to 3/8" Tube
2	1	12767	Brine Line Screen
3	2	10332	Insert Sleeve 3/8" Tube
4	3	10329	Fitting Nut (3/8" Tube)
5	3	10330	Derlin Sleeve (3/8" Tube)
6	1	15221	Brine Valve Tube
7	1	10250	Retaining Ring
8	1	11749	Stem Guide
9	1	10249	Brine Valve Spring
10	1	12550	Quad Ring
11	1	12748	Brine Valve Body
12	1	12552	Brine Valve Stem
13	1	12626	Brine Valve Seat
14	1	11982	O-Ring
15	1	60020-25	BLFC.25GPM
		60020-50	BLFC .50 GPM
		60020-100	BLFC 1.0 GPM
16	2	10692	Screw, Slotted, Indented Hex Head, #10 - 24 X 5/6
17	1	11893	Cap, Injector, SS
18	1	10229	Gasket, Injector Body
19	1	10227	Screen, Injector
20	1	10913	Nozzle, Injector, Std
21	1	10914	Injector Throat, Std
22	1	17776	Body, Injector, 1600
23	1	16221	Disperser, Air
24	1	14805	Gasket, Injector Body

# MODEL 2900

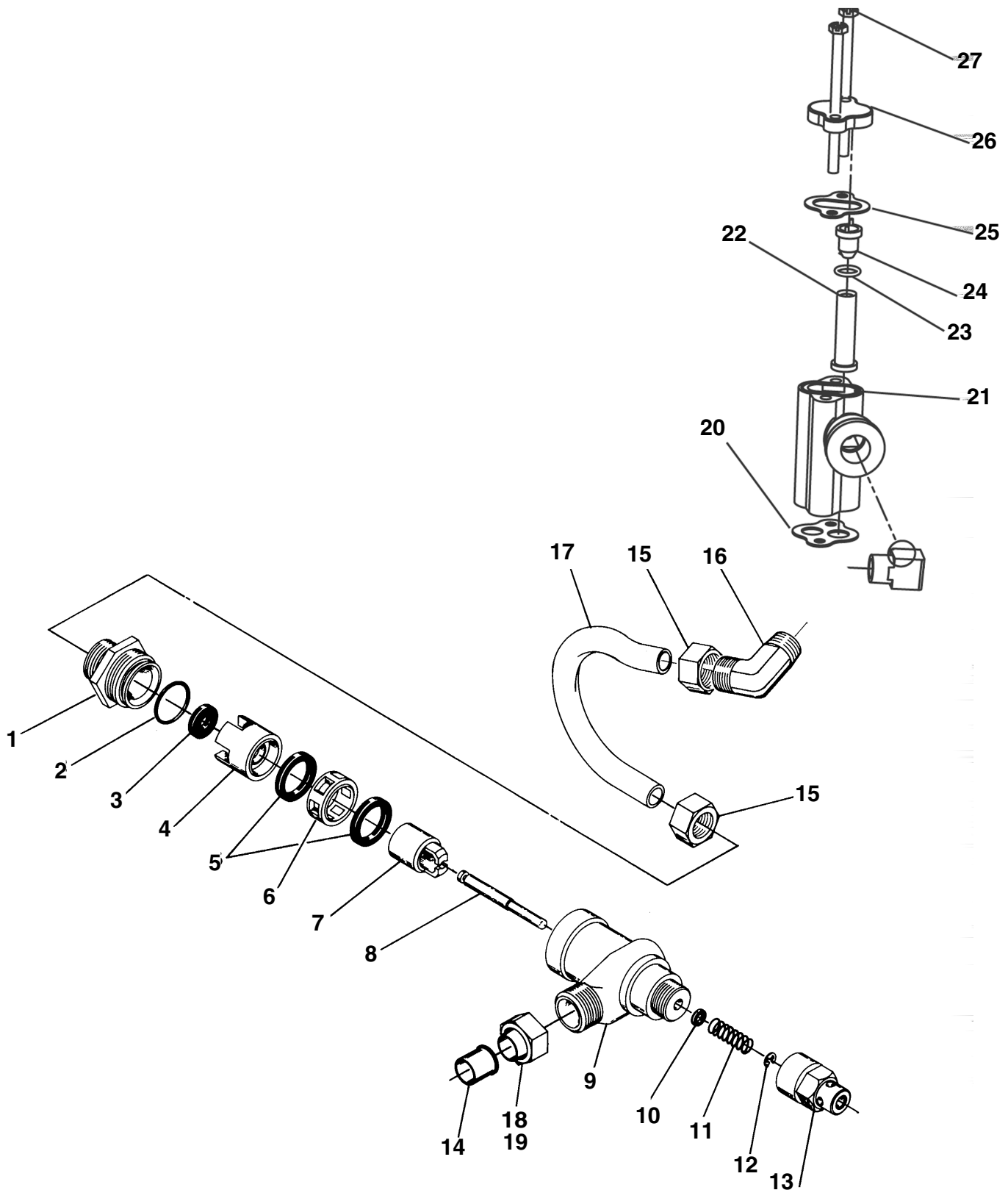
## 1650 Brine System



Item No.	Quantity	Part No.	Description
<b>60011 Brine Valve Assembly, Includes Items 3-15 (Less BLFC 60010-)</b>			
1	1	10328	Elbow, 90 1/4 NPT x 3/8
2	1	12767	Screen, Brine Line
3	3	10332	Insert, 3/8
4	1	10330	Sleeve, 3/8 Nut Brine
5	1	10329	Tube Fitting, 3/8 Nut Brine
6	1	40027	Tube, Brine Valve
7	1	19625	Assy., GFN Nut
8	1	16924	O-Ring
9	1	12626	Seat, Brine Valve
10	1	12552	Brine Valve Stem, 1600
11	1	19625	Assy., GFN Nut
12	1	17906	Guide, Brine Valve Stem
13	1	10250	Retaining Ring
14	1	10249	Spring, Brine Valve
15	1	17884	Brine Valve Body Assy., Plastic
16	1	60020-25	BLFC.25GPM
		60020-50	BLFC .50 GPM
		60020-100	BLFC 1.0 GPM
17	2	10692	Screw, Slotted, Indented Hex Head, #10 - 24 X 5/6
18	1	11893	Cap, Injector, SS
19	1	10229	Gasket, Injector Body
20	1	10227	Screen, Injector
21	1	10913	Nozzle, Injector, Std
22	1	10914	Injector Throat, Std
23	1	17776	Body, Injector, 1600
24	1	16221	Disperser, Air
25	1	14805	Gasket, Injector Body

# MODEL 2900

## 1700 Brine System





# MODEL 2900

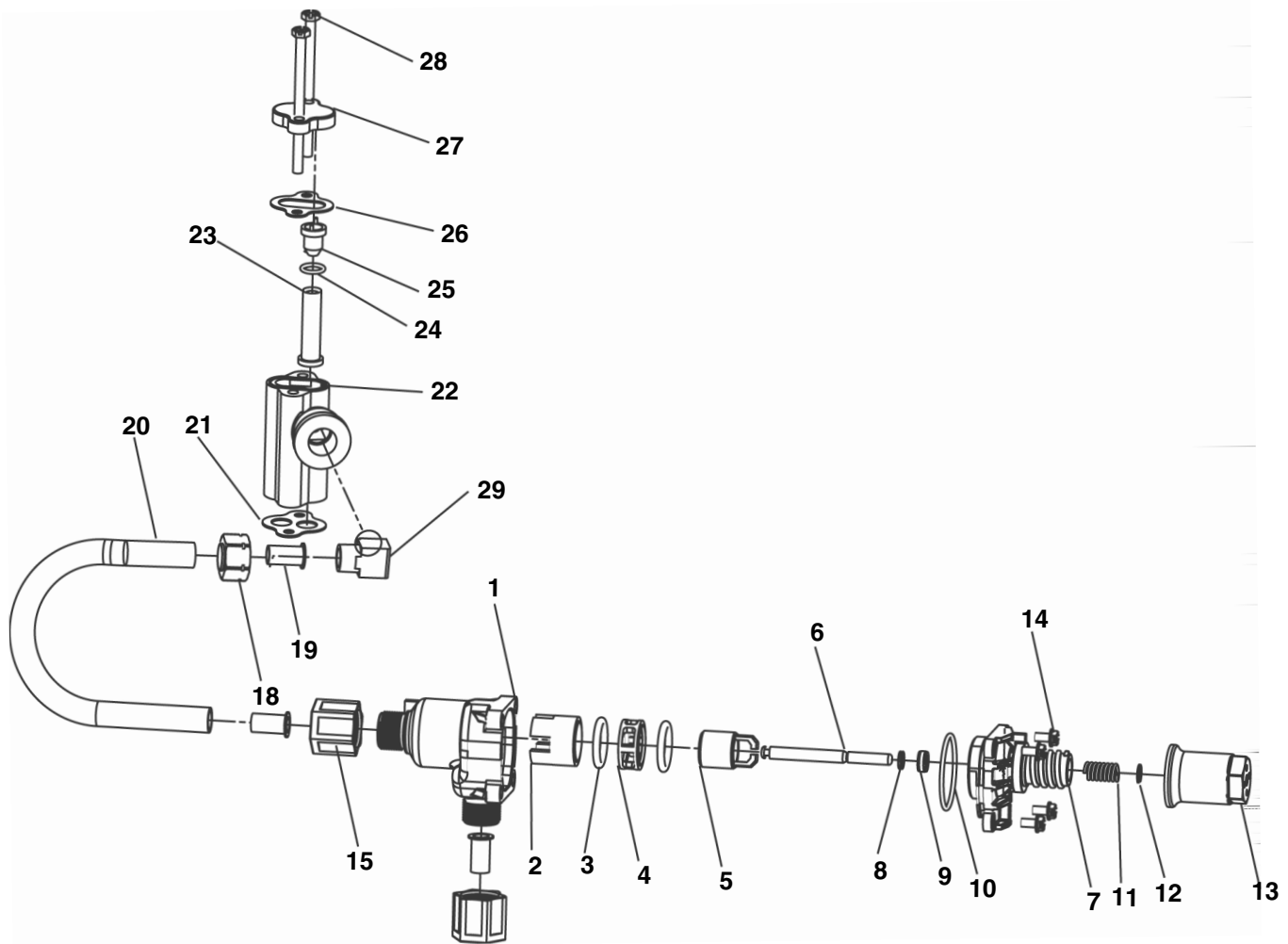
## 1700 Brine System

### Parts List

Item No.	Quantity	Part No.	Description
1.....	1 .....	14792 .....	End Plug
2.....	1 .....	13201 .....	O-Ring - End Plug
3.....	1 .....	12085 .....	Flow Washer 1.2 GPM
		12086 .....	Flow Washer 1.5 GPM
		12087 .....	Flow Washer 2.0 GPM
		12088 .....	Flow Washer 2.4 GPM
		12089 .....	Flow Washer 3.0 GPM
		12090 .....	Flow Washer 3.5 GPM
		12091 .....	Flow Washer 4.0 GPM
		12092 .....	Flow Washer 5.0 GPM
4.....	1 .....	14785 .....	Flow Control Retainer
5.....	2 .....	14811 .....	Piston Seals
6.....	1 .....	14798 .....	Spacer
7.....	1 .....	14795 .....	Brine Valve Piston
8.....	1 .....	14797 .....	Brine Valve Stem
9.....	1 .....	14790 .....	Brine Valve Body
10.....	1 .....	12550 .....	Quad Ring - Brine Stem
11.....	1 .....	15310 .....	Spring - Brine Valve
12.....	1 .....	10250 .....	Retaining Ring
13.....	1 .....	15517 .....	Stem Guide
14.....	1 .....	15415 .....	Insert
15.....	2 .....	15414 .....	Nut Ferrule 1/2"
16.....	1 .....	15413 .....	Elbow
17.....	1 .....	15416 .....	Brine Tube
18.....	2 .....	16123 .....	Tube Nut 1/2"
19.....	2 .....	16124 .....	Ferrule 1/2"
20.....	1 .....	16974 .....	Fitting, Brass, Female 3/4" x 3/4" Slip - Not Shown
21.....	1 .....	11893 .....	Injector Cover
22.....	1 .....	10229 .....	Injector Cover Gasket
23.....	1 .....	17777 .....	Injector Body
24.....	1 .....	*14802.....	Injector Throat
25.....	1 .....	*14801.....	Injector Nozzle
26.....	1 .....	14803 .....	Injector Screen
27.....	2 .....	14804 .....	Screw, Hex Head Mach, #10 - 24 X 2 3/4" 18-8 SS
		*Injector Throat	*Injector Nozzle
		14802-03C .....	14801-03C .....
		14802-04C .....	14801-04C .....
		14802-05C .....	14801-05C .....
		14802-06C .....	14801-06C .....
		14802-07C .....	14801-07C .....
			Size
			Color
			#3C .....
			Yellow
			#4C .....
			Green
			#5C .....
			White
			#6C .....
			Red
			#7C .....
			Black

# MODEL 2900

## 1710 Brine System



60604

# MODEL 2900

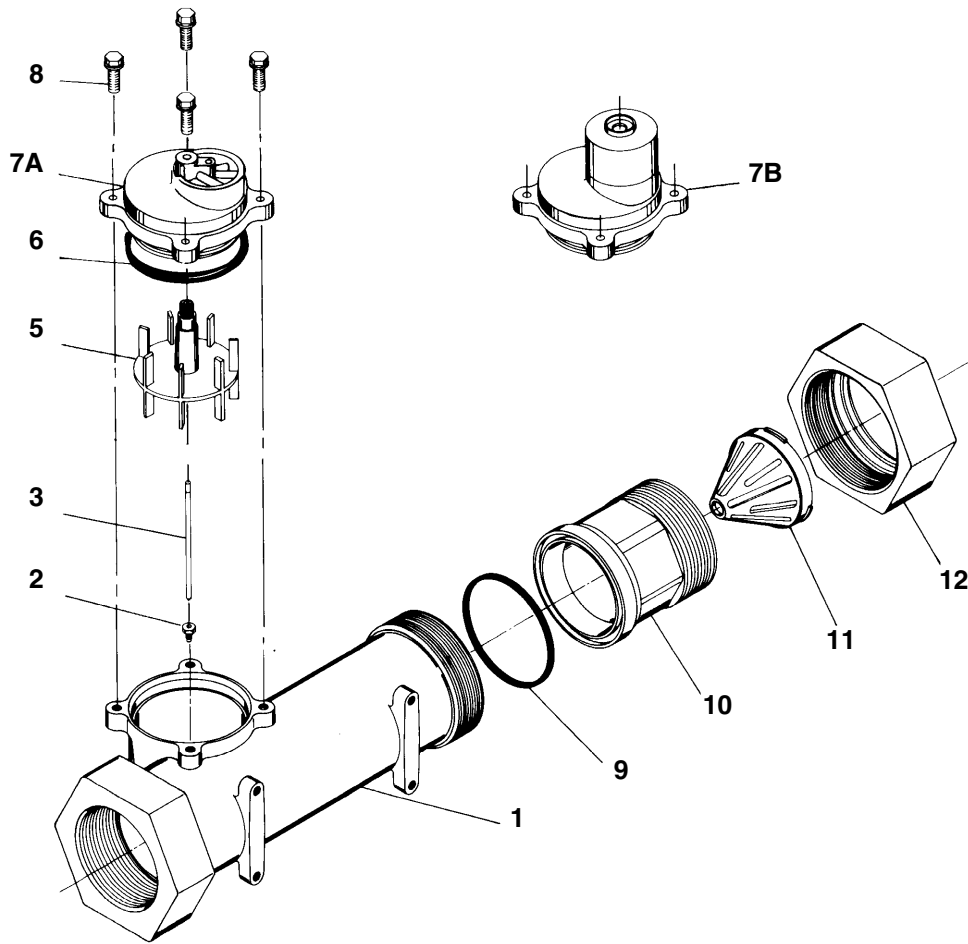
## 1710 Brine System

### Parts List

Item No.	Quantity	Part No.	Description
1	1	41202	1700 Plastic Brine, Top
2	1	14785-01	Retainer, Flow Control
3	-	14811	O-Ring, -210, 560CD
4	1	14798	Spacer, 2900
5	1	14795	Piston, Brine Valve
6	1	41203	Brine Valve Stem
7	1	41201	1700 Plastic Brine, Bottom
8	1	12550	Ring, Quad -009
9	5	17908	Sleeve, Brine Valve Stem
10	3	41547	O-Ring, 2mmx35mm
11	2	15310	Spring, Brine Valve
12	2	10250	Ring, Retaining
13	1	17906	Guide, Brine Valve Stem
14	2	14202-01	Screw, Hex Wsh Mach, 8-32 X 5/16"
15	2	41056	Nut Assembly, 1/2"
16	1	19151	Washer, Flow, 1.0 Gpm (not shown)
17	1	41493-00	Label, Blfc, 1710 (not shown)
18	1	16460	Tube, Brine, 2900
19	1	15414	Nut, 2900, W/Sleeve
21	1	19925	Gasket, Injector Body
22	1	17777-03	Body, Injector, 1700
23	1	14802-++C	Throat, Injector
24	1	13771	O-ring, -012
25	1	14801-++C	Nozzle, Injector
26	1	10229	Gasket, Injector Body
27	1	10228	Cap, Injector
28	2	14804	Screw, Hex Head Mach, #10 - 24 X 2 3/4" 18-8 SS
29	1	15413	Fitting, Elbow, Male, 1/2T X 3/8NPT

