Fleck 5600SXT Down fow

Service Manual

TABLE OF CONTENTS

JOB SPECIFICATION SHEET 1
INSTALLATION 2
START-UP INSTRUCTIONS 2
TIMER FEATURES 3
TIMER OPERATION 4
MASTER PROGRAMMING MODE CHART 5
MASTER PROGRAMMING MODE 6
USER PROGRAMMING MODE 9
DIAGNOSTIC PROGRAMMING MODE 10
CONTROL VALVE ASSEMBLY 11
VALVE POWERHEAD ASSEMBLY 12
3/4" TURBINE METER ASSEMBLY 13
BYPASS VALVE ASSEMBLY (PLASTIC) 14
BYPASS VALVE ASSEMBLY (METAL) 15
2300 SAFETY BRINE VALVE 16
2310 SAFETY BRINE VALVE 17
TROUBLESHOOTING 18
WATER CONDITIONER FLOW DIAGRAMS 20
WIRING DIAGRAM 21
SERVICE INSTRUCTIONS 22
SERVICE ASSEMBLIES 24

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. Down fow: Up fow Up fow Variable

3. Meter Size:

A. 3/4" Std Range (125 - 2,100 gallon setting)

B. 3/4" Ext Range (625 - 10,625 gallon setting)

C. 1" Std Range (310 - 5,270 gallon setting)

D. 1" Ext Range (1,150 - 26,350 gallon setting)

E. 1-1/2" Std Range (625 - 10,625 gallon setting)

F. 1-1/2" Ext Range (3,125 - 53,125 gallon setting)

G. 2" Std Range (1,250 - 21,250 gallon setting)

H. 2" Ext Range (6,250 - 106,250 gallon setting)

I. 3" Std Range (3,750 - 63,750 gallon setting)

J. 3" 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 ofþine based on þow.

5. Timer Program Settings:

A. Backwash: _____ Minutes

B. Brine and Slow Rinse: _____ Minutes

C. Rapid Rinse: _____ Minutes

D. Brine Tank Reýll: _____ 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 ýlter 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 þow.

By-Pass Valves

Always provide for the installation of a by-pass 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 ýrm 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" (13 mm). Backwash þow rates in excess of 7 gpm (26.5 Lpm) or length in excess of 20’ (6 m) require 3/4" (19 mm) drain line. Commercial drain lines should be the same size as the drain line þow control.
4. Refer to the dimensional drawing for cutting height of the distributor tube. If there is no dimensional drawing, cut the distributor tube þush 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. Solder joints near the drain must be done prior to connecting the Drain Line Flow Control ýtting (DLFC). Leave at least 6" (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.
7. Teþon tape is the only sealant to be used on the drain ýtting. The drain from twin tank units may be run through a common line.
8.

TIMER FEATURES

TIMER OPERATION

Meter Immediate Control

A meter immediate control measures water usage and regenerates the system as soon as the calculated system capacity is depleted. The control calculates the system capacity by dividing the unit capacity (typically expressed in grains/unit volume) by the feedwater hardness and subtracting the reserve. Meter Immediate systems generally do not use a reserve volume. However, in twin tank systems with soft-water regeneration, the reserve capacity should be set to the volume of water used during regeneration to prevent hard water break-through. A Meter Immediate control will also start a regeneration cycle at the programmed regeneration time if a number of days equal to the regeneration day override pass before water usage depletes the calculated system capacity.

Meter Delayed Control

A Meter Delayed Control measures water usage and regenerates the system at the programmed regeneration time after the calculated system capacity is depleted. As with Meter Immediate systems, the control calculates the system capacity by dividing the unit capacity by the feedwater hardness and subtracting the reserve. The reserve should be set to insure that the system delivers treated water between the time the system capacity is depleted and the actual regeneration time. A Meter Delayed control will also start a regeneration cycle at the programmed regeneration time if a number of days equal to the regeneration day override pass before water usage depletes the calculated system capacity.

Time Clock Delayed Control

A Time Clock Delayed Control regenerates the system on a timed interval. The control will initiate a regeneration cycle at the programmed regeneration time when the number of days since the last regeneration equals the regeneration day override value.

Day of the Week Control

This control regenerates the system on a weekly schedule. The schedule is deýned in Master Programming by setting each day to either “off” or “on.” The control will initiates a regeneration cycle on days that have been set to “on” at the speciýed regeneration time.

Control Operation During Regeneration

During regeneration, the control displays a special regeneration display. In this display, the control shows the current regeneration step number the valve is advancing to, or has reached, and the time remaining in that step. The step number that displays þashes until the valve completes driving to this regeneration step position. Once all regeneration steps are complete the valve returns to service and resumes normal operation.

Pressing the Extra Cycle button during a regeneration cycle immediately advances the valve to the next cycle step position and resumes normal step timing.

Control Operation During Programming

The control only enters the Program Mode with the valve in service. While in the Program Mode, the control continues to operate normally monitoring water usage and keeping all displays up to date. Control programming is stored in memory permanently, eliminating the need for battery backup power.

