



FLECK 2900S

SERVICE MANUAL

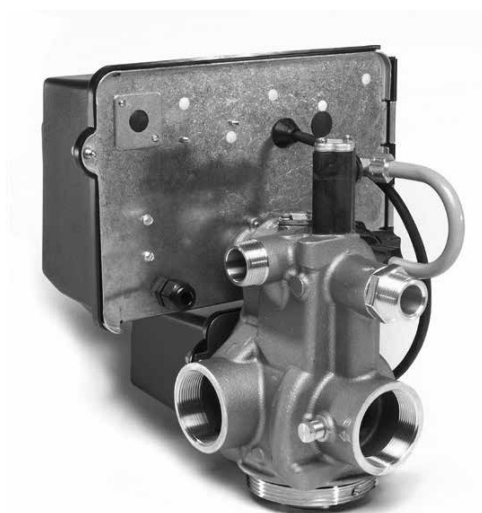


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CALIFORNIA PROPOSITION 65 WARNING

⚠ WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

JOB SPECIFICATION SHEET

Job Number: _____
Model Number: _____
Water Hardness: _____ ppm or gpg
Capacity Per Unit: _____
Mineral Tank Size: _____ Diameter: _____ Height: _____
Salt Setting per Regeneration: _____

1. Type of Timer:

- A. 7 Day or 12 Day
- B. Meter Initiated

2. Downflow: Upflow Upflow Variable

3. Meter Size:

- A. 3/4-inch Std Range (125 - 2,100 gallon setting)
- B. 3/4-inch Ext Range (625 - 10,625 gallon setting)
- C. 1-inch Std Range (310 - 5,270 gallon setting)
- D. 1-inch Ext Range (1,150 - 26,350 gallon setting)
- E. 1-1/2 inch Std Range (625 - 10,625 gallon setting)
- F. 1-1/2 inch Ext Range (3,125 - 53,125 gallon setting)
- G. 2-inch Std Range (1,250 - 21,250 gallon setting)
- H. 2-inch Ext Range (6,250 - 106,250 gallon setting)
- I. 3-inch Std Range (3,750 - 63,750 gallon setting)
- J. 3-inch Ext Range (18,750 - 318,750 gallon setting)
- K. Electronic ____ Pulse Count ____ Meter Size _____

4. System Type:

- A. System #4: 1 Tank, 1 Meter, Immediate, or Delayed Regeneration
- B. System #4: Time Clock
- C. System #4: Twin Tank
- D. System #5: 2-5 Tanks, Interlock Mechanical
2-4 Tanks, Interlock Electronic
Meter per unit for Mechanical and Electronic
- E. System #6: 2-5 Tanks, 1 Meter, Series Regeneration, Mechanical
2-4 Tanks, 1 Meter, Series Regeneration, Electronic
- F. System #7: 2-5 Tanks, 1 Meter, Alternating
Regeneration, Mechanical
2 Tanks only, 1 Meter, Alternating
Regeneration, Electronic
- G. System #9: Electronic Only, 2-4 Tanks, Meter per Valve, Alternating
- H. System #14: Electronic Only, 2-4 Tanks, Meter per Valve.
Brings units on and offline based on flow.

5. Timer Program Settings:

- A. Backwash: _____ Minutes
- B. Brine and Slow Rinse: _____ Minutes
- C. Rapid Rinse: _____ Minutes
- D. Brine Tank Refill: _____ Minutes
- E. Pause Time: _____ Minutes
- F. Second Backwash: _____ Minutes

6. Drain Line Flow Control: gpm

7. Brine Line Flow Controller: gpm

8. Injector Size#:

9. Piston Type:

- A. Hard Water Bypass
- B. No Hard Water Bypass

INSTALLATION

Water Pressure

A minimum of 20 pounds (1.4 bar) of water pressure is required for regeneration valve to operate effectively.

Electrical Facilities

An uninterrupted alternating current (A/C) supply is required.

NOTE: Other voltages are available. Please make sure your voltage supply is compatible with your unit before installation.

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 to prevent air breaks and back flow.

Bypass Valves

Always provide for the installation of a bypass valve if unit is not equipped with one.

CAUTION Water pressure is not to exceed 125 psi (8.6 bar), water temperature is not to exceed 110°F (43°C), 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.
2. During cold weather, the installer should warm the valve to room temperature before operating.
3. All plumbing should be done in accordance with local plumbing codes. The pipe size for residential drain line should be a minimum of 1/2-inch (13 mm). Backwash flow rates in excess of 7 gpm (26.5 Lpm) or length in excess of 20 feet (6 m) require 3/4-inch (19 mm) drain line. Commercial drain lines should be the same size as the drain line flow control.
4. Refer to the dimensional drawing for cutting height of the distributor tube. If there is no dimensional drawing, cut the distributor tube flush with the top of the tank.
5. Lubricate the distributor o-ring seal and tank o-ring seal. Place the main control valve on tank.

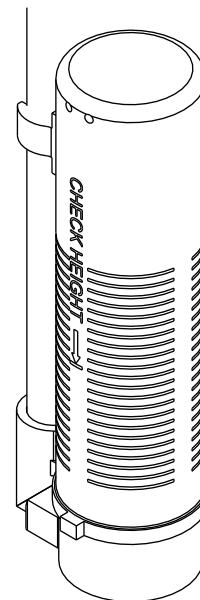
NOTE: Only use silicone lubricant.

6. **⚠ IMPORTANT:** For valves equipped with electromechanical timers and stainless steel meters, refer to the Meter Dome and Union Orientation section.
7. Solder joints near the drain must be done prior to connecting the Drain Line Flow Control fitting (DLFC). Leave at least 6 inches (15 cm) between the DLFC and solder joints when soldering pipes that are connected on the DLFC. Failure to do this could cause interior damage to the DLFC.
8. Plumber tape is the only sealant to be used on the drain fitting. The drain from twin tank units may be run through

a common line.

9. Make sure that the floor is clean beneath the salt storage tank and that it is level.
10. Place approximately 1 inch (25 mm) of water above the grid plate. If a grid is not utilized, fill to the top of the air check (Figure 1) in the salt tank. Do not add salt to the brine tank at this time.
11. 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. Once clean, close the water tap.
12. Slowly place the by-pass in service position and let water flow into the mineral tank. When water flow stops, slowly open a cold water tap nearby and let run until the air is purged from the unit.
13. Plug unit into an electrical outlet.

NOTE: All electrical connections must be connected according to local codes. Be certain the outlet is uninterrupted.



60002 Rev E

Figure 1 Residential Air Check Valve

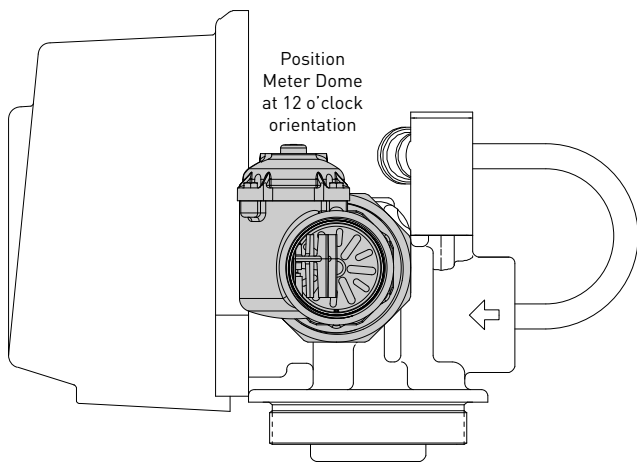
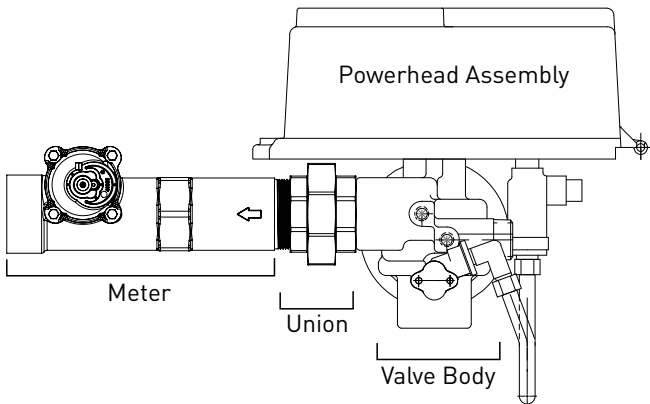
INSTALLATION *CONTINUED*

Meter Dome and Union Orientation

Control valves outfitted with an electromechanical timer and stainless steel water meter include a special male x female threaded stainless steel union to insure proper installation and operation of the water meter.

⚠ WARNING: The location of this union in relation to the control valve and water meter is critical for proper operation. DO NOT omit or substitute this special union; it positions the meter dome at the correct distance from the control valve and allows re-positioning the water meter dome for proper operation.

1. Apply a suitable thread sealant to the male threads of the union and meter body.
2. Thread the union into the OUTLET port of the control valve, then thread the meter into the union. See illustrations below.
3. Rotate the water meter body so the meter dome is at the 12 o'clock position. Loosen the nut on the union to facilitate this if required. Once in position, tighten the union nut.
4. Connect the meter cable to the open port in the center of the meter dome.
5. Continue with the installation of the control valve.



START-UP INSTRUCTIONS

The water softener should be installed with the inlet, outlet, and drain connections made in accordance with the manufacturer's recommendations, and to meet applicable plumbing codes.

1. Turn the manual regeneration knob slowly in a clockwise direction until the program micro switch lifts on top of the first set of pins. Allow the drive motor to move the piston to the first regeneration step and stop. Each time the program switch position changes, the valve will advance to the next regeneration step. Always allow the motor to stop before moving to the next set of pins or spaces.

NOTE: For electronic valves, please refer to the manual regeneration part of the timer operation section. If the valve came with a separate electronic timer service manual, refer to the timer operation section of the electronic timer service manual.

2. Position the valve to backwash. Ensure the drain line flow remains steady for 10 minutes or until the water runs clear (see above).
3. Position the valve to the brine / slow rinse position. Ensure the unit is drawing water from the brine tank (this step may need to be repeated).
4. Position the valve to the rapid rinse position. Check the drain line flow, and run for 5 minutes or until the water runs clear.
5. Position the valve to the start of the brine tank fill cycle. Ensure water goes into the brine tank at the desired rate. The brine valve drive cam will hold the valve in this position to fill the brine tank for the first regeneration.
6. Replace control box cover.
7. Put salt in the brine tank.

NOTE: Do not use granulated or rock salt.

3200 TIMER SETTING PROCEDURE

How To Set Days On Which Water Conditioner Is To Regenerate (Figure 2)

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

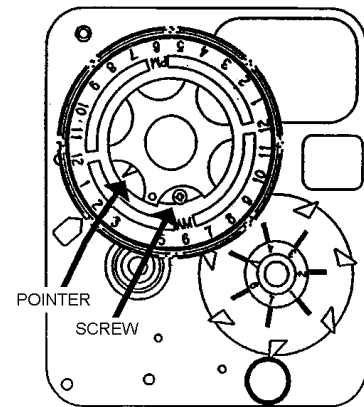
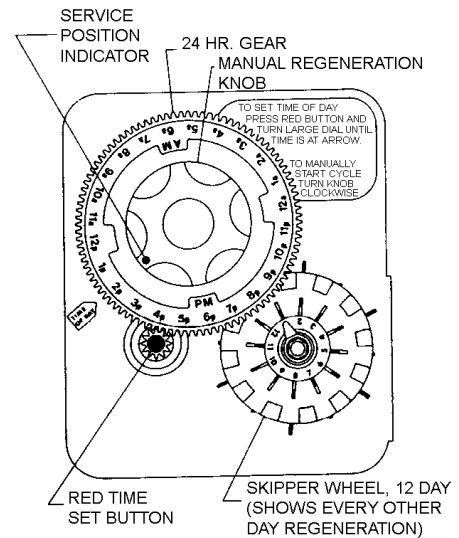
1. Press and hold the red button in to disengage the drive gear.
2. Turn the large gear until the actual time of day is at the time of day pointer.
3. Release the red button to again engage the drive gear.

How To Manually Regenerate Your Water Conditioner At Any Time

1. Turn the manual regeneration knob clockwise.
2. This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration program.
3. The black center knob will make one revolution in the following approximately three hours and stop in the position shown in the drawing.
4. 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.
5. 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

IMPORTANT!
SALT LEVEL MUST ALWAYS BE ABOVE
WATER LEVEL IN BRINE TANK

61502-3200 Rev A

Figure 2

3210 & 3220 TIMER SETTING PROCEDURE

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 (Figure 3).

NOTE: Drawing shows 8,750 gallon setting. The capacity (gallons) arrow (15) shows zero gallons remaining. The unit will regenerate tonight at the set regeneration time.

How To Set The Time Of Day

1. Press and hold the red button in to disengage the drive gear.
2. Turn the large gear until the actual time of day is opposite the time of day pointer.
3. Release the red button to again engage the drive gear.

How To Manually Regenerate Your Water Conditioner At Any Time

1. Turn the manual regeneration knob clockwise.
2. This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration program.

3210 & 3220 TIMER SETTING

PROCEDURE *CONTINUED*

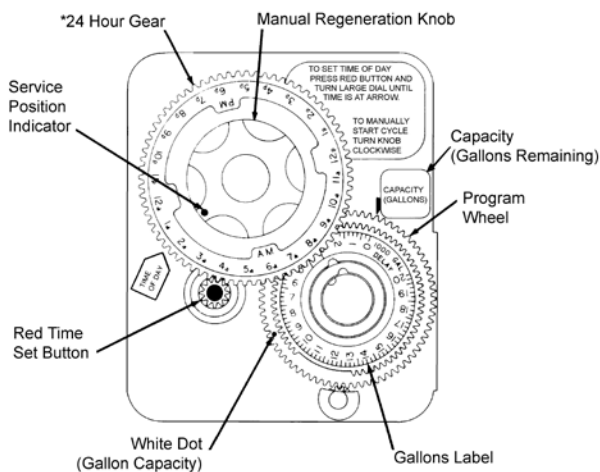
- The black center knob will make one revolution in the following approximately three hours and stop in the position shown in the drawing.
- Even though it takes three hours for this center knob to complete one revolution, the regeneration cycle of your unit might be set for only one half of this time.
- 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. The timer will regenerate as soon as the capacity gallons reaches zero.

NOTE: The program wheel to the left may be different than the program wheel on the product.

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



61502-3200 Rev A

Figure 3

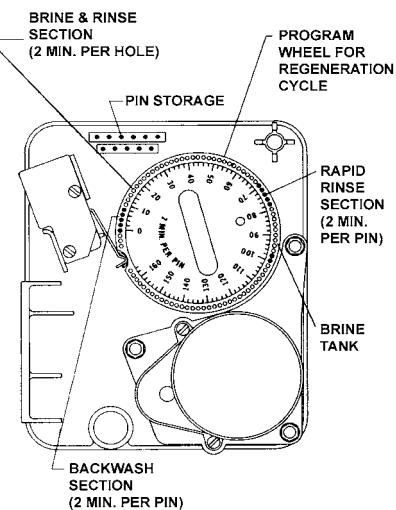
3200, 3210, 3220, 3230 REGENERATION CYCLE SETTING PROCEDURE

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 Series Timers (Figure 4)

- 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.



61502-3210 Rev A

Figure 4

Timer Setting Procedure

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

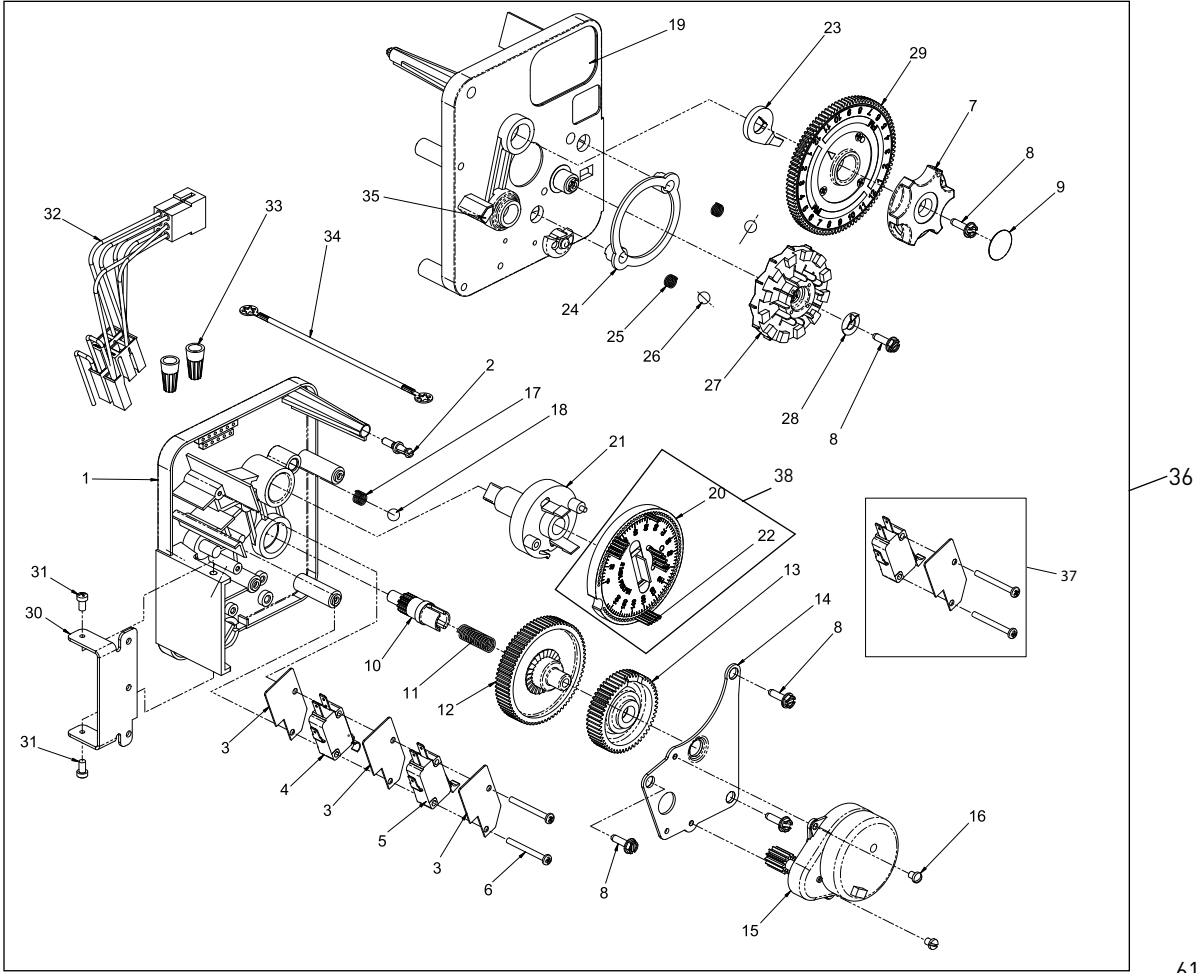
- The second group of pins on the program wheel determines the length of time that your water conditioner will rapid rinse (2 min. per pin).
- To change the length of rapid rinse time, add or remove pins at the higher numbered end of this section as required. The number of pins times two equals the rapid 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.

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3200 TIME CLOCK TIMER ASSEMBLY



615023200 Rev A

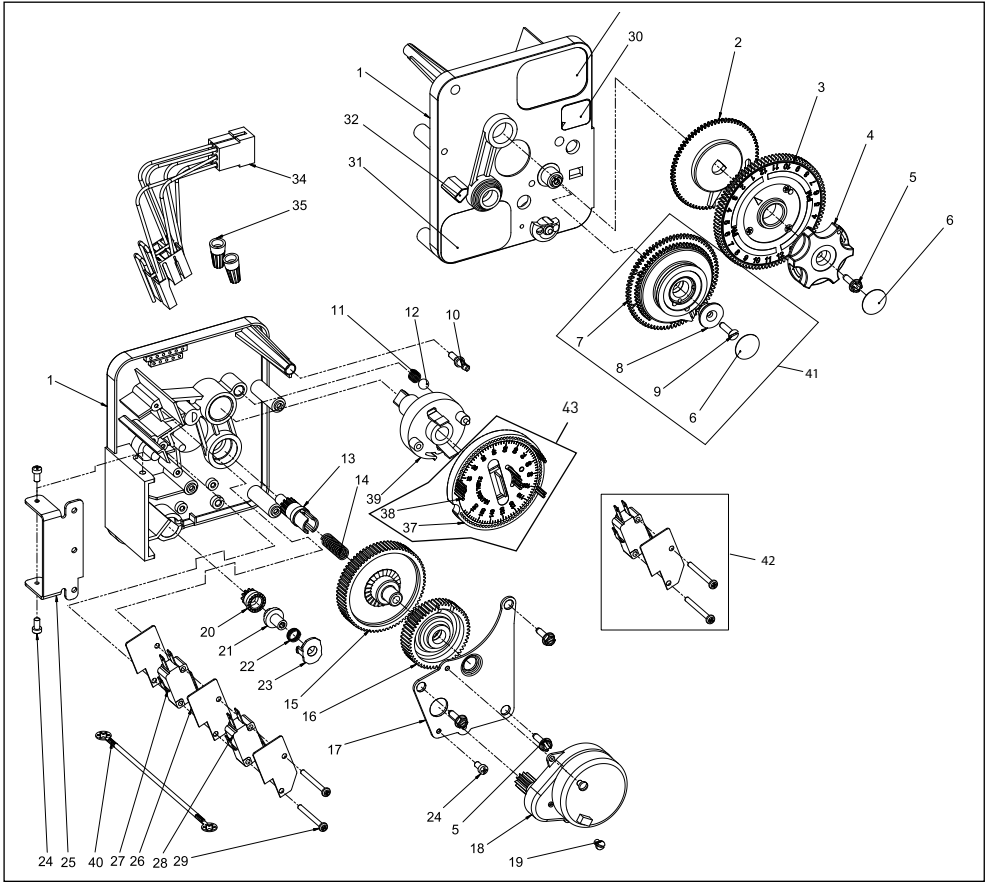
3200 TIME CLOCK TIMER ASSEMBLY

CONTINUED

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|----------|--------------------------------------|----------|-----|----------|---|
| 1 | 1 | 13870 | Housing, Timer, 3200 | 27 | 1 | 14381 | Skipper Wheel Assy, 12 Day |
| 2 | 1 | 14265 | Clip, Sping | | 1 | 14860 | Skipper Wheel Assy, 7 Day |
| 3 | 3 | 14087 | Insulator | 28 | 1 | 13014 | Pointer, Regeneration |
| 4 | 1 | 10896 | Switch, Micro | 29 | 1 | 40096-24 | Dial, 12 AM Regen Assy, Black |
| 5 | 1 | 15320 | Switch, Micro, Timer | | | 40096-02 | Dial, 2 AM Regen Assy, Black |
| 6 | 2 | 11413 | Screw, Pan Hd Mach, 4-40 x 1-1/8 | 30 | 1 | 13881 | Bracket, Hinger Timer |
| 7 | 1 | 13886 | Knob, 3200 | 31 | 2 | 11384 | Screw, Phil, 6-32 x 1/4 Zinc |
| 8 | 5 | 13296 | Screw, Hex Wsh, 6-20 x 1/2 | 32 | 1 | 13902 | Harness, 3200 |
| 9 | 1 | 11999 | Label, Button | 33 | 2 | 40422 | Nut, Wire, Tan |
| 10 | 1 | 13018 | Pinion, Idler | 34 | 1 | 15354-01 | Wire, Ground, 4 inches |
| 11 | 1 | 13312 | Spring, Idler Shaft | 35 | 1 | 14007 | Label, Time of Day |
| 12 | 1 | 13017 | Gear, Idler | 36 | 1 | * | Complete 3200 Time Clock Timer Assembly |
| 13 | 1 | 13164 | Gear, Drive | 37 | | 60320-02 | Switch Kit, 3200/9000 Timer Auxiliary, Optional |
| 14 | 1 | 13887 | Plate, Motor Mounting | 38 | | 61420-03 | Program Wheel, Gear Assy, Filter 2 Min Per Pin |
| 15 | 1 | 18743-1 | Motor, 120V, 60Hz, 1/30 RPM | | | 61420-04 | Program Wheel, Gear Assy, Softener, 2 Min Per Pin |
| | | 18752-1 | Motor, 100V, 50Hz, 1/30 RPM | | | | |
| | | 18824-1 | Motor, 230V, 50Hz, 1/30 RPM | | | | |
| | | 18826-1 | Motor, 24V, 50Hz, 1/30 RPM | | | | |
| | | 19659-1 | Motor, 24V, 60Hz, 1/30 RPM | | | | |
| | | 19660-1 | Motor, 230V, 60Hz, 1/30 RPM | | | | |
| 16 | 2 | 13278 | Screw, Sltd Fillister Hd 6-32 x .156 | | | | |
| 17 | 1 | 15424 | Spring, Detent, Timer | | | | |
| 18 | 1 | 15066 | Ball, 1/4-inch, Delrin | | | | |
| 19 | 1 | 15465 | Label, Caution | | | | |
| 20 | 1 | 19210 | Program Wheel Assy | | | | |
| 21 | 1 | 13911 | Gear, Main Drive, Timer | | | | |
| 22 | 17 | 41754 | Pin, Spring, 1/16 x 5/8 SS, Timer | | | | |
| 23 | 1 | 13011 | Arm, Cycle Actuator | | | | |
| 24 | 1 | 13864 | Ring, Skipper Wheel | | | | |
| 25 | 2 | 13311 | Spring, Detent, Timer | | | | |
| 26 | 2 | 13300 | Ball, 1/4-inch, SS | | | | |