# MODEL 2900

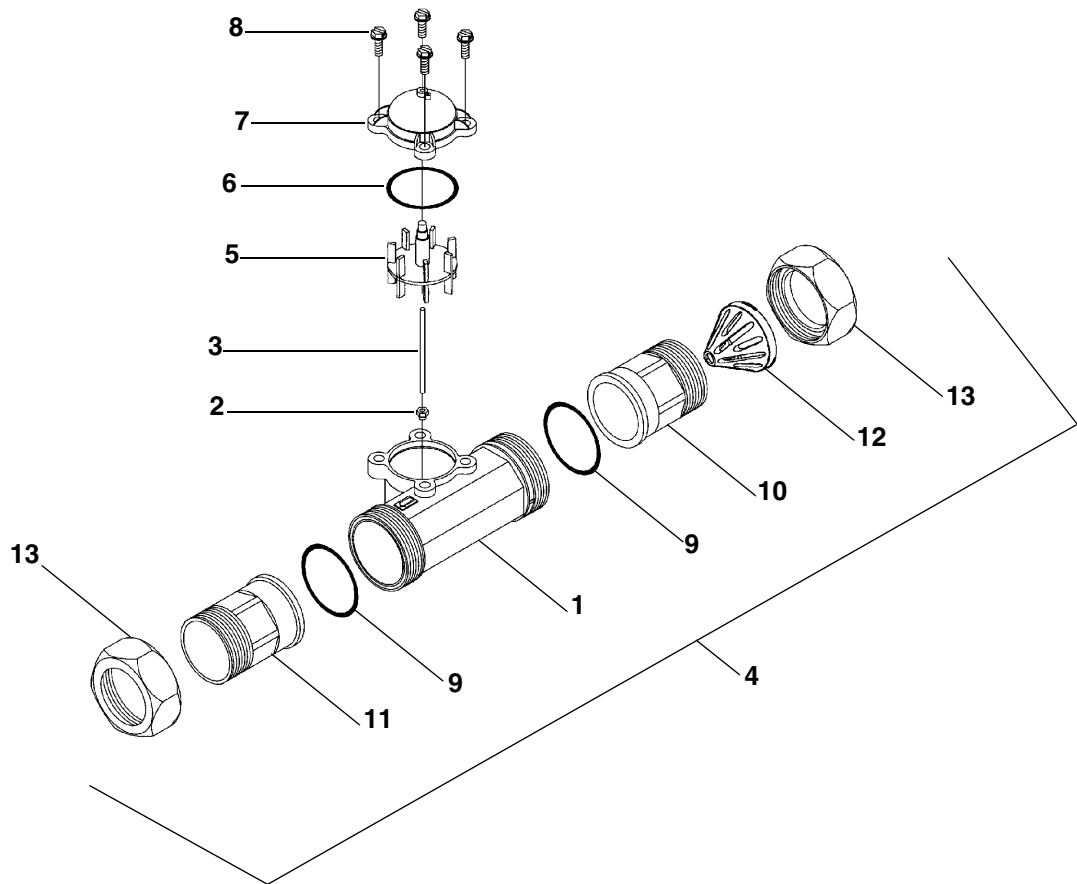
## 2" Meter Assembly



Item No.	Quantity	Part No.	Description
1	1	14456	Meter Body
2	1	15532	Impeller Shaft Retainer
3	1	15432	Impeller Shaft
4			Not Assigned
5	1	15374	Impeller
6	1	13847	O-Ring - Meter Cover
7A	1	15218	Meter Cover Assembly (Standard)
7B	1	15237	Meter Cover Assembly (Extended Range)
8	4	12112	Screw - Meter Cover
9	1	14679	O-Ring - Quick Connect
10	1	14568	Nipple - Quick Connect
11	1	14680	Flow Straightener
12	1	14569	Nut - Quick Connect

# MODEL 2900

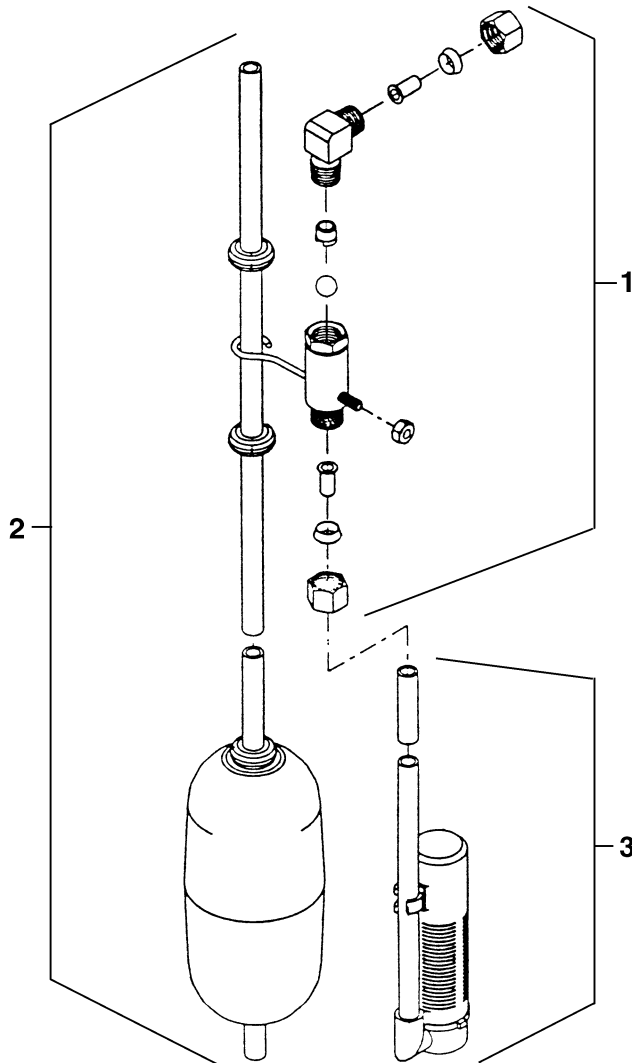
## 2" Plastic Meter Assembly



Item No.	Quantity	Part No.	Description
1	1	17689	Body, Meter, 2" Plastic
2	1	15532	Shaft, Impeller Seat
3	1	15432	Shaft, Impeller
4	1	60620	Meter Assembly, 2" (Standard Range)
	1	60621	Meter Assembly, 2" (Extended Range)
		60625	Meter Assembly, 2" (Electronic)
5	1	15374	Impeller Assembly, 2" Meter
6	1	13847	O-Ring, -137, Meter
7	1	14038	Meter Cap Assembly (Standard Range)
	1	15150	Meter Cap Assembly (Extended Range)
	1	14716	Meter Cap Assembly (Electronic)
8	4	12473	Screw, Hex Washer, 10-24 x 5/8
9	2	40666	Seal, Face, 2", Plastic
10A	1	17987-001	Fitting, Nipple, 2", Plastic, NPT, Machined
10B	1	17987-101	Fitting, Nipple, 2", Plastic, BSP, Machined
11A	1	17987-000	Fitting, Nipple, 2", Plastic, NPT
11B	1	17987-100	Fitting, Nipple, 2", Plastic, BSP
12	1	14680	Flow Straightener
13	2	17988	Nut, 2" Meter

# MODEL 2900

## 2300 Safety Brine Valve

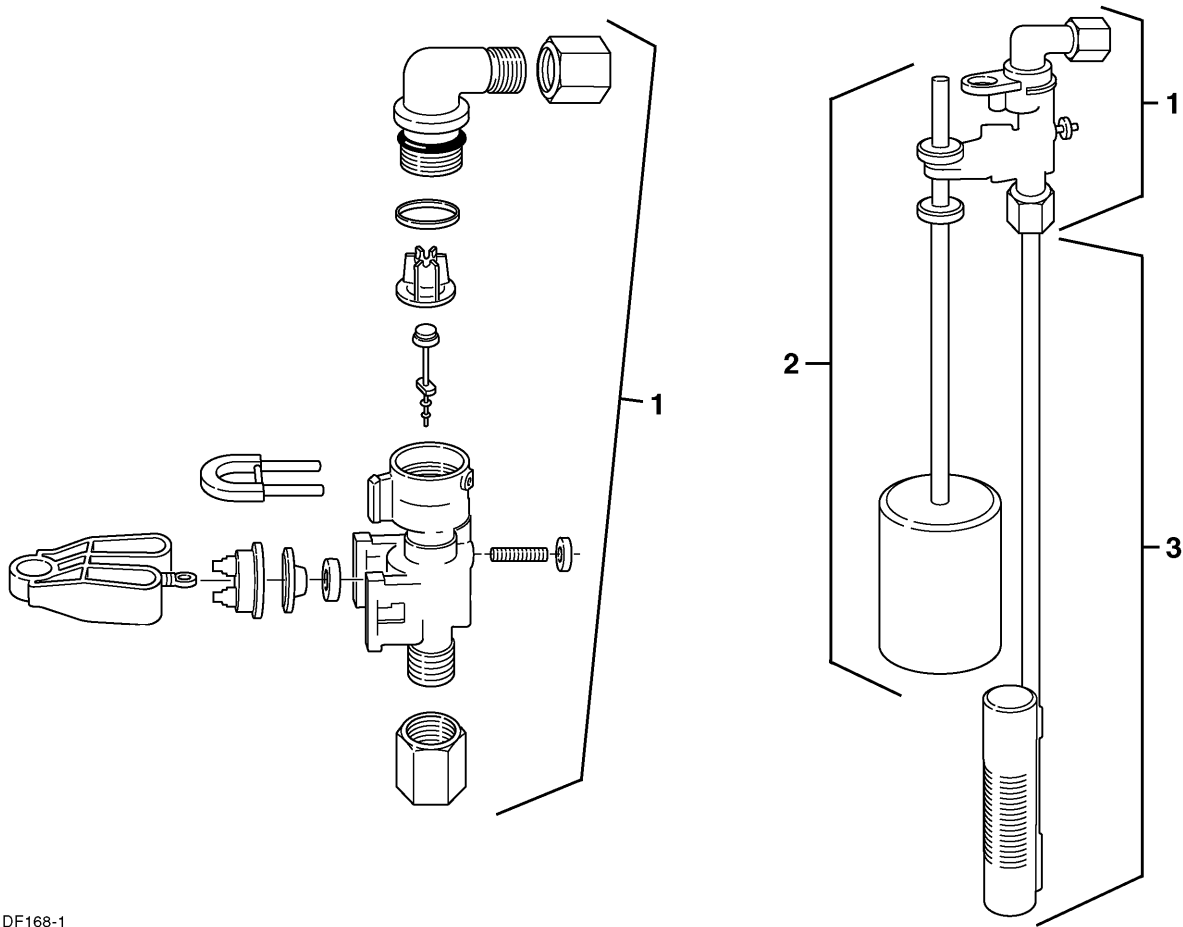


DF044-1

<i>Item</i>	<i>Quantity</i>	<i>Part Number</i>	<i>Description</i>
1	1	60027-FFA	<b>2300</b> safety brine valve, fitting facing arm
		60027-FFS	<b>2300</b> safety brine valve, fitting facing stud
2	1	60028-30	float assembly blue/white
		60026-30SAN	float assembly green/green, hot water
3	1	60002	#500 air check
		60003	#500 air check, hot water

# MODEL 2900

## 2310 Safety Brine Valve

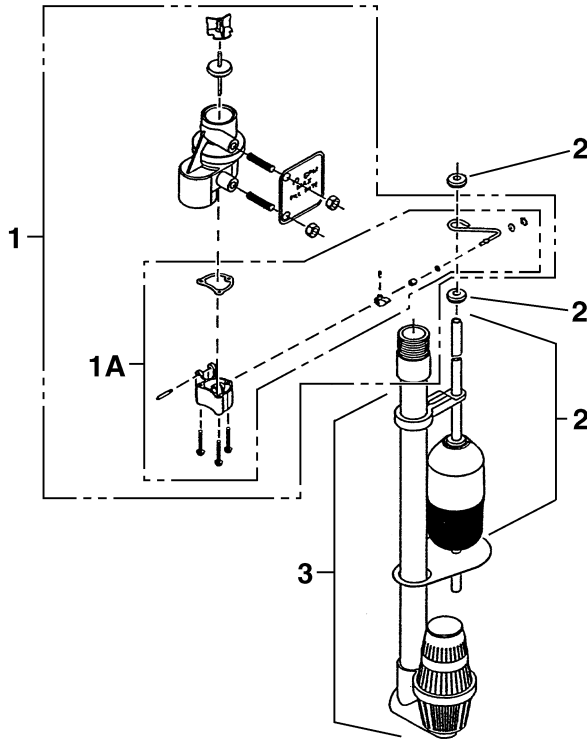


DF168-1

<i>Item</i>	<i>Quantity</i>	<i>Part Number</i>	<i>Description</i>
1	1	60014	<b>2310</b> safety brine valve
2	1	60068	<b>2310</b> float assembly
		60026-30	float assembly red/white (float fill)
3	1	60002	#500 air check

# MODEL 2900

## 2350 Safety Brine Valve



DF213-0

<i>Item</i>	<i>Quantity</i>	<i>Part Number</i>	<i>Description</i>
1	1	60038	<b>2350</b> safety brine valve
1A	1	61024	<b>2350</b> actuator assembly
2	1	60026-30	float assembly red/white
		60076-30SAN	float assembly green/green (hot water)
3	1	60009-00	#900 air check
	1	60009-01	#900 air check hot water