Manually Initiating a Regeneration

1. When timer is in service, press the Extra Cycle button for 5 seconds on the main screen.
2. The timer advances to Regeneration Cycle Step #1 (rapid rinse), and begins programmed time count down.
3. Press the Extra Cycle button once to advance valve to Regeneration Cycle Step #2 (backwash).
4. Press the Extra Cycle button once to advance valve to Regeneration Cycle Step #3 (brine draw & slow rinse).
5. Press the Extra Cycle button once to advance valve to Regeneration Cycle Step #4 (brine reýll).
6. Press the Extra Cycle button once more to advance the valve back to in service.

NOTE: If the unit is a ýlter or upýow, the cycle step order may change.

NOTE: A queued regeneration can be initiated by pressing the Extra Cycle button. To clear a queued regeneration, press the Extra Cycle button again to cancel. If regeneration occurs for any reason prior to the delayed regeneration time, the manual regeneration request shall be cleared.

Control Operation During A Power Failure

The SXT includes integral power backup. In the event of power failure, the control shifts into a power-saving mode. The control stops monitoring water usage, and the display and motor shut down, but it continues to keep track of the time and day for a minimum of 48 hours.

The system conýguration settings are stored in a non-volatile memory and are stored indeýnitely with or without line power. The Time of Day þashes when there has been a power failure. Press any button to stop the Time of Day from þashing.

If power fails while the unit is in regeneration, the control will save the current valve position before it shuts down. When power is restored, the control will resume the regeneration cycle from the point where power failed. Note that if power fails during a regeneration cycle, the valve will remain in it’s current position until power is restored. The valve system should include all required safety components to prevent overþows resulting from a power failure during regeneration.

The control will not start a new regeneration cycle without line power. If the valve misses a scheduled regeneration due to a power failure, it will queue a regeneration. Once power is restored, the control will initiate a regeneration cycle the next time that the Time of Day equals the programmed regeneration time. Typically, this means that the valve will regenerate one day after it was originally scheduled. If the treated water output is important and power interruptions are expected, the system should be setup with a sufýcient reserve capacity to compensate for regeneration delays.

MASTER PROGRAMMING MODE CHART

Caution: Before entering Master Programming, please contact your local professional water dealer.

Master Programming Options			
Abbreviation	**Parameter**	**Option Abbreviation**	**Options**
DF	Display Format	GAL	Gallons
		Ltr	Liters
VT	Valve Type	dF1b	Standard Downþow/Upþow Single Backwash
		dF2b	Standard Downþow/Upþow Double Backwash
		Fltr	Filter
		UFbd	Upþow Brine First
		UFtr	Upþow Filter
		Othr	Other
CT	Control Type	Fd	Meter (Flow) Delayed
		FI	Meter (Flow) Immediate
		tc	Time Clock
		dAY	Day of Week
NT	Number of Tanks	1	Single Tank System
		2	Two Tank System
TS	Tank in Service	U1	Tank 1 in Service
		U2	Tank 2 in Service
C	Unit Capacity		Unit Capacity (Grains)
H	Feedwater Hardness		Hardness of Inlet Water
RS	Reserve Selection	SF	Percentage Safety Factor
		rc	Fixed Reserve Capacity
SF	Safety Factor		Percentage of the system capacity to be used as a reserve
RC	Fixed Reserve Capacity		Fixed volume to be used as a reserve
DO	Day Override		The system's day override setting
RT	Regen Time		The time of day the system will regenerate
BW, BD, RR, BF	Regen Cycle Step Times		The time duration for each regeneration step. Adjustable from OFF and 0-199 minutes. **NOTE: If "Othr" is chosen under "Valve Type", then R1, R2, R3, etc, will be displayed instead**
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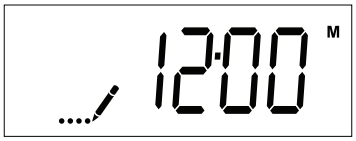
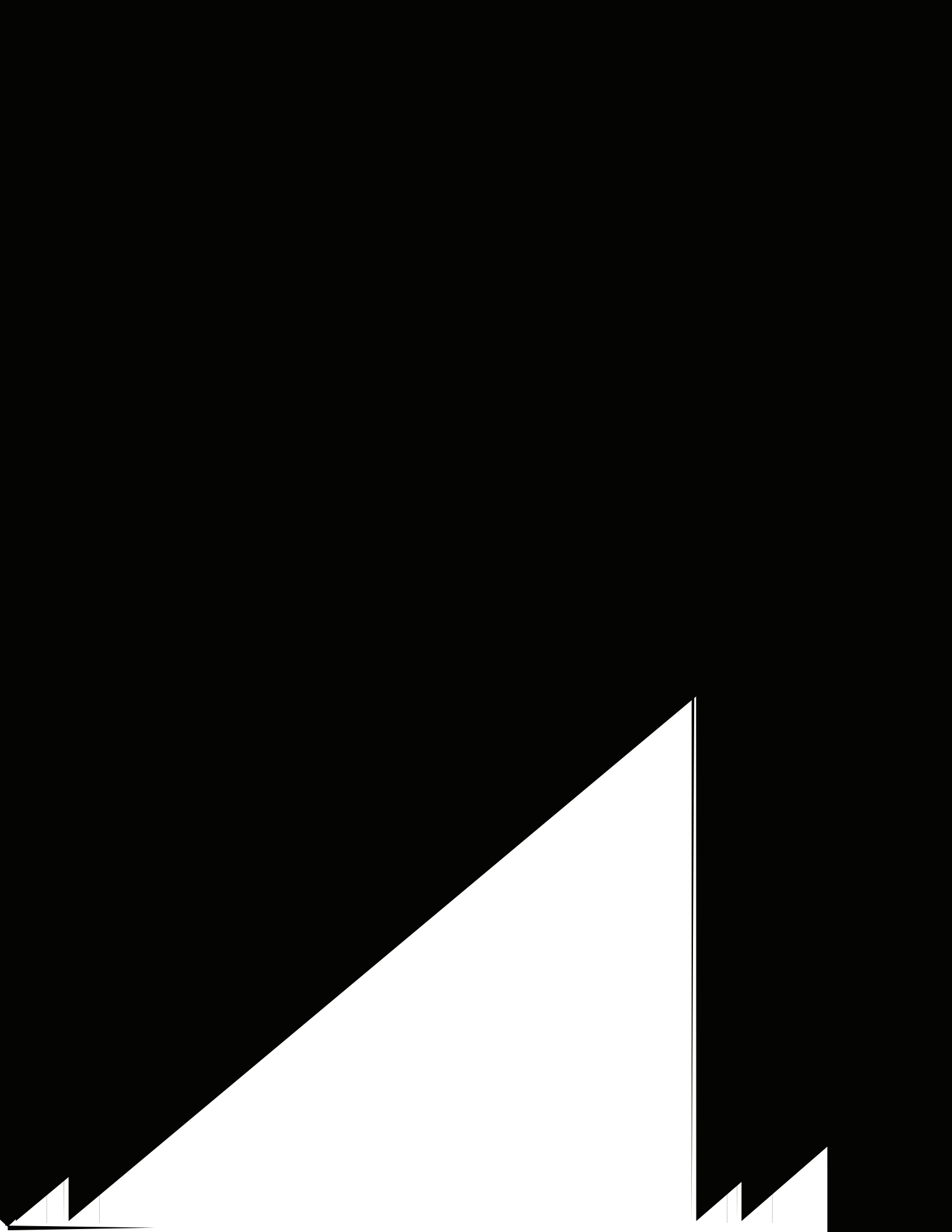
MASTER PROGRAMMING MODE