*Call your distributor for Part Number

3210 METER DELAYED TIMER ASSEMBLY



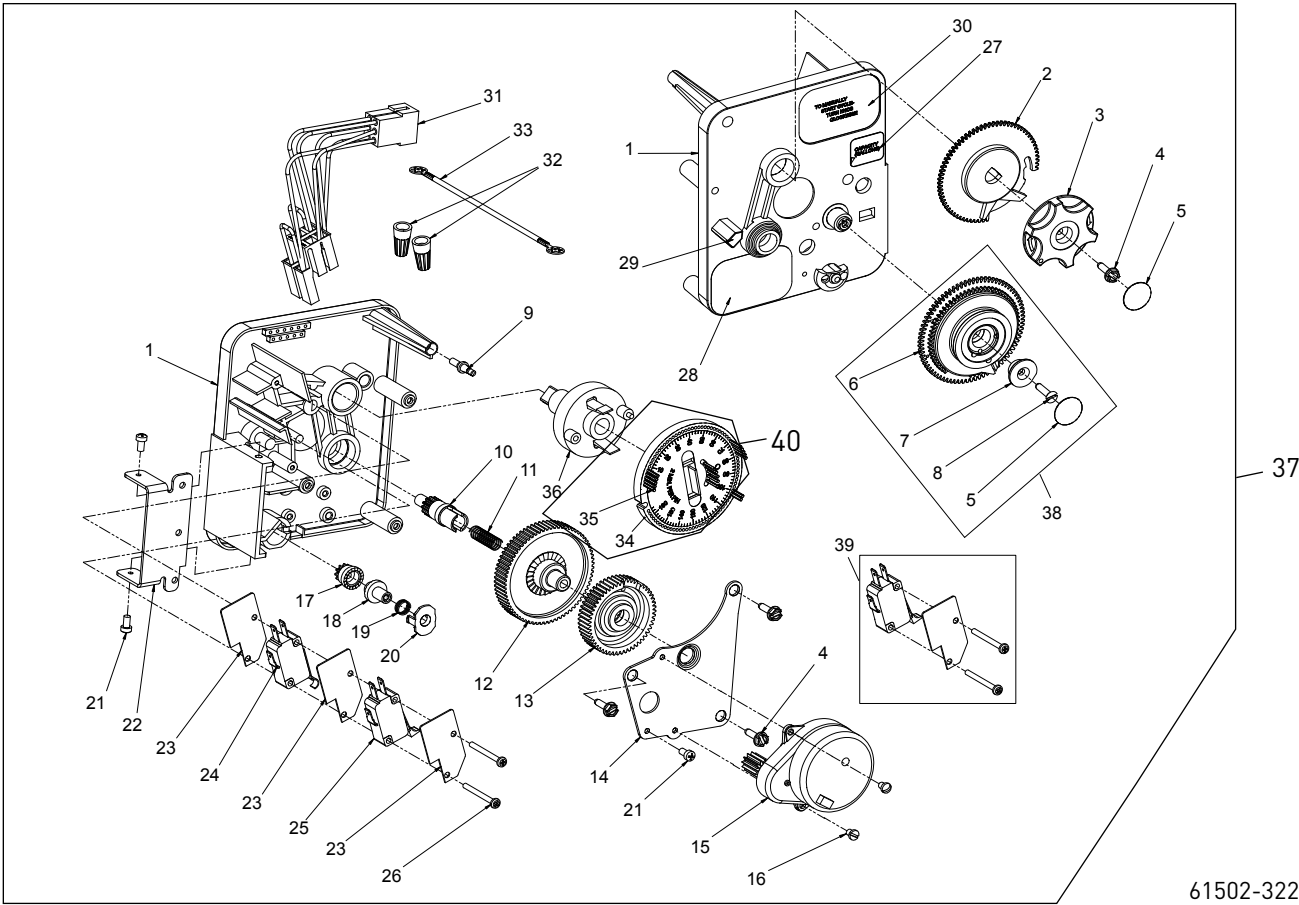
61502-3210 Rev A

3210 METER DELAYED TIMER ASSEMBLY

CONTINUED

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|----------|-------------------------------------|--|-----|----------|--|
| 1 | 1 | 13870 | Housing, Timer, 3200 | 30 | 1 | 14198 | Label, Indicator |
| 2 | 1 | 13802 | Gear, Cycle Actuator | 31 | 1 | 15465 | Label, Caution |
| 3 | 1 | 40096-02 | Dial 2 AM Regen Assy, Black | 32 | 1 | 14007 | Label, Time of Day |
| 4 | 1 | 13886 | Knob, 3200 | 33 | 1 | 14045 | Label, Instruction |
| 5 | 4 | 13296 | Screw, Hex Wsh, 6-20 x 1/2 | 34 | 1 | 13902 | Harness, 3200 |
| 6 | 2 | 11999 | Label, Button | 35 | 2 | 40422 | Nut, Wire, Tan |
| 7 | 1 | 13803 | Gear, Program Drive Wheel | 36 | 1 | 15354-01 | Wire, Ground, 4 inches |
| 8 | 1 | 13806 | Retainer, Program Wheel | 37 | 1 | 19210 | Program Wheel Assy |
| 9 | 1 | 13748 | Screw, Flat Head St, 6-20 x 1/2 | 38 | 17 | 41754 | Pin, Spring, 1/16 x 5/8 SS, Timer |
| 10 | 1 | 14265 | Clip, Spring | 39 | 1 | 13911 | Gear, Main Drive, Timer |
| 11 | 1 | 15424 | Spring, Detent, Timer | 40 | 1 | * | Complete 3210 Meter Delayed Timer Assembly |
| 12 | 1 | 15066 | Ball, 1/4-inch Delrin | 41 | | 60405-50 | Program Wheel, w/2-inch STD Label 0-21,000 gal |
| 13 | 1 | 13018 | Pinion, Idler | | | 60405-60 | Program Wheel, w/2-inch EXT Label 0-100,000 gal |
| 14 | 1 | 13312 | Spring, Idler Shaft | | | 60405-61 | Program Wheel, w/2-inch EXT Range 375 m3 |
| 15 | 1 | 13017 | Gear, Idler | 42 | | 60320-02 | Switch Kit, 3200/9000 Timer Auxiliary, Optional |
| 16 | 1 | 13164 | Gear, Drive | 43 | | 61420-03 | Program Wheel, Gear Assy, Filter 2 Min Per Pin |
| 17 | 1 | 13887 | Plate, Motor Mounting | | | 61420-04 | Program Wheel, Gear Assy, Softener, 2 Min Per Pin |
| 18 | 1 | 18743-1 | Motor, 120V, 60Hz 1/30 RPM | *Call your distributor for Part Number | | | |
| | | 18752-1 | Motor, 100V, 50Hz, 1/30 RPM | | | | |
| | | 18824-1 | Motor, 230V, 50Hz, 1/30 RPM | | | | |
| | | 18826-1 | Motor, 24V, 50Hz, 1/30 RPM | | | | |
| | | 19659-1 | Motor, 24V, 60Hz, 1/30 RPM | | | | |
| | | 19660-1 | Motor, 230V, 60Hz, 1/30 RPM | | | | |
| 19 | 1 | 13278 | Screw, Fillister Hd, 6-32 x .156 | | | | |
| 20 | 1 | 13830 | Pinion, Program Wheel Drive | | | | |
| 21 | 1 | 13831 | Clutch, Drive Pinion | | | | |
| 22 | 1 | 14276 | Spring, Meter, Clutch | | | | |
| 23 | 1 | 14253 | Retainer, Clutch Spring | | | | |
| 24 | 3 | 11384 | Screw, Phil, 6-32 x 1/4 | | | | |
| 25 | 1 | 13881 | Bracket, Hinge Timer | | | | |
| 26 | 3 | 14087 | Insulator | | | | |
| 27 | 1 | 10896 | Switch, Micro | | | | |
| 28 | 1 | 15320 | Switch, Micro, Timer | | | | |
| 29 | 2 | 11413 | Screw, Pan Hd Mach, 4-40 x 1 1/8 | | | | |

3220 METER IMMEDIATE TIMER ASSEMBLY



61502-3220 Rev B

3220 METER IMMEDIATE TIMER

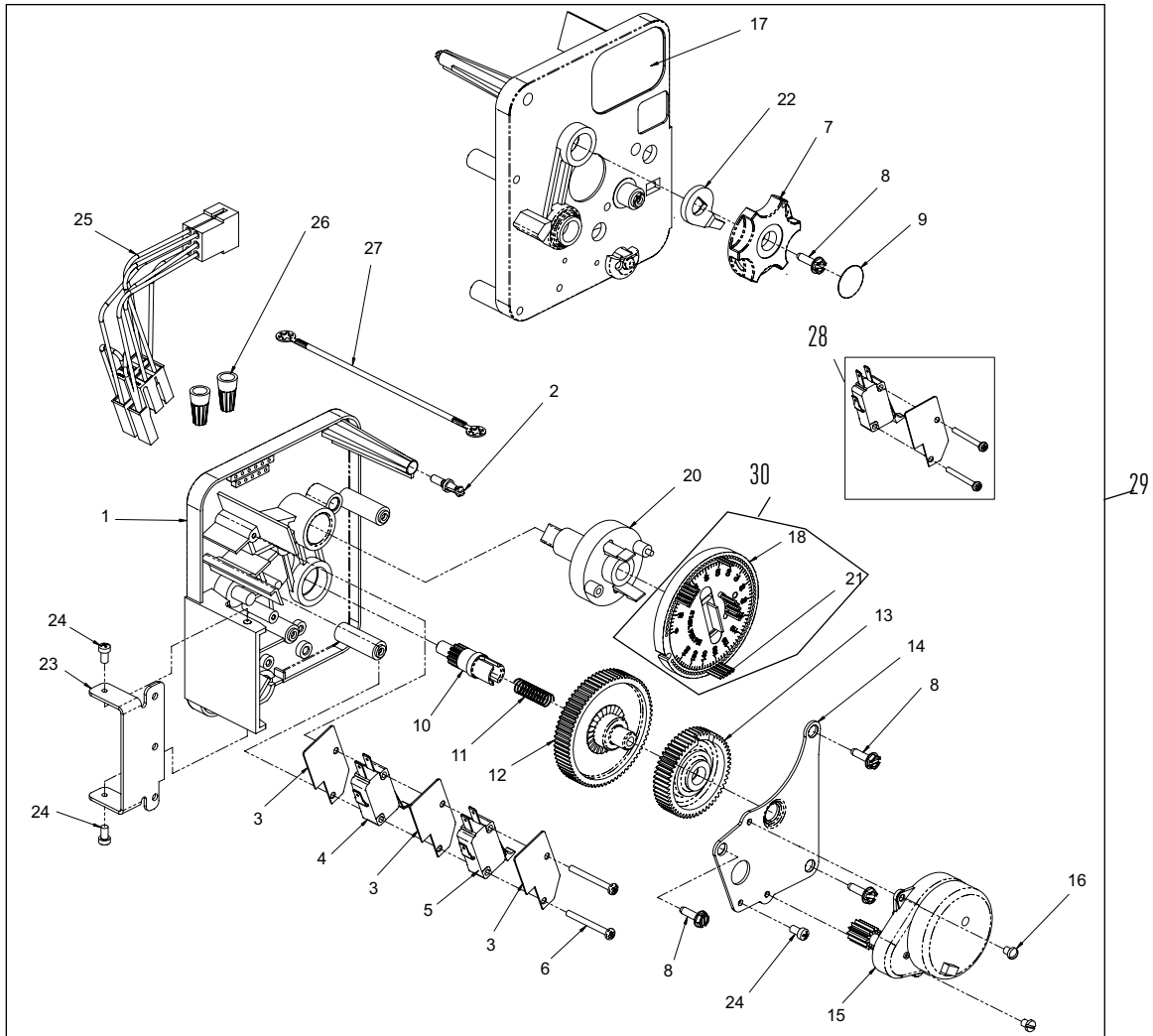
ASSEMBLY *CONTINUED*

| Item No. | QTY | Part No. | Description |
|----------|-----|----------|----------------------------------|
| 1 | 1 | 13870 | Housing, Timer |
| 2 | 1 | 15431 | Gear, Cycle Actuator, System #5 |
| 3 | 1 | 13886 | Knob, 3200 |
| 4 | 4 | 13296 | Screw, Hex Wsh, 6-20 x 1/2 |
| 5 | 2 | 11999 | Label, Button |
| 6 | 1 | 13807 | Gear, Program Drive Wheel |
| 7 | 1 | 13806 | Retainer, Program Wheel |
| 8 | 1 | 13748 | Screw, Flt Hd St, 6-20 x 1/2 |
| 9 | 1 | 14265 | Spring Clip |
| 10 | 1 | 13018 | Pinion, Idler |
| 11 | 1 | 18563 | Idler Shaft Spring |
| 12 | 1 | 13017 | Gear, Idler |
| 13 | 1 | 13164 | Drive Gear |
| 14 | 1 | 13887 | Plate, Motor Mounting |
| 15 | 1 | 18743-1 | Motor, 120V, 60 Hz, 1/30 RPM |
| | | 18752-1 | Motor, 100V, 50Hz, 1/30 RPM |
| | | 18824-1 | Motor, 230V, 50Hz, 1/30 RPM |
| | | 18826-1 | Motor, 24V, 50Hz, 1/30 RPM |
| | | 19659-1 | Motor, 24V, 60Hz, 1/30 RPM |
| | | 19660-1 | Motor, 230V, 60Hz, 1/30 RPM |
| 16 | 2 | 13278 | Screw, Slt'd Fillister Hd |
| 17 | 1 | 14502 | Pinion, Program Wheel |
| 18 | 1 | 14501 | Clutch, Drive Pinion |
| 19 | 1 | 14276 | Meter Clutch Spring |
| 20 | 1 | 14253 | Retainer, Clutch Spring |
| 21 | 3 | 11384 | Screw, Phil, 6-32 x 1/4 Zinc |
| 22 | 1 | 13881 | Bracket, Hinge Timer |
| 23 | 3 | 14087 | Insulator |
| 24 | 1 | 15414-00 | Micro Switch |
| 25 | 1 | 15320 | Switch, Micro, Timer |
| 26 | 2 | 11413 | Screw, Pan Hd Mach, 4-40 x 1-1/8 |
| 27 | 1 | 14198 | Label, Indicator |
| 28 | 1 | 15465 | Label, Caution |
| 29 | 1 | 14007 | Label, Time of Day |
| 30 | 1 | 15148 | Label, Instruction |

| Item No. | QTY | Part No. | Description |
|----------|-----|----------|--|
| 31 | 1 | 40617 | Harness, 3220 |
| 32 | 2 | 40422 | Nut, Wire, Tan |
| 33 | 1 | 15354-01 | Wire, Ground, 4 inches |
| 34 | 1 | 19210-05 | Program Wheel Assembly, 9000/3230 |
| 35 | 17 | 41754 | Pin, Spring, 1/16 x 5/8 Stainless Steel, Timer |
| 36 | 1 | 15055 | Gear, Main Drive |
| 37 | 1 | * | Complete 3220 Meter Immediate Timer Assy |
| 38 | | 60405-50 | Program Wheel, w/2-inch STD Label 0-21,000 gal |
| | | 60405-60 | Program Wheel, w/2-inch EXT Label 0-100,000 gal |
| | | 60405-61 | Program Wheel, w/2-inch EXT Range 375 m3 |
| 39 | | 60320-02 | Switch Kit, 3200/9000 Timer Auxiliary, Optional |
| 40 | | 61420-06 | Program Wheel, Gear Assy, Softener Immediate 2 Min Per Pin |
| | | 61420-42 | Program Wheel, Gear Assy, Filter Immediate 2 Min Per Pin |

*Call your distributor for Part Number

3230 REMOTE START TIMER ASSEMBLY



61502-3230R REV A

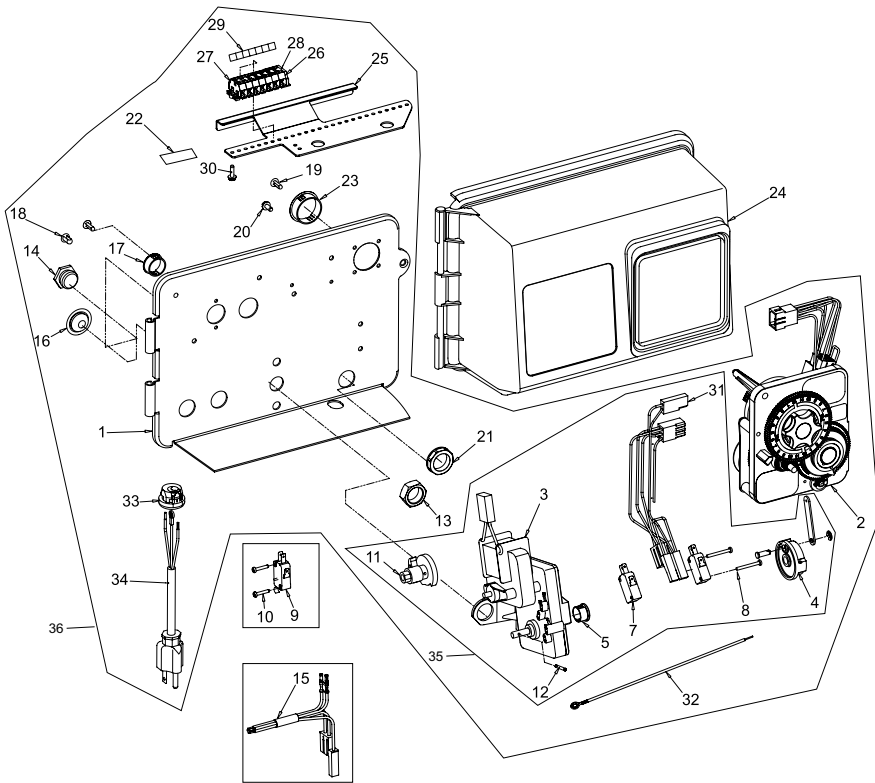
3230 REMOTE START TIMER ASSEMBLY

CONTINUED

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|----------|----------------------------------|----------|-----|----------|--|
| 1 | 1 | 13870 | Housing, Timer | 18 | 1 | 19210-05 | Program Wheel Assembly, 3200 |
| 2 | 1 | 14265 | Spring Clip | 20 | 1 | 15055 | Main Drive Gear |
| 3 | 3 | 14087 | Insulator | 21 | 17 | 41754 | Pin, Spring, 1/16 x 5/8 Stainless Steel, Timer |
| 4 | 1 | 15314 | Micro Switch | 22 | 1 | 13011 | Cycle Actuator Arm |
| 5 | 1 | 15320 | Switch, Micro, Timer | 23 | 1 | 13881 | Bracket, Hinge Timer |
| 6 | 2 | 11413 | Screw, Pan Hd Mach, 4-40 x 1-1/8 | 24 | 3 | 11384 | Screw, Phil, 6-32 x 1/4 Zinc |
| 7 | 1 | 13886 | Knob, 3200 | 25 | 1 | 16336 | Harness, 3230R |
| 8 | 4 | 13296 | Screw, Hex Wsh, 6-20 x 1/2 | 26 | 2 | 40422 | Nut, Wire, Tan |
| 9 | 1 | 11999 | Label, Button | 27 | 1 | 15354-01 | Wire, Ground, 4 inches |
| 10 | 1 | 13018 | Pinion, Idler | 28 | | 60320-02 | Switch Kit, 3200/9000 Timer Auxiliary, Optional |
| 11 | 1 | 18563 | Idler Shaft Spring | 29 | * | | 3230 Timer Assy |
| 12 | 1 | 13017 | Gear, Idler | 30 | | 61420-06 | Program Wheel, Gear Assy, Softener Immediate 2 Min Per Pin |
| 13 | 1 | 15055 | Drive Gear | | | 61420-42 | Program Wheel, Gear Assy, Filter Immediate 2 Min Per Pin |
| 14 | 1 | 13887 | Plate, Motor Mounting | | | | |
| 15 | 1 | 18743-1 | Motor, 120V, 60 Hz, 1/30 RPM | | | | |
| | | 18752-1 | Motor, 100V, 50Hz, 1/30 RPM | | | | |
| | | 18824-1 | Motor, 23V, 50Hz, 1/30 RPM | | | | |
| | | 18826-1 | Motor, 24V, 50Hz, 1/30 RPM | | | | |
| | | 19659-1 | Motor, 24V, 60Hz, 1/30 RPM | | | | |
| | | 19660-1 | Motor, 230V, 60Hz, 1/30 RPM | | | | |
| 16 | 2 | 13278 | Screw, Slted Fillister Hd | | | | |
| 17 | 1 | 15313 | Label, Caution | | | | |

*Call your distributor for Part Number

UPPER ENVIRONMENTAL POWERHEAD ASSEMBLY



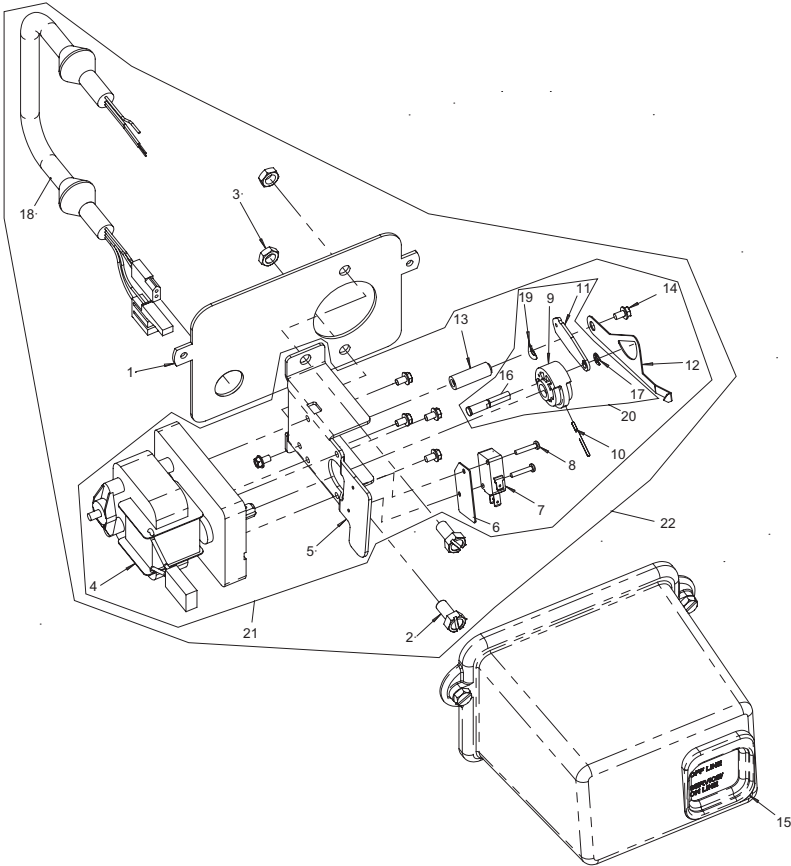
61501-2900 Rev G

UPPER ENVIRONMENTAL POWERHEAD

ASSEMBLY *CONTINUED*

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|-----------|--|---|-----|-----------|--|
| 1 | 1 | 18697-15 | Backplate, Hinged | 25 | 1 | 19772 | Bracket, Terminal Block |
| 2 | 1 | | 3200 Clock Timer Assembly | 26 | 1 | 40174 | Terminal Block, Green/ Yellow Commercial, 809- 260/141 |
| | | | 3200 Meter Timer Assembly | 27 | 6 | 41084 | Terminal Block, Segment, Gray |
| 3 | 1 | 41543 | Motor, Drive, 115V, 50/60 Hz | 28 | 1 | 41085 | Endplate, Terminal Block, Gray |
| | | 42579 | Motor, Drive, 24VAC/DC, 50/60 Hz | 29 | 2 | 15250 | Label, Terminal Strip |
| | | 41545 | Motor, Drive, 230V, 50/60 Hz | 30 | 2 | 13296 | Screw, Hex Wsh, 6-20 6-20 x 1/2 Type 25 Steel Zinc |
| 4 | 1 | 60160-15 | Drive Cam Assembly, STF, Blue, 2900 | 31 | 1 | 40400 | Harness, Drive, Designer/ Environmental |
| | | 60160-30* | Drive Cam Assembly, Upflow | 32 | 1 | 40175-01 | Wire, Ground, Commercial Valves |
| | | 60160-31* | Drive Cam Assembly, Upflow, Variable | 33 | 1 | 13547 | Strain Relief, Flat Cord Heyco #30-1 |
| 5 | 1 | 17904 | Bushing, Heyco 1/2, Heyco #2073 | | | 13547-01 | Strain Relief, Euro Round Cord |
| 7 | 2 | 10218 | Switch, Micro | | | 13547-02 | Strain Relief, U.S. Round |
| 8 | 2 | 14923 | Screw, Pan Hd Mach, 4-40 X 1 MS Steel Zinc | 34 | 1 | 11545 | Powercord, 4-foot European, Black |
| 9 | 1 | 10896 | Switch, Micro | | | 19303 | Powercord, 8-foot, Australian |
| 10 | 2 | 11805 | Screw, Rd Hd, 4-40 X 5/8 TYPE 1 Steel Zinc | | | 40084-12 | Powercord, 12-foot US, Round, 120V, Sys 5,6,7&2900/3150/3900 |
| 11 | 1 | 12472 | Cam Assy, Tri-Stack, After RR | | | 40085-12 | Powercord, 12-foot US, Round, 240V |
| | | 12777 | Cam, Shut-Off Valve | 35 | | 60050-23 | Drive Assy, 2750, STF, 24V 50/60 Hz, Downflow Less Lower Drive Brine Cam Switch, Item 9 & 10 |
| | | 15770 | Cam Assy, Special Tri- Stack, After Brine Fill | | | 60050-22 | Drive Assy, 2750, STF, 220V 50/60 Hz, Downflow Less Lower Drive Brine Cam Switch, Item 9 & 10 |
| | | 15805 | Cam, SVO | | | 60052-21 | Upper Drive Assy, 2900, STF 120V, Downflow |
| | | 19887* | Cam, Brine, 2750 U/F, Std | | | 60052-217 | Upper Drive Assy, 2900, STF 120V, System 7, Downflow |
| 12 | 2 | 10338 | Pin, Roll 3/32 x 7/8 | 36 | | ** | Upper Powerhead Assembly |
| 13 | 1 | 10269 | Nut, Jam, 3/4-16 | Not Shown: | | | |
| 14 | 1 | 43560 | Fitting, Brine Valve | 1 | | 15216 | Meter Cable Assembly, 15.25 inch long, 2 inch Brass Meter |
| 15 | 1 | 14822 | Harness, 2900 | 1 | | 15513 | Meter Cable Assembly, 17.5 inch long 2 inch Stainless Steel Meter |
| 16 | 2 | 19691 | Plug, .750 Dia Recessed, Black | 1 | | 15879 | Cable Guide Assembly, 2900 |
| 17 | 1 | 15806 | Plug, Hole, Heyco #2693 | *Upflow Only | | | |
| 18 | 1 | 19801 | Plug, .190 Dia, White Heyco 0307 | **Call your distributor for Part Number | | | |
| 19 | 7 | 19800 | Plug, .140 Dia, White Heyco 0304 | | | | |
| 20 | 4 | 10300 | Screw, Slot Hex Wsh, 8-18 X 3/8 Type "B" RC 44-47 | | | | |
| 21 | 1 | 18691-02 | Nut, Conduit Fitting 1/2- inch | | | | |
| 22 | 1 | 40038-03 | Label, Voltage, 120V, 3200ET | | | | |
| 23 | 1 | 17421 | Plug, 1.20 Hole Heyco #2733 | | | | |
| 24 | 1 | 60219-02 | Cover Assembly, Environmental, Black w/ Clear Window | | | | |