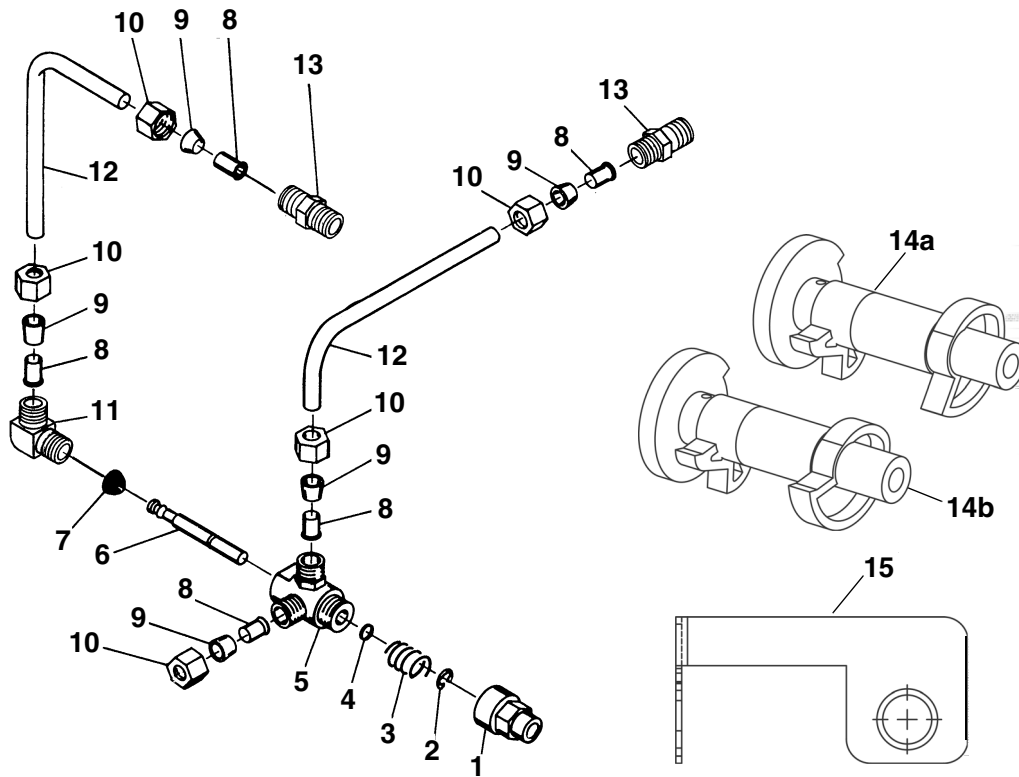
*Not Shown*

4		18603	<b>2350</b> fittings for <b>1700</b> brine system
5		18602	#900 fittings for <b>1700</b> brine system



# MODEL 2900

## Service Valve Operator



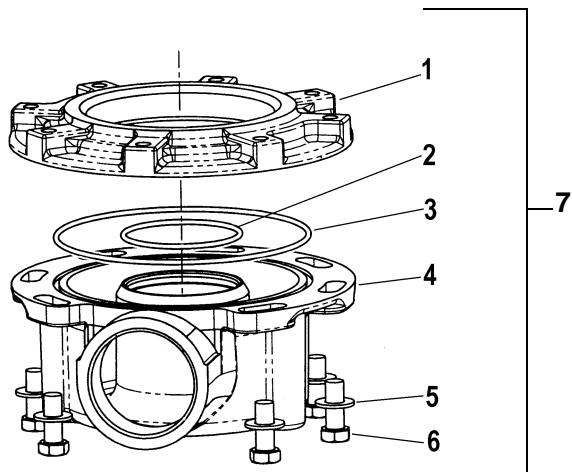
### PARTS LIST

Item No.	Quantity	Part No.	Description
1	1	11749	Guide, Brine Valve Stem
2	1	10250	Retaining Ring
3	1	10249	Spring, Brine Valve
4	1	12550	Quad Ring
5	1	10785	Service Actuator Assembly - .25 gpm
6	1	12552	Brine Valve Stem, 1600
7	1	12626	Seat, Brine Valve
8	5	10332	Insert,
9	5	10330	Sleeve, 3/8" Delrin
10	5	10329	Nut, 3/8" Brass
11	1	10328	Elbow, 90° 1/4" NPT x 3/8"
12	2	12897	Tube
13	2	16730	Connector, Male 1/8" NPT to 3/8" T
14a	1	12472	Cam Assy. Tri stack, After Rapid Rinse
14b	1	15770	Cam Assy. Tri stack, After Brine Tank Fill
15	1	12114	Bracket, Motor Outboard

# MODEL 2900

## Control Valve

### Side Mount Adapter



Item No.	Quantity	Part No.	Description
1.....	1	40316	Adaptor, Side Mount
2.....	1	40372	O-Ring - 142
3.....	1	40368	O-Ring - 160
4.....	1	40310	Base, Rotating
5.....	7	40375	Washer
6.....	7	19768	Screw
7.....	1	61415	Assembly

# MODEL 2900

## Service Assemblies

### ADAPTERS

61525	Treated Water Regen Adapter Assembly
61415	Sidemount Adapter Assembly
61415NP	Sidemount Adapter Assembly, Nickel Plated
61415-20	Sidemount Adapter Assembly, BSP/Metric
61415-20NP	Sidemount Adapter Assembly, BSP/Metric, Nickel Plated

### AIR CHECKS

60002	#500 Air Check
60003	#500 Air Check Hot Water
60009	# 900 Commercial Air Check
60009-01	# 900 Commercial Air Check Hot Water

### AUXILIARY MICRO SWITCH

60320-02	3200 Series Timer
60320-11	Lower Drive (2nd Switch)
60230-08	Lower Drive (3rd Switch)

### BRINE LINE FLOW (BLFC)

60020-00	Model 1600, blank
60020-25	Model 1600 with .25 gpm flow control
60020-50	Model 1600 with .50 gpm flow control
60020-100	Model 1600 with 1.0 gpm flow control
60010-00	Model 1650, blank
60010-25	Model 1650 with .25 gpm flow control
60010-50	Model 1650 with .50 gpm flow control
60010-100	Model 1650 with 1.0 gpm flow control

### BRINE VALVES

60011	Model 1650 brine valve assy.
60029	Model 1600 brine valve assy.
60029HW	Model 1600 Hot Water brine valve assy.
60034-__	Model 1700 brine valve assy.( specify flow control 1.0 - 5.0 )
60604-__	Model 1710 brine valve assy.( specify flow control 1.0 - 5.0 )

### COVERS

60217-__	Environmental lower cover
60219-__	Environmental
60232-__	Designer 2 piece
60232-110	Designer 1 piece ( only available in black )
60239-__	Designer Lower cover

### DRIAN LINE FLOW CONTROLS

60366-__	1" FNPT x 3/4" FNPT ( specify flow control .6 - 7.0 )
60701-__	1" FNPT x 1" FNPT ( specify flow control 8.0 - 25.0 )
60702-__	1" FNPT x 1" MNPT ( specify flow control 8.0 - 25.0 )
60708-__	1" FNPT x 3/4" FNPT ( specify flow control 8.0 - 25.0 )
60721-__	1" FNPT x 1" FNPT ( specify flow control .6 - 7.0 )

### CAM ASSEMBLY

60160-00	Separate time fill drive cam ( Black )
60160-20	Lower drive (Designer)
60160-22	Lower drive (Environmental)

### 24 HOUR GEAR ASSEMBLY

19205	
60519-02	Model 3200 timer 2 times regeneration
60519-03	Model 3200 timer 3 times regeneration
60519-04	Model 3200 timer 4 times regeneration
60519-06	Model 3200 timer 6 times regeneration

### INJECTOR ASSEMBLIES COMPLETE

60483-__	1700 - 1/2" brine (specify size of injector)
60480-__	1600 - 3/8" brine (specify size of injector)
60481-__	1600 Brass - 3/8" brine ( specify size of injector)

### METERS

60393	2" Meter brass standard range
60394	2" Meter brass extended range
60616	2" Meter brass electronic
60620	2" Meter plastic standard range
60621	2" Meter plastic Extended range
60625	2" Meter plastic electronic
15474-02	1 1/2" low flow sleeve only

### PISTON ASSEMBLIES

61540	Top piston
61540-01	Top piston, Hot Water
61550	Lower piston, Hard Water By-Pass
61550-01	Lower piston, By-Pass, Treated Water Regen
61550-02	Lower piston, By-Pass, Treated Water Regen, Hot Water
61550-03	Lower Piston, By-Pass, Hot Water
61555	Lower Piston, No By-Pass
61555-01	Lower Piston, No By-Pass, Treated Water Regen, Hot Water
61555-02	Lower Piston, No By-Pass, Treated Water Regen
61555-03	Lower Piston, No By-Pass, Hot Water

### PROGRAM WHEEL ASSEMBLIES

60405-20	1 1/2" Std. Range ( 0 - 10,000 )
60405-50	2" Std. Range ( 0 - 21,000 )
60405-60	2" Ext. Range ( 0 - 100,000 )
60405-70	1 1/2" Ext. Range ( 0 - 50,000 )

### SAFETY BRINE VALVES

60014	Model 2310 plastic safety brine valve
60038	Model 2350 Safety Brine Valve
60026-30	Float Assy. (red/white)
60026-30SAN	San float assy. (Hot Water)
60027-FFA	Model 2300 safety brine valve
60027-FFS	Model 2300 Safety brine valve
60028-30	Float Assy. (blue/white)
60068-30	Float Assy. 2310

### SALES AND SERVICE AIDS

16864 -01	Spec sheet
15238	Service manual
41717	Product line Catalog

### SEAL & SPACER KITS

61530	Upper kit
61530-01	Upper kit, Hot Water
60128	Lower kit
60128-01	Lower kit, Hot Water

### SERVICE EQUIPMENT

11098	Seal & Spacer stuffer tool upper
12682	Spacer puller tool lower
12683	Seal & Spacer stuffer tool lower
13061	Spacer puller tool upper
16174	Silicone, 2 oz. Tube
60460	Meter Checker Std. Range
60461	Meter Checker Ext. Range
16586-8	Silicone, 8 lb. pail

### SERVICE VALVE OPERATOR ASSEMBLY ( SVO )

60150	SVO (Old Style)
60150-01	SVO (New Style)

### SKIPPER WHEEL ASEMBLIES

14860	3200 Timer 12 day
14381	3200 Timer 7 day

# MODEL 2900

## Service Instructions

PROBLEM	CAUSE	CORRECTION
1. Softener Fails To Regenerate.	A. Electrical Service To Unit Has Been Interrupted. B. Timer Is Defective. C. Power Failure.	A. Assure Permanent Electrical Service (Check Fuse, Plug, Pull Chain or Switch). B. Replace Timer. C. Reset Time of Day.
2. Hard Water.	A. By-Pass Valve is Open. B. No Salt in Brine Tank C. Injector Screen Plugged. D. Insufficient Water Flowing Into Brine Tank E. Hot Water Tank Hardness. F. Leak At Distributor Tube. G. Internal Valve Leak H. Service Adapter Did Not Return To Service.	A. Close By-Pass Valve. B. Add Salt To Brine Tank and Maintain Salt Level Above Water Level. C. Clean Injector Screen. D. Check Brine Tank Fill Time And Clean Brine Line Flow Control If Plugged. E. Repeated Flushings Of The Hot Water Tank is Required. F. Make Sure Distributor Tube Is Not Cracked. Check O-Ring And Tube Pilot. G. Replace Seals and Spacers And/ Or Piston. H. Check Drive Motor And Switch.
3. Unit Used Too Much Salt	A. Improper Salt Setting. B. Excessive Water in Brine Tank	A. Check Salt Usage and Salt Setting. B. See Problem No. 7.
4. Loss Of Water Pressure.	A. Iron Buildup In Line To Water Conditioner. B. Iron Buildup in Water Conditioner. C. Inlet of Control Plugged Due to Foreign Material Broken Loose From Pipes By Recent Work Done On Plumbing System.	A. Clean Line To Water Conditioner. B. Clean Control and Add Mineral Cleaner to Mineral Bed. Increased Frequency of Regeneration. C. Remove Piston and Clean Control.
5. Loss of Mineral Through Drain Line.	A. Air In Water System. B. Improperly Sized Drain Line Flow Control.	A. Assure That Well System Has Proper Air Eliminator Control. Check For Dry Well Condition. B. Check For Proper Drain Rate.
6. Iron In Conditioned Water.	A. Fouled Mineral Bed.	A. Check Backwash, Brine Draw And Brine Tank Fill. Increase Frequency of Regeneration. Increase Backwash Time.

# MODEL 2900

## Service Instructions (Cont'd.)

PROBLEM	CAUSE	CORRECTION
7. Excessive Water In Brine Tank.	A. Plugged Drain Line Flow Control. B. Plugged Injector System. C. Timer Not Cycling. D. Foreign Material In Brine Valve. E. Foreign Material In Brine Line Flow Control.	A. Clean Flow Control. B. Clean Injector and Screen. C. Replace Timer. D. Replace Brine Valve Seat And Clean Valve. E. Clean Brine Line Flow Control.
8. Softener Fails To Draw Brine.	A. Drain Line Flow Control Is Plugged. B. Injector Is Plugged. C. Injector Screen Plugged. D. Line Pressure Is Too Low. E. Internal Control Leak F. Service Adapter Did Not Cycle.	A. Clean Drain Line Flow Control. B. Clean Injector. C. Clean Screen. D. Increase Line Pressure To 20 P.S.I. E. Change Seals, Spacers and Piston Assembly. F. Check Drive Motor And Switches.
9. Control Cycles Continuously.	A. Misadjusted, Broken or Shorted Switch.	A. Determine If Switch or Timer Is Faulty and Replace It or Replace Complete Power Head.
10. Drain Flows Continuously.	A. Valve Is Not Programming Correctly. B. Foreign Material In Control. C. Internal Control Leak	A. Check Timer Program and Positioning of Control. Replace Power Head Assembly If Not Positioning Properly. B. Remove Power Head Assembly And Inspect Bore. Remove Foreign Material and Check Control In Various Regeneration Positions. C. Replace Seals and Piston Assembly.

### General Service Hints For Meter Control

Problem: Softener Delivers Hard Water.

Cause could be that . . . Reserve Capacity Has Been Exceeded.

Correction: Check salt dosage requirements and reset program wheel to provide additional reserve.