When the Master Programming Mode is entered, all available option setting displays may be viewed and set as needed. Depending on current option settings, some parameters cannot be viewed or set.

Setting the Time of Day

1. Press and hold either the Up or Down buttons until the programming icon replaces the service icon and the parameter display reads DO.
2. Adjust the displayed time with the Up and Down buttons.
3. When the desired time is set, press the Extra Cycle button to resume normal operation. The unit will also return to normal operation after 5 seconds if no buttons are pressed.

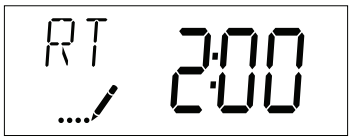




MASTER PROGRAMMING MODE

12. Regeneration Time

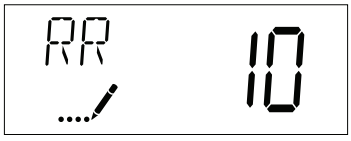
Press the Extra Cycle button. Use this display to set the Regeneration Time. This setting speciýes the time of day the control will initiate a delayed, manually queued, or day override triggered regeneration. This option setting is identiýed by ñRTò in the upper left hand corner of the screen. Use the Up and Down buttons to adjust the value as needed.



13. Regeneration Cycle Step Times

Press the Extra Cycle button. Use this display to set the Regeneration Cycle Step Times. The different regeneration cycles are listed in sequence based on the valve type selected for the system, and are identiýed by an abbreviation in the upper left-hand corner of the screen. The abbreviations used are listed below. If the system has been conýgured with the ñOTHERò valve type, the regeneration cycles will be identiýed as R1, R2, R3, R4, R5, and R6. Each cycle step time can be set from 0 to 199 minutes. Setting a cycle step time to 0 will cause the control to skip that step during regeneration, but keeps the following steps available. Use the Up and Down buttons to adjust the value as needed. Press the Extra Cycle button to accept the current setting and move to the next parameter.

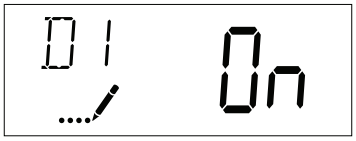
Abbreviation	Cycle Step
BD	Brine Draw
BF	Brine Fill
BW	Backwash
RR	Rapid Rinse
SV	Service



Range: 0-199 minutes

14. Day of Week Settings

Press the Extra Cycle button. Use this display to set the regeneration schedule for a system conýgured as a Day of Week control. The different days of the week are identiýed as D1, D2, D3, D4, D5, D6, and D7 in the upper left-hand corner of the display. Set the value to “ON” to schedule a regeneration or “OFF” to skip regeneration for each day. Use the Up and Down buttons to adjust the setting as needed. Press the Extra Cycle button to accept the setting and move to the next day. Note that the control requires at least one day to be set to “ON.” If all 7 days are set to “OFF”, the unit will return to Day One until one or more days are set to “ON.”