LOWER ENVIRONMENTAL POWERHEAD ASSEMBLY



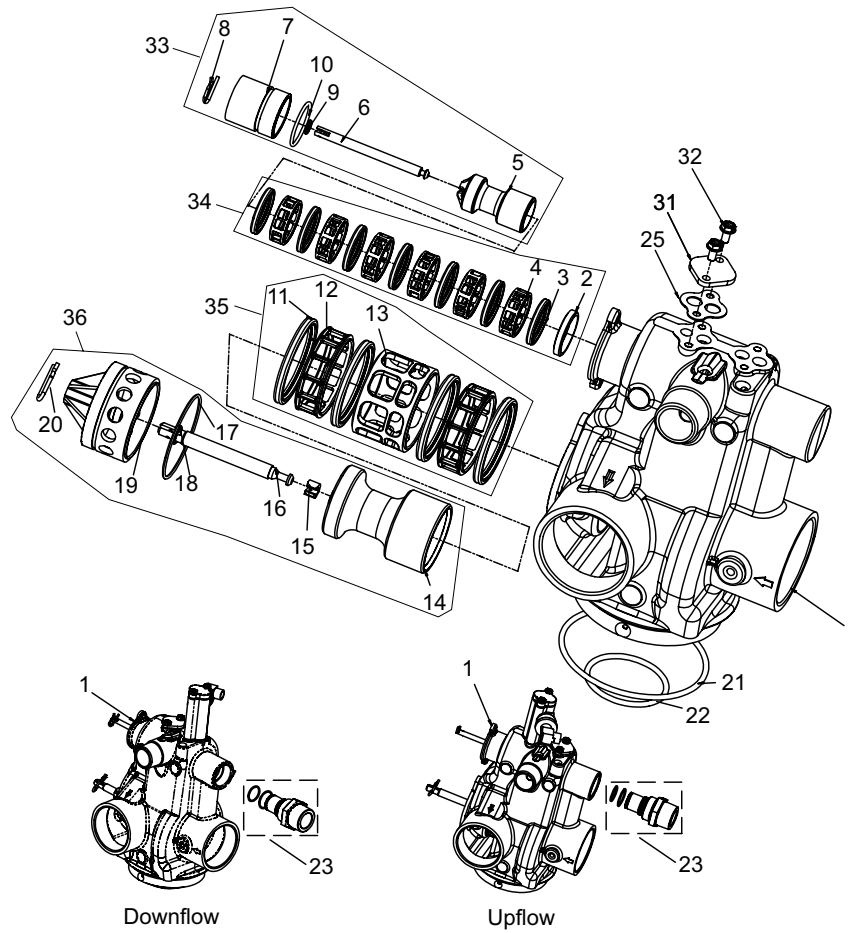
61501-2900 Rev G

LOWER ENVIRONMENTAL POWERHEAD

ASSEMBLY *CONTINUED*

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|----------|---|--|-----|----------|---|
| 1 | 1 | 18709 | Backplate, Lower | | | 40408 | Harness, Lower Drive, Syst 7, Duplex, Lag, Enviromental |
| 2 | 2 | 11224 | Screw, Slotted Hex Head | | | 40398 | Harness, Lower Drive, Syst #7, Multiple, Enviromental |
| 3 | 2 | 16346 | Nut, Hex, Jam, 5/16-18, 18-8-SS (only used for shipping) | 19 | 1 | 18727 | Washer, Curved Spring, /265 ID |
| 4 | 1 | 40387 | Motor, Drive, 115V, 60 Hz, SP FAM | 20 | | 60160-22 | Drive Cam Assy, Link, Enviromental, 2900 Lower Drive |
| | | 42580 | Motor, Drive, 24 Vac/Dc, 50-60 Hz, Fam 2 | 21 | | 60055-53 | Lower Drive Assy, 2900, 24/60, System #4 |
| | | 40389 | Motor, Drive, 220V, 50/60 Hz, SP | | | 60055-51 | Lower Drive Assy, 2900, 120, System #4 |
| 5 | 1 | 14769 | Bracket, Motor, 2900 | | | 60055-52 | Lower Drive Assy, 2900, 220, System #4 |
| 6 | 1 | 10302 | Insulator, Limit Switch | | | 60255-51 | Lower Drive Assy, 2900, 120, System #5 and #6, Lead/Lag |
| 7 | 1 | 10218 | Switch, Micro | | | 60056-51 | Lower Drive Assy, 2900, 120, System #7, Lead |
| 8 | 2 | 19849 | Screw, Pan HD, 4-40 x 5/8 | | | 60056-61 | Lower Drive Assy, 2900, 120, System #7, Lag |
| 9 | 1 | 14775 | Cam, Main Drive, 2900 Lower | 22 | * | | 2900 Lower Powerhead Assembly |
| 10 | 1 | 41022 | Pin, Roll 2900 Lower | Not Shown: | | | |
| 11 | 1 | 14759 | Link, Piston Rod | 1 | | 14044 | Tie, Cable, HeyCo VNT # 4-18 |
| 12 | 1 | 18725 | Indicator, Service/Standby | 1 | | 43062 | Grease, Lubriplate, 630-2 |
| 13 | 1 | 18726 | Spacer, Indicator | | | 60320-11 | Switch Kit, 2900 Lower Drive, Adding Second Switch |
| 14 | 6 | 10872 | Screw, Hex WSH, 8-32 x 5/16 | | | 60320-08 | Switch Kit, 2900 Lower Drive, Adding Third Switch |
| 15 | 1 | 60217-02 | Cover Assy, 2900, Lower, Black | *Call your distributor for Part Number | | | |
| 16 | 1 | 42979 | Bearing, Connecting Rod | | | | |
| 17 | 1 | 42980 | Ring, Retaining | | | | |
| 18 | 1 | 42446 | Harness, Lower Drive SYS4, ENV | | | | |
| | | 40405 | Harness, Lower Drive, Sys 4 Remote Start | | | | |
| | | 40406 | Harness, Lower Drive, Sys 5 & 6, Duplex, Enviromental | | | | |
| | | 40405 | Harness, Lower Drive Syst 5 Multiple, Enviromental | | | | |
| | | 40405 | Harness, Lower Drive Syst 6 Multiple, Lead, Enviromental | | | | |
| | | 40406 | Harness, Lower Drive, Sys 6, Multiple, Middle/Lag, Enviromental | | | | |
| | | 40407 | Harness, Lower Drive, Syst #7, Duplex, Lead, Enviromental | | | | |

CONTROL VALVE ASSEMBLY



61500-2900 Rev F

| Item No. | QTY | Part No. | Description |
|----------|-----|------------|---|
| 1 | 1 | 41428-01 | Valve Body, 2900s, Machd, NPT U.S. Tap |
| | | 41428-09 | Valve Body, 2900s, Machined, w/Soft Water Adapter |
| | | 41428-01NP | Valve Body, 2900s, MCHD, NPT, NP, U.S. Tap, Top Coll |
| | | 41428-03 | Valve Body, 2900s, MACHD, NPT, U.S. Tap, Aux Tap, Top Coll |
| | | 41428-03NP | Valve Body, 2900s, MCHD, NPT, NP, U.S. Tap, Aux Tap, Top Coll |
| | | 41428-05 | Valve Body, 2900s, NPT, U.S. Tap, SVO, Top Coll |
| | | 41428-07 | Valve Body, 2900s, MACHD, NPT, U.S. Tap, Aux Tap, SVO, Top Coll |
| | | 41428-09 | Valve Body, 2900s, MACHD, NPT, U.S. Tap, Soft ADAPT, Top Coll |

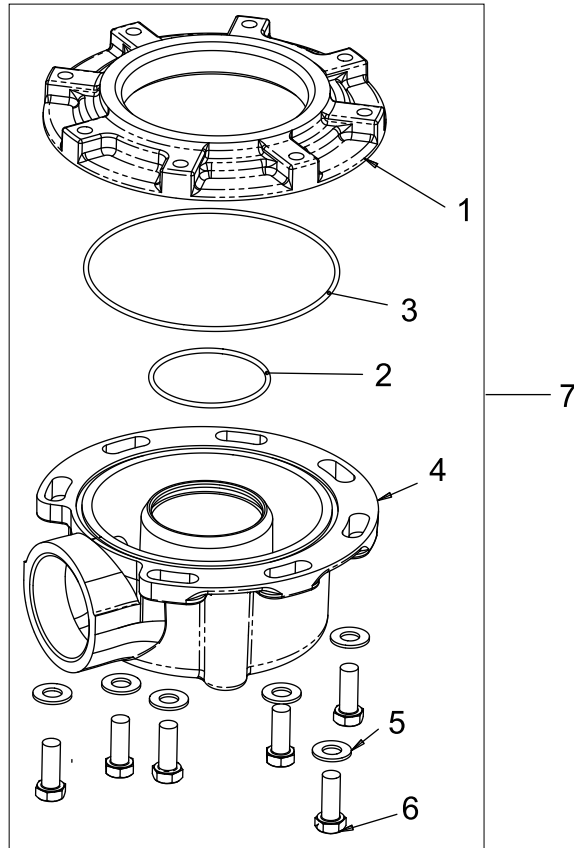
| Item No. | QTY | Part No. | Description |
|----------|-----|------------|--|
| | | 41428-09NP | Valve Body, 2900S, MCHD, NPT, NP, U.S. Tap, Soft ADAPT, Top Coll |
| | | 41428-11 | Valve Body, 2900S, NPT, U.S. Tap, Aux Tap, SFT ADPT, Top Coll |
| | | 41428-13 | Valve Body, 2900S, MACHD, NPT, U.S. Tap, SVO, Soft ADAPT, Top Coll |
| | | 41428-15 | Valve Body, 2900S, MACHD, NPT, U.S. Tap, SVO, SFT ADPT, AX TP Top |
| | | 41428-21 | Valve Body, 2900S, MACHD, BSP, Metric Tap, Top Coll |
| | | 41428-21NP | Valve Body, 2900S, MCHD, BSP, NP, Metric Tap, Top Coll |
| 2 | 1 | 10757 | Spacer, End |
| | | 10757B | Spacer, End, Brass, HW |
| 3 | 7 | 10545 | Seal, Piston |
| | | 10545-01 | Seal, Piston, Viton |
| | | 10545-02 | Seal, Piston, Silicone |

CONTROL VALVE ASSEMBLY *CONTINUED*

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|-----------|---|----------|-----|-----------|--|
| | | | | | | 60721-30 | DLFC, 1-inch F x 1-inch F, NPTF, 3.0 gpm |
| | | 60366-45 | DLFC, 1-inch F x 3/4-inch F, NPT, 4.5 gpm | | | 60721-35 | DLFC, 1-inch F x 1-inch F, NPTF, 3.5 gpm |
| | | 60366-50 | DLFC, 1-inch F x 3/4-inch F, NPT, 5.0 gpm | | | 60721-40 | DLFC, 1-inch F x 1-inch F, NPTF, 4.0 gpm |
| | | 60366-60 | DLFC, 1-inch F x 3/4-inch F, NPT, 6.0 gpm | | | 60721-45 | DLFC, 1-inch F x 1-inch F, NPTF, 4.5 gpm |
| | | 60366-70 | DLFC, 1-inch F x 3/4-inch F, NPT, 7.0 gpm | | | 60721-50 | DLFC, 1-inch F x 1-inch F, NPTF, 5.0 gpm |
| | | 60708-00 | DLFC, 1-inch F x 3/4-inch F, NPT, No Button | | | 60721-60 | DLFC, 1-inch F x 1-inch F, NPTF, 6.0 gpm |
| | | 60708-8.0 | DLFC, 1-inch F x 3/4-inch F, NPT, 8.0 gpm | | | 60721-70 | DLFC, 1-inch F x 1-inch F, NPTF, 7.0 gpm |
| | | 60708-9.0 | DLFC, 1-inch F x 3/4-inch F, NPT, 9.0 gpm | | | 60702-00 | DLFC, 1-inch M x 1-inch F, NPT, Brass, No Button |
| | | 60708-10 | DLFC, 1-inch F x 3/4-inch F, NPT, 10.0 gpm | | | 60702-8.0 | DLFC, 1-inch M x 1-inch F, NPT, 8.0 gpm |
| | | 60708-12 | DLFC, 1-inch F x 3/4-inch F, NPT, 12.0 gpm | | | 60702-9.0 | DLFC, 1-inch M x 1-inch F, NPT, 9.0 gpm |
| | | 60708-15 | DLFC, 1-inch F x 3/4-inch F, NPT, 15.0 gpm | | | 60702-10 | DLFC, 1-inch M x 1-inch F, NPT, 10 gpm |
| | | 60708-20 | DLFC, 1-inch F x 3/4-inch F, NPT, 20.0 gpm | | | 60702-12 | DLFC, 1-inch M x 1-inch F, NPT, 12 gpm |
| | | 60708-25 | DLFC, 1-inch F x 3/4-inch F, NPT, 25.0 gpm | | | 60702-15 | DLFC, 1-inch M x 1-inch F, NPT, 15 gpm |
| | | 60721-00 | DLFC, 1-inch F x 1-inch F, NPT, No Button | | | 60702-20 | DLFC, 1-inch M x 1-inch F, NPT, 20 gpm |
| | | 60721-06 | DLFC, 1-inch F x 1-inch F, NPT, 0.06 gpm | | | 60702-25 | DLFC, 1-inch M x 1-inch F, NPT, 25 gpm |
| | | 60721-08 | DLFC, 1-inch F x 1-inch F, NPT, 0.08 gpm | | | 13640 | Flow Control, Dole, 30 gpm |
| | | 60721-10 | DLFC, 1-inch F x 1-inch F, NPT, 1.0 gpm | | | 60711-35 | DLFC, 2-inch NPT, 35 gpm |
| | | 60721-12 | DLFC, 1-inch F x 1-inch F, NPT, 1.2 gpm | | | | |
| | | 60721-13 | DLFC, 1-inch F x 1-inch F, NPT, 1.3 gpm | | | | |
| | | 60721-15 | DLFC, 1-inch F x 1-inch F, NPT, 1.5 gpm | | | | |
| | | 60721-00 | DLFC, 1-inch F x 1-inch F, NPTF, No Button | | | | |
| | | 60721-17 | DLFC, 1-inch F x 1-inch F, NPTF, 1.7 gpm | | | | |
| | | 60721-20 | DLFC, 1-inch F x 1-inch F, NPTF, 2.0 gpm | | | | |
| | | 60721-24 | DLFC, 1-inch F x 1-inch F, NPTF, 2.4 gpm | | | | |

*Upflow Only

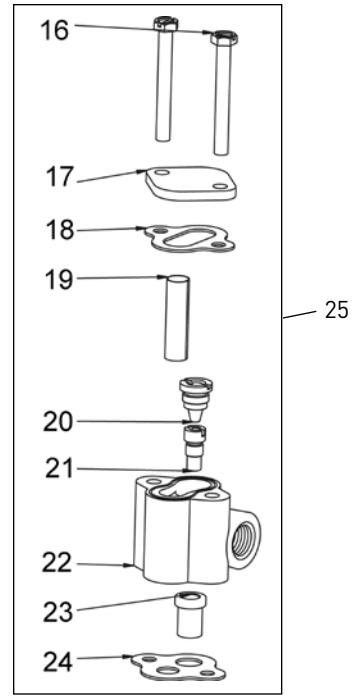
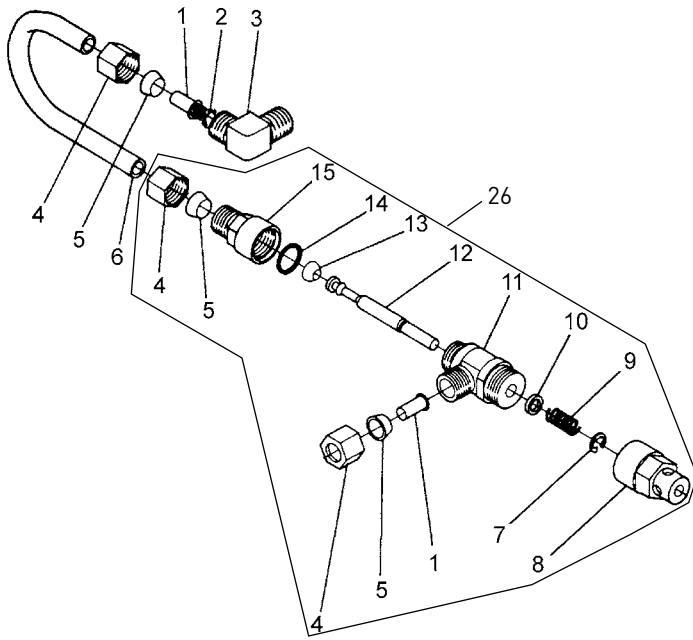
CONTROL VALVE SIDE MOUNT ADAPTER



61415 Rev B

| Item No. | QTY | Part No. | Description |
|----------|-----|------------|---|
| 1 | 1 | 40316 | Adapter, Sidemount |
| 2 | 1 | 40372 | O-ring - 142 |
| 3 | 1 | 40368 | O-ring - 160, Sidemount, Flange |
| 4 | 1 | 40310 | Base, 2850/2900/3930, Rotating |
| 5 | 7 | 40375 | Washer, Flat, 3/8, Type A, N-SERS |
| 6 | 7 | 19768 | Screw, Hex Hd, 3/8 - 16 x 1, Cap 18-8 |
| 7 | 1 | 61415 | Adapter Assy, Sidemount 2850/2900/2930 |
| | | 61415NP | Adapter Assy, Sidemount, NP 2850/2900/2930 |
| | | 61415-20 | Adapter Assy, Sidemount, BSP/MTC 2850/2900/2930 |
| | | 61415-20NP | Adapter Assy, Sidemount, BSP/NP 2850/2900/2930 |

1600 SERIES BRINE SYSTEM



60029 Rev C

| Item No. | QTY | Part No. | Description |
|----------|-----|-----------|---|
| 1 | 2 | 10332 | Fitting, Insert, 3/8 |
| 2 | 1 | 12767 | Screen, Brine |
| 3 | 1 | 10328 | Fitting, Elbow, 90 Deg. 1/4 PT x 3/8 Tube |
| 4 | 3 | 10329 | Fitting, Tube, 3/8 Nut, Brass |
| 5 | 3 | 10330 | Fitting, Sleeve, 3/8 Celcon |
| 6 | 1 | 16508 | Tube, Brine, 1600, PVC |
| | 1 | 16508-01 | Tube, Brine Valve, 2850/2900s |
| | 1 | 12774 | Tube, Brine Valve, 1500 |
| | 1 | 40027 | Tube, Brine Valve, 2510 |
| | 1 | 15221 | Tube, Brine Valve, 2750/2900 |
| | 1 | 42184 | Tube, Brine Valve, 2850s |
| | 1 | 41683* | Tube, Brine Valve, UF, 1600/1650 |
| 7 | 1 | 10250 | Ring, Retaining |
| 8 | 1 | 11749 | Guide, Brine Valve Stem |
| 9 | 1 | 10249 | Spring, Brine Valve |
| 10 | 1 | 12550 | Quad Ring, -009 |
| 11 | 1 | 12748 | Brine Valve Body Assy, 1600 w/Quad Ring |
| 12 | 1 | 12552-02 | Brine Valve Stem, 1600, with Seat |
| 13 | 1 | 12626 | Seat, Brine Valve |
| 14 | 1 | 11982 | O-ring, -016 |
| 15 | 1 | 60020-25 | BLFC, .25 GPM, 1600 |
| | 1 | 60020-50 | BLFC, .50 GPM, 1600 |
| | 1 | 60020-100 | BLFC, 1.0 GPM, 1600 |
| 16 | 2 | 10692 | Screw, Slot Hex Hd, 10 - 24X 18-8 Stainless Steel |