Cause could be that . . . Program Wheel Is Not Rotating With Meter Output

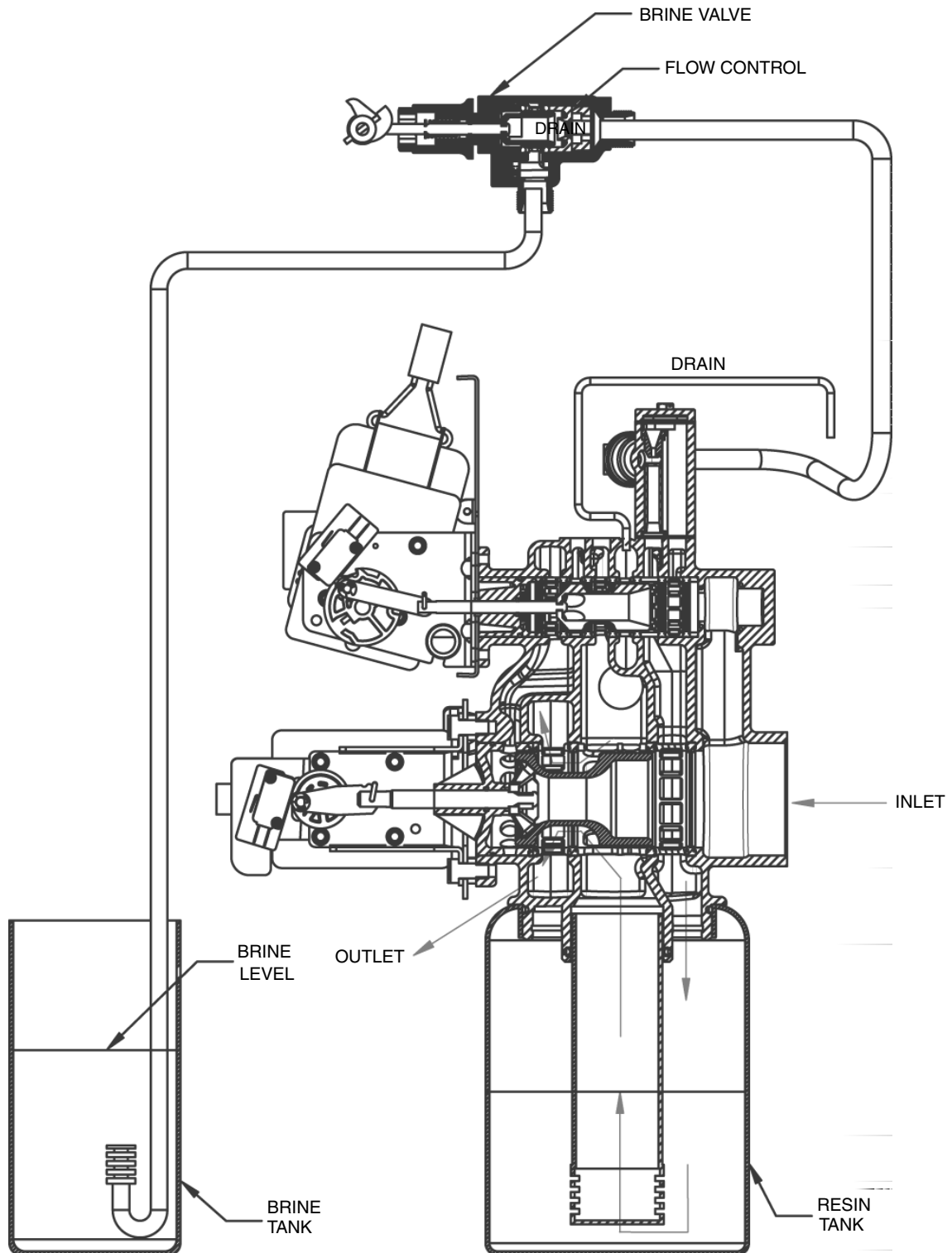
Correction: Pull cable out of meter cover and rotate manually. Program wheel must move without binding and clutch must give positive "clicks" when program wheel strikes regeneration stop. If it does not, replace timer.

Cause could be that . . . Meter Is Not Measuring Flow.

Correction: Check meter with meter checker.

# MODEL 2900

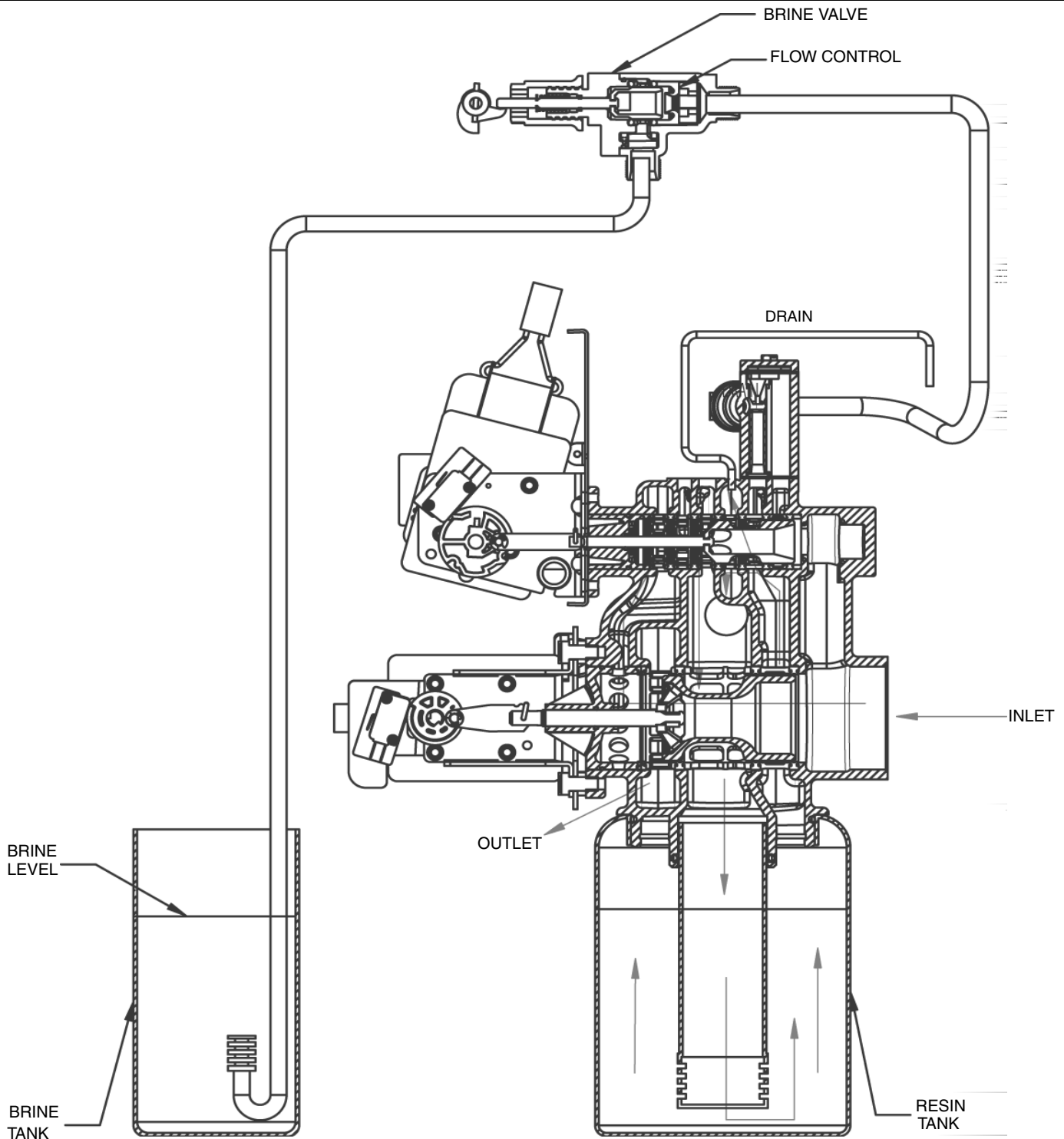
## Service Position



Hard water enters unit at valve inlet and flows down thru the mineral in the mineral tank. Conditioned water enters center tube thru the bottom distributor — then flows up thru the center tube — around the piston and out the side outlet of the valve.

# MODEL 2900

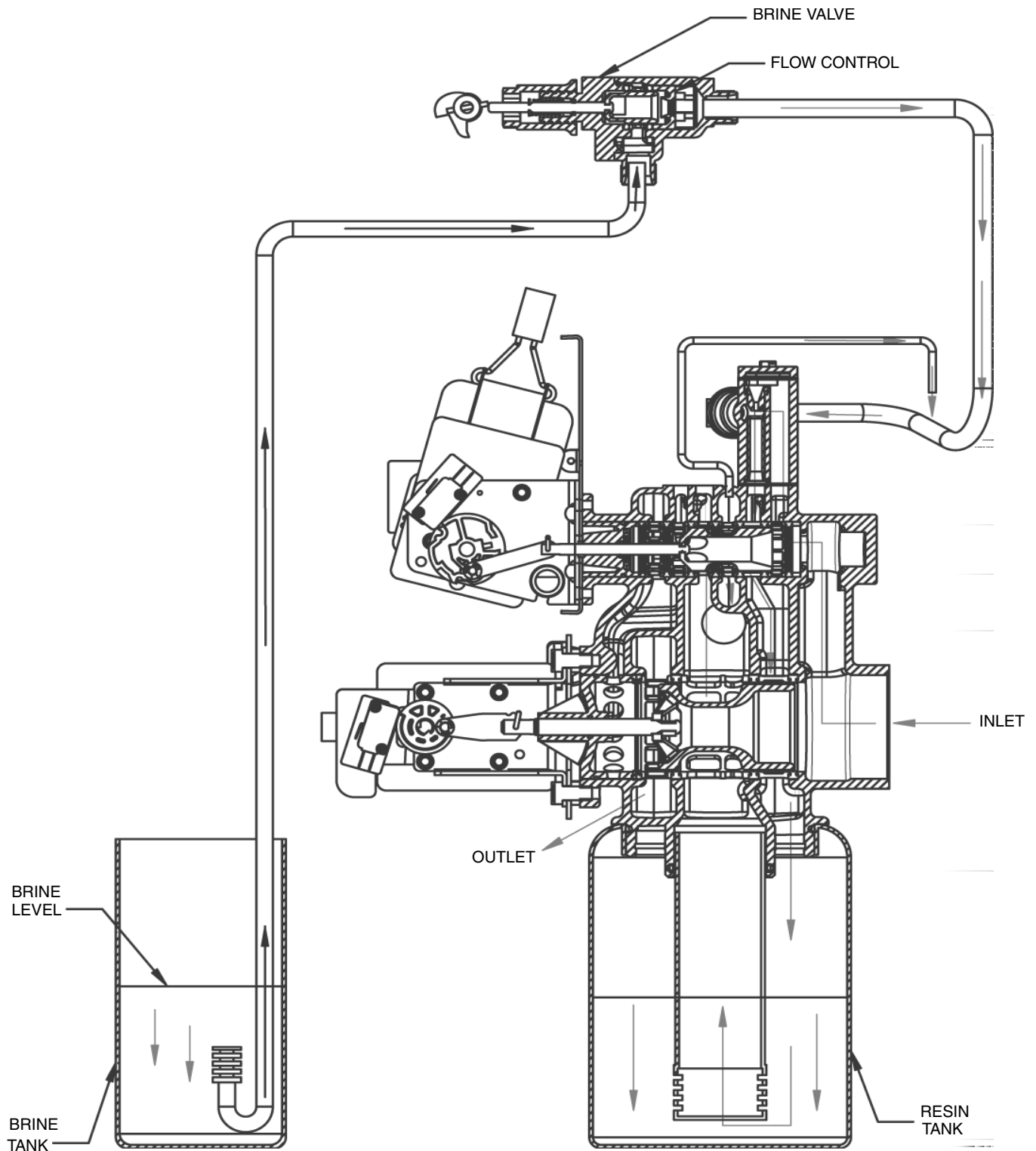
## Backwash Position



Hard water enters unit at valve inlet — flows to the front passage and up through the front passage to regenerating valve — down the center tube — thru the bottom distributor and up thru the mineral — around the piston and out the drain line. If optional no hard water by pass piston is used water flow to outlet is prevented by an extended section of the service piston which closes the outlet port from by pass water until the end of rapid rinse.

# MODEL 2900

## Brine Position

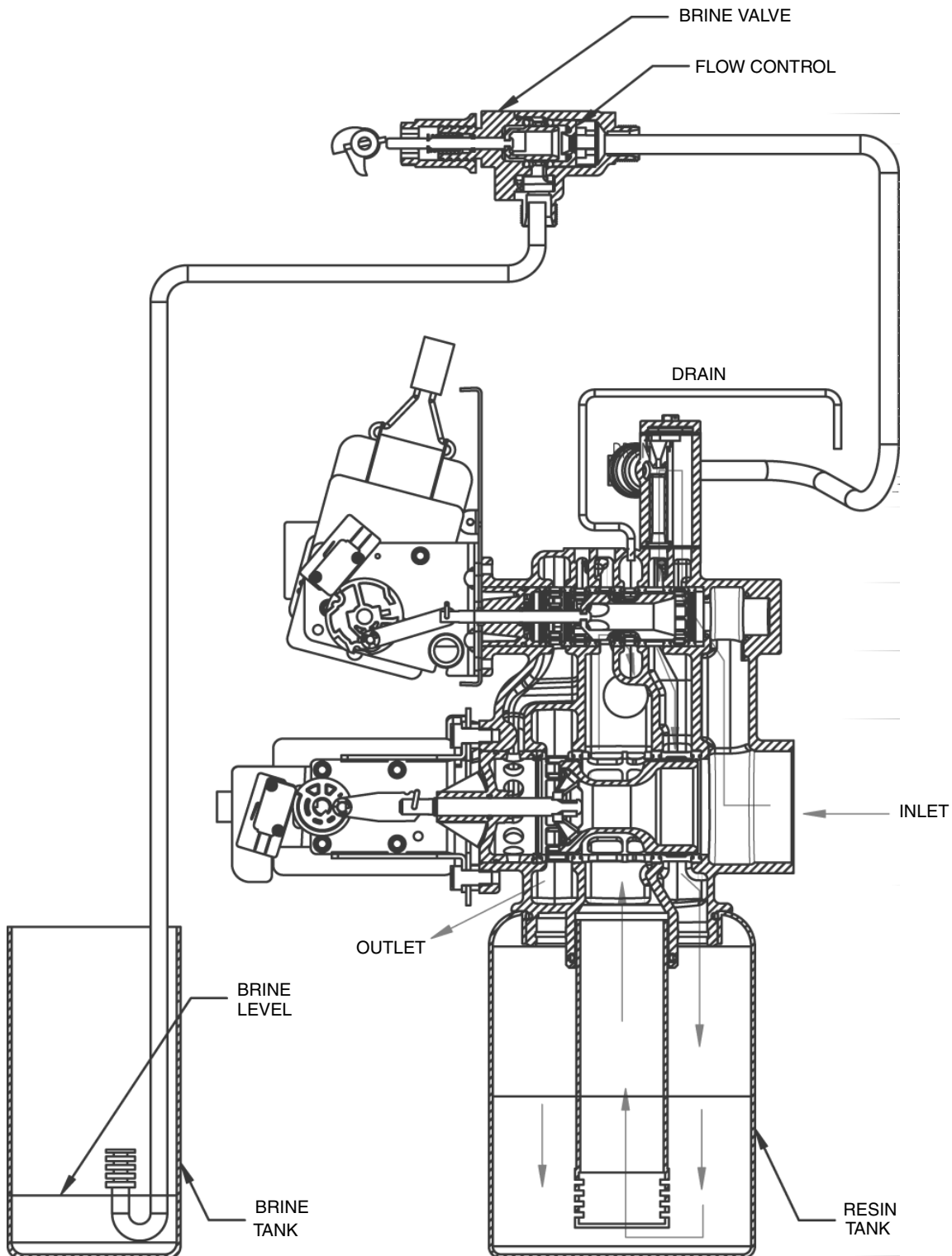


Hard water enters unit at valve inlet — flows up into injector housing and down thru nozzle and orifice to draw brine from the brine tank — brine flows down thru mineral and enters the center tube thru bottom distributor — flows up thru center tube — around the piston and out thru the drain line.