15. Current Day (Display Code CD)

Press the Extra Cycle button. Use this display to set the current day on systems that have been conýgured as Day of Week controls. This setting is identiýed by ñCDò in the upper left-hand corner of the screen. Use the Up and Down buttons to select from Day 1 through Day 7.

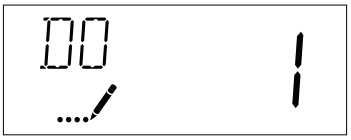
USER PROGRAMMING MODE

User Programming Mode Options		
Abbreviation	**Parameter**	**Description**
DO	Day Override	The timer's day override setting
RT	Regeneration Time	The time of day that the system will regenerate (meter delayed, timeclock, and day-of-week systems)
H	Feed Water Hardness	The hardness of the inlet water - used to calculate system capacity for metered systems
RC or SF	Reserve Capacity	The ýxed reserve capacity
CD	Current Day	The current day of week

NOTE: Some items may not be shown depending on timer con f guration. The timer will discard any changes and exit User Mode if any button is not pressed for sixty seconds.

User Programming Mode Steps

1. Press the Up and Down buttons for ýve seconds while in service, and the time of day is NOT set to 12:01 PM.
2. Use this display to adjust the Day Override. This option setting is identiýed by ñDOò in the upper left hand corner of the screen.

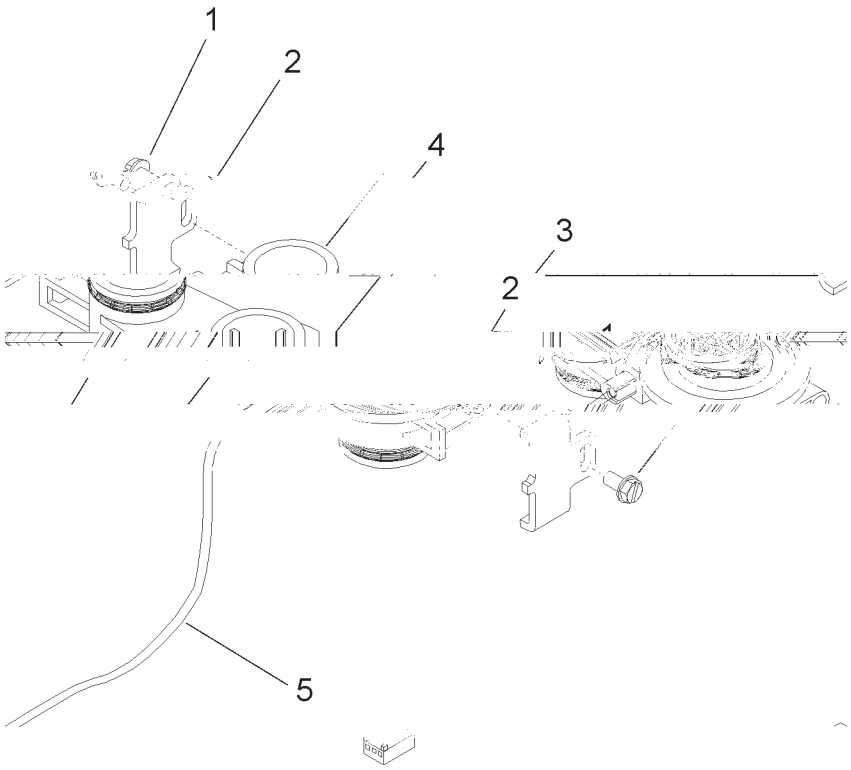


3. Press the Extra Cycle button. Use this display to adjust the Regeneration Time. This option setting is identiýed by ñRTò in the upper left hand corner of the screen.

DIAGNOSTIC PROGRAMMING MODE

Diagnostic Programming Mode Options		
Abbreviation	**Parameter**	**Description**
FR	Flow Rate	Displays the current outle

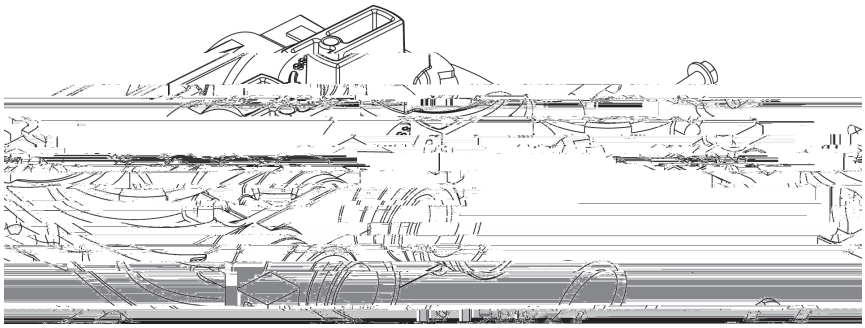
3/4" TURBINE METER ASSEMBLY



60626 Assy Rev A

Item No.	QTY	Part No.	Description
1	2	13314	Screw, Hex Washer, 8-18 x 5/8
2	2	19569	Clip, Flow Meter
3	1	19797	Meter Body Assembly, 3/4" Turbine
4	4	13305	O-ring, 119
5	1	19791-01	Harness Assembly, Flow Meter
6	1	14613	Flow Straightener (not shown)