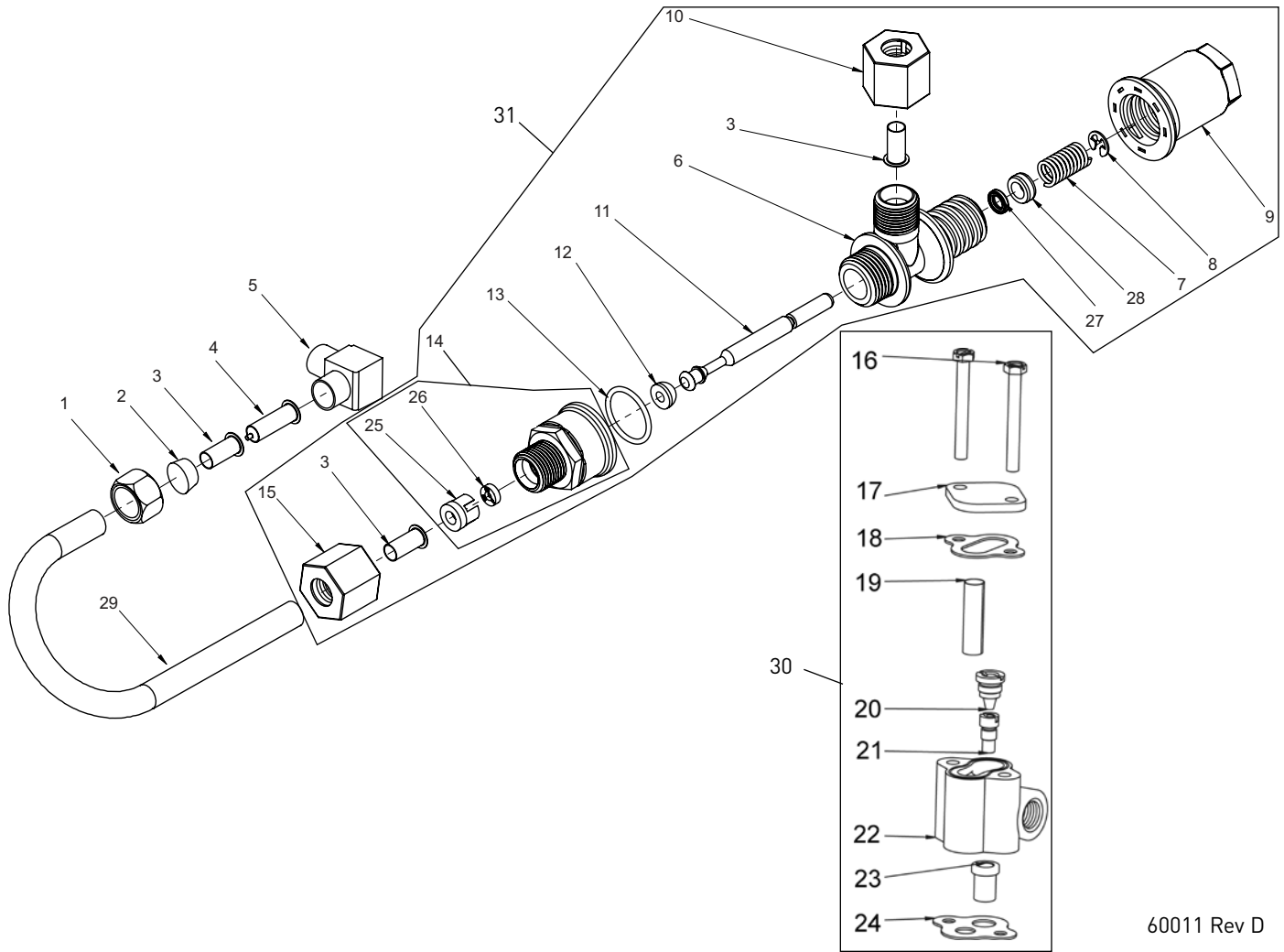
| Item No. | QTY | Part No. | Description |
|----------|-----|-----------|--------------------------------------|
| 17 | 1 | 11893 | Cap, Injector, SS |
| 18 | 1 | 10229 | Gasket, Injector Cap, 1600 |
| 19 | 1 | 10227 | Screen, Injector |
| 20 | 1 | 10913-000 | Nozzle, Injector #000, Brown |
| | | 10913-00 | Nozzle, Injector #00, Violet |
| | | 10913-0 | Nozzle, Injector #0, Red |
| | | 10913-1 | Nozzle, Injector #1, White |
| | | 10913-2 | Nozzle, Injector #2, Blue |
| | | 10913-3 | Nozzle, Injector #3, Yellow |
| | | 10913-4 | Nozzle, Injector #4, Green |
| | | 12973-0 | Nozzle, Injector #0, PVC, Grey |
| | | 12973-1 | Nozzle, Injector #1, PVC, Grey |
| | | 12973-2 | Nozzle, Injector #2, PVC, Grey |
| | | 12973-3 | Nozzle, Injector #3, PVC, Grey |
| | | 12973-4 | Nozzle, Injector #4, PVC, Grey |
| | | 10225-0 | Nozzle, Injector #0, Stainless Steel |
| | | 10225-1 | Nozzle, Injector #1, Stainless Steel |
| | | 10225-2 | Nozzle, Injector #2, Stainless Steel |
| | | 10225-3 | Nozzle, Injector #3, Stainless Steel |
| | | 10225-4 | Nozzle, Injector #4, Stainless Steel |

1600 SERIES BRINE SYSTEM *CONTINUED*

| Item No. | QTY | Part No. | Description |
|----------|-----|-----------|---|
| 21 | 1 | 10914-000 | Throat, Injector #000, Brown |
| | | 10914-00 | Throat, Injector #00, Violet |
| | | 10914-0 | Throat, Injector #0, Red |
| | | 10914-1 | Throat, Injector #1, White |
| | | 10914-2 | Throat, Injector #2, Blue |
| | | 10914-3 | Throat, Injector #3, Yellow |
| | | 10914-4 | Throat, Injector #4, Green |
| | | 12974-0 | Throat, Injector #0, PVC, Grey |
| | | 12974-1 | Throat, Injector #1, PVC, Grey |
| | | 12974-2 | Throat, Injector #2, PVC, Grey |
| | | 12974-3 | Throat, Injector #3, PVC, Grey |
| | | 12974-4 | Throat, Injector #4, PVC, Grey |
| | | 10226-0 | Throat, Injector #0, Stainless Steel |
| | | 10226-1 | Throat, Injector #1, Stainless Steel |
| | | 10226-2 | Throat, Injector #2, Stainless Steel |
| | | 10226-3 | Throat, Injector #3, Stainless Steel |
| | | 10226-4 | Throat, Injector #4, Stainless Steel |
| 22 | 1 | 17776 | Body, Injector, 1600 |
| | 1 | 17776-02* | Body, Injector, 1600 Upflow |
| 23 | 1 | 16221 | Dispenser, Air |
| 24 | 1 | 14805 | Gasket, Injector Body, 1600/1700 |
| 25 | | 60480-01 | Injector Assy, 1600, #1, Plastic |
| | | 60480-02 | Injector Assy, 1600, #2, Plastic |
| | | 60480-03 | Injector Assy, 1600, #3, Plastic |
| | | 60480-04 | Injector Assy, 1600, #4, Plastic |
| | | 60481-21 | Injector Assy, 1600, #1, S.S. Brass |
| | | 60481-22 | Injector Assy, 1600, #2, S.S. Brass |
| | | 60481-23 | Injector Assy, 1600, #3, S.S. Brass |
| | | 60080-11 | Injector Assy, 1600, #1, PVC |
| | | 60080-12 | Injector Assy, 1600, #2, PVC |
| | | 60080-14 | Injector Assy, 1600, #4, PVC |
| | | 60485-003 | Injector Assy, 2900/1600, Upflow, #0, w/Reg Cap, 20 psi |
| | | 60485-012 | Injector Assy, 2900/1600, Upflow, #1, w/Reg Cap, 20 psi |
| | | 60485-022 | Injector Assy, 2900/1600, Upflow, #2, w/Reg Cap, 20 psi |
| | | 60485-032 | Injector Assy, 2900/1600, Upflow, #3, w/Reg Cap, 20 psi |
| | | 60485-043 | Injector Assy, 2900/1600, Upflow, #4, w/Reg Cap, 20 psi |
| 26 | | 60029-010 | Brine Valve, 1600, 0.25 gpm |
| | | 60029-020 | Brine Valve, 1600, 0.50 gpm |
| | | 60029-030 | Brine Valve, 1600, 1.0 gpm |

*Upflow Only

1650 BRINE SYSTEM ASSEMBLY



60011 Rev D

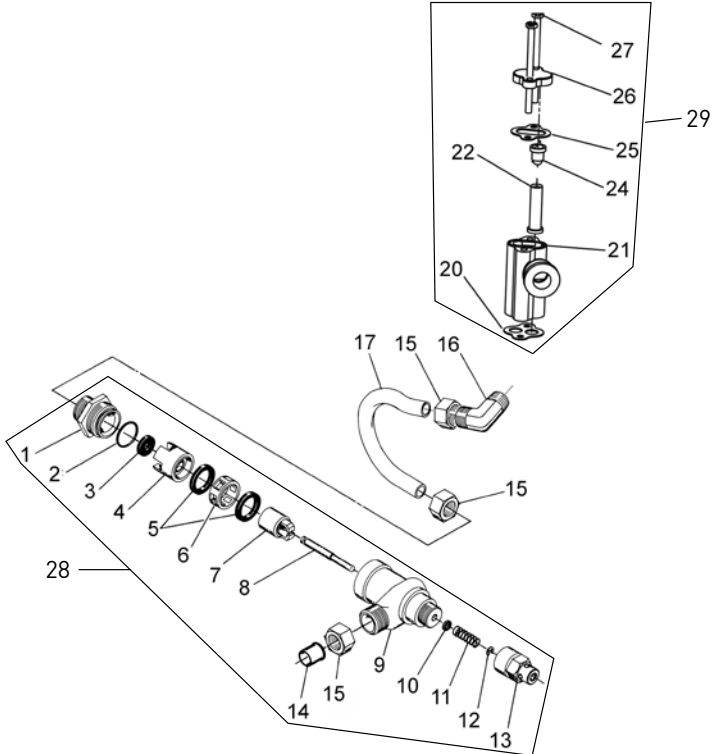
| Item No. | QTY | Part No. | Description |
|----------|-----|----------|---|
| 1 | 1 | 10329 | Fitting, Tube, 3/8 Nut, Brass |
| 2 | 1 | 10330 | Fitting, Sleeve, 3/8 Celcon |
| 3 | 3 | 10332 | Fitting, Insert, 3/8 |
| 4 | 1 | 12767 | Screen, Brine |
| 5 | 1 | 10328 | Fitting, Elbow, 90 Deg 1/4 NPT x 3/8T |
| 6 | 1 | 17884 | Brine Valve Body Assy, 1650 |
| 7 | 1 | 10249 | Spring, Brine Valve |
| 8 | 1 | 10250 | Ring, Retaining |
| 9 | 1 | 17906 | Guide, Brine Valve Stem |
| 10 | 1 | 19625 | Nut Assy, 3/8-inch, Plastic |
| 11 | 1 | 12552-02 | Brine Valve Stem, 1600 |
| 12 | 1 | 12626 | Seat, Brine Valve |
| 13 | 1 | 16924 | O-ring, -018 |
| 14 | 1 | 60010-25 | BLFC, 1650, .25 GPM, Plastic (Includes items 25 and 26) |
| 1 | 1 | 60010-50 | BLFC, 1650, .50 GPM, |

| Item No. | QTY | Part No. | Description |
|----------|-----|-----------|---|
| 16 | 2 | 10692 | Screw, Slot Hex Hd, 10 - 24X 18-8 Stainless Steel |
| 17 | 1 | 11893 | Cap, Injector, Stainless Steel |
| 18 | 1 | 10229 | Gasket, Injector Cap, 1600 |
| 19 | 1 | 10227 | Screen, Injector |
| 20 | 1 | 10913-000 | Nozzle, Injector #000, Brown |
| | | 10913-00 | Nozzle, Injector #00, Violet |
| | | 10913-0 | Nozzle, Injector #0, Red |
| | | 10913-1 | Nozzle, Injector #1, White |
| | | 10913-2 | Nozzle, Injector #2, Blue |
| | | 10913-3 | Nozzle, Injector #3, Yellow |
| | | 10913-4 | Nozzle, Injector #4, Green |
| | | 12973-0 | Nozzle, Injector #0, PVC, Grey |
| | | 12973-1 | Nozzle, Injector #1, PVC, Grey |
| | | 12973-2 | Nozzle, Injector #2, PVC, Grey |

1650 BRINE SYSTEM ASSEMBLY *CONTINUED*

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|-----------|--------------------------------------|--------------|-----|-----------|---|
| | | 12973-3 | Nozzle, Injector #3, PVC, Grey | 27 | 1 | 12550 | Quad Ring -009 |
| | | 12973-4 | Nozzle, Injector #4, PVC, Grey | | 1 | 12550-01 | Quad Ring -009 560CD |
| | | 10225-0 | Nozzle, Injector #0, Stainless Steel | 28 | 1 | 17908 | Sleeve, Brine Valve Stem |
| | | 10225-1 | Nozzle, Injector #1, Stainless Steel | 29 | 1 | 16508-01 | Tube, Brine Valve, 2850/1600 |
| | | 10225-2 | Nozzle, Injector #2, Stainless Steel | | 1 | 40027 | Tube, Brine Valve, 2510 |
| | | 10225-3 | Nozzle, Injector #3, Stainless Steel | | 1 | 42184 | Tube, Brine Valve, 2850s |
| | | 10225-4 | Nozzle, Injector #4, Stainless Steel | | 1 | 12774 | Tube, Brine Valve, 1500 |
| 21 | 1 | 10914-000 | Throat, Injector #000, Brown | | 1 | 15221 | Tube, Brine Valve, 2750 |
| | | 10914-00 | Throat, Injector #00, Violet | | 1 | 41683* | Tube, Brine Valve, UF, 1600/1650 |
| | | 10914-0 | Throat, Injector #0, Red | 30 | | 60480-01 | Injector Assy, 1600, #1, Plastic |
| | | 10914-1 | Throat, Injector #1, White | | | 60480-02 | Injector Assy, 1600, #2, Plastic |
| | | 10914-2 | Throat, Injector #2, Blue | | | 60480-03 | Injector Assy, 1600, #3, Plastic |
| | | 10914-3 | Throat, Injector #3, Yellow | | | 60480-04 | Injector Assy, 1600, #4, Plastic |
| | | 10914-4 | Throat, Injector #4, Green | | | 60481-21 | Injector Assy, 1600, #1, S.S. Brass |
| | | 12974-0 | Throat, Injector #0, PVC, Grey | | | 60481-22 | Injector Assy, 1600, #2, S.S. Brass |
| | | 12974-1 | Throat, Injector #1, PVC, Grey | | | 60481-23 | Injector Assy, 1600, #3, S.S. Brass |
| | | 12974-2 | Throat, Injector #2, PVC, Grey | | | 60080-11 | Injector Assy, 1600, #1, PVC |
| | | 12974-3 | Throat, Injector #3, PVC, Grey | | | 60080-12 | Injector Assy, 1600, #2, PVC |
| | | 12974-4 | Throat, Injector #4, PVC, Grey | | | 60080-14 | Injector Assy, 1600, #4, PVC |
| | | 10226-0 | Throat, Injector #0, Stainless Steel | | | 60485-003 | Injector Assy, 2900/1600, Upflow, #0, w/Reg Cap, 20 psi |
| | | 10226-1 | Throat, Injector #1, Stainless Steel | | | 60485-012 | Injector Assy, 2900/1600, Upflow, #1, w/Reg Cap, 20 psi |
| | | 10226-2 | Throat, Injector #2, Stainless Steel | | | 60485-022 | Injector Assy, 2900/1600, Upflow, #2, w/Reg Cap, 20 psi |
| | | 10226-3 | Throat, Injector #3, Stainless Steel | | | 60485-032 | Injector Assy, 2900/1600, Upflow, #3, w/Reg Cap, 20 psi |
| | | 10226-4 | Throat, Injector #4, Stainless Steel | | | 60485-043 | Injector Assy, 2900/1600, Upflow, #4, w/Reg Cap, 20 psi |
| 22 | 1 | 17776 | Body, Injector, 1600 | 31 | | 60011-010 | Brine Valve, 1650, 0.25 gpm |
| | 1 | 17776-02* | Body, Injector, 1600 Upflow | | | 60011-020 | Brine Valve, 1650, 0.50 gpm |
| 23 | 1 | 16221 | Dispenser, Air | | | 60011-030 | Brine Valve, 1650, 1.0 gpm |
| 24 | 1 | 14805 | Gasket, Injector Body, 1600/1700 | *Upflow Only | | | |
| 25 | 1 | 12098 | Retainer, Flow Control | | | | |
| 26 | 1 | 12095 | Washer, Flow Control .50 GPM | | | | |
| | 1 | 12094 | Washer, Flow Control .25 GPM | | | | |
| | 1 | 12097 | Washer, Flow Control 1.0 GPM | | | | |

1700 BRINE SYSTEM ASSEMBLY



60034 Rev D

1700 BRINE SYSTEM ASSEMBLY *CONTINUED*

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|-----------|---|----------|-----|-----------|---|
| 1 | 1 | 14792 | Plug, End, Brine Valve | | | 14801-05c | Nozzle, Injector, #5c, White |
| 2 | 1 | 13201 | Quad Ring, -020 | | | 14801-06c | Nozzle, Injector, #6c, Red |
| 3 | 1 | 12085 | Washer, Flow, 1.2 GPM | 25 | 1 | 10229 | Gasket, Injector Cap, 1600 |
| | 1 | 12086 | Washer, Flow, 1.5 GPM | 26 | 1 | 11893 | Cap, Injector, Stainless Steel |
| | 1 | 12087 | Washer, Flow, 2.0 GPM | | 1 | 10228 | Cap, Injector |
| | 1 | 12088 | Washer, Flow, 2.4 GPM | 27 | 2 | 14804 | Screw, Hex Hd Mach, 10 - 24 x 2-3/4-inch 18-8 Stainless Steel |
| | 1 | 12089 | Washer, Flow, 3.0 GPM | | | | |
| | 1 | 12090 | Washer, Flow, 3.5 GPM | 28 | 1 | 60034-00 | Brine Valve, 1700, Blank |
| | 1 | 12091 | Washer, Flow, 4.0 GPM | | | 60034-10 | Brine Valve, 1700, 1.0 gpm |
| | 1 | 12092 | Washer, Flow, 5.0 GPM | | | 60034-12 | Brine Valve, 1700, 1.2 gpm |
| 4 | 1 | 14785 | Retainer, Flow Control | | | 60034-15 | Brine Valve, 1700, 1.5 gpm |
| 5 | 3 | 14811 | O-ring, -210, 560CD, Brine | | | 60034-20 | Brine Valve, 1700, 2.0 gpm |
| 6 | 1 | 14798 | Spacer, 1700, Brine | | | 60034-24 | Brine Valve, 1700, 2.4 gpm |
| 7 | 1 | 14795 | Piston, Brine Valve | | | 60034-30 | Brine Valve, 1700, 3.0 gpm |
| 8 | 1 | 14797 | Brine Valve Stem | | | 60034-40 | Brine Valve, 1700, 4.0 gpm |
| 9 | 1 | 14790 | Brine Valve Body | | | 60034-50 | Brine Valve, 1700, 5.0 gpm |
| 10 | 1 | 12550 | Quad Ring, -009 | 29 | 1 | 60381-03 | Injector Assy, 1700, #3c, Complete |
| 11 | 1 | 15310 | Spring, Brine Valve | | | 60381-04 | Injector Assy, 1700, #4c, Complete |
| 12 | 1 | 10250 | Retaining Ring | | | 60381-05 | Injector Assy, 1700, #5c, Complete |
| 13 | 1 | 15517 | Guide, Stem | | | 60381-06 | Injector Assy, 1700, #6c, Complete |
| 14 | 1 | 15415 | Fitting, Insert, 1/2-inch, Tube | | | | |
| 15 | 3 | 15414 | Nut, 2900, w/Sleeve | | | | |
| 16 | 1 | 15413 | Fitting, Elbow, Male, 1/2T x 3/8 NPT | | | | |
| 17 | 1 | 15416 | Tube, Brine, 2900/2750 | | | | |
| | 1 | 16460 | Tube, Brine, 2850/2900s | | | | |
| | 1 | 41447* | Tube, Brine, 2900s, U/F | | | | |
| | 1 | 42183 | Tube, Brine, 1700, 2850s | | | | |
| 20 | 1 | 14805 | Gasket, Injector Body 1600/1700 | | | | |
| 21 | 1 | 17777 | Body, Injector, 1700 | | | | |
| | 1 | 17777-02* | Body, Injector, 1700 U/F | | | | |
| 22 | 1 | 14802-03c | Throat, Injector, #3c, Yellow | | | | |
| | | 14802-04c | Throat, Injector, #4c, Green | | | | |
| | | 14802-05c | Throat, Injector, #5c, White | | | | |
| | | 14802-06c | Throat, Injector, #6c, Red | | | | |
| 24 | | 14801-03c | Nozzle, Injector, #3c, Yellow | | | | |
| | | 14801-04c | Nozzle, Injector, #4c, Green | | | | |

Not Shown:

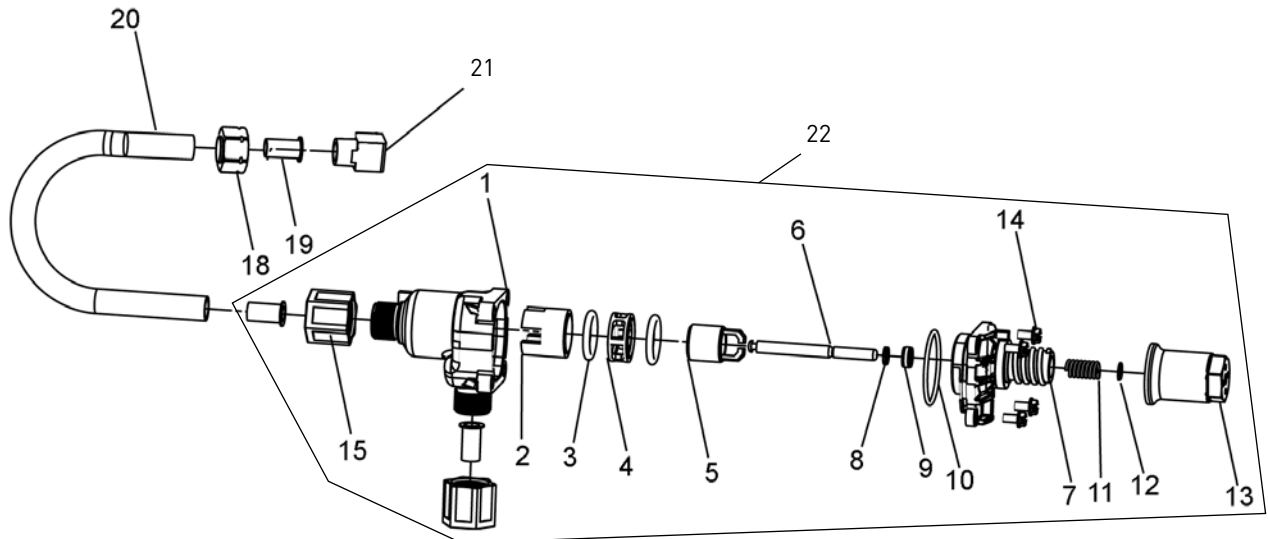
1 16974 Fitting, Plastic, Female,
3/4 x 3/4 Slip

1 17996 Disperser, Air, Injector

*Upflow Only

NOTE: Item number 26 (11893) is used on injector sizes 2 through 5C. Part number 10228 is used on injector sizes 6C.

1710 BRINE SYSTEM ASSEMBLY



60604 Rev F

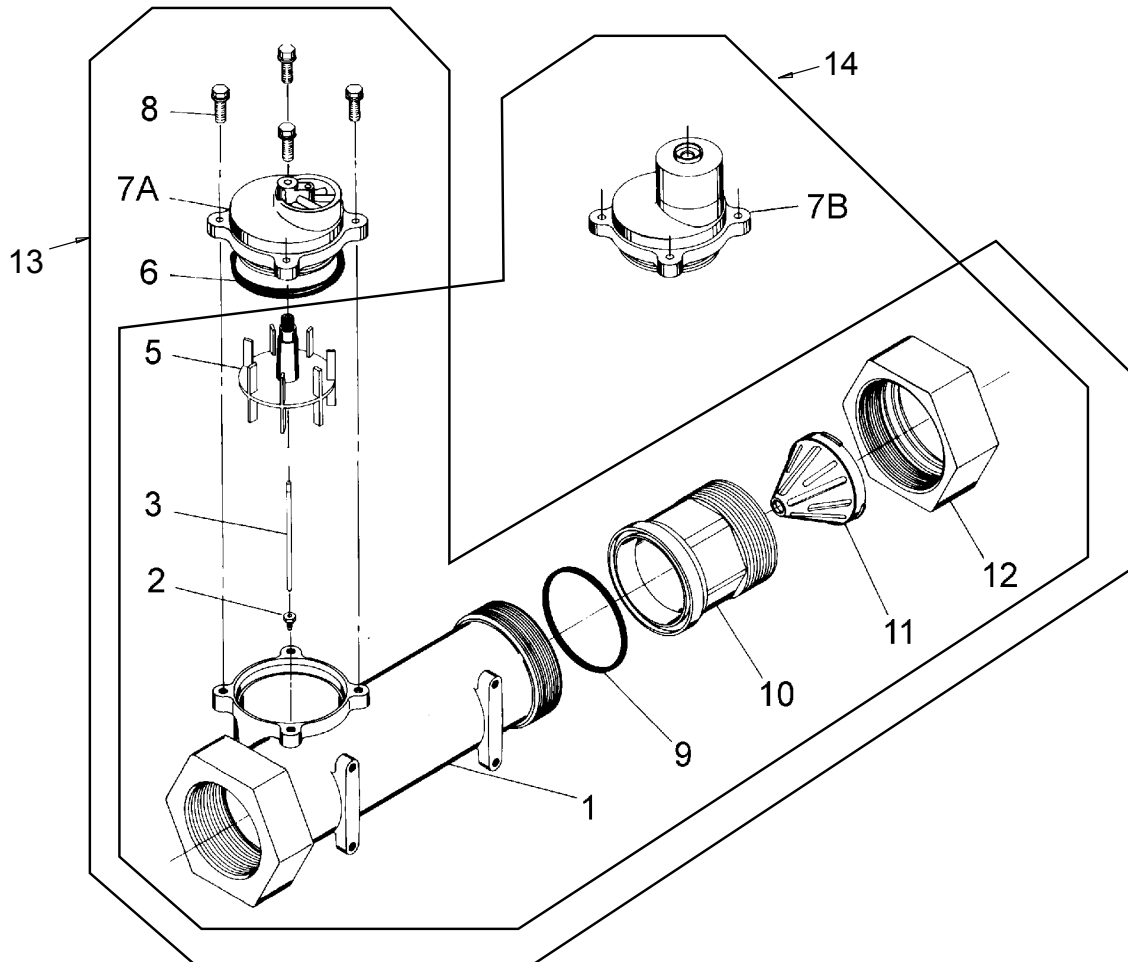
| Item No. | QTY | Part No. | Description |
|----------|-----|----------|-------------------------------------|
| 1 | 1 | 41202 | Brine Valve, 1700, Plastic, Top |
| 2 | 1 | 14785-01 | Retainer, Flow Control |
| 3 | 1 | 14811 | O-Ring, -210, 560CD, Brine |
| 4 | 1 | 14798 | Spacer, 1700, Brine |
| 5 | 1 | 14795 | Piston, Brine Valve |
| 6 | 1 | 41203 | Stem, Brine, 1710, Plastic, 2900 |
| 7 | 1 | 41201 | Brine Valve, 1700, Plastic, Bottom |
| 8 | 5 | 17908 | Sleeve, Brine Valve Stem |
| 9 | 1 | 12550 | Quad Ring, -009 |
| 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-inch Plastic |
| 18 | 1 | 15414 | Nut, 2900, w/Sleeve |
| 19 | 1 | 15415 | Fitting, Insert, 1/2-inch, Tube |
| 20 | 1 | 16460 | Tube, Brine, 2850, 2900s |
| | 1 | 42183 | Tube, Brine, 1700/2850s |
| | 1 | 15416 | Tube, Brine, 2900/2750 |
| | 1 | 41447* | Tube, Brine, 2900s U/F |
| 21 | 1 | 15413 | Fitting, Elbow, Male, 1/2T X 3/8NPT |

| Item No. | QTY | Part No. | Description |
|----------|-----|----------|----------------------------------|
| 22 | | 60605-00 | Brine Valve, 1710, 2750, Blank |
| | | 60605-10 | Brine Valve, 1710, 2750, 1.0 gpm |
| | | 60605-12 | Brine Valve, 1710, 2750, 1.2 gpm |
| | | 60605-15 | Brine Valve, 1710, 2750, 1.5 gpm |
| | | 60605-20 | Brine Valve, 1710, 2750, 2.0 gpm |
| | | 60605-24 | Brine Valve, 1710, 2750, 2.4 gpm |
| | | 60605-30 | Brine Valve, 1710, 2750, 3.0 gpm |
| | | 60605-40 | Brine Valve, 1710, 2750, 4.0 gpm |
| | | 60605-50 | Brine Valve, 1710, 2750, 5.0 gpm |

