

INSTALLATION GUIDELINES

GENERAL RESIDENTIAL INSTALLATION CHECK LIST

1) NOTE

A. WATER PRESSURE

- I. A minimum of 25 PSI of water pressure is required for the regeneration valve to operate effectively. Maximum pressure is 120 PSI.

B. ELECTRICAL FACILITIES

- I. An uninterrupted 110-volt alternating current (A/C) power supply is required. Please make sure voltage supply is compatible with unit before installation.

C. EXISTING PLUMBING

- I. Condition of existing plumbing should be free from lime and iron build-up. If piping is clogged with iron, install a separate iron filter system ahead of the water softener.

D. LOCATION OF SOFTENER AND DRAIN

- I. Locate the softener close to a clean, working drain and connect according to local plumbing codes.

E. BYPASS VALVES

- I. If the current piping in your home does not have a three-valve bypass, you should then buy the optional bypass available through your local retailer.

THREE VALVE BYPASS



OPTIONAL BYPASS



WATER SOFTENER INSTALLATION GUIDE

NOTE: All plumbing needs to be in accordance with local plumbing codes. The pipe size for residential drain line should be a minimum of 1/2" ID.

STEP 1: Place the water softener at location to be installed making sure the unit is level and on a firm base.

STEP 2: Connect the plumbing to the inlet (#1), outlet (#2) and drain (#3) on the water softener.

I. *NOTE: It is normal to have a little play or up/down movement of the yoke/meter assembly.*



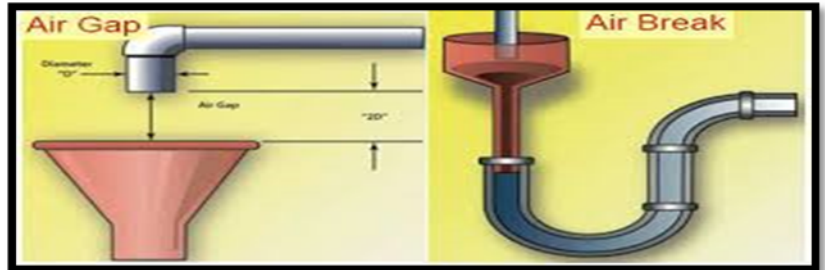
A) The #1 is the INLET SIDE of the water softener. This is raw water in. Connection is 3/4" MNPT.

B) The #2 is the OUTLET SIDE of the water softener. This is soft water coming out. Connection is 3/4" MNPT.

NOTE: Some water softeners are piped so the water in (inlet) and water out (outlet) are reversed from the Addie unit. Verify flow direction before you do the piping.

C) The #3 is pointing to the DRAIN on the water softener. Connection is 1/2" ID x 5/8" OD.

Connect poly tubing (not included) to the closest approved drain, making sure an air gap or vacuum (air) break is used to prevent backflow contamination, as seen below.



STEP 3: Attaching the brine tank



This arrow is showing the brine line (from the salt tank) and brass fitting where it will be inserted

Insert the brine line into the brass nut and tighten with a crescent wrench.

STEP 4: Optional brine tank overflow protection



If a floor drain is available, connect 1/2" ID x 5/8" OD poly tubing from overflow fitting to the floor drain. This hose cannot be ran higher than the overflow fitting on the brine tank or connected with any other drain tubing. Always be sure the drain is securely fastened.

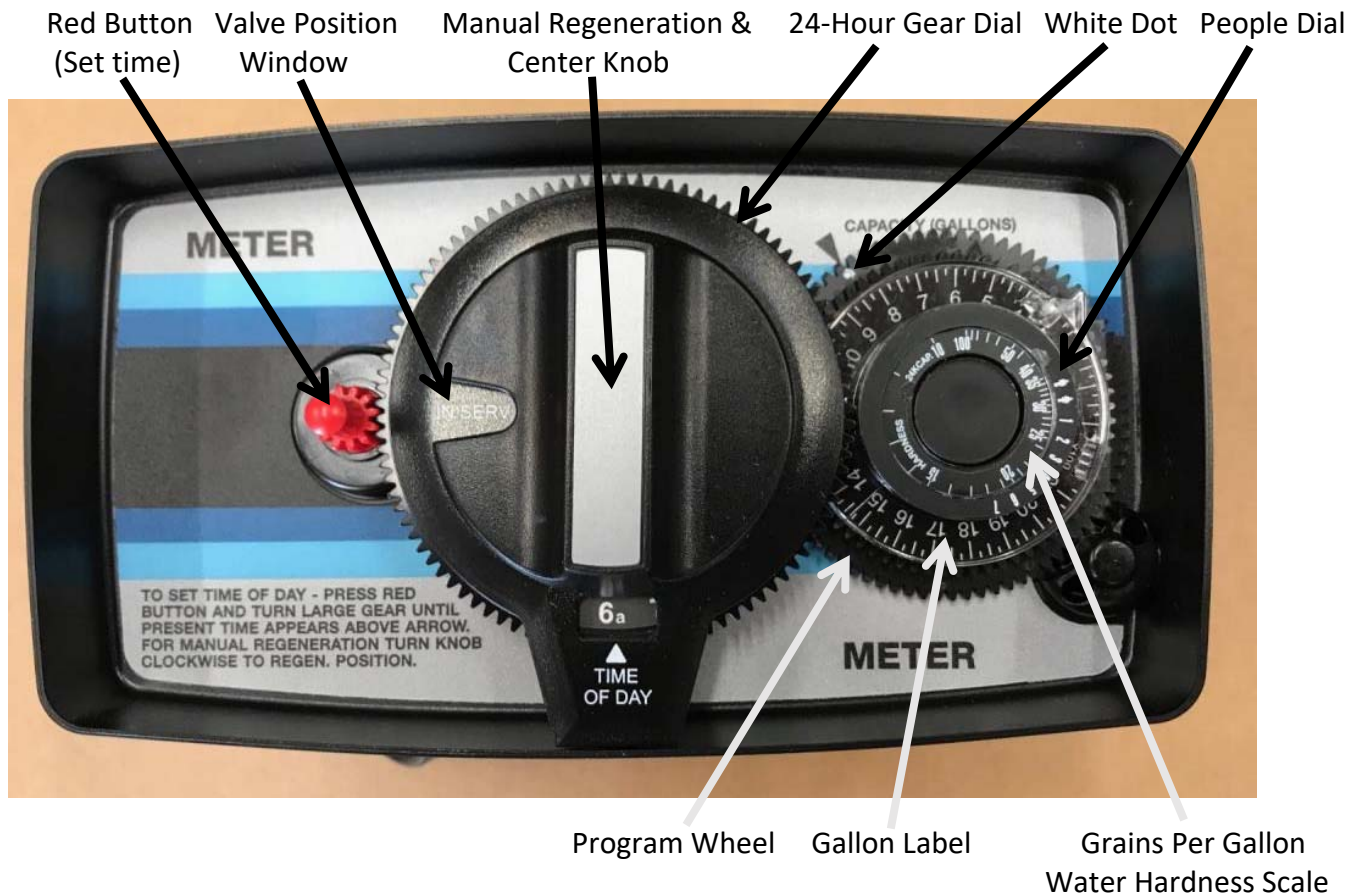
Overflow fitting to floor drain

STEP 5: Optional bypass installation



- 1) Using a 1/4" nut driver (or a flat head screwdriver) loosen or remove both screws and retaining clips (on each side), which are holding the yoke onto the meter assembly.
- 2) Once the screws and retaining clips have