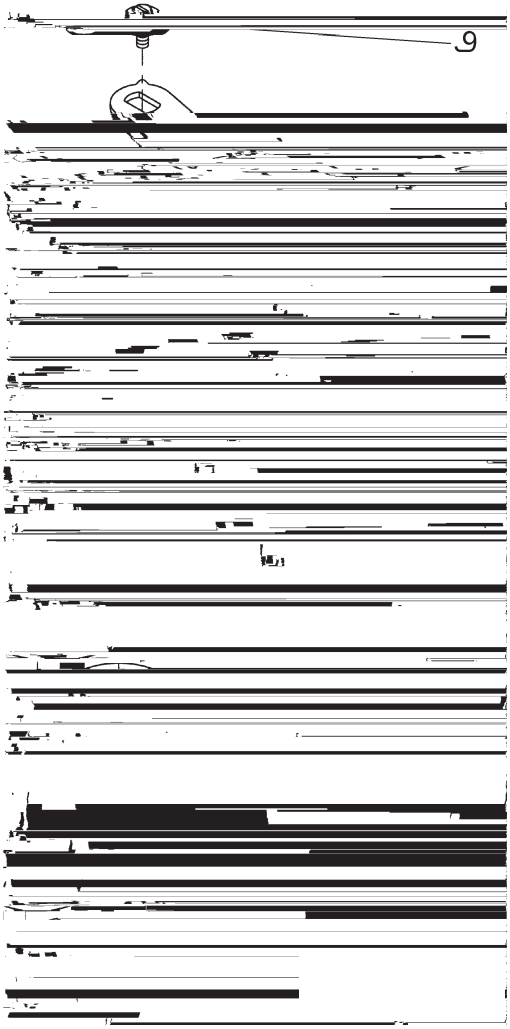
BYPASS VALVE ASSEMBLY (PLASTIC)



60049 Rev G

Item No.	QTY	Part No.	Description
1	2	13305	O-ring, -119
2	2	13255	Clip, Mounting
3	2	13314	Screw, Hex Washer Head, 8-18 x 5/8
4A	1	18706	Yoke, Plastic, 1” NPT
	1	18706-02	Yoke, Plastic, 3/4” NPT
4B	1	13708	Yoke, Brass, 3/4” NPT
	1	13708NP	Yoke, 3/4” NPT Nickel Plated
	1	13398	Yoke, Brass, 1” NPT
	1	13398NP	Yoke, 1” NPT Nickel Plated
	1	40636	Yoke, 1-1/4” NPT
	1	40636-49	Yoke, 1-1/4” Sweat

BYPASS VALVE ASSEMBLY (METAL)



60040SS Rev R
60041SS Rev T

Item No.	QTY	Part No.	Description
1	1	17290	Bypass Valve Body, 3/4”
	1	17290NP	Bypass Valve Body, 3/4” Nickel Plated
	1	13399	Bypass Valve Body, 1”
	1	13399NP	Bypass Valve Body, 1”, Nickel Plated
2	1	11726	Seal, Bypass
3	1	11972	Plug, Bypass
4	1	11978	Side Cover
5	1	13604-01	Label
6	8	15727	Screw
7	1	11986	Side Cover
8	1	11979	Lever, Bypass
9	1	11989	Screw, Hex Head, 1/4-14

2300 SAFETY BRINE VALVE

60027 Rev D

Item No.	QTY	Part No.	Description
1	1	11942	Brine Valve Body 1/4” NPT
2	1	10138	Ball, 3/8”
3	1	11566	Bull Stop
4	1	10328	Elbow, 1/4” x 1/4” T
5	2	10332	Insert, 3/8”
6	2	10330	Sleeve, 3/8”
7	2	10329	Tube Nut, 3/8”
8	1	10186	Nut, Hex, 10-32, Nylon
9	1	60002	#500 Air Check
10	1	10149	Float Rod, 30”
11	1	10700	Float Assembly, White
12	4	10150	Grommet

2310 SAFETY BRINE VALVE

Item No.	QTY	Part No.	Description
1	1	19645	Safety Brine Valve Body
2	1	19803	Safety Brine Valve Arm Assembly
3	1	19804	Stud, 10-24
4	1	19805	Nut, 10-24
5	1	19652-01	Poppet and Seal
6	1	19649	Flow Dispenser
7	1	11183	O-ring, 017
8	1	19647	Elbow, Safety Brine Valve
9	2	19625	Nut Assembly, 3/8
10	1	18312	Retaining Clip
11	1	60014	Safety BrineValve, 2310 (includes items 1-10)
12	2	10150	Grommet (included with item 13)
13	1	60068-30	Float Assembly, 2310, w/30” Rod
14	1	60002-34	Air Check, #500, 34” long

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.
	Insufýcient water þowing into brine tank.	Check brine tank ýll time and clean brine line þow control if plugged.
	Hot water tank hardness.	Repeated þushings 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

TROUBLESHOOTING

Error Codes

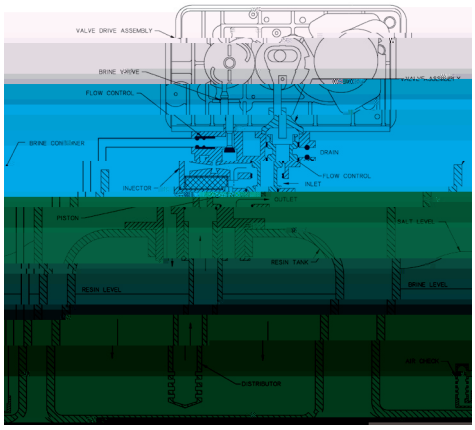
NOTE: Error codes appear on the In Service display.