Not Shown

| | | | |
|---|--|-----------|--------------------------|
| 1 | | 19151 | Washer, Flow, 1.0 gpm |
| 1 | | 17996 | Dispenser, Air, Injector |
| 1 | | 414193-00 | Label, Blank, BLFC, 1710 |

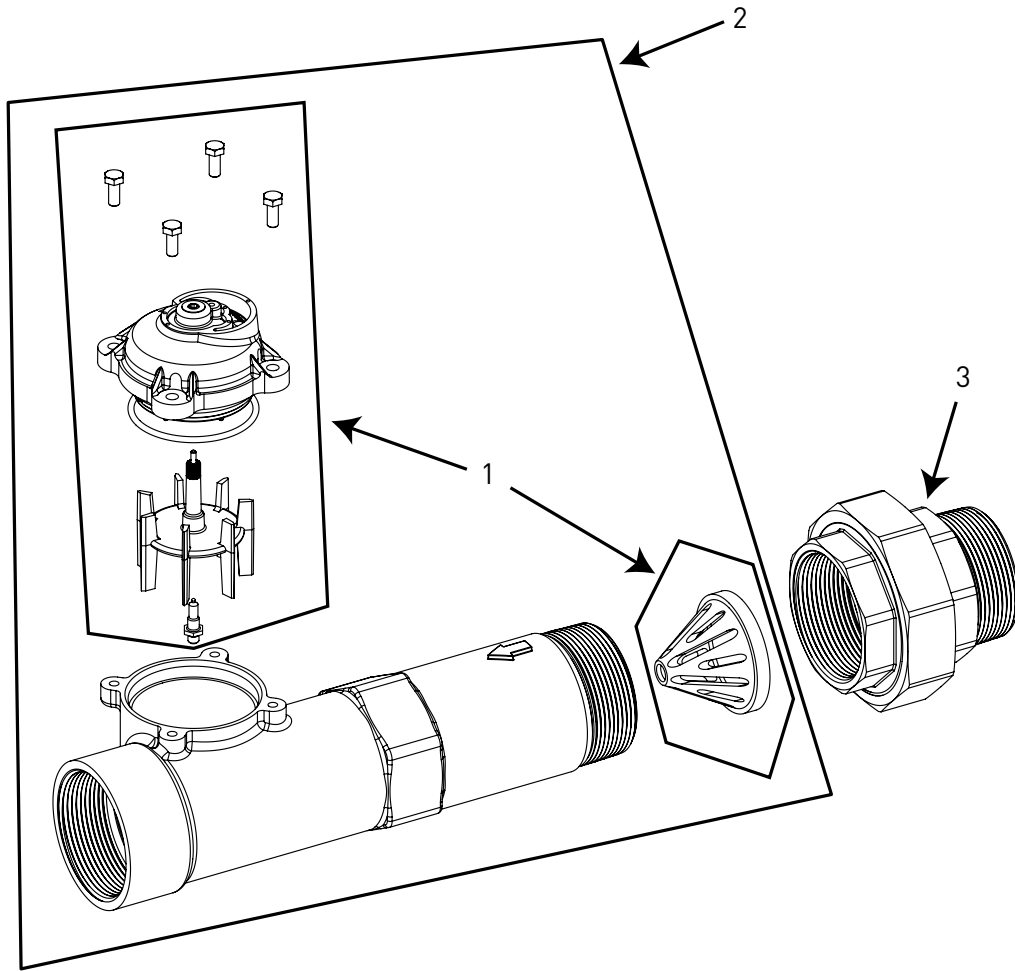
2-INCH BRASS METER ASSEMBLY



| Item No. | QTY | Part No. | Description |
|----------|-----|----------|--|
| 1 | 1 | 14456 | Body, Meter, 2-inch |
| | | 14456-20 | Body, Meter, 2-inch, BSP, Metric |
| 2 | 1 | 15532 | Seat, Impeller Shaft, Hex |
| 3 | 1 | 15432 | Shaft |
| 5 | 1 | 15374 | Impeller Assy, 2-inch Meter |
| 6 | 1 | 13847 | O-ring, -137, Std/560CD, Meter |
| 7A | 1 | 14038 | Meter Cap Assembly, Std, Plastic |
| 7B | 1 | 15150 | Meter Cap Assembly, 3/4-inch to 2-inch, Ext Plastic, Pdl |
| 8 | 4 | 12112 | Screw, Hex Hd Mach, 10-24 x 1/2 18-8 Stainless Steel |
| | | 15886 | Screw, Hex Hd, M5 x 12 SS, Metric |
| 9 | 1 | 14679 | O-ring, -227, Meter |
| 10 | 1 | 14568 | Fitting, Nipple, 2-inch |
| | | 14568-10 | Fitting, Nipple, 2-inch BSP, Brass |

| Item No. | QTY | Part No. | Description |
|------------------|-----|----------|--|
| 11 | 1 | 14680 | Flow Straightener |
| 12 | 1 | 14569 | Nut, 2900 Meter |
| 13 | | | Meter Assy, 2-inch In-line, NPT, STD, Brass, Paddlewheel |
| | | | Meter Assy, 2-inch In-line, BSP, STD, Brass, Paddlewheel |
| 14 | | | Meter Assy, 2-inch In-line, NPT, EXT, Brass Paddlewheel |
| | | | Meter Assy, 2-inch In-line, BSP, EXT, Brass, Paddlewheel |
| Not Shown | | | |
| | | 61439 | Meter Sleeve w/O-rings, 1-1/2 inch |

2-INCH STAINLESS STEEL METER ASSEMBLY

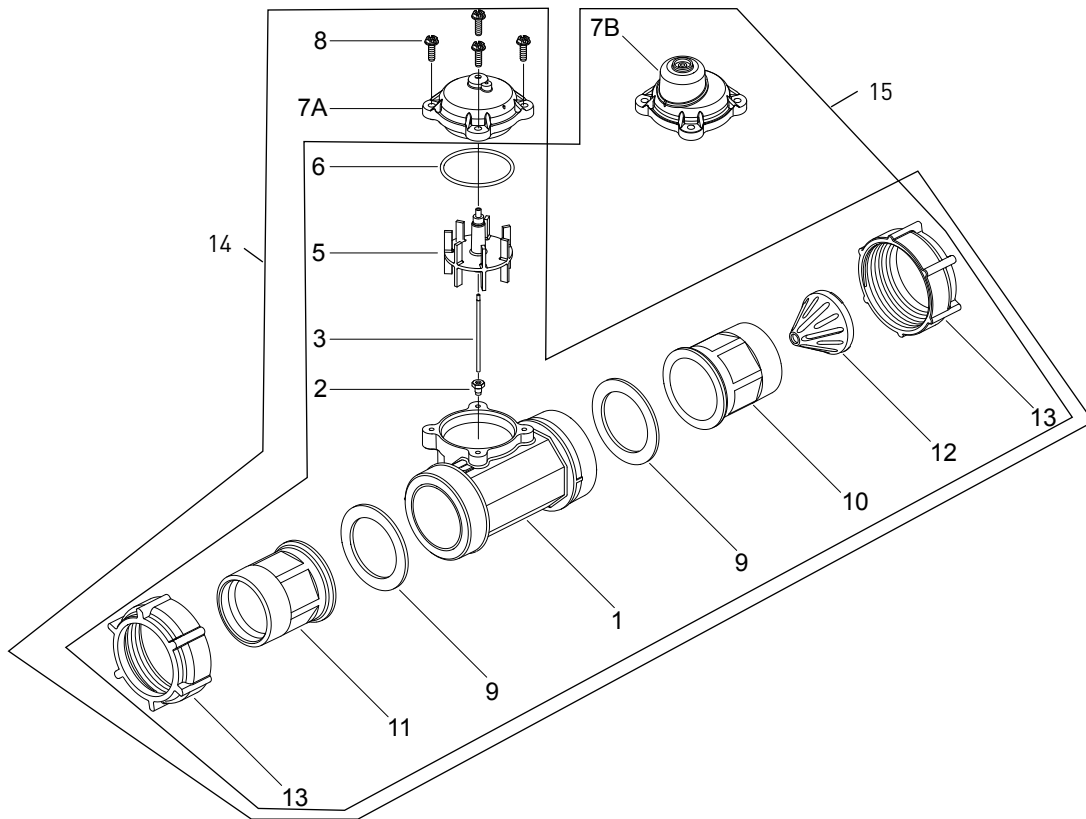


▲ IMPORTANT: For valves equipped with electromechanical timers and stainless steel meters, refer to the Meter Dome and Union Orientation section.

| Item No. | QTY | Part No. | Description |
|----------|-----|----------|--|
| 1 | 1 | 62048-01 | Service Kit, 2 inch Meter, Standard Range |
| 1 | 1 | 62048-02 | Service Kit, 2 inch Meter, Extended Range |
| 2 | 1 | 61934-10 | Meter Assy, 2 inch, Inline, Stainless Steel, NPT Standard Range |
| 1 | 1 | 61934-11 | Meter Assy, 2 inch, Inline, Stainless Steel, NPT Extended Range |
| 1 | 1 | 61934-20 | Meter Assy, 2 inch, Inline, Stainless Steel, BSP Standard Range |
| 1 | 1 | 61934-21 | Meter Assy, 2 inch, Inline, Stainless Steel, BSP Extended Range |
| 3 | 1 | 44026 | Union, 2 inch, NPT (Optional on models with electronic controls) |
| 1 | 1 | 44027 | Union, 2 inch, BSP (Optional on models with electronic controls) |

| Item No. | QTY | Part No. | Description |
|-----------------------------|-----|----------|---|
| Not Shown (optional) | | | |
| 1 | 1 | 62073 | Meter Sleeve, 2 inch to 1-1/2 inch (optional) |

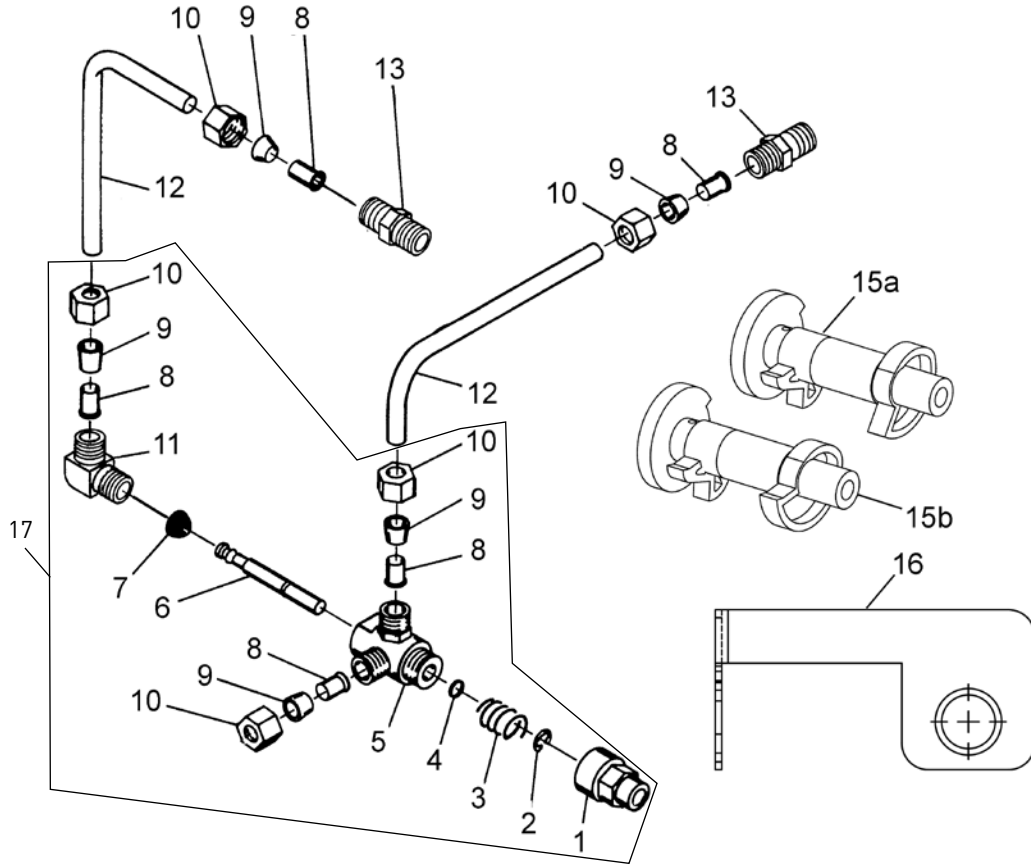
2-INCH PLASTIC METER ASSEMBLY



60621 Rev D

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|-----------|--|----------|-----|----------|---|
| 1 | 1 | 17689 | Body, Meter, 2-inch Plastic w/Impeller Shaft Seat | 12 | 1 | 14680 | Flow Straightener |
| 2 | 1 | 15532 | Seat, Impeller Shaft, Hex | 13 | 2 | 17988 | Nut, 2-inch Meter |
| 3 | 1 | 15432 | Shaft, Impeller, Stainless Steel | 14 | | 60620 | Meter Assy, 2-inch, Inline, NPT, STD, Plastic, w/Plastic Nipples, Paddlewheel |
| 5 | 1 | 15374 | Impeller Assy, 2-inch Meter | | | 60620-01 | Meter Assy, 2-inch, Inline, NPT, STD, Plastic, w/Brass Nipples, Paddlewheel |
| 6 | 1 | 13847 | O-ring, -137, Std/560CD, Meter | | | 60620-10 | Meter Assy, 2-inch Inline, BSP, STD, Plastic, Plastic Nipples, Paddlewheel |
| 7A | 1 | 14038 | Meter Cap Assembly | | | 60620-11 | Meter Assy, 2-inch, Inline, BSP, STD, Plastic, Brass Nipples, Paddlewheel |
| 7B | | 15150 | Meter Cap Assembly, EXT | 15 | | 60621 | Meter Assy, 2-inch, Inline, NPT, EXT, Plastic, w/Plastic Nipples, Paddlewheel |
| 8 | 4 | 12473 | Screw, Hex Wsh, 10-24 x 5/8 18-8 Stainless Steel | | | 60621-01 | Meter Assy, 2-inch, Inline, NPT, EXT, Plastic, w/Brass Nipples, Paddlewheel |
| 9 | 2 | 40666 | Seal, Face, 2-inch, Plastic Meter | | | 60621-10 | Meter Assy, 2-inch Inline, BSP, EXT, Plastic, Plastic Nipples, Paddlewheel |
| 10A | 1 | 17987-001 | Fitting, Nipple, 2-inch, Plastic, NPT, Machined, Flow Straightener | | | 60621-11 | Meter Assy, 2-inch, Inline, BSP, EXT, Plastic, Brass Nipples, Paddlewheel |
| 10B | 1 | 17987-101 | Fitting, Nipple, 2-inch, Plastic, BSP, Machined, Flow Straightener | | | | |
| 11A | 1 | 17987-000 | Fitting, Nipple, 2-inch, Plastic, NPT | | | | |
| 11B | 1 | 17987-100 | Fitting, Nipple, 2-inch, Plastic, BSP | | | | |

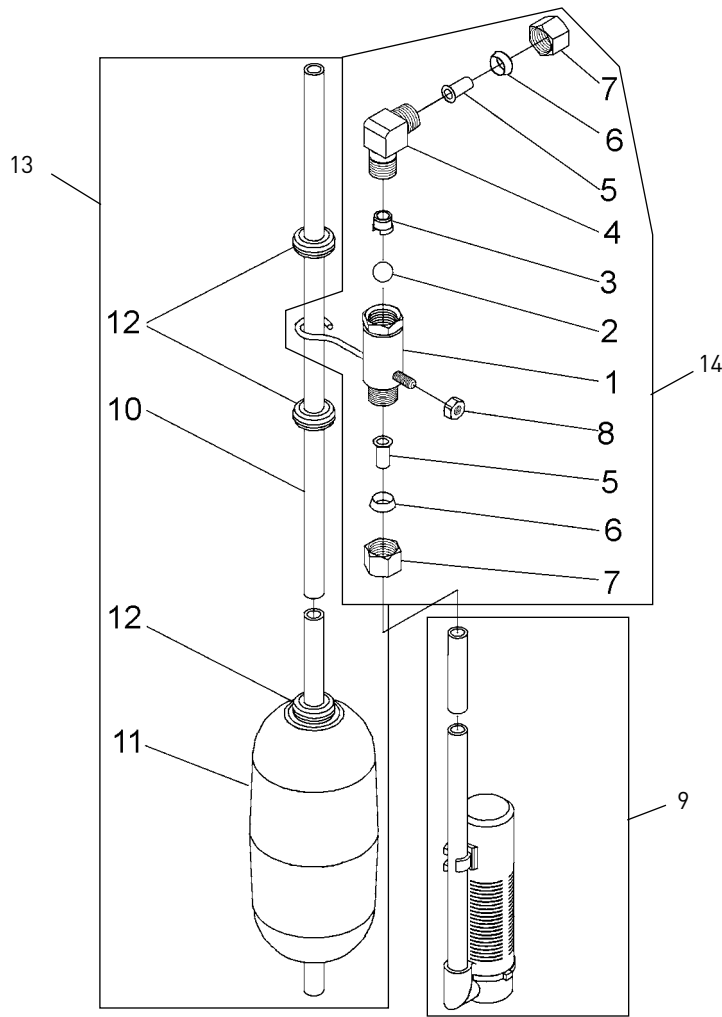
1600 SERVICE VALVE OPERATOR (NEW STYLE)



60150 Rev A

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|----------|---|----------|-----|----------|--|
| 1 | 1 | 11749 | Guide, Brine Valve Stem | 14 | 2 | 15415 | Fitting, Insert, 1/2-inch Tube |
| 2 | 1 | 10250 | Ring, Retaining | 15a | 1 | 12472 | Cam Assembly, Tri-Stack, After RR |
| 3 | 1 | 10249 | Spring, Brine Valve | 15b | 1 | 15770 | Cam Assembly, Special Tri-Stack After Brine Fill |
| 4 | 1 | 12550 | Quad Ring, -009 | 16 | 1 | 12114 | Bracket, Motor Outboard, Coated |
| 5 | 2 | 10785 | SVO Body Assy Brass Valves | 17 | 1 | 60150-01 | Service Valve Operator Assembly, 1600, New Style, Item No's 1-11 |
| 6 | 1 | 12552 | Brine Valve Stem, 1600 | | | | |
| 7 | 1 | 12626 | Seat, Brine Valve | | | | |
| 8 | 5 | 10332 | Fitting, Insert, 3/8-inch | | | | |
| 9 | 5 | 10330 | Fitting, Sleeve, 3/8-inch Celcon | | | | |
| 10 | 5 | 10329 | Fitting, Tube, 3/8 Nut, Brass | | | | |
| 11 | 1 | 10328 | Fitting, Elbow, 90 Deg 1/4 NPT x 3/8 Tube | | | | |
| 12 | 2 | 12897 | Tube, Fitting, 3/8 x 9 3/4 | | | | |
| 13 | 1 | 16730 | Fitting, Male, 1/4 x 1 | | | | |

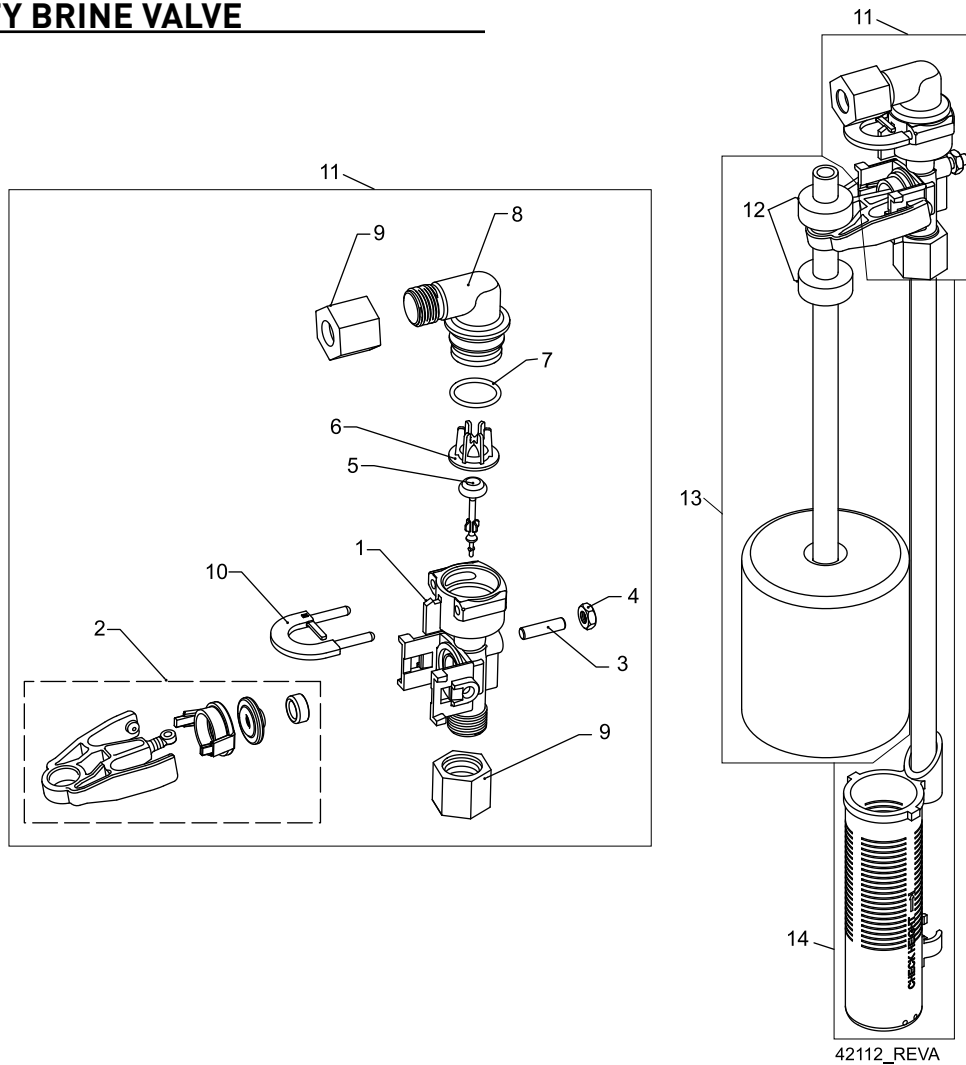
2300 SAFETY BRINE VALVE



60027 Rev D

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|-------------|--|----------|-----|-------------|--|
| 1 | 1 | 60027-00 | Safety Brine Valve, 2300, Less Elbow | | | 60002-36 | Air Check, #500, 36 inches Long |
| 2 | 1 | 10138 | Ball, 3/8-inch, Brass | | | 60002-48 | Air Check, #500, 48 inches Long |
| 3 | 1 | 11566 | Ball Stop, Slow Fill | | | 60002-26.25 | Air Check, #500, 26.25 inches Long |
| 4 | 1 | 10328 | Fitting, Elbow, 90 Deg. 1/4 NPT x 3/8 Tube | | | 60002-33.25 | Air Check, #500, 33.25 inches Long |
| 5 | 1 | 10332 | Fitting, Insert, 3/8 | | | | |
| 6 | 1 | 10330 | Fitting, Sleeve, 3/8 Celcon | 10 | 1 | 10149 | Rod, Float, 30-inch |
| 7 | 1 | 10329 | Fitting, Tube, 3/8 Nut, Brass | 11 | 1 | 10700 | Float Assy, White |
| 8 | 1 | 10186 | Nut, Hex, 10-32 | 12 | 3 | 10150 | Grommet, .30 Dia |
| 9 | 1 | 60002-10 | Air Check, #500, American Hydro | 13 | 1 | 60028-30 | Float Assy, 2300, 30-inch White |
| | | 60002-11.38 | Air Check, #500, 11.38 inches Long | 14 | 1 | 60027-FFA | Safety Brine Valve, 2300, Fitting Facing Arm |
| | | 60002-24 | Air Check, #500, 24 inches Long | | | 60027-FFS | Safety Brine Valve, 2300 Fitting Facing Stud |
| | | 60002-27 | Air Check, #500, 27 inches Long | | | | |
| | | 60002-32 | Air Check, #500, 32 inches Long | | | | |
| | | 60002-34 | Air Check, #500, 34 inches Long | | | | |