# MODEL 2900

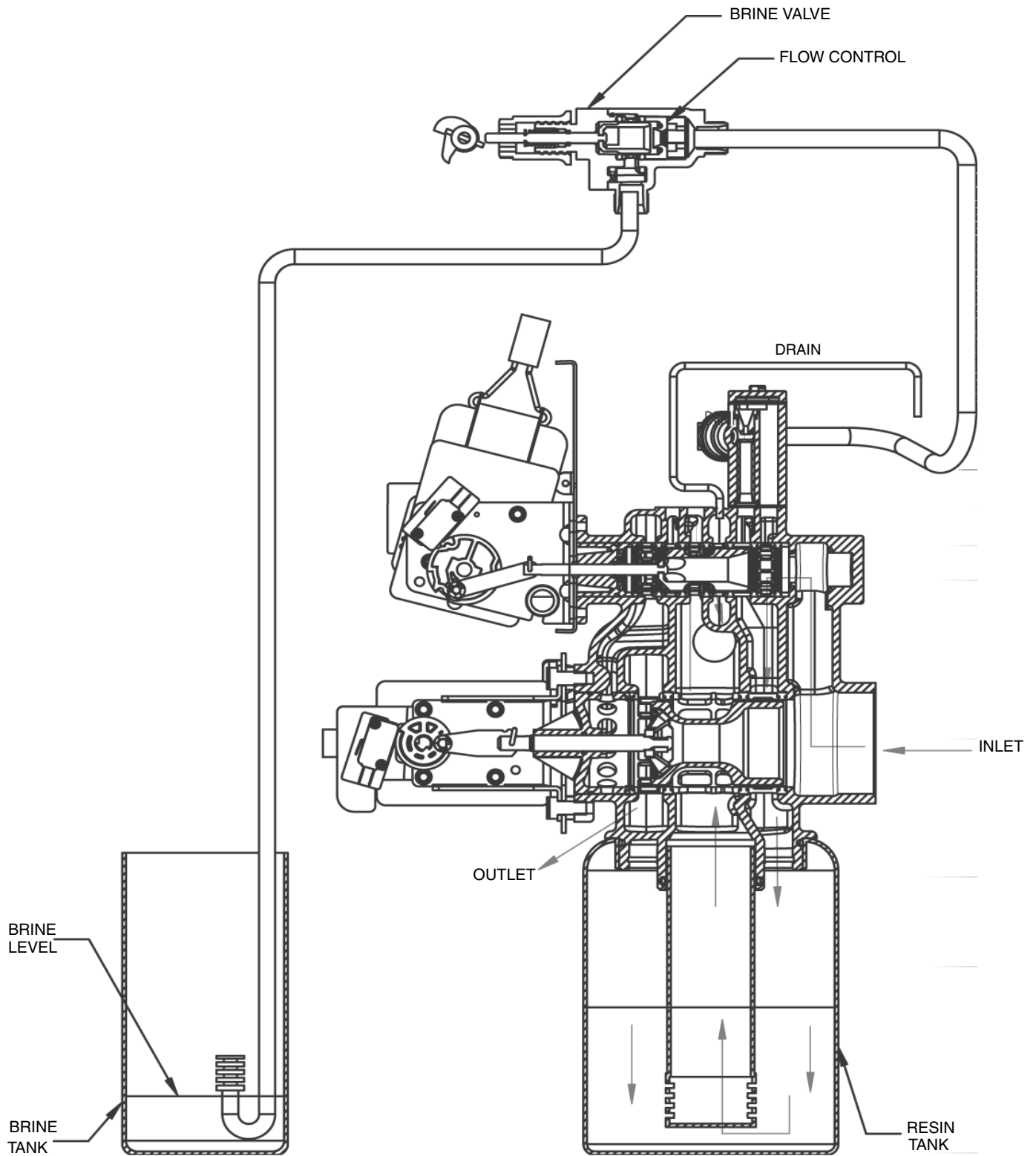
## *Slow Rinse Position*



Hard water enters unit at valve inlet — flows up into injector housing and down thru nozzle and orifice — around the piston — down thru mineral — enters center tube thru bottom distributor — flows up thru center tube — around piston and out thru the drain line.

# MODEL 2900

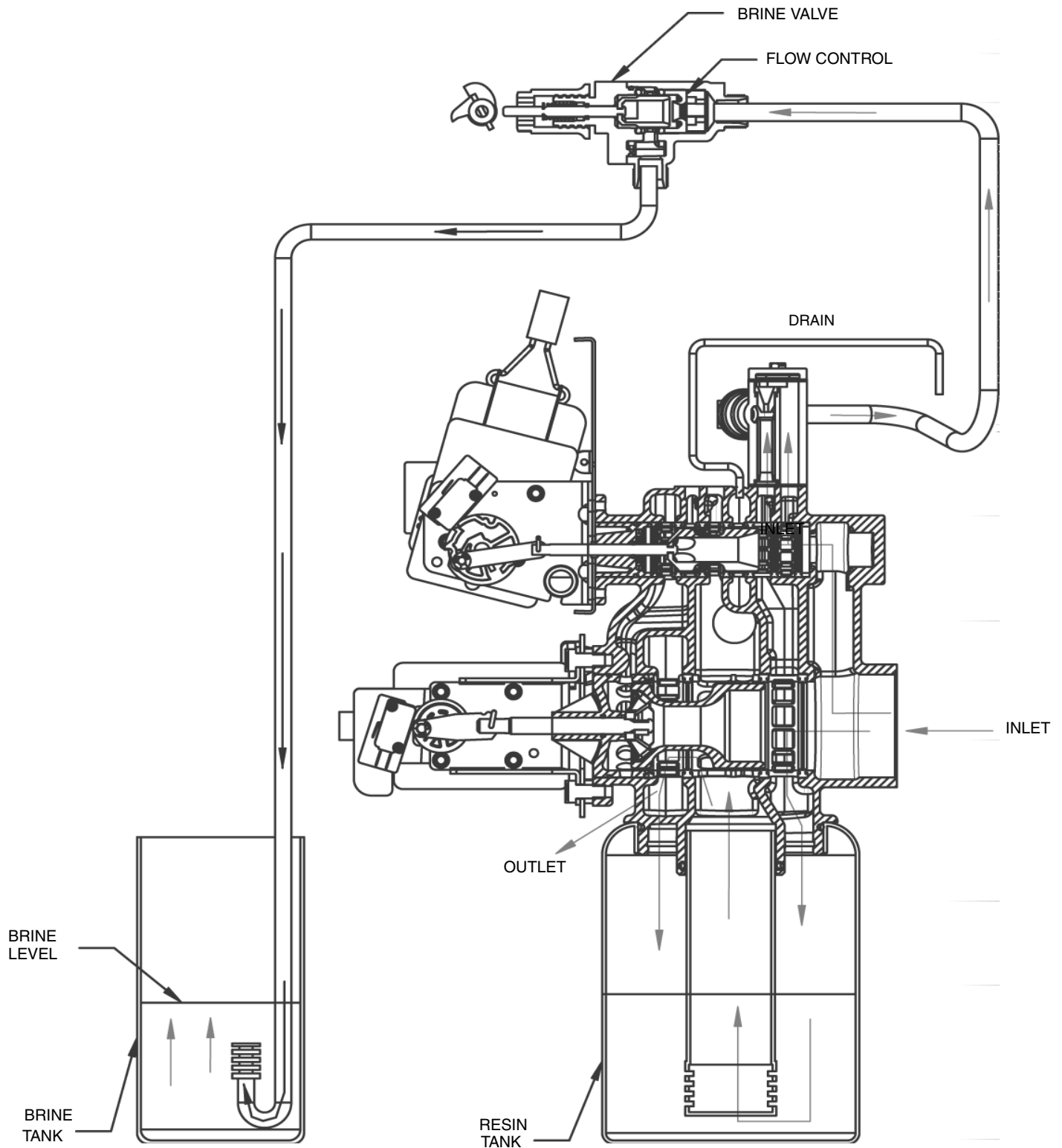
## *Rapid Rinse*



Hard water flows thru the regenerating valve directly down thru the mineral into the bottom distributor and up thru the center tube — around the piston and out the drain line.

# MODEL 2900

## Brine Tank Fill Position

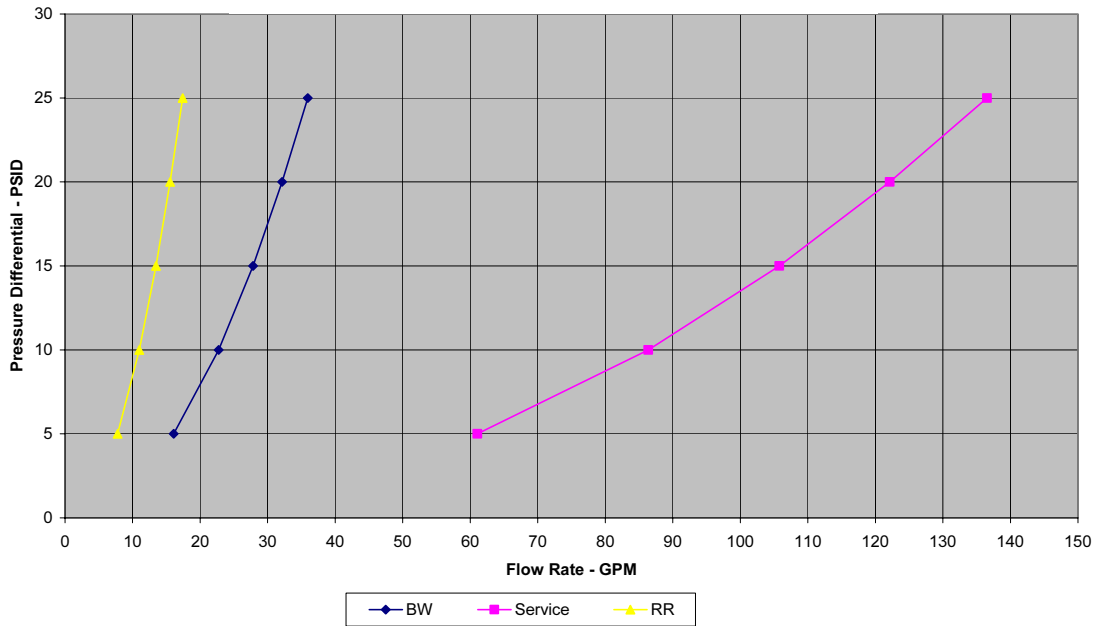


Hard water flows thru the service valve and down thru the mineral. Conditioned water enters the bottom distributor — flows up the center tube around the piston to the outlet. Hard water flows to the regenerating valve thru the injector housing and brine valve to fill the brine tank.

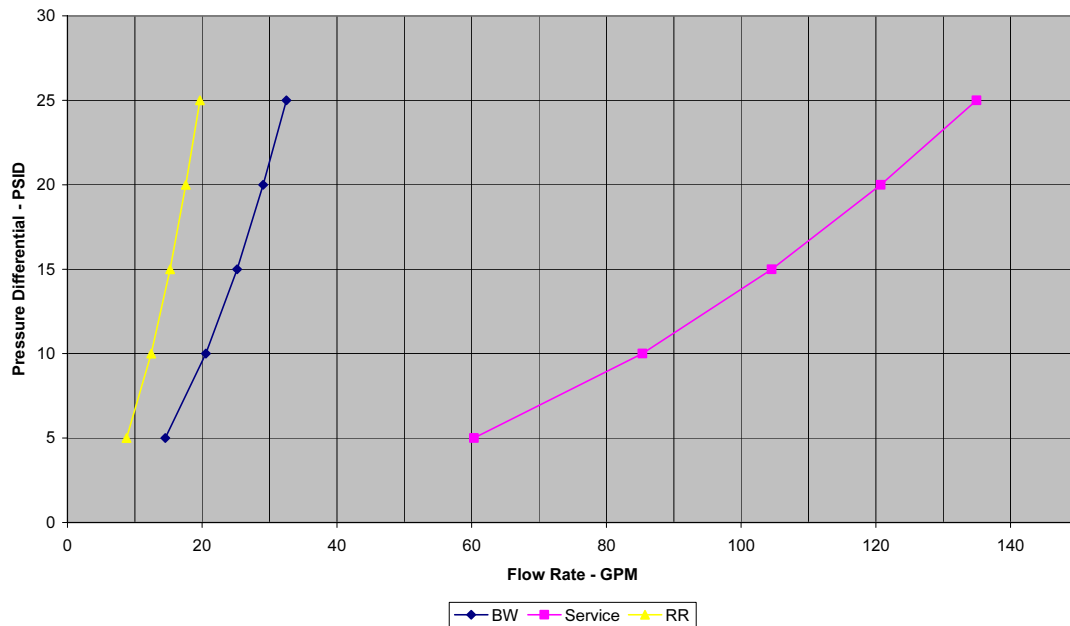
# MODEL 2900

## Flow Data & Injector Draw Rates

Backwash, Service and Rapid Rinse  
Pressure Differential

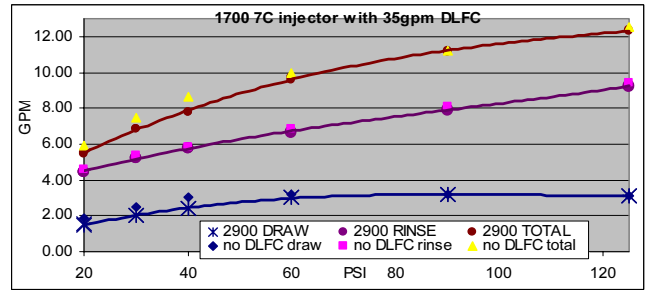
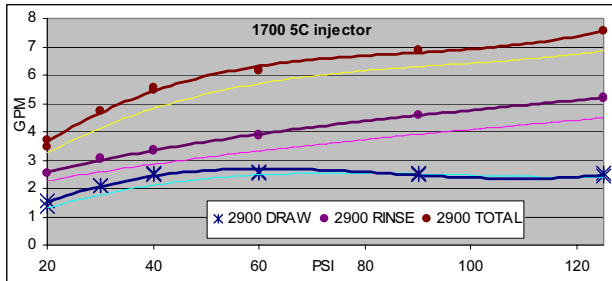
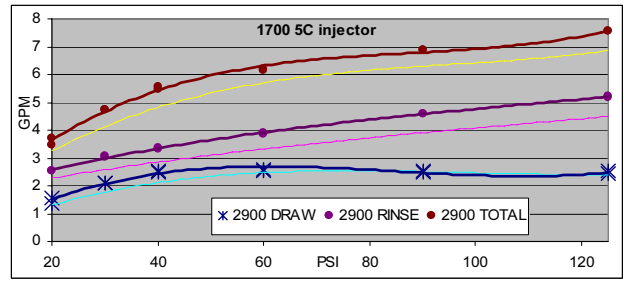
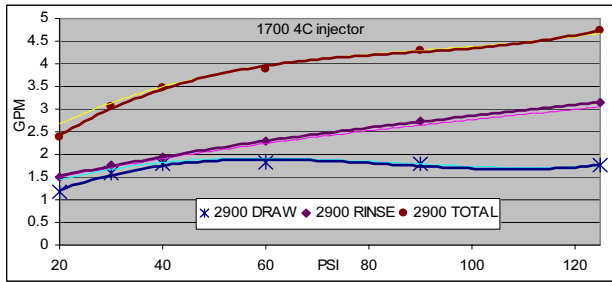
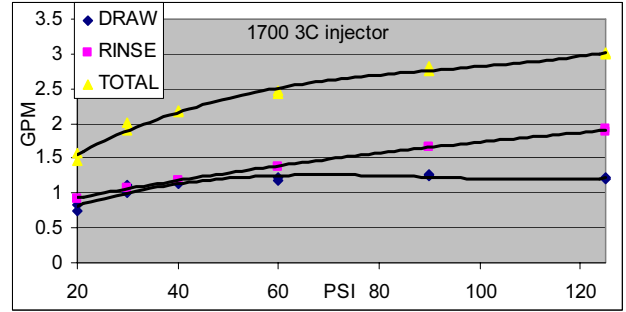
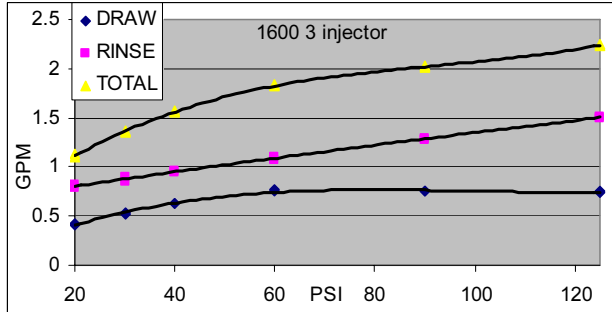