Error Code	Error Type	Cause	Reset and Recovery
0	Cam Sense Error	The valve drive took longer than 6 minutes to advance to the next regeneration position	Unplug the unit and examine the powerhead. Verify that all cam switches are connected to the circuit board and functioning properly. Verify that the motor and drive train components are in good condition and assembled properly. Check the valve and verify that the piston travels freely. Replace/reassemble the various components as necessary. Plug the unit back in and observe its behavior. The unit should cycle to the next valve position and stop. If the error re-occurs, unplug the unit and contact technical support.
1	Cycle Step Error	The control experienced an unexpected cycle input	Unplug the unit and examine the powerhead. Verify that all cam switches are connected to the circuit board and functioning properly. Enter Master Programming mode and verify that the valve type and system type are set correctly with regard to the unit itself. Step the unit through a manual regeneration and verify that it functions correctly. If the error re-occurs unplug the unit and contact technical support.
2	Regenhan Failure	The system has not regeneratedhan	

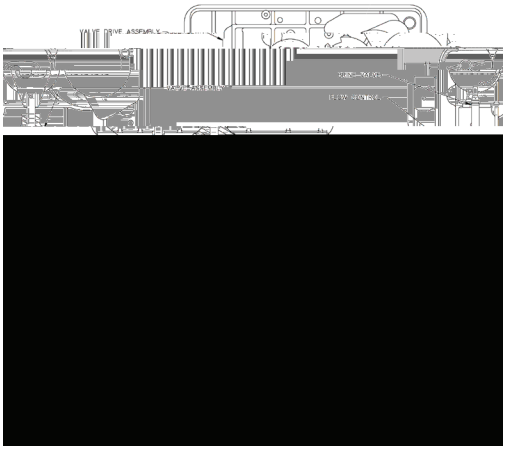
WATER CONDITIONER FLOW DIAGRAMS

Single Backwash Positions Black Cycle Cam (Part Number 17438)	Double Backwash Positions Blue Cycle Cam (Part Number 40609)
Service Position	Service Position
1. Backwash Position	1. First Backwash Position
2. Brine/Slow Rinse Positon	2. Brine/Slow Rinse Positon
3. Rapid Rinse Position	3. Second Backwash Position
4. Brine Tank Fill Position	4. Rapid Rinse Position
Service Postion	5. Brine Tank Fill Position
	Service Postion

Service Position

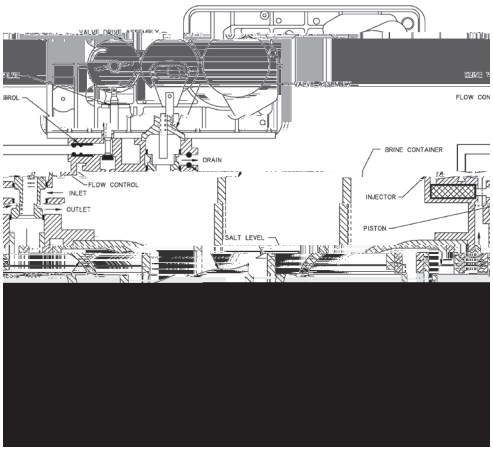


Backwash Position

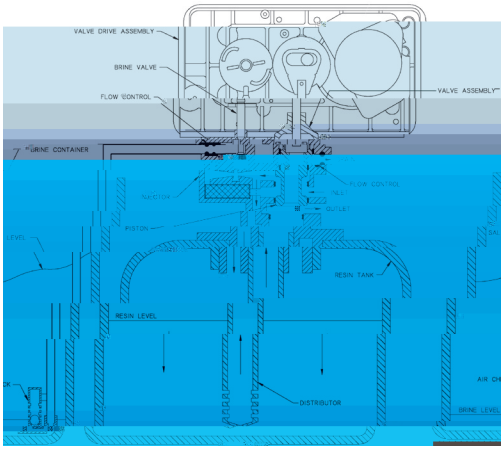


Brine/Slow Rinse Position

Second Backwash Position (Double Backwash Units Only)