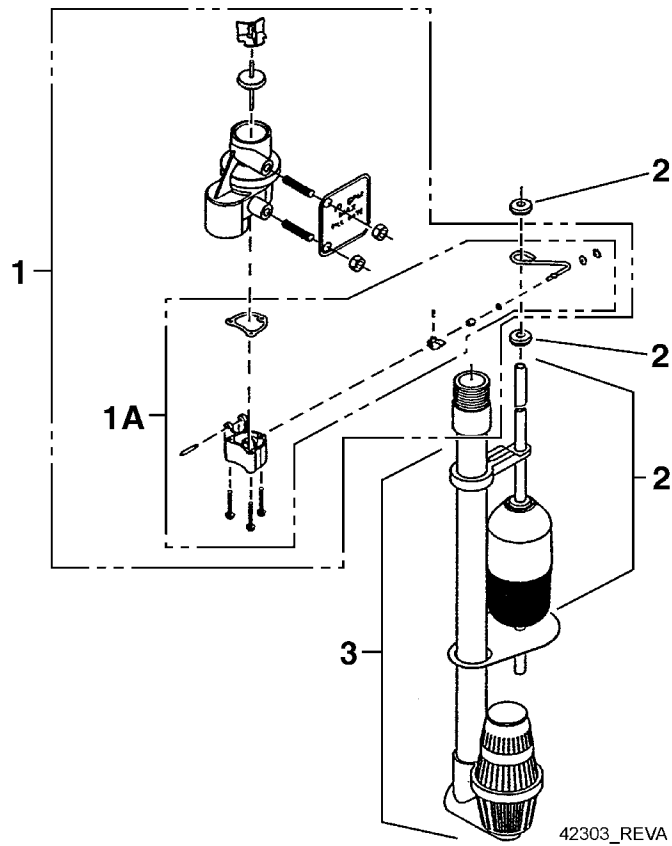
2310 SAFETY BRINE VALVE



42112_REVA

| Item No. | QTY | Part No. | Description | Item No. | QTY | Part No. | Description |
|----------|-----|------------|-----------------------------------|----------|-----|-------------|----------------------------------|
| 1 | 1 | 19645 | Body, Safety Brine Valve, 2310 | | | 60068-30 | Float Assy, 2310, w/30-inch Rod |
| 2 | 1 | 19803 | Safety Brine Valve Assy | 14 | 1 | 60002-10 | Air Check, #500, American Hydro |
| 3 | 1 | 19804 | Screw, Sckt Hd, Set, 10-24 x .75 | | | 60002-11.38 | Air Check, #500, 11.38-inch Long |
| 4 | 1 | 19805 | Nut, Hex, 10-24, Nylon Black | | | 60002-24 | Air Check, #500, 24-inch Long |
| 5 | 1 | 19652-01 | Poppet Assy, SBV w/O-ring | | | 60002-27 | Air Check, #500, 27-inch Long |
| 6 | 1 | 19649 | Flow Dispenser | | | 60002-32 | Air Check, #500, 32-inch Long |
| 7 | 1 | 11183 | O-ring, -017 | | | 60002-34 | Air Check, #500, 34-inch Long |
| 8 | 1 | 19647 | Elbow, Safety Brine Valve | | | 60002-36 | Air Check, #500, 36-inch Long |
| 9 | 2 | 19625 | Nut Assy, 3/8-inch Plastic | | | 60002-48 | Air Check, #500, 48-inch Long |
| 10 | 1 | 18312 | Retainer, Drain | | | 60002-26.25 | Air Check, #500, 26.25-inch Long |
| 11 | 1 | 60014 | Safety Brine Valve Assy, 2310 | | | 60002-33.25 | Air Check, #500, 33.25-inch Long |
| 12 | 2 | 10150 | Grommet, .30 Dia | | | | |
| 13 | 1 | 60068-8.06 | Float Assy, 2310, w/8.06-inch Rod | | | | |
| | | 60068-10.5 | Float Assy, 2310, w/10.5-inch Rod | | | | |
| | | 60068-11.5 | Float Assy, 2310, w/11.5-inch Rod | | | | |
| | | 60068-20 | Float Assy, 2310, w/20-inch Rod | | | | |

2350 SAFETY BRINE VALVE



| Item No. | QTY | Part No. | Description |
|----------|-----|-------------|--|
| 1 | 1 | 60038 | Safety Brine Valve, 2350 |
| 1A | 1 | 61024 | Actuator Assy, 2350 Brine |
| 2 | 1 | 60028-30 | Float Assy, 2350, 30-inch Wht |
| | 1 | 60026-30SAN | Float Assy, 2350, 30-inch Hot Water |
| 3 | 1 | 60009-00 | Air Check, #900, Commercial Less Fittings |
| | 1 | 60009-01 | Air Check, #900, Commercial, Hot Water Less Fittings |

Not Shown

| | | | |
|-------|---|-------|----------------------------------|
| | 1 | 18603 | Fitting Assy, 900 Air Check 2350 |
| | 1 | 18602 | Fitting Assy, 900 Air Check |

GENERAL SERVICE HINTS FOR METER CONTROL

Problem: Softener delivers hard water

Reason: Reserve capacity has been exceeded.

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

Reason: 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.

Reason: Meter is not measuring flow.

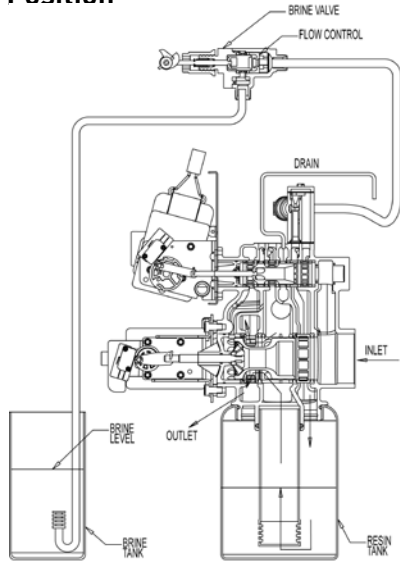
Correction: Check meter with meter checker.

TROUBLESHOOTING

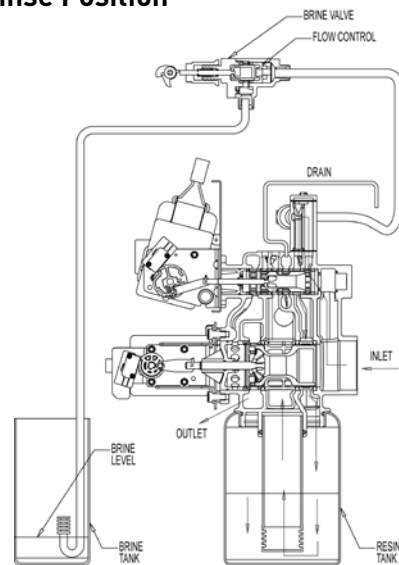
| Problem | Cause | Correction |
|--|--|---|
| Water conditioner fails to regenerate. | Electrical service to unit has been interrupted | Assure permanent electrical service (check fuse, plug, pull chain, or switch) |
| | Timer is defective. | Replace timer. |
| | Power failure. | Reset time of day. |
| Hard water. | By-pass valve is open. | Close by-pass valve. |
| | No salt is in brine tank. | Add salt to brine tank and maintain salt level above water level. |
| | Injector screen plugged. | Clean injector screen. |
| | Insufficient water flowing into brine tank. | Check brine tank fill time and clean brine line flow control if plugged. |
| | Hot water tank hardness. | Repeated flushings of the hot water tank is required. |
| | Leak at distributor tube. | Make sure distributor tube is not cracked. Check o-ring and tube pilot. |
| | Internal valve leak. | Replace seals and spacers and/or piston. |
| Unit used too much salt. | Improper salt setting. | Check salt usage and salt setting. |
| | Excessive water in brine tank. | See "Excessive water in brine tank". |
| Loss of water pressure. | Iron buildup in line to water conditioner. | Clean line to water conditioner. |
| | Iron buildup in water conditioner. | Clean control and add mineral cleaner to mineral bed. Increase frequency of regeneration. |
| | Inlet of control plugged due to foreign material broken loose from pipes by recent work done on plumbing system. | Remove piston and clean control. |
| Loss of mineral through drain line. | Air in water system. | Assure that well system has proper air eliminator control. Check for dry well condition. |
| | Improperly sized drain line flow control. | Check for proper drain rate. |
| Iron in conditioned water. | Fouled mineral bed. | Check backwash, brine draw, and brine tank fill. Increase frequency of regeneration. Increase backwash time. |
| Excessive water in brine tank. | Plugged drain line flow control. | Clean flow control. |
| | Plugged injector system. | Clean injector and screen. |
| | Timer not cycling. | Replace timer. |
| | Foreign material in brine valve. | Replace brine valve seat and clean valve. |
| | Foreign material in brine line flow control. | Clean brine line flow control. |
| Softener fails to draw brine. | Drain line flow control is plugged. | Clean drain line flow control. |
| | Injector is plugged. | Clean injector |
| | Injector screen plugged. | Clean screen. |
| | Line pressure is too low. | Increase line pressure to 20 psi |
| | Internal control leak | Change seals, spacers, and piston assembly. |
| | Service adapter did not cycle. | Check drive motor and switches. |
| Control cycles continuously. | Misadjusted, broken, or shorted switch. | Determine if switch or timer is faulty and replace it, or replace complete power head. |
| Drain flows continuously. | Valve is not programming correctly. | Check timer program and positioning of control. Replace power head assembly if not positioning properly. |
| | Foreign material in control. | Remove power head assembly and inspect bore. Remove foreign material and check control in various regeneration positions. |
| | Internal control leak. | Replace seals and piston assembly. |

WATER CONDITIONER FLOW DIAGRAMS - DOWNFLOW

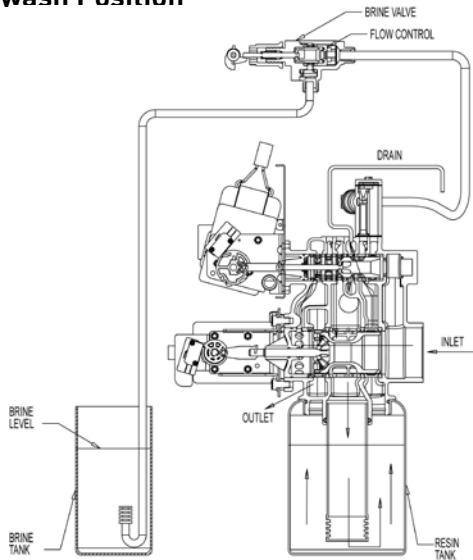
1 Service Position



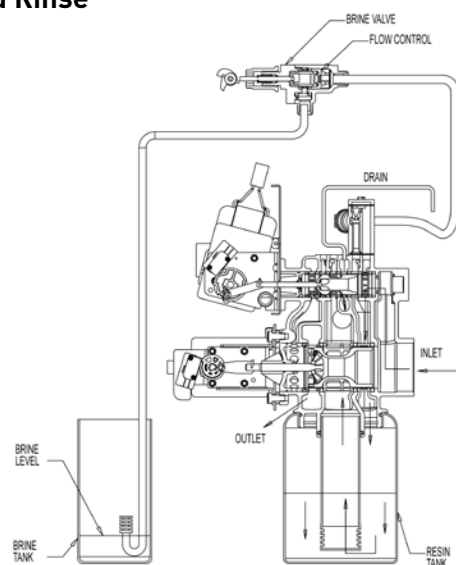
4 Slow Rinse Position



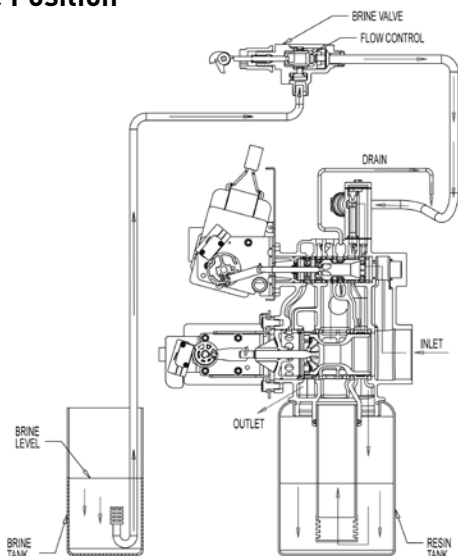
2 Backwash Position



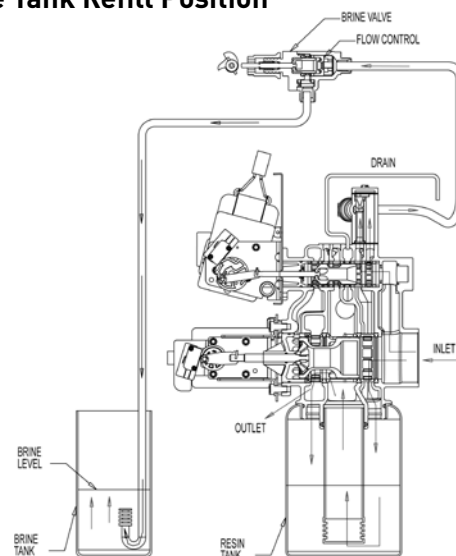
5 Rapid Rinse



3 Brine Position

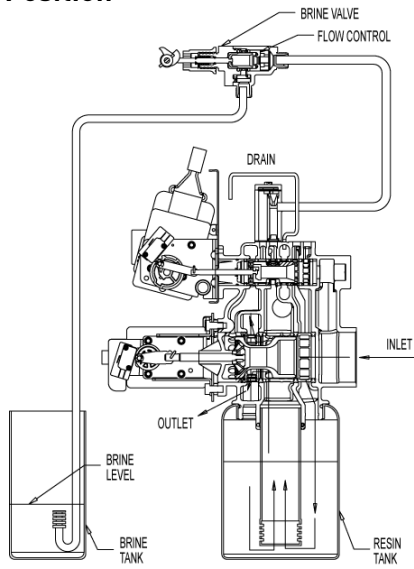


6 Brine Tank Refill Position

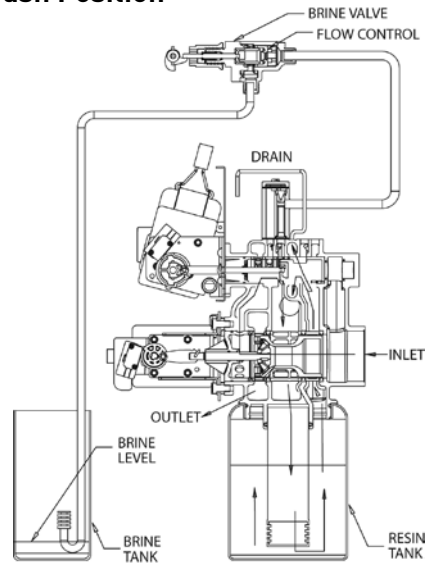


WATER CONDITIONER FLOW DIAGRAMS - UPFLOW

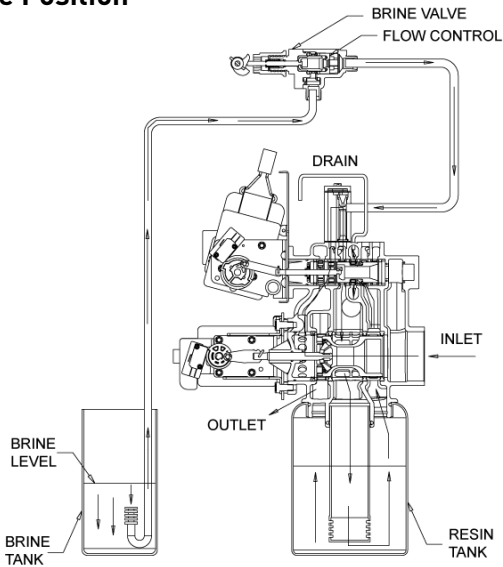
1 Service Position



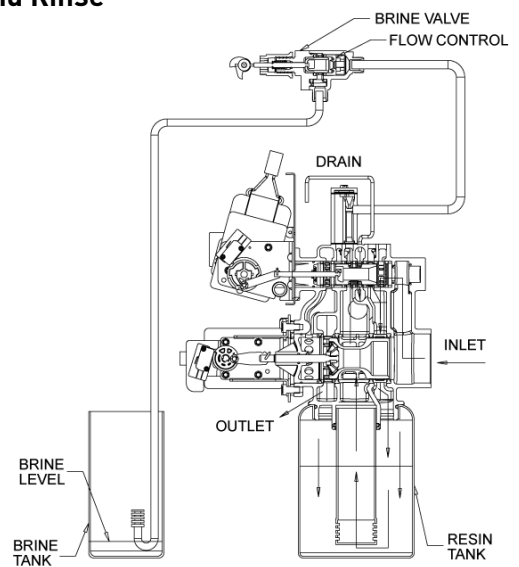
4 Back Wash Position



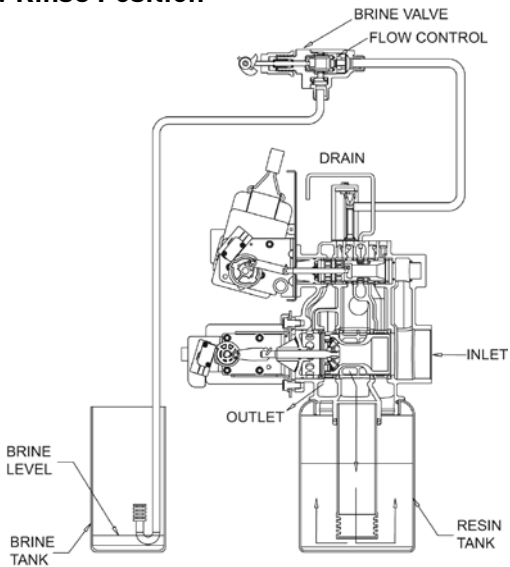
2 Brine Position



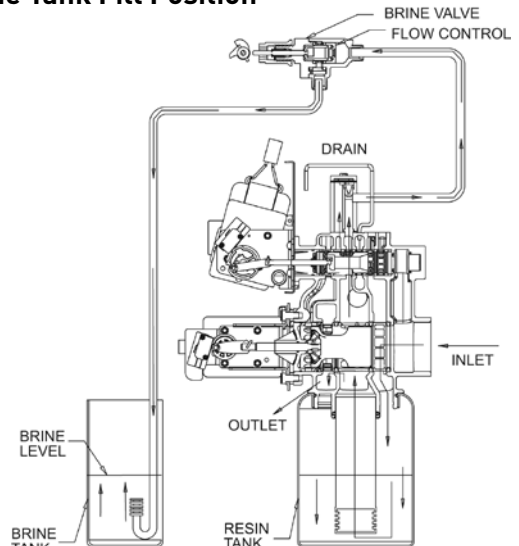
5 Rapid Rinse



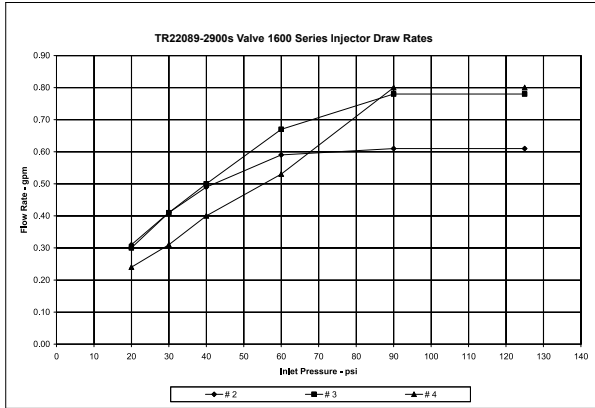
3 Slow Rinse Position



6 Brine Tank Fill Position

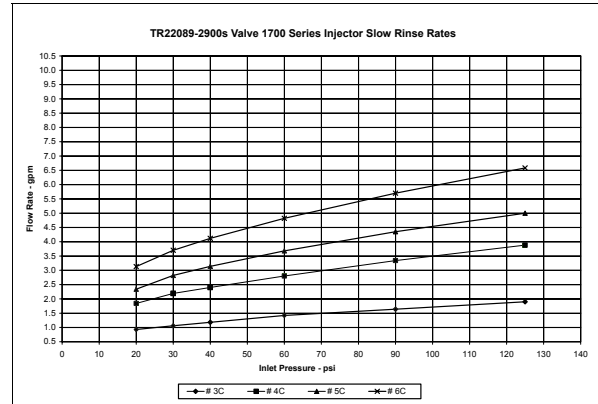


FLOW DATA & INJECTOR DRAW RATES - DOWNFLOW



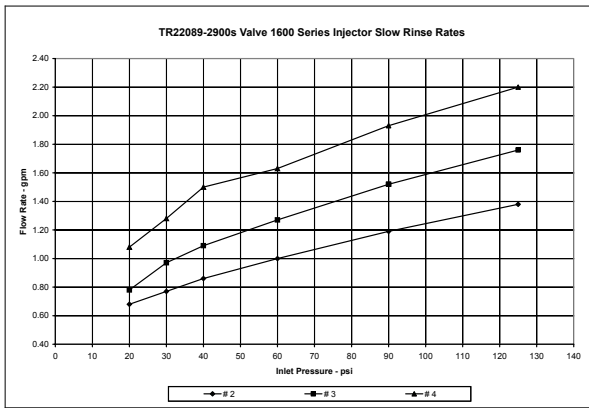
| 1600 series injectors | Draw Rate - gpm | | |
|-----------------------|-----------------|------|------|
| pressure | # 2 | # 3 | # 4 |
| 20 | 0.31 | 0.30 | 0.24 |
| 30 | 0.41 | 0.41 | 0.31 |
| 40 | 0.49 | 0.50 | 0.40 |
| 60 | 0.59 | 0.67 | 0.53 |
| 90 | 0.61 | 0.78 | 0.80 |
| 125 | 0.61 | 0.78 | 0.80 |

all injectors used the steel cap and an air disperser



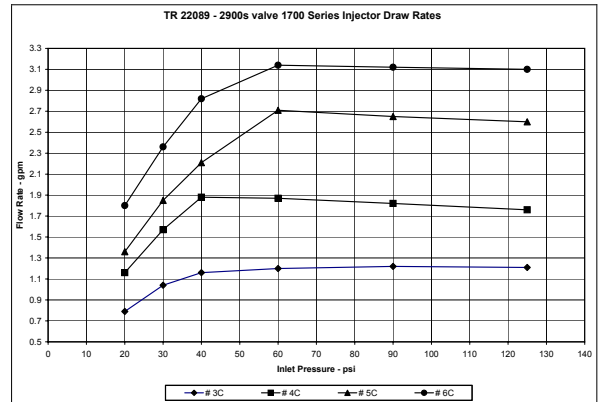
| 1700 series injectors | Slow Rinse - gpm | | | |
|-----------------------|------------------|------|------|------|
| pressure | # 3C | # 4C | # 5C | # 6C |
| 20 | 0.93 | 1.84 | 2.34 | 3.13 |
| 30 | 1.06 | 2.19 | 2.82 | 3.70 |
| 40 | 1.18 | 2.40 | 3.14 | 4.12 |
| 60 | 1.42 | 2.80 | 3.68 | 4.82 |
| 90 | 1.64 | 3.34 | 4.35 | 5.70 |
| 125 | 1.90 | 3.88 | 5.00 | 6.58 |

3C - steel cap, no o-ring, air disperser
 # 4C & 5C - steel cap, o-ring, air disperser
 # 6C & 7C - brass cap, o-ring, no air disperser