2900 Treated Water Down Flow Valve  
Backwash, Service and Rapid Rinse  
Pressure Differential



# MODEL 2900

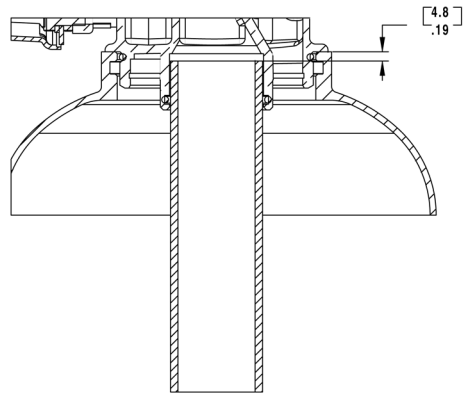
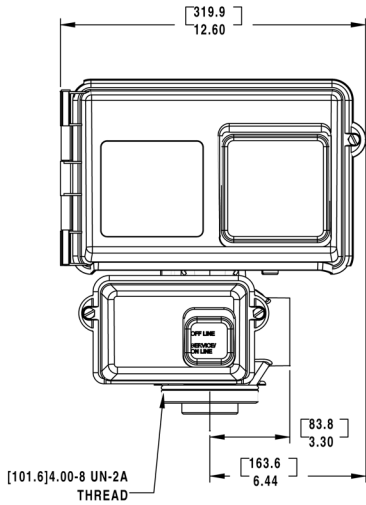
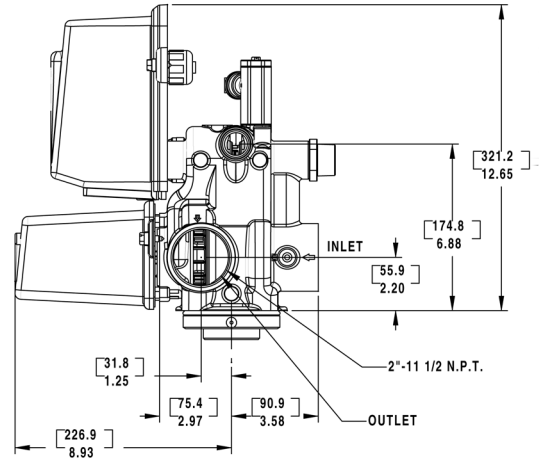
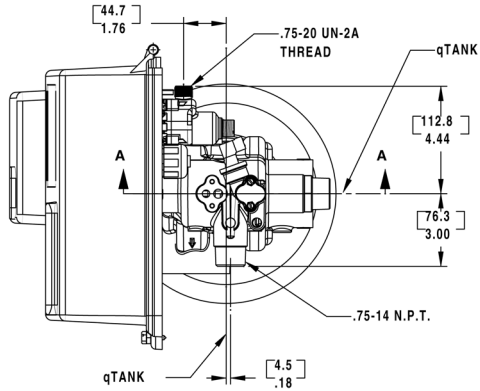
## Flow Data & Injector Draw Rates



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# MODEL 2900

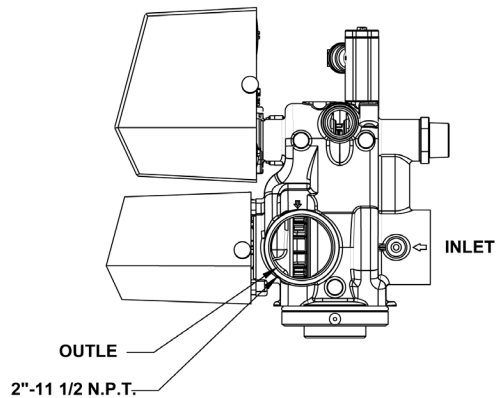
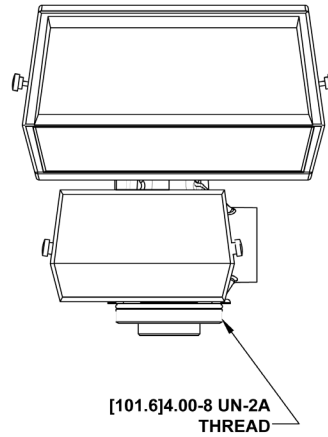
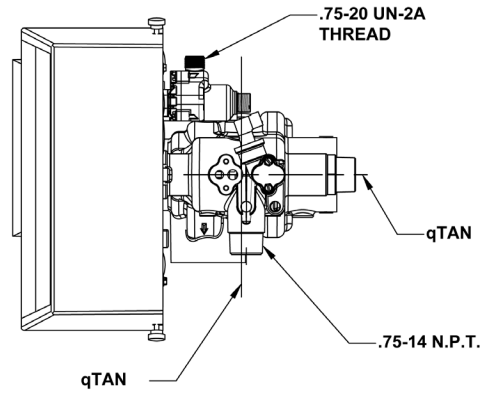
## Environmental Backplate Line Drawing



61500-2900LNE

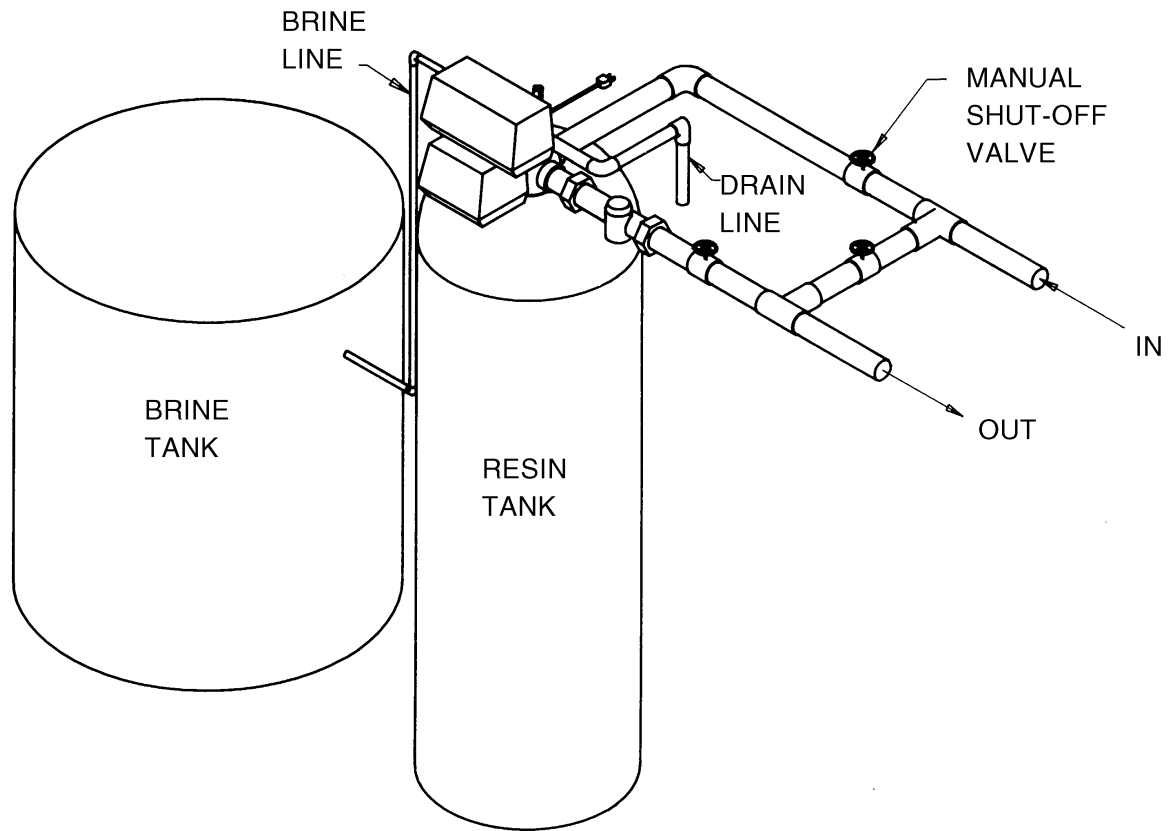
# MODEL 2900

## *Environmental Designer*



# MODEL 2900

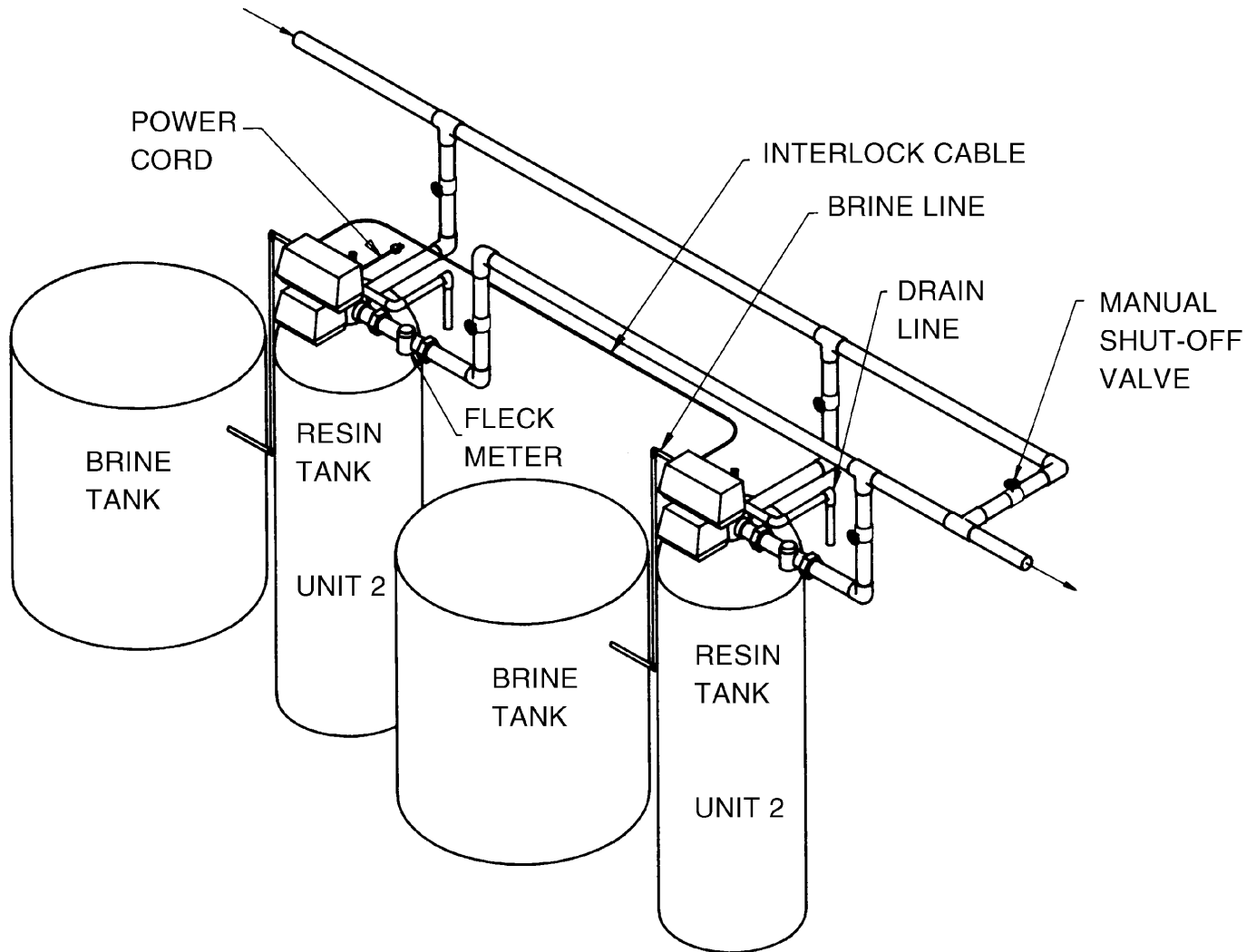
## System #4 - Typical Single Tank Installation With Optional Meter





# MODEL 2900

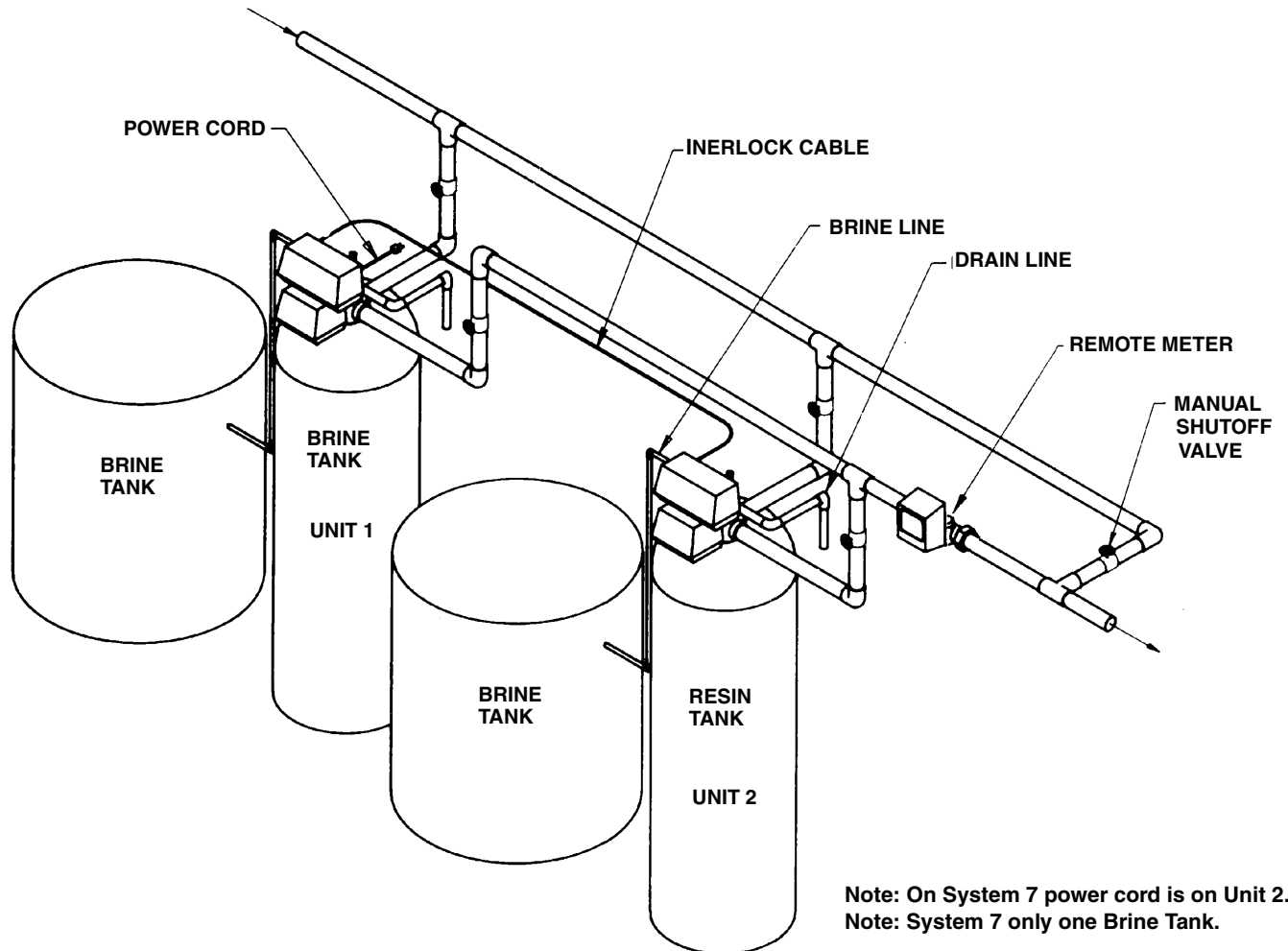
## System #5 - Interlock - Typical Twin Tank Installation With Optional Meter Interlock And No Hard Water Bypass