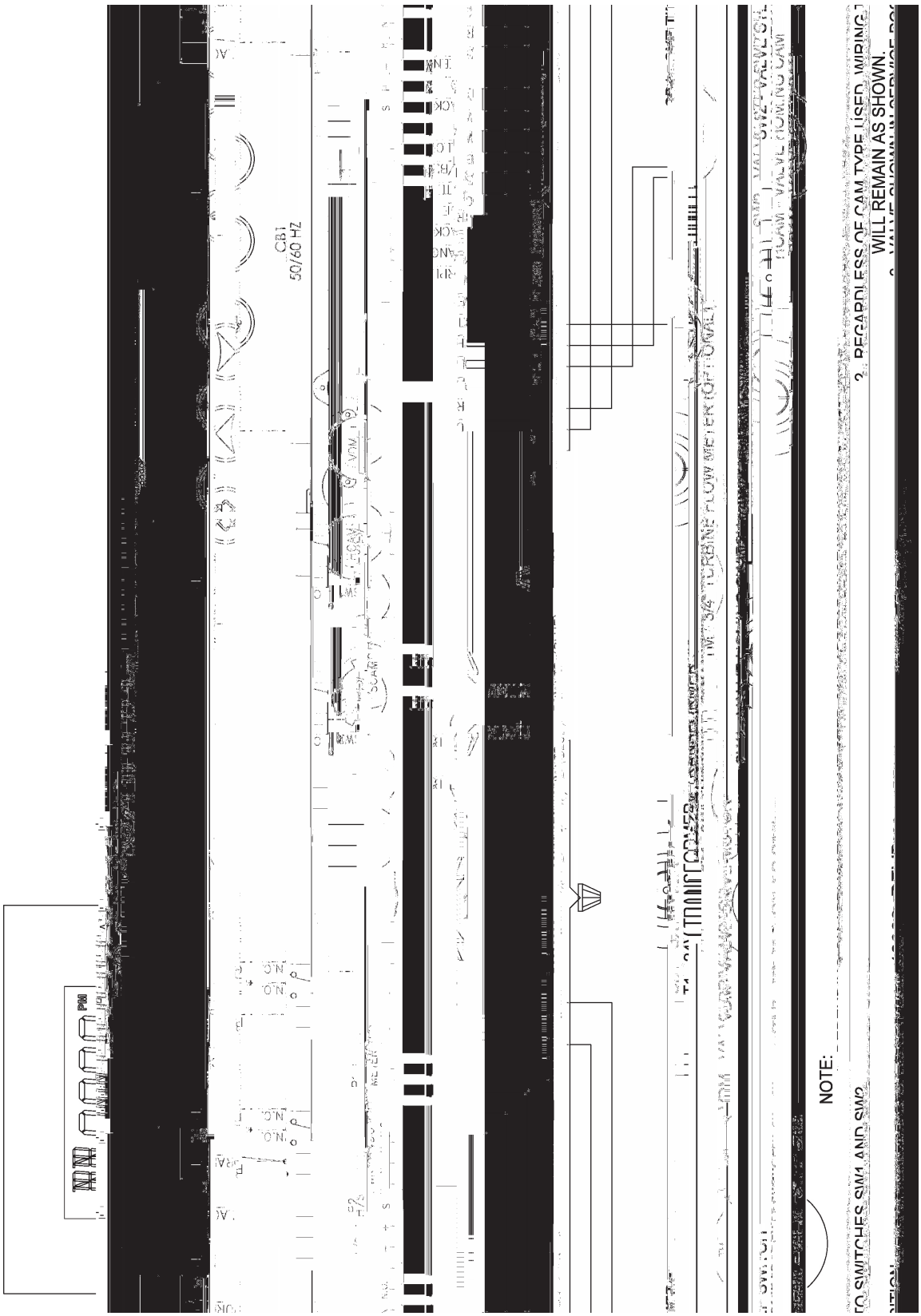


Rapid Rinse



Brine Tank Fill Position

WIRING DIAGRAM



SERVICE INSTRUCTIONS

Replacing Brine Valve, Injectors and Screen

1. Turn off water supply to conditioner:
   If the conditioner installation has a “three valve” bypass system, ýrst open the valve in the bypass line, then close the valves at the conditioner inlet and outlet.
   If the conditioner has an integral bypass valve, put it in the Bypass position.
   If there is only a shut-off valve near the conditioner inlet, close it.
2. Relieve water pressure in the conditioner by stepping the control into the Backwash position momentarily. Return the control to the In Service position.
3. Unplug electrical cord from outlet.
4. Disconnect brine tube and drain line connections at the injector body.
5. Remove the two injector body mounting screws. The injector and brine module can now be removed from the control valve. Remove and discard brine body O-rings.

Brine Valve Replacement

1. Pull brine valve from injector body. Also remove and discard O-ring at bottom of brine valve hole.
2. Apply silicone lubricant to new O-ring and reinstall at bottom of brine valve hole.
3. Apply silicone lubricant to O-ring on new valve assembly and press into brine valve hole. Be sure shoulder on bushing is þush with injector body.