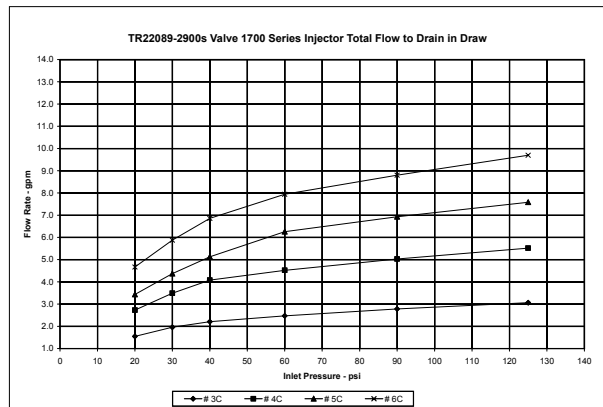
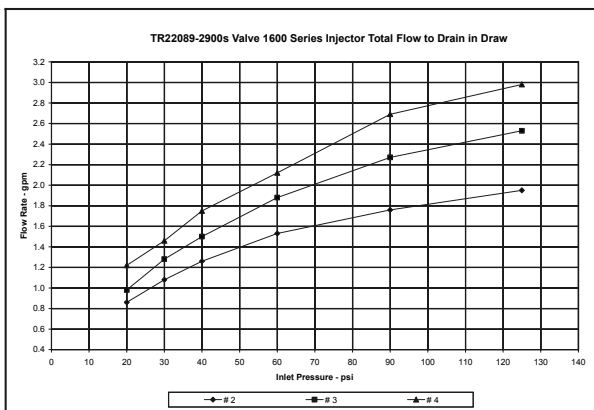
| 1600 series injectors | Slow Rinse Rates - gpm | | |
|-----------------------|------------------------|------|------|
| pressure | # 2 | # 3 | # 4 |
| 20 | 0.68 | 0.78 | 1.08 |
| 30 | 0.77 | 0.97 | 1.28 |
| 40 | 0.86 | 1.09 | 1.50 |
| 60 | 1.00 | 1.27 | 1.63 |
| 90 | 1.19 | 1.52 | 1.93 |
| 125 | 1.38 | 1.76 | 2.20 |

all injectors used the steel cap and an air disperser

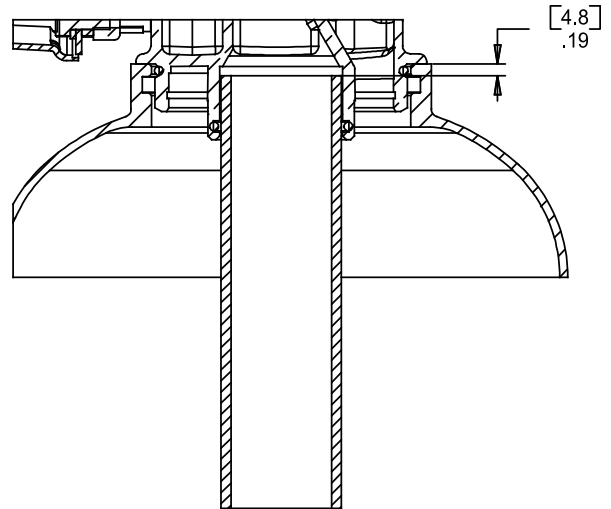
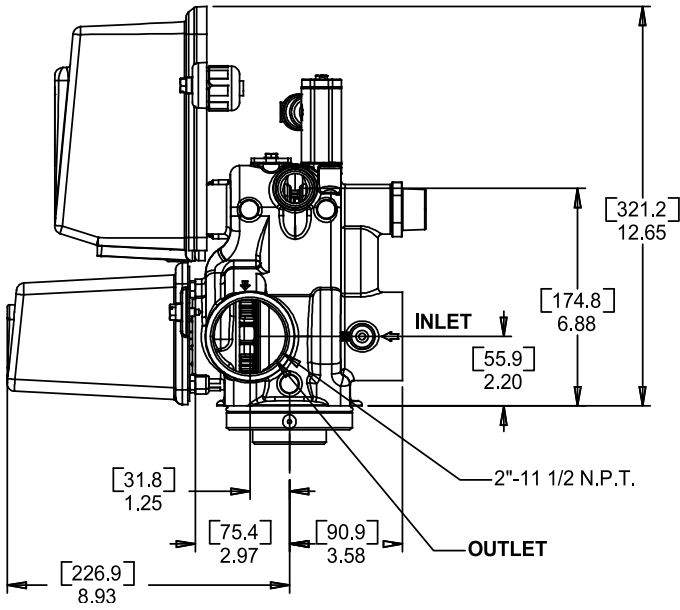
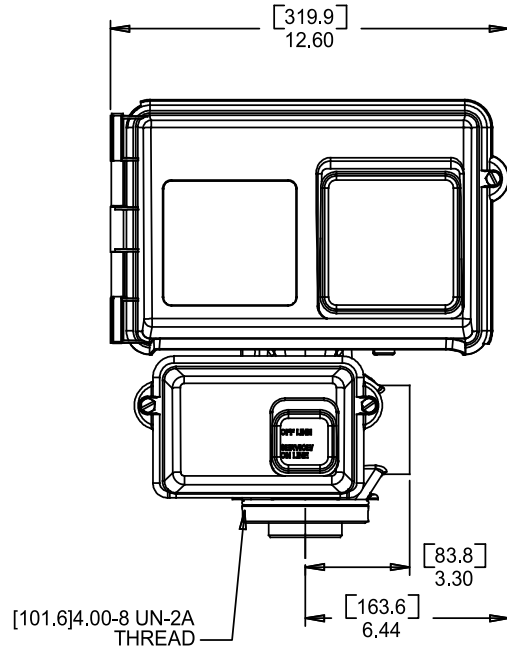
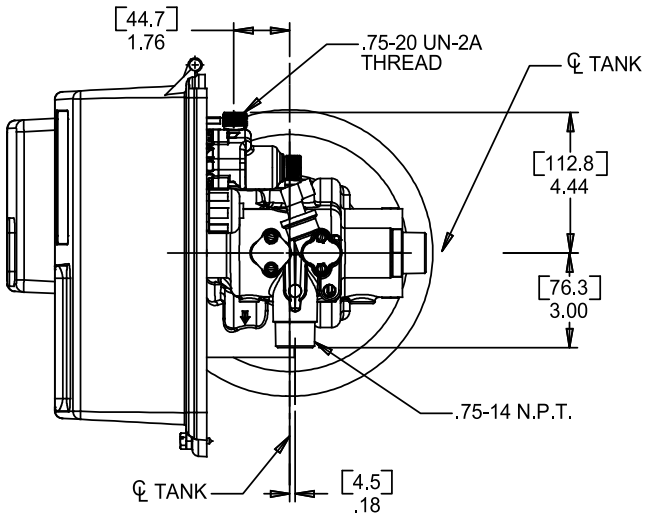


| 1700 series injectors | Draw Rate - gpm | | | |
|-----------------------|-----------------|------|------|------|
| pressure | # 3C | # 4C | # 5C | # 6C |
| 20 | 0.79 | 1.16 | 1.36 | 1.80 |
| 30 | 1.04 | 1.57 | 1.85 | 2.36 |
| 40 | 1.16 | 1.88 | 2.21 | 2.82 |
| 60 | 1.20 | 1.87 | 2.71 | 3.14 |
| 90 | 1.22 | 1.82 | 2.65 | 3.12 |
| 125 | 1.21 | 1.76 | 2.60 | 3.10 |

3C - steel cap, no o-ring, air disperser
 # 4C & 5C - steel cap, o-ring, air disperser
 # 6C - brass cap, o-ring, no air disperser



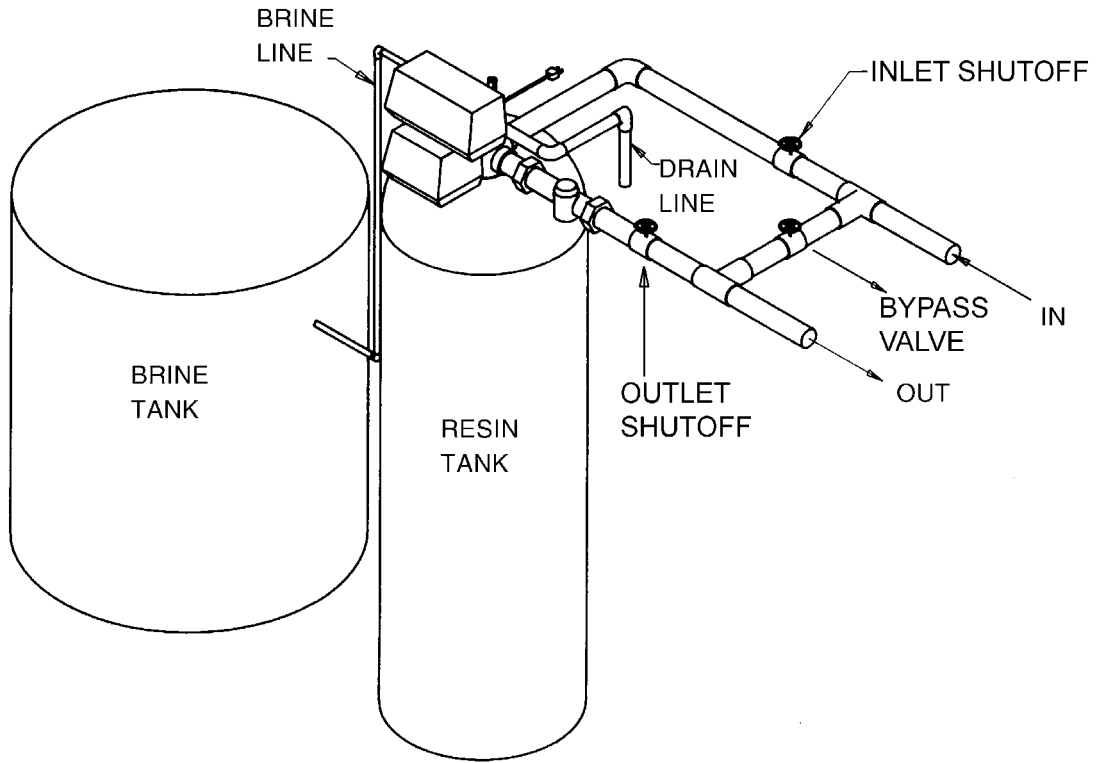
ENVIRONMENTAL BACKPLATE DIMENSIONS



61500-2900LNE Rev B

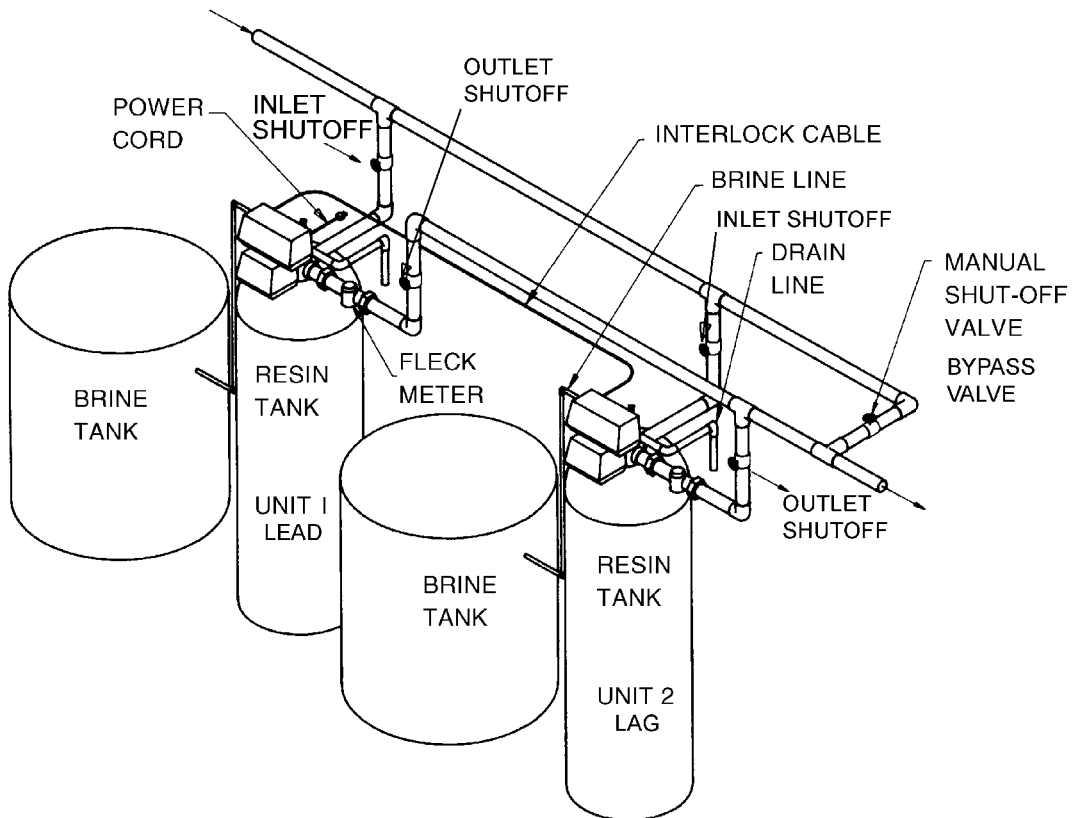
SYSTEM #4

Typical Single Tank Installation with Optional Meter



SYSTEM #5 INTERLOCK

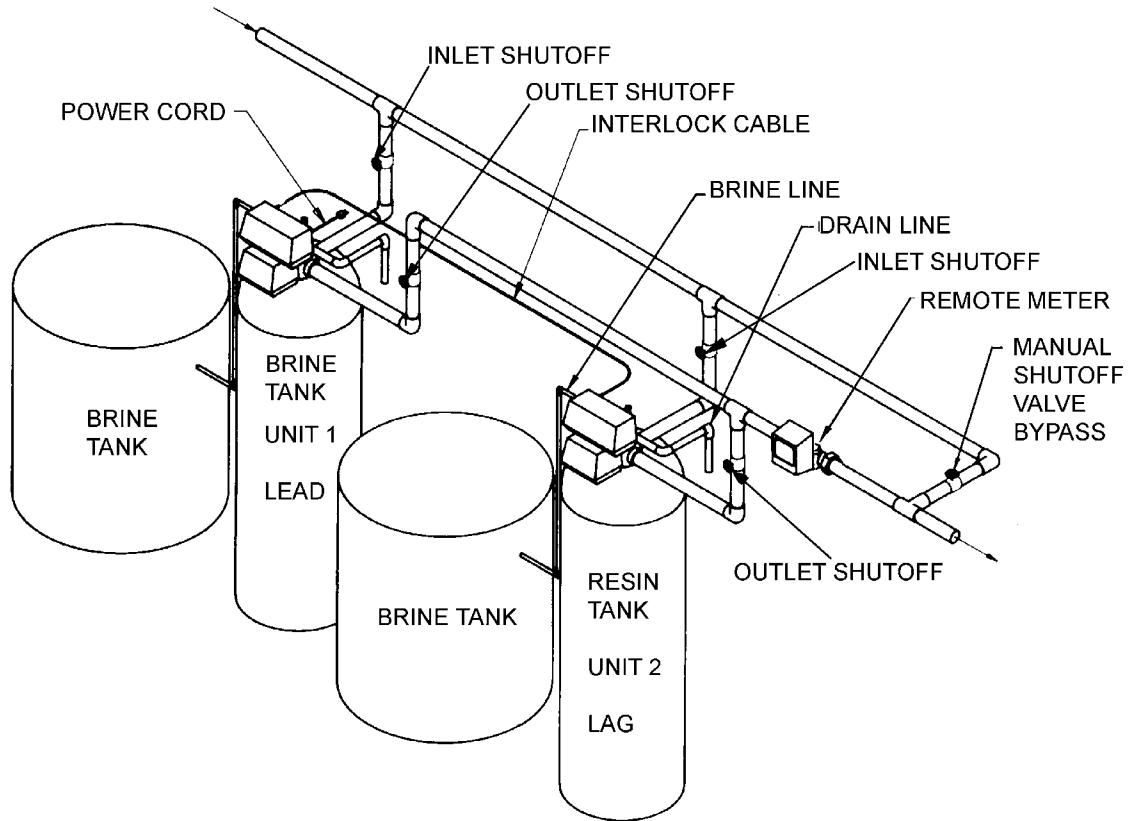
Typical Twin Tank Installation with Optional Meter Interlock and No Hard Water Bypass



SYSTEM #6 & #7

Twin Series Regeneration Installation with a Remote Meter

Twin Alternator Installation

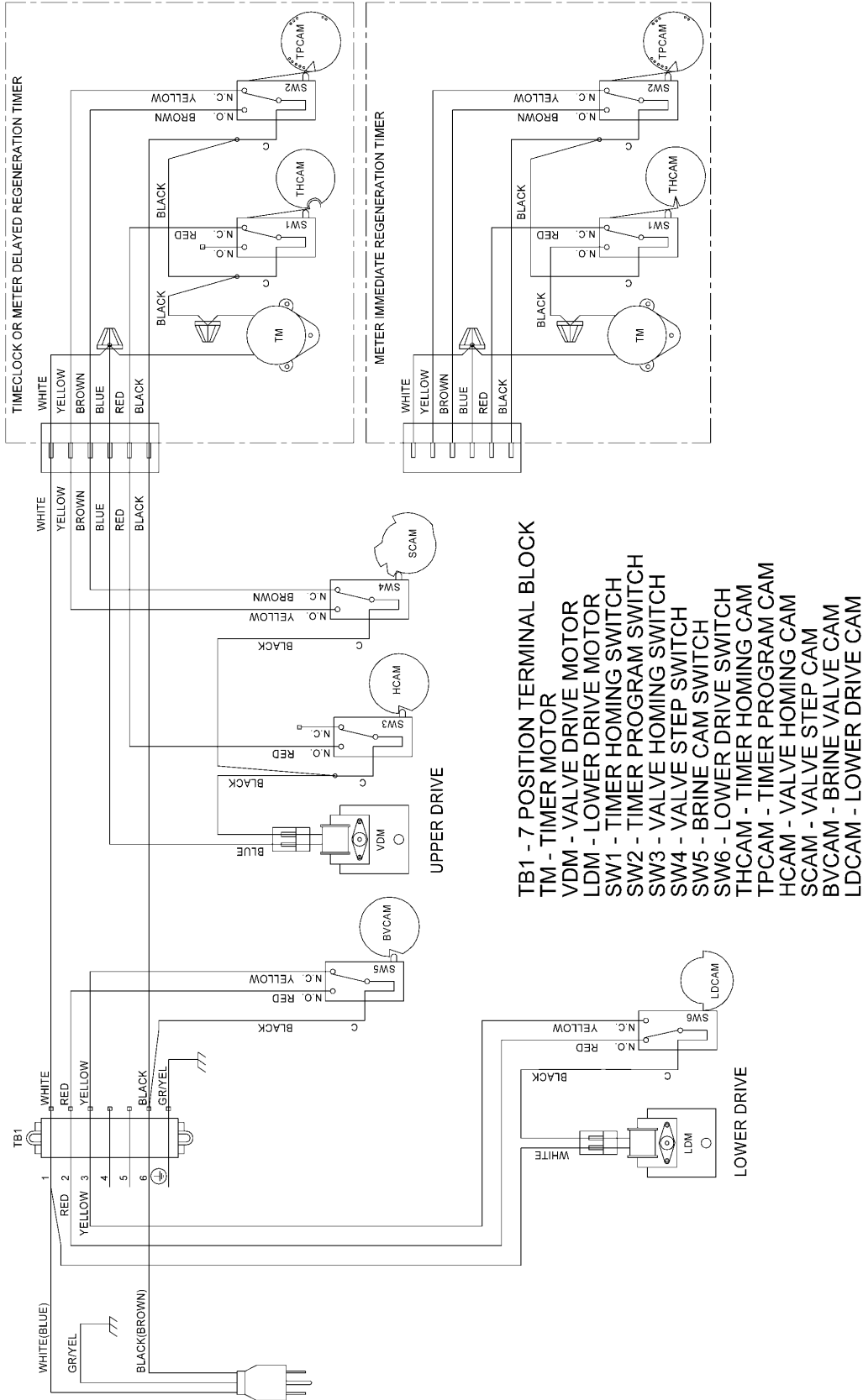


NOTE: On System 7, the power cord is on Unit 2.

NOTE: System 7 can run with either one or two brine tanks. Two brine tanks should be used if regeneration is less than 4 hours.

SYSTEM #4 WIRING

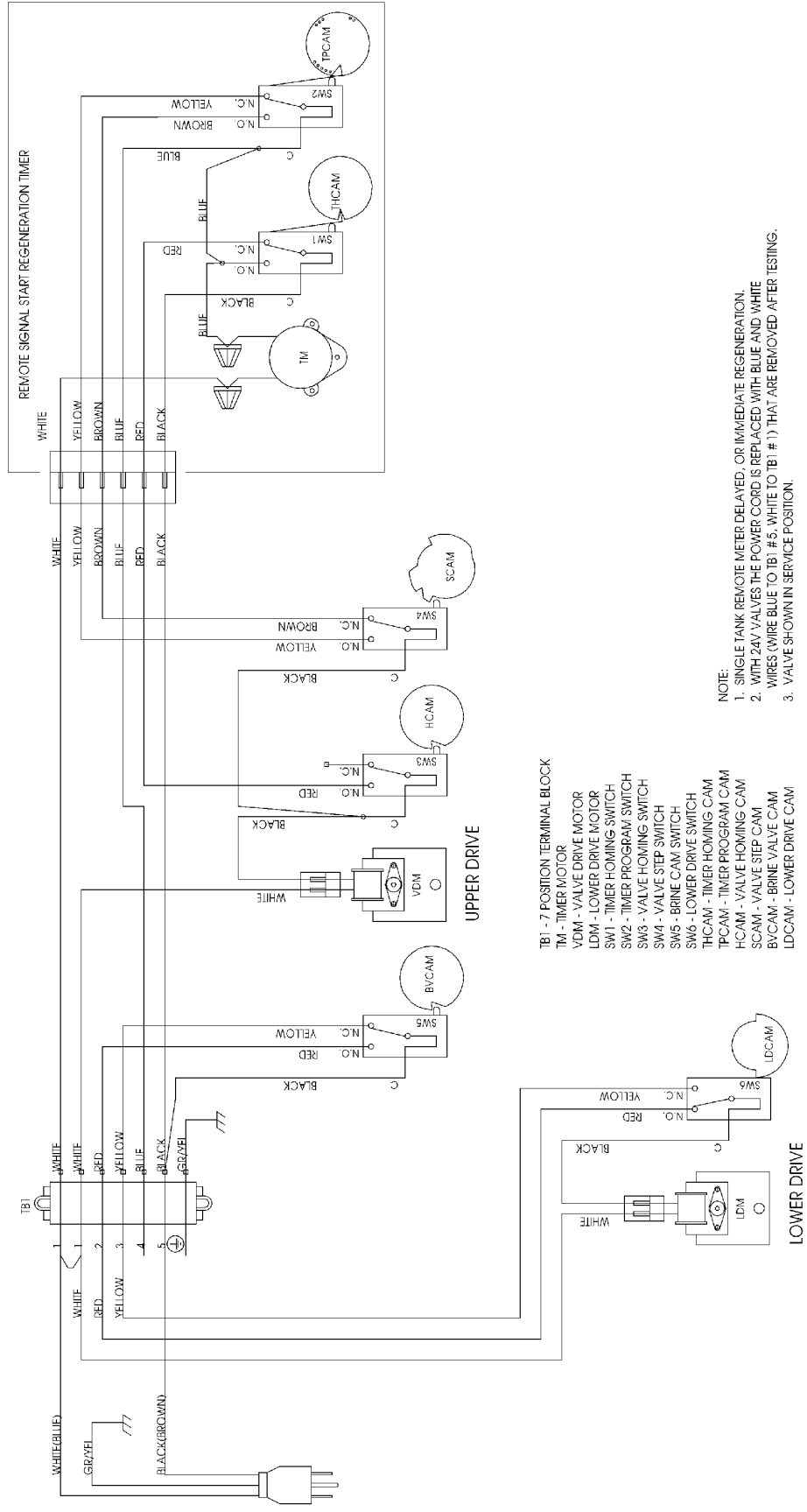
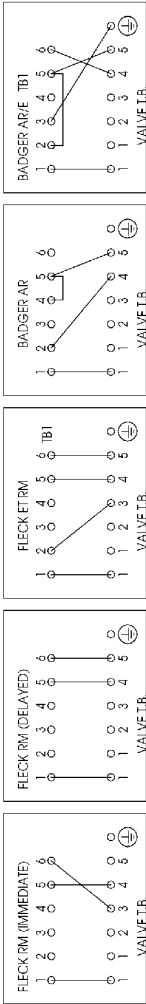
Single Valve Regeneration Immediate and Delayed Valve Wiring



SYSTEM #4 WIRING *CONTINUED*

With Remote Starter Valve Wiring

REMOTE METER WIRING

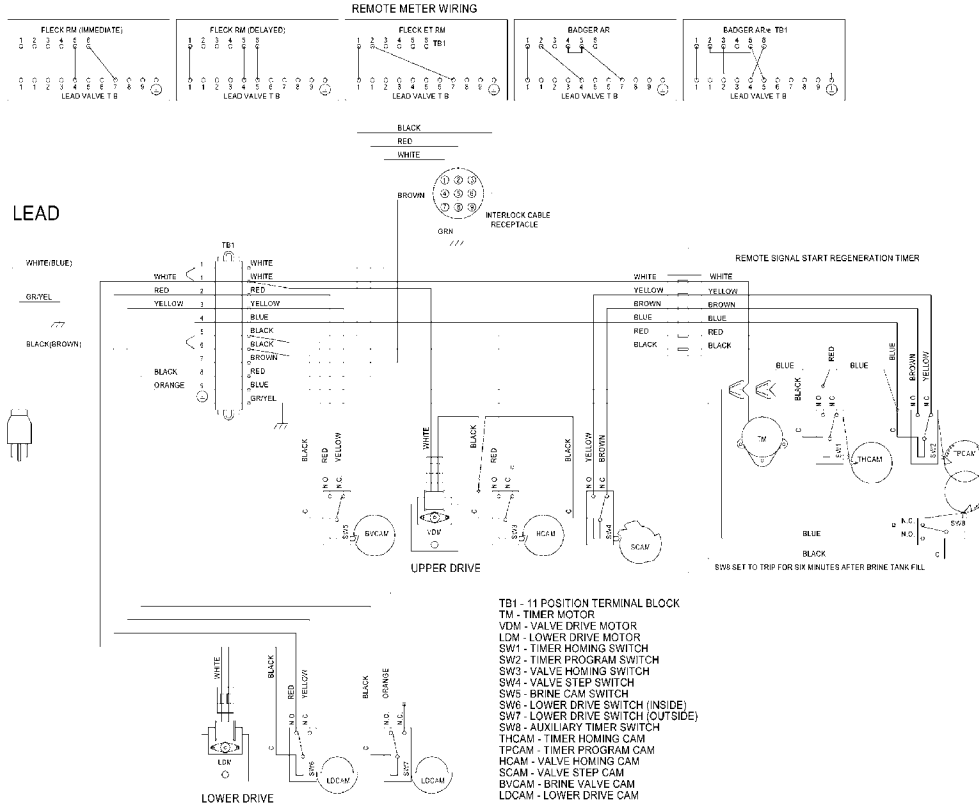


- TBI - 7 POSITION TERMINAL BLOCK**
- TM - TIMER MOTOR
 - VDM - VALVE DRIVE MOTOR
 - LDM - LOWER DRIVE MOTOR
 - SW1 - TIMER HOMING SWITCH
 - SW2 - TIMER PROGRAM SWITCH
 - SW3 - VALVE HOMING SWITCH
 - SW4 - VALVE STEP SWITCH
 - SW5 - BRINE CAM SWITCH
 - SW6 - LOWER DRIVE SWITCH
 - HCAM - TIMER HOMING CAM
 - PCAM - TIMER PROGRAM CAM
 - HCAM - VALVE HOMING CAM
 - SCAM - VALVE STEP CAM
 - BVCAM - BRINE VALVE CAM
 - LDCAM - LOWER DRIVE CAM

- NOTE:**
1. SINGLE TANK REMOTE METER DELAYED, OR IMMEDIATE REGENERATION.
 2. WITH 24V VALVES THE POWER CORD IS REPLACED WITH BLUE AND WHITE WIRES (WIRE BLUE TO TBI #5, WHITE TO TBI #1) THAT ARE REMOVED AFTER TESTING.
 3. VALVE SHOWN IN SERVICE POSITION.