# MODEL 2900

## System #6 – Twin Series Regeneration

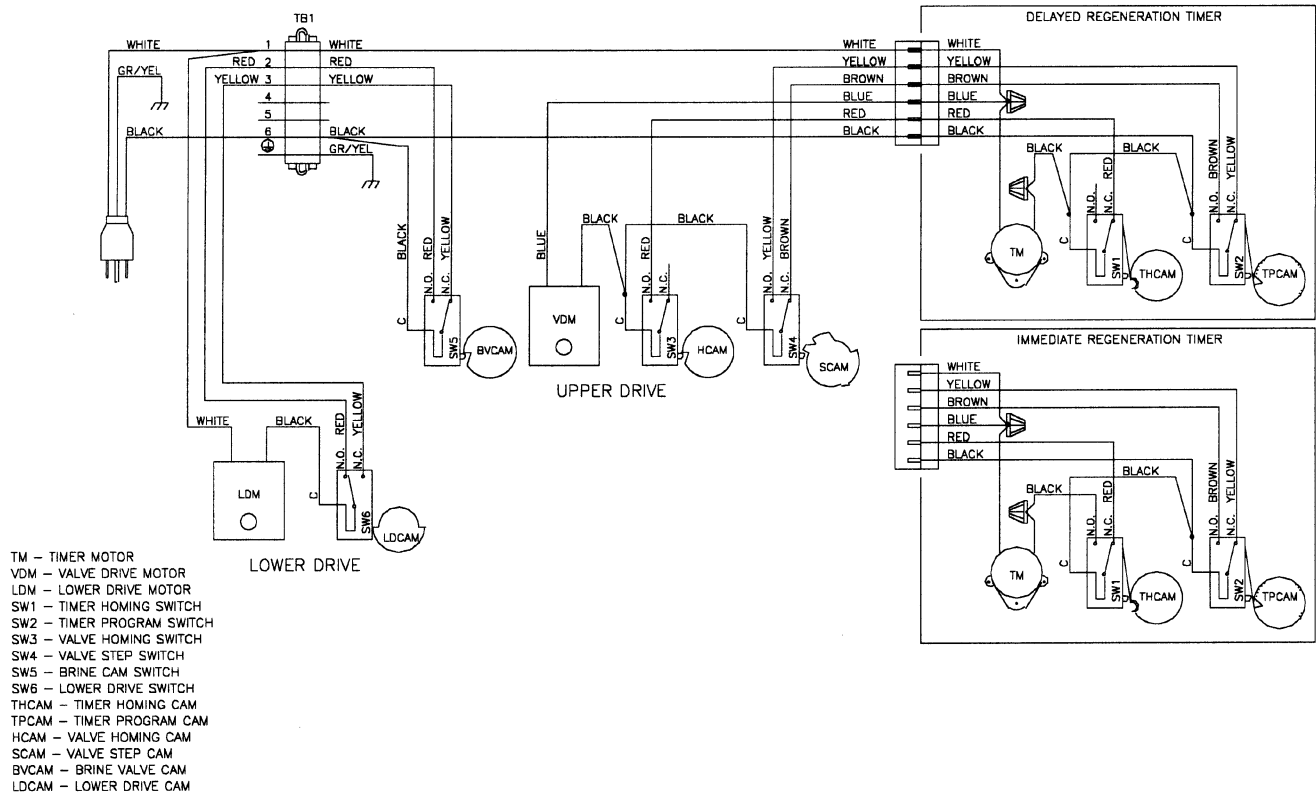
## System #7 – Twin Alternator Installation



# MODEL 2900

## System #4-Single Valve Regeneration

### Immediate and Delayed Valve Wiring

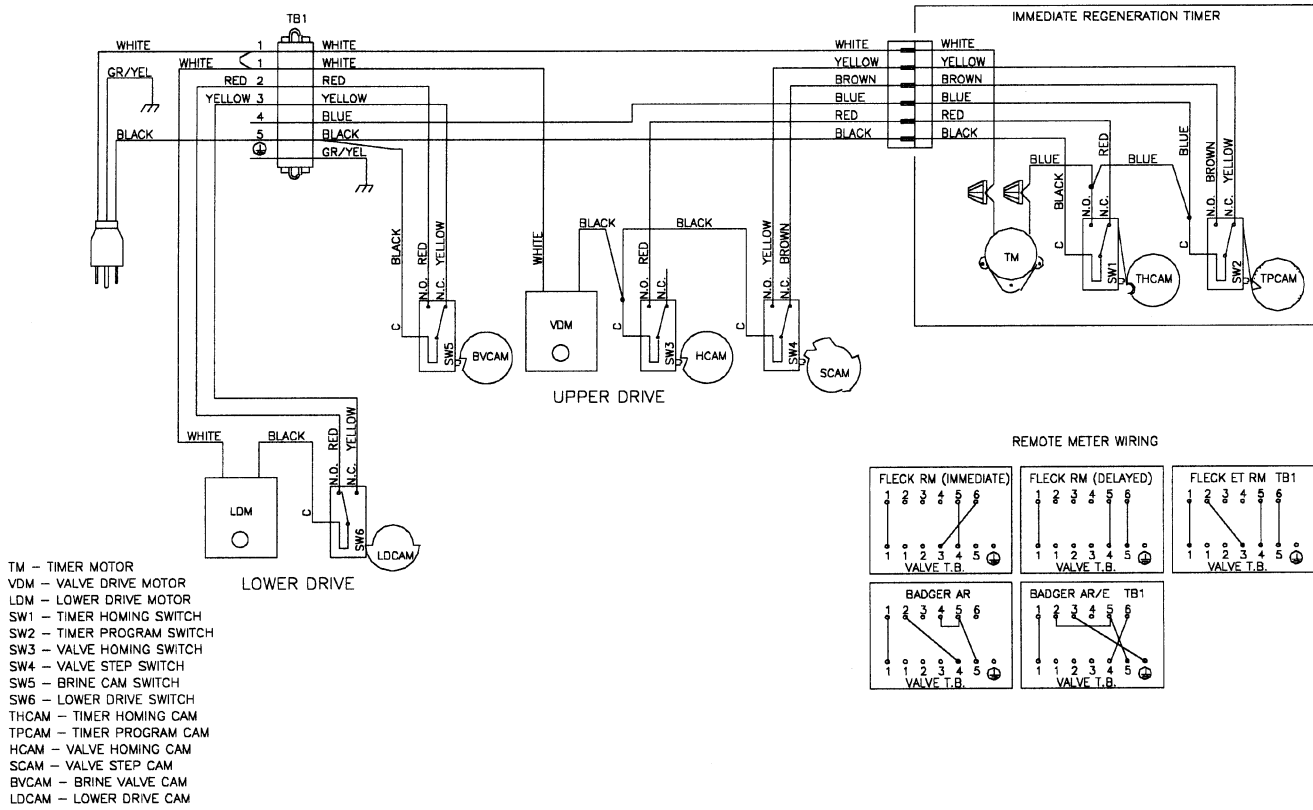


NOTE:  
SINGLE TANK TIMELOCK, METER DELAYED, OR METER IMMEDIATE REGENERATION.

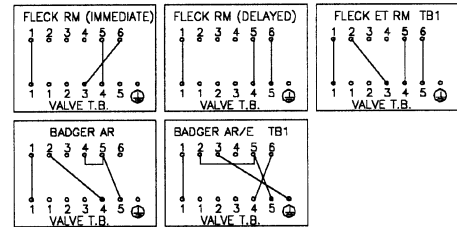
# MODEL 2900

## System #4-With Remote Signal Start

### Valve Wiring



REMOTE METER WIRING

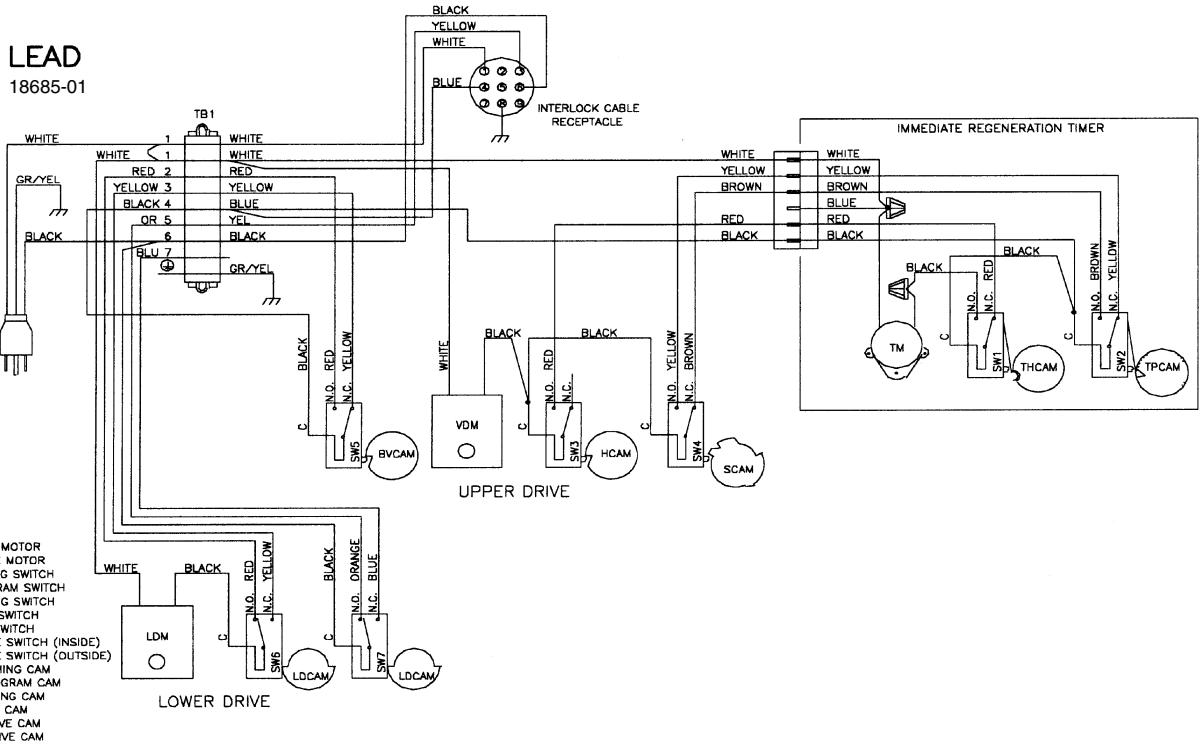


NOTE:  
SINGLE TANK REMOTE METER DELAYED, OR IMMEDIATE REGENERATION.