Injectors/Screen Replacement

1. Remove injector cap and screen, discard O-ring. Unscrew injector nozzle and throat from injector body.
2. Screw in new injector throat and nozzle, be sure they are sealed tightly. Install a new screen.
3. Apply silicone lubricant to new O-ring and install around oval extension on injector cap.
4. Apply silicone lubricant to three new O-rings and install over three bosses on injector body.
5. Insert screws thorough injector cap and injector. Place this assembly thorough hole in timer housing and into mating holes in the valve body. Tighten screws.
6. Reconnect brine tube and drain line.
7. Return bypass or inlet valve to normal In Service position. Water pressure automatically builds in the conditioner

   NOTE: Be sure to shut off any bypass line.
8. Check for leaks at all seal areas. Check drain seal with the control in the Backwash position.
9. Plug electrical cord into outlet.
10. Set Time Of Day and cycle the control valve manually to assure proper function. Make sure control valve is returned to the In Service position.
11. Be sure there is enough salt in the brine tank.
12. Start regeneration cycle manually if water is hard.

Timer Replacement

To replace timer refer to Replacing Brine Valve, Injectors and Screen, steps 1–3.

1. Remove the control valve back cover. Remove the control valve front cover. Disconnect the meter dome signal wire from the front cover and feed it back through the control.
2. Remove screw and washer at drive yoke. Remove timer mounting screws. The entire timer assembly then lifts off easily.
3. Put new timer on top of valve. Be sure drive pin on main gear engages slot in drive yoke.
4. Replace timer mounting screws. Replace screw and washer at drive yoke. Replace meter signal wire.
5. Return bypass or inlet valve to normal In Service position. Water pressure automatically builds in the conditioner.

   NOTE: Be sure to shut off any bypass line.
6. Replace the control valve back cover.
7. Follow Injectors/Screen Replacement, steps 9–12.

Piston Assembly Replacement

To replace piston assembly refer to Replacing Brine Valve, Injectors and Screen, steps 1–3.

1. Remove the control valve back cover. Remove the control valve front cover. Disconnect the meter dome signal wire from the front cover and feed it back through the control.
2. Remove screw and washer at drive yoke. Remove timer mounting screws. The entire timer assembly will now lift off easily. Remove end plug retainer plate.
3. Pull upward on end of piston yoke until assembly is out of valve.
4. Inspect the inside of the valve to make sure that all spacers and seals are in place, and that there is no foreign matter that would interfere with the valve operation.
5. Take new piston assembly as furnished and push piston into valve by means of the end plug. Twist yoke carefully in a clockwise direction to properly align it with drive gear. Replace end plug retainer plate.
6. Place timer on top of valve. Be sure drive pin on main gear engages slot in drive yoke.
7. Replace timer mounting screws. Replace screw and washer at drive yoke.
8. Return bypass or inlet valve to normal In Service position. Water pressure automatically builds in the conditioner

   NOTE: Be sure to shut off any bypass line.
9. Replace the control valve back cover.
10. Follow Injectors/Screen Replacement, steps 9–12.

SERVICE INSTRUCTIONS

Seal and Spacer Replacement

To replace seals and spacers, refer to Replacing Brine Valve, Injectors and Screen, steps 1–3.

1. Remove the control valve back cover. Remove the control valve front cover. Disconnect the meter dome signal wire from the front cover and feed it back through the control.
2. Remove screw and washer at drive yoke. Remove timer mounting screws. The entire timer assembly will now lift off easily. Remove end plug retainer plate.
3. Pull upward on end of piston rod yoke until assembly is out of valve. Remove and replace seals and spacers.
4. Take piston assembly and push piston into valve by means of the end plug. Twist yoke carefully in a clockwise direction to properly align it with drive gear. Replace end plug retainer plate.
5. Place timer on top of valve. Be sure drive pin on main gear engages slot in drive yoke.
6. Replace timer mounting screws. Replace screw and washer at drive yoke.
7. Return bypass or inlet valve to normal In Service position. Water pressure automatically builds in the conditioner.

   NOTE: Be sure to shut off any bypass line.
8. Replace the control valve back cover.
9. Follow Injectors/Screen Replacement, steps 9–12.

Meter Replacement

To replace meter refer to Replacing Brine Valve, Injectors and Screen, steps 1–3.

1. Remove two screws and clips at bypass valve or yoke. Pull resin tank away from plumbing connections.
2. Pull meter module out of control valve.
3. Remove signal wire from meter module, (snap tab on end opposite wire cable).
4. Apply silicone lubricant to four new O-rings and assemble to four ports on new meter module.
5. Install signal wire into new meter module.
6. Assemble meter to control valve. Note, meter portion of module must be assembled at valve outlet.
7. Push resin tank back to the plumbing connections and engage meter ports with bypass valve or yoke.
8. Attach two clips and screws at bypass valve or yoke. Be sure clip legs are ýrmly engaged with lugs.
9. Return bypass or inlet valve to normal In Service position. Water pressure automatically builds in the conditioner.

   NOTE: Be sure to shut off any bypass line.
10. Check for leaks at all seal areas.
11. Follow Injectors/Screen Replacement, steps 9–12.

SERVICE ASSEMBLIES

Air Check
60002-34 .....Air Check #500 34”

Brine Line Flow Controls
60022-12 .....BLFC .125 gpm
60022-25 .....BLFC .25 gpm
60022-50 .....BLFC .50 gpm
60022-100 .....BLFC 1.0 gpm

Brine Line Flow Control Washers
17307.....Washer Flow .125 gpm
12094.....Washer Flow .25 gpm
12095.....Washer Flow .50 gpm
12097.....Washer Flow 1.0 gpm

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