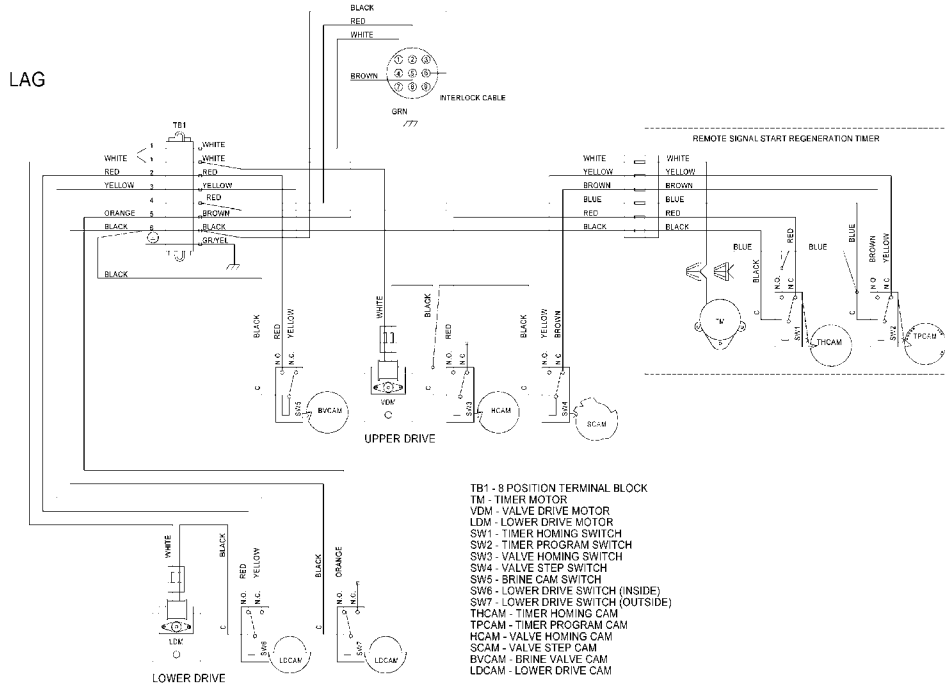
SYSTEM #6 WIRING

Series Regeneration Valve Wiring



- NOTE:**
1. TWO TANK INTERLOCKED, SINGLE REMOTE METER, SERIES REGENERATION.
 2. BOTH TANKS NORMALLY IN SERVICE.
 3. ONLY ONE TANK IN REGENERATION, THE OTHER REMAINS IN SERVICE.
 4. LEAD VALVE REGENERATES FIRST, FOLLOWED IMMEDIATELY BY LAG VALVE.

18686-01 Rev E

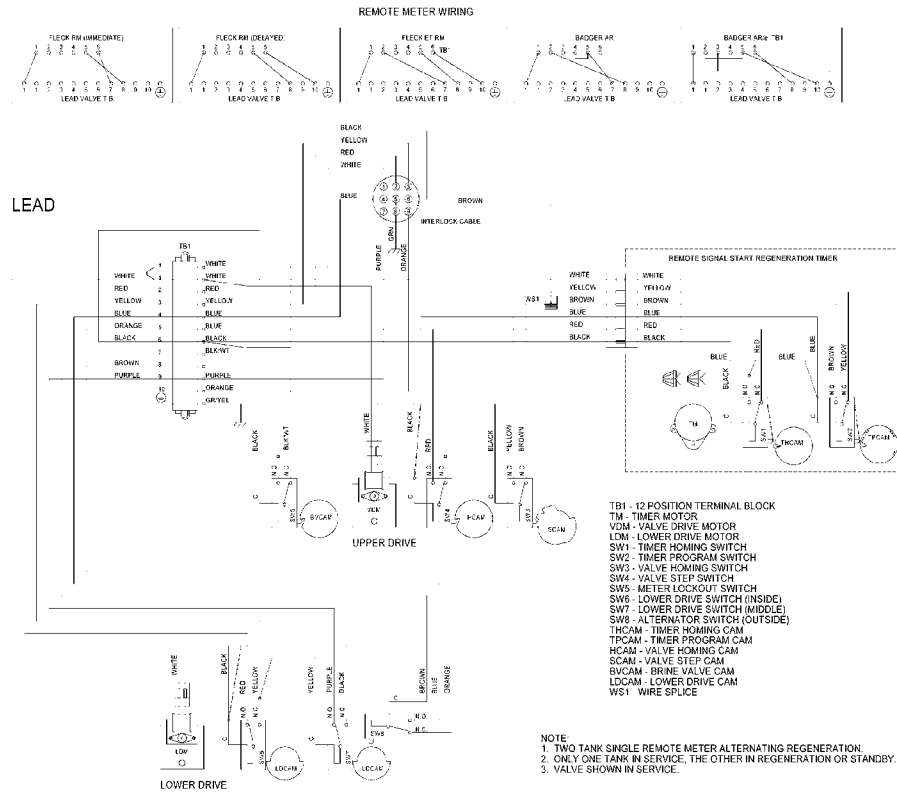


- NOTE:**
1. TWO TANK INTERLOCKED, SINGLE REMOTE METER, SERIES REGENERATION.
 2. BOTH TANKS NORMALLY IN SERVICE.
 3. ONLY ONE TANK IN REGENERATION, THE OTHER REMAINS IN SERVICE.
 4. LEAD VALVE REGENERATES FIRST, FOLLOWED IMMEDIATELY BY LAG VALVE.

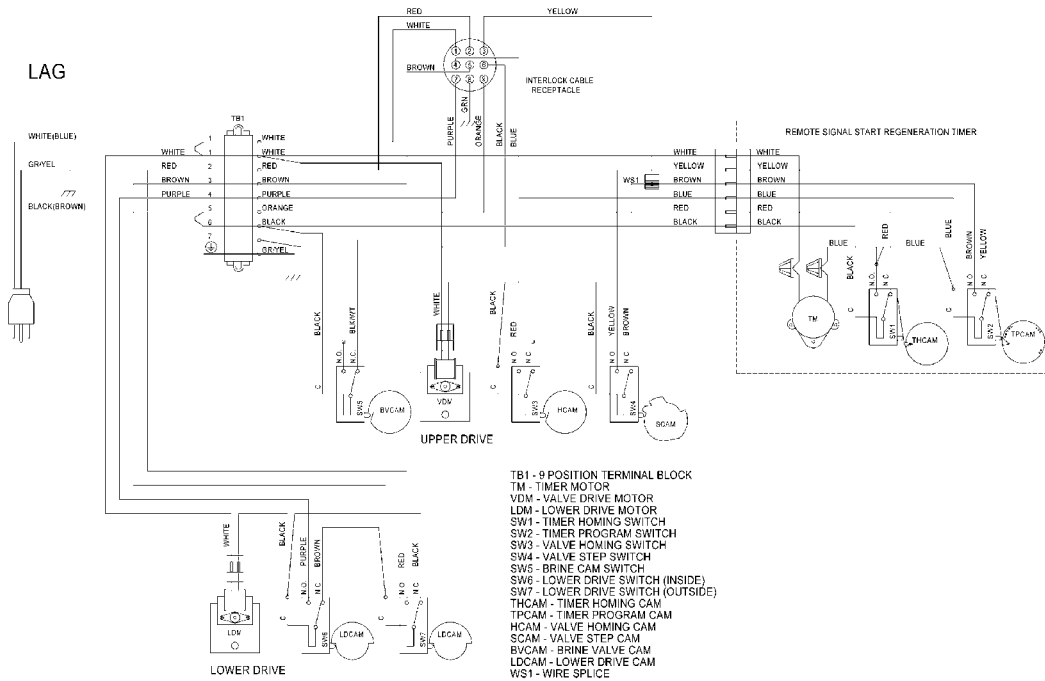
18686-02 Rev E

SYSTEM #7 WIRING

Alternating Regeneration Valve Wiring



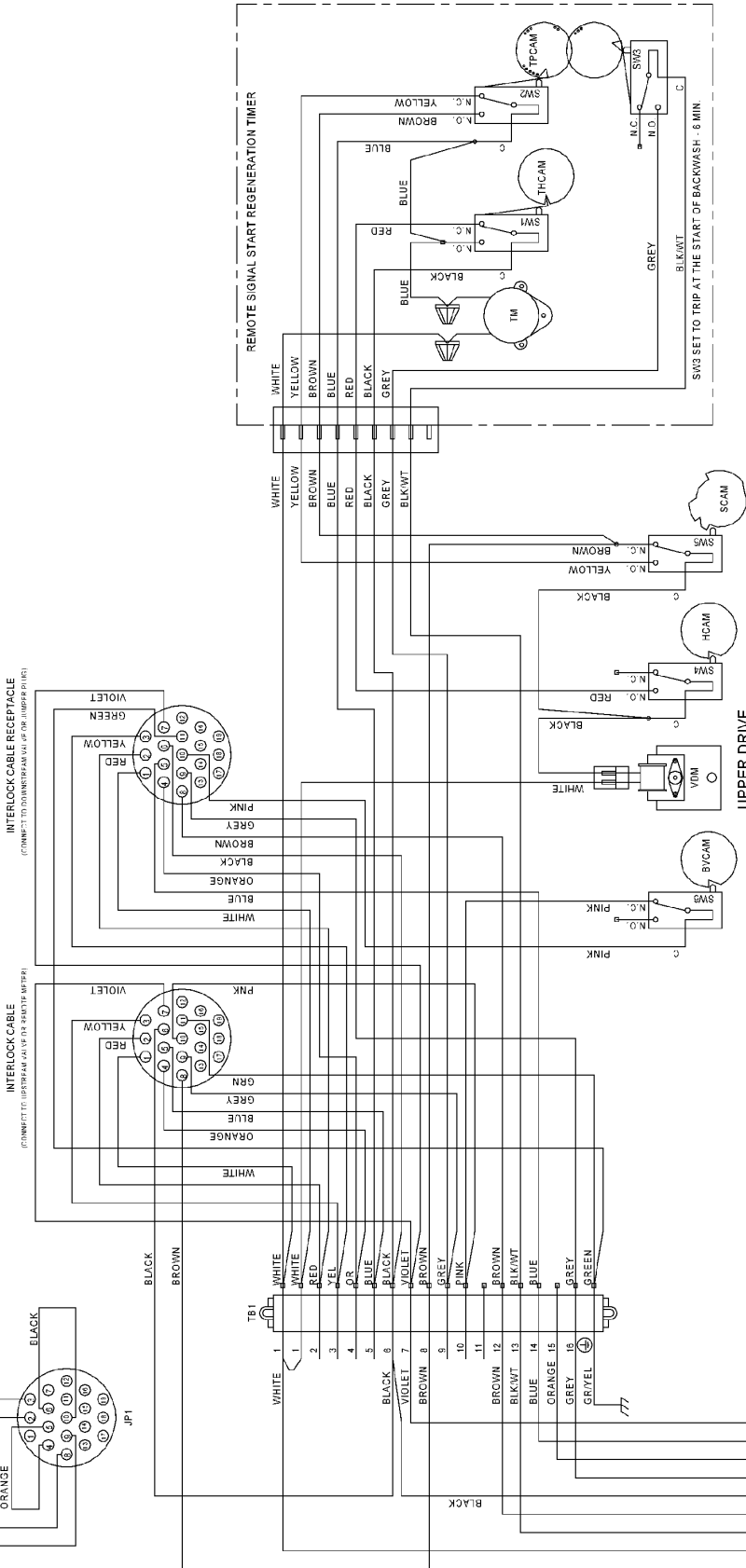
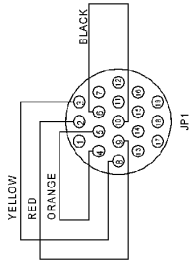
18687-01 Rev E



18687-02 Rev E

SYSTEM #7 WIRING CONTINUED

JUMPER PLUG WIRING
JUMPER PLUG PLACED ON LAST VALVE IN SYSTEM



- TB1 - 16 POSITION TERMINAL BLK
- JP1 - JUMPER PLUG ASSEMBLY
- TM - TIMER MOTOR
- VDM - VALVE DRIVE MOTOR
- LDM - LOWER DRIVE MOTOR
- SW4 - VALVE HOMING SWITCH
- SW5 - TIMER PROGRAM SWITCH
- SW6 - VALVE HOMING SWITCH
- SW7 - BRINE CAM SWITCH
- SW8 - LOWER DRIVE SWITCH (INSIDE)
- SW9 - LOWER DRIVE SWITCH (OUTSIDE)
- T-CAM - TIMER PROGRAM CAM
- H-CAM - VALVE HOMING CAM
- SCAM - VALVE STOP CAM
- BCAM - BRINE VALVE CAM
- LOCAM - LOWER DRIVE CAM

NOTE TO FOUR TANK SINGLE METER ALTERNATING REGENERATION.

1. TO 3 TANKS IN SERVICE.
2. ONE TANK IN REGENERATION OR STANDBY
3. ALL VALVES IN SYSTEM WIRED ALIKE.
4. LAST VALVE IN SYSTEM RECEIVES JUMPER PLUG ASSEMBLY.
5. CONNECT JUMPER PLUG TO INTERLOCK CABLE RECEPTACLE.
6. SPECIAL MULTI VALVE REMOTE METER OR EQUIV. REQUIRED FOR PROPER OPERATION.
7. INTERLOCK CABLE RECEPTACLE CONNECTED TO REMOTE METER.
8. VALVE SHOWN IN SERVICE POSITION.

1600/1700 SYSTEM NOZZLE & THROAT CHART

1600 Brine System

Standard

| Size | Color | Nozzle | Throat |
|---------|--------------|---------|---------|
| #0..... | Red | 10913-0 | 10914-0 |
| #1..... | White | 10913-1 | 10914-1 |
| #2..... | Blue | 10913-2 | 10914-2 |
| #3..... | Yellow | 10913-3 | 10914-3 |
| #4..... | Green..... | 10913-4 | 10914-4 |

PVC

| Size | Color | Nozzle | Throat |
|---------|------------|---------|---------|
| #0..... | Gray | 12973-0 | 12974-0 |
| #1..... | Gray | 12973-1 | 12974-1 |
| #2..... | Gray | 12973-2 | 12974-2 |
| #3..... | Gray | 12973-3 | 12974-3 |
| #4..... | Gray | 12973-4 | 12974-4 |

Stainless Steel

| Size | Color | Nozzle | Throat |
|---------|--------------|---------|---------|
| #0..... | Silver | 10225-0 | 10226-0 |
| #1..... | Silver | 10225-1 | 10226-1 |
| #2..... | Silver | 10225-2 | 10226-2 |
| #3..... | Silver | 10225-3 | 10226-3 |
| #4..... | Silver | 10225-4 | 10226-4 |

1700 Brine System

Standard

| Size | Color | Nozzle | Throat |
|---------|--------------|-----------|-----------|
| #3..... | Yellow | 14801-03C | 14802-03C |
| #4..... | Green..... | 14801-04C | 14802-04C |
| #5..... | White | 14801-05C | 14802-05C |
| #6..... | Red | 14801-06C | 14802-06C |

SERVICE ASSEMBLIES

Adapters:

| | |
|------------|--|
| 61525 | Softwater Adapter Kit, 2900s |
| 61415 | Adapter Assy, Sidemount 2850/2900/2930 |
| 61415NP | Adapter Assy, Sidemount, NP 2850/2900/2930 |
| 61415-20 | Adapter Assy, Sidemount, BSP/MTC 2850/2900/2930 |
| 61415-20NP | Adapter Assy, Sidemount, BSP/NP 2850/2900/2930 |

Air Checks:

| | |
|----------|--|
| 60002-34 | Air Check, #500, 34 inches Long |
| 60003-34 | Air Check, #500, HW, 34 inches Tube |
| 60009-01 | Air Check, #900, Commercial, HW Less Fittings |

Auxiliary Micro Switch:

| | |
|----------|---|
| 60320-02 | Switch Kit, 3200/9000 Timer Auxiliary |
| 60320-11 | Switch Assy, 2900, Lower Drive (For Adding 2nd Switch) |
| 60320-08 | Switch Assy, 2900, Lower Drive Aux (For Adding Third Switch) |

Brine Line Flow Controls (BLFC):

| | |
|-----------|-------------------------------|
| 60020-25 | BLFC, .25 GPM, 1600 |
| 60020-50 | BLFC, .50 GPM, 1600 |
| 60020-100 | BLFC, 1.0 GPM, 1600 |
| 60011-090 | Brine Valve, 1650, Short Stem |
| 60010-25 | BLFC, 1650, .25 GPM, Plastic |
| 60010-50 | BLFC, 1650, .50 GPM, Plastic |
| 60010-100 | BLFC, 1650, 1.0 GPM, Plastic |

Brine Valves:

| | |
|----------|--|
| 60011 | Brine Valve, 1650, Less BLFC |
| 60029 | Brine Valve, 1600, Short Stem Brass, Std O-rings |
| 60029HW | Brine Valve, 1600, Short Stem Hot Water |
| 60034-XX | Model 1700 brine valve assy (specify flow control 1.0 - 5.0) |
| 60604-XX | Model 1710 brine valve assy (specify flow control 1.0 - 5.0) |

Covers:

| | |
|-----------|----------------------------------|
| 60217-02 | Environmental Lower Cover, Black |
| 60219-02 | Environmental, Cover, Black |
| 60232-XX | Designer 2 Piece |
| 60232-110 | Cover, Designer, 1 Piece Black |
| 14800-02 | Cover, Dust, Lower, 2900, Black |

Drain Line Flow Controls (DLFC):

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

Cam Assemblies:

| | |
|-----------|---|
| 60160-00 | Drive Cam Assy, RR, White |
| 60160-20 | Drive Cam Assy, Std |
| 60160-22 | Drive Cam Assy, Link, Environmental 2900 Lower Drive |
| 60160-30* | Drive Cam Assy, Upflow |
| 60160-31* | Drive Cam Assy, Upflow, Variable |

24-Hour Gear Assemblies:

| | |
|----------|--|
| 19205 | Gear Assy, 24 Hour, Silver, 5600, 12 A.M. |
| 60519-02 | Gear Assy, 3200 24 Hour 2 Times/Day, w/ Silver Label |
| 60519-03 | Gear Assy, 3200, 24 Hour 3 Times/Day, w/Silver Label |
| 60519-04 | Gear Assy, 3200, 24 Hour 4 Times/Day, w/Silver Label |
| 60519-06 | Gear Assy, 3200, 24 Hour (12:00) 6 Times/Day, w/Silver Label |

Injector Assemblies (Complete):

| | |
|----------|--|
| 60480-XX | 1600/1650 - 3/8-inch brine (specify size of injector) |
|----------|--|

Meters:

| | |
|-------|---------------------------------------|
| 60393 | Meter Assy, 2900, 2-inch Std |
| 60394 | Meter Assy, 2900, 2-inch Ext |
| 60616 | Meter Assy, Elec 2-inch |
| 60620 | Meter Assy, 2-inch Plastic, Std |
| 60621 | Meter Assy, 2-inch Plastic, Ext |
| 60625 | Meter Assy, 2-inch Plastic Electronic |
| 61439 | Meter Sleeve w/O-ring, Machd |

Piston Assemblies:

| | |
|-----------|--|
| 60103 | Piston Assy, 2900/2930, HWBP Lower |
| 60103-01 | Piston Assy, 2900/2930, HWBP, HW, Lower |
| 60104 | Piston Assy, 2900/2930, NHWBP Lwr, 2900s, Soft Wtr Rgn |
| 60104-01 | Piston Assy, 2900/2930, NHWBP, HW Lwr, 2900s Soft Wtr Rgn |
| 61540 | Piston Assy, 2900s, Downflow Upper |
| 61540-01 | Piston Assy, 2900s Downflow Upper, HW |
| 61545* | Piston Assy, 2900s, Upflow Upper |
| 61545-01* | Piston Assy, 2900s, Upflow Upper, HW |
| 61550 | Piston Assy, 2900s, HWBP Lower |
| 61550-03 | Piston Assy, 2900s, HWBP Lower, HW |
| 61555 | Piston Assy, 2900s, NHWBP Lower |
| 61555-03 | Piston Assy, 2900s, NHWBP Lower, HW |

Program Wheel Assemblies:

| | |
|----------|---|
| 60405-20 | Program Wheel, w/3/4-inch Ext Label 1-1/2 inch Std Set @ 100 |
| 60405-50 | Program Wheel, w/2-inch Std Label Set @ 21 |
| 60405-60 | Program Wheel, w/2-inch Ext Label |
| 60405-70 | Program Wheel, w/1-1/2 inch Ext Label |

SERVICE ASSEMBLIES *CONTINUED*

Safety Brine Valves:

| | |
|------------------|--|
| 60014..... | Safety Brine Valve Assy, 2310 |
| 60038..... | Safety Brine Valve , 2350 |
| 60027-FFA..... | Safety Brine Valve Body, 2300 Fitting Facing Arm |
| 60027-FFS..... | Safety Brine Valve Body Fitting Facing Stud |
| 60026-30SAN..... | Float Assy, 400A/2350, 30-inch HW |
| 60028-30..... | Float Assy, 2300, 30-inch White |
| 60028-30..... | Float Assy, 2300, 30-inch, Blue/White |
| 60068-30..... | Float Assy, 2310, w/30-inch Rod |

Sales & Service Aids:

| | |
|------------|--|
| 40738..... | Literature, 2900 Spec Sheet |
| 41689..... | Literature, 2900s S/Manual |
| 40717..... | Literature, Catalog Assy, PWT Residential/Commercial |

Seal & Spacer Kits:

| | |
|---------------|--|
| 61530..... | Seal & Spacer Kit, 2900s Upper |
| 61530-01..... | Seal & Spacet Kit, 2900s, HW Upper |
| 60128..... | Seal & Spacer Kit, 2900/2930 Lower |
| 60128-01..... | Seal & Spacer Kit, 2900/2930, HW Lower |

Service Equipment:

| | |
|--------------|------------------------------|
| 11098..... | Stuffer Tool Assy, Complete |
| 12682..... | Puller Tool Assy, 2900/3150 |
| 12683..... | Stuffer Tool Assy, 2900/3150 |
| 13061..... | Puller Assy, Port Ring |
| 16174..... | Silicone, 2 oz. Tube |
| 60460..... | Meter Checker Kit, Std |
| 60461..... | Meter Checker Kit, Ext |
| 16586-8..... | Silicone, Dow #7 8 Lb |

Service Valve Operator Assemblies:

| | |
|---------------|--------------------|
| 60150..... | SVO Assy, 1600 O/S |
| 60150-01..... | SVO Assy, 1600 N/S |

Skipper Wheel Assemblies:

| | |
|------------|----------------------------|
| 14860..... | Skipper Wheel Assy, 7 Day |
| 14381..... | Skipper Wheel Assy, 12 Day |

*Upflow Only

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