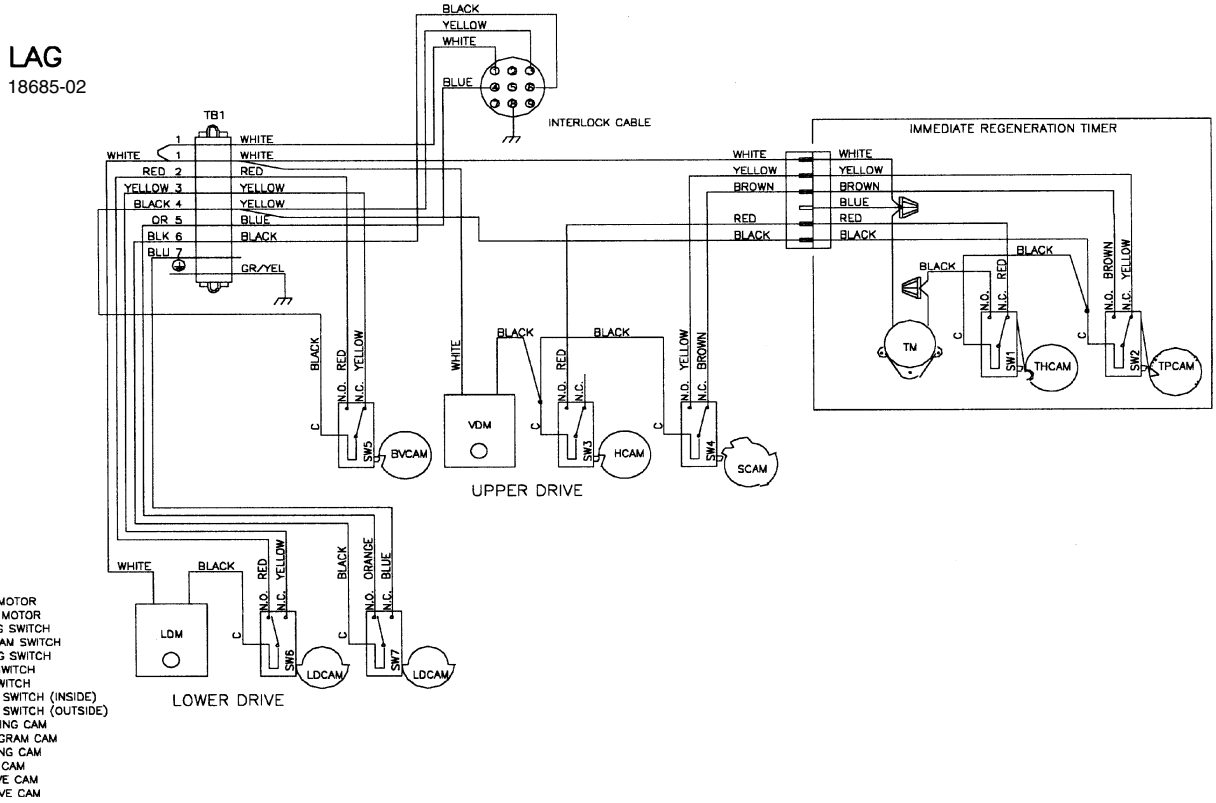
# MODEL 2900

## System #5-Interlocked Regeneration

### Valve Wiring



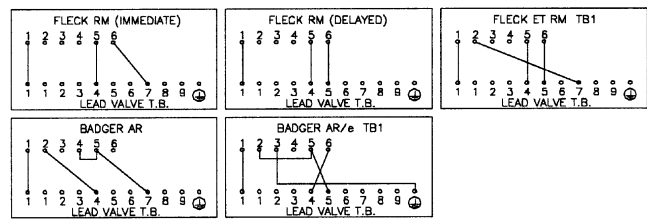
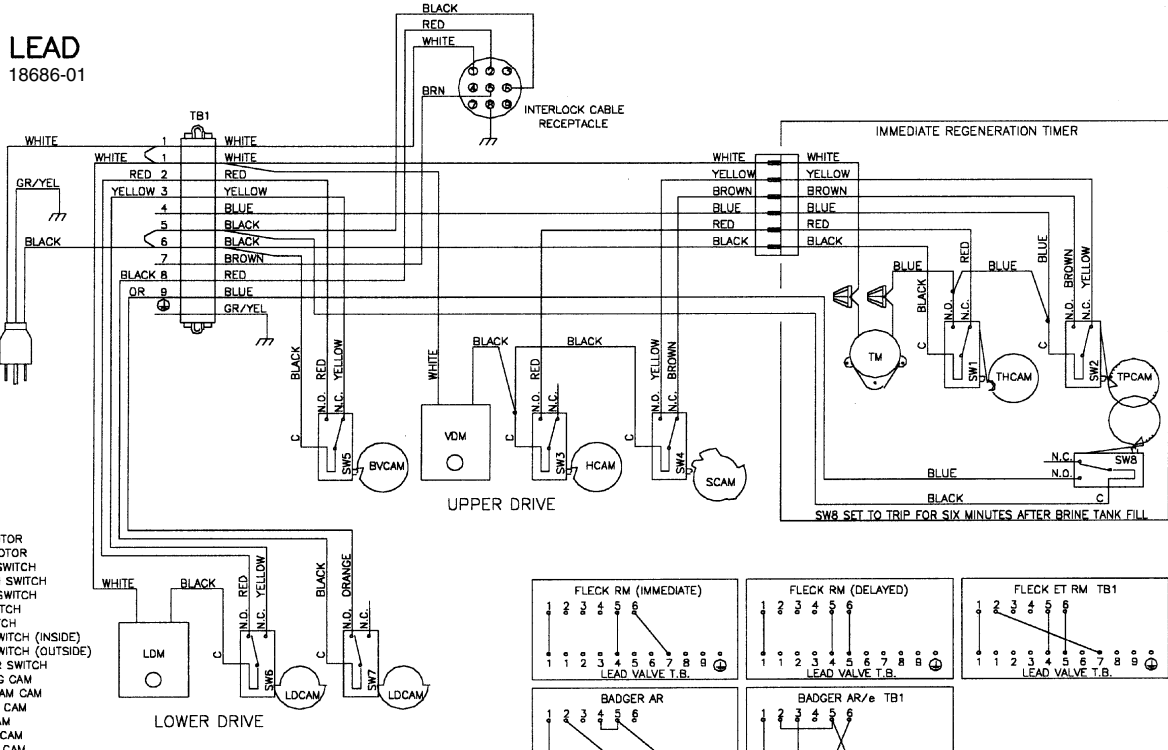
NOTE:  
TWO TANK INTERLOCKED, INDIVIDUAL METER, IMMEDIATE REGENERATION.  
BOTH TANKS NORMALLY IN SERVICE. ONLY ONE TANK IN REGENERATION,  
THE OTHER REMAINS IN SERVICE.



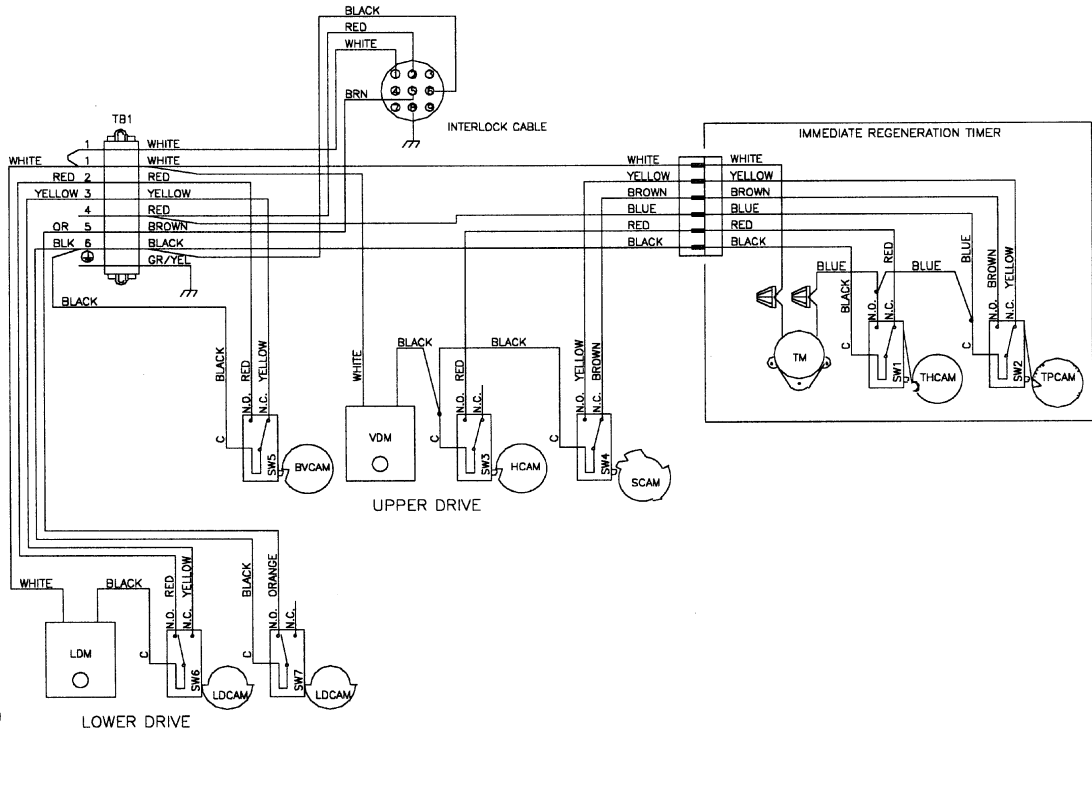
# MODEL 2900

## System #6-Series Regeneration

### Valve Wiring



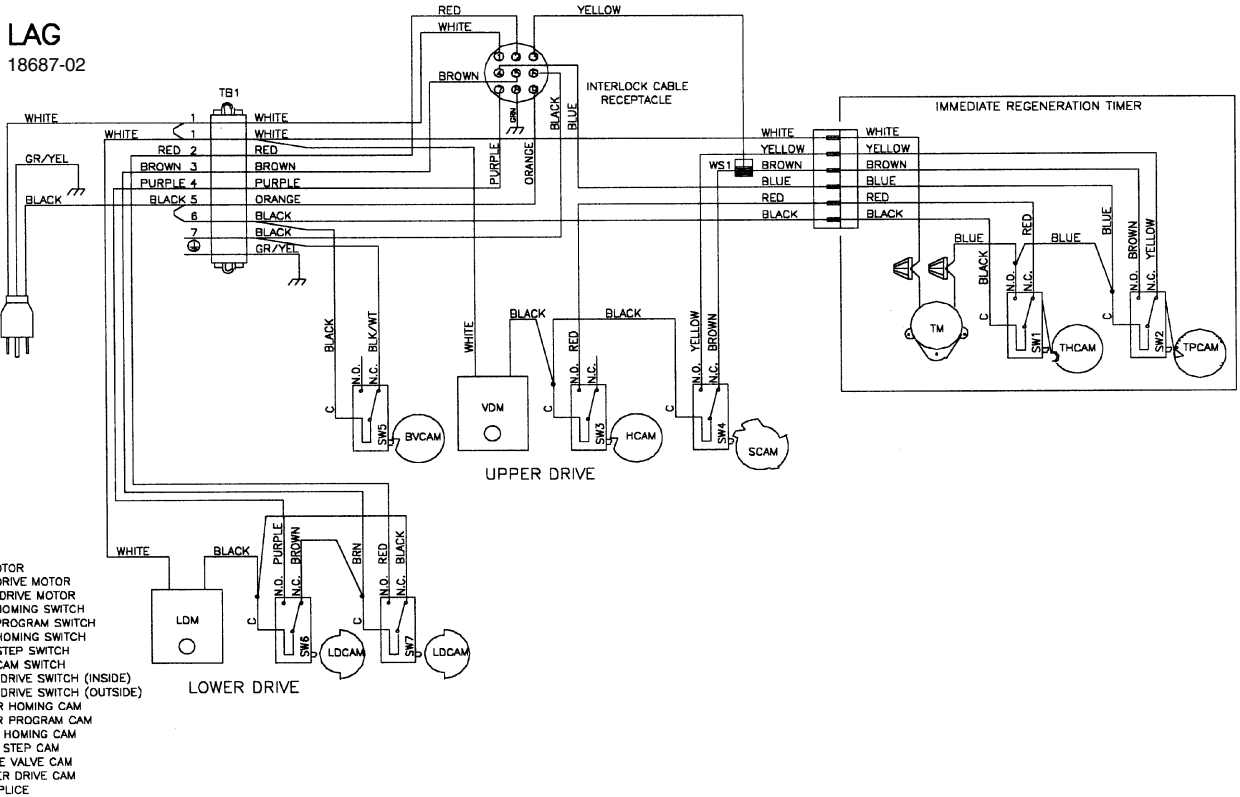
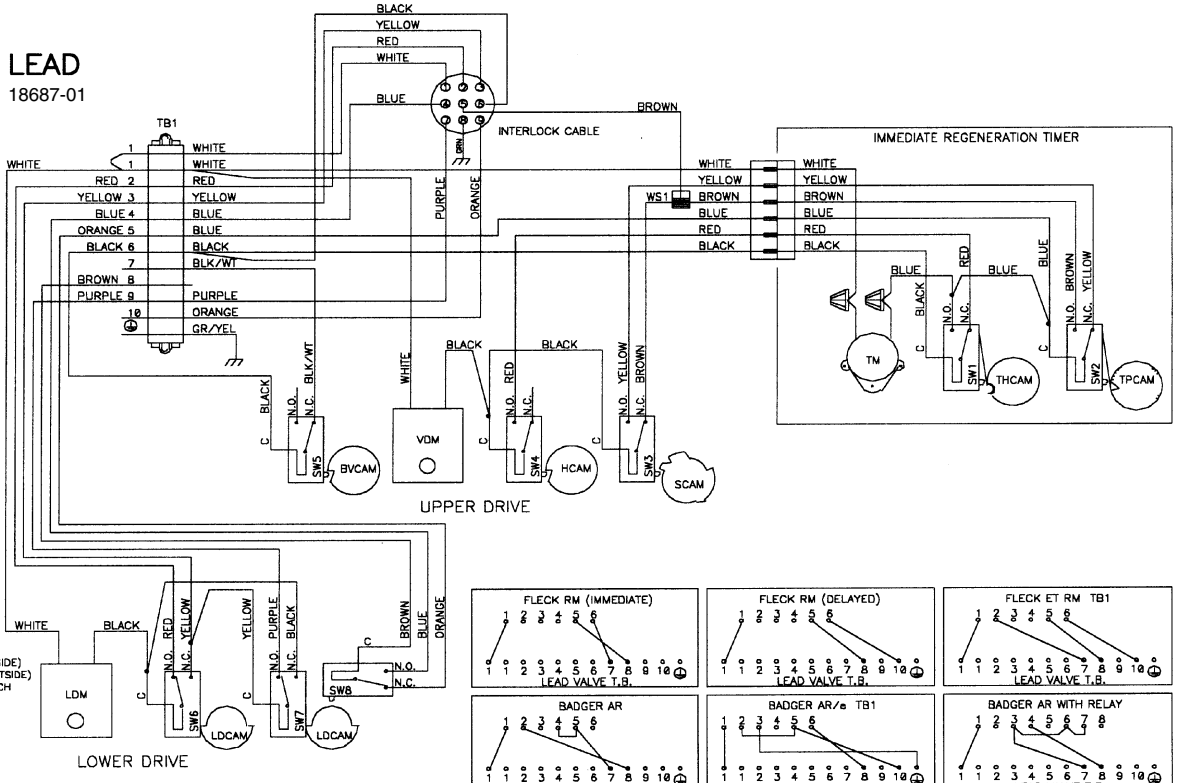
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# MODEL 2900

## System #7-Alternating Regeneration

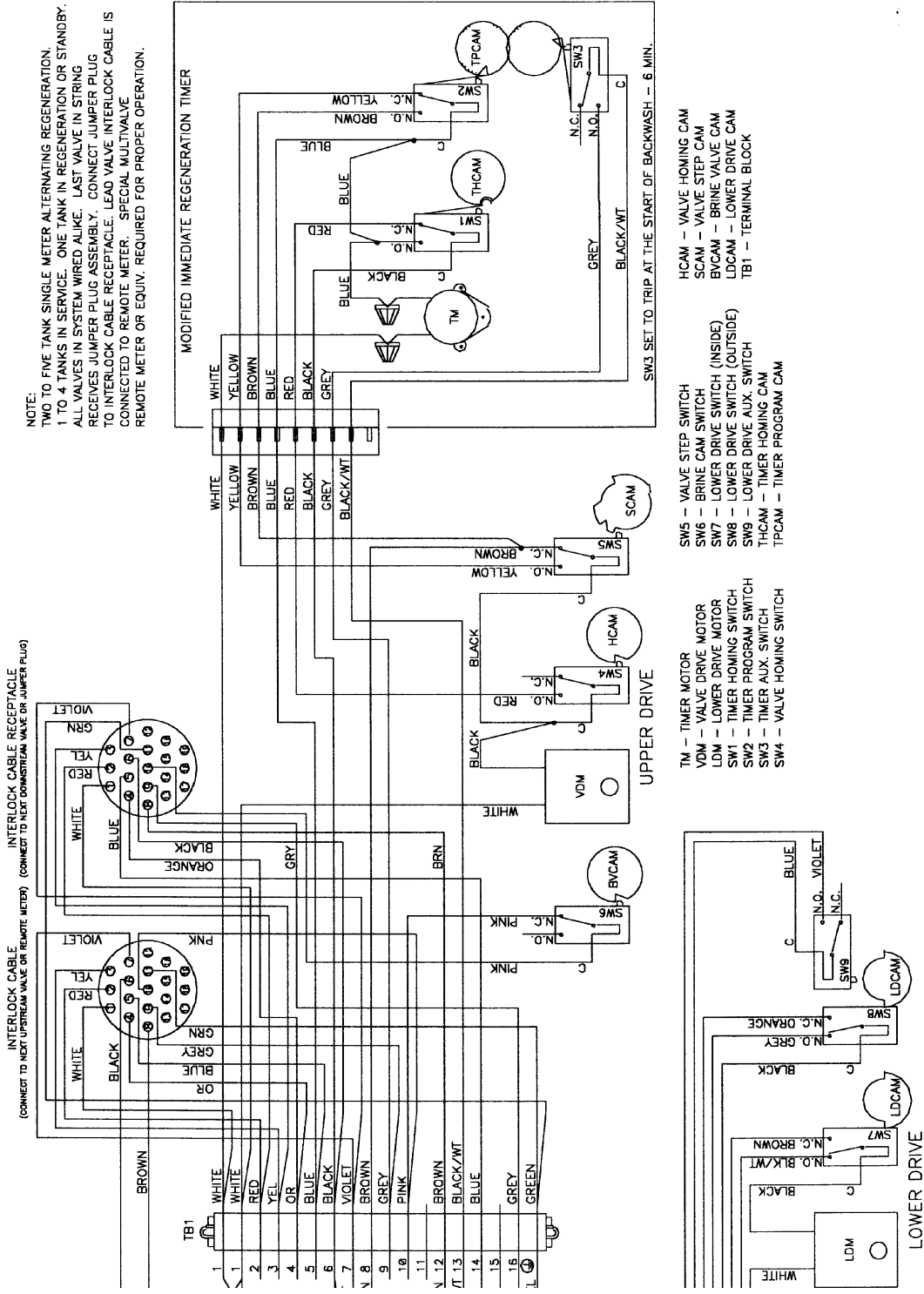
### Valve Wiring



# MODEL 2900

## System #7-Alternating Regeneration

### Multi-Valve System Valve Wiring



16172



# MODEL 2900

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*Notes*

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# MODEL 2900

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# MODEL 2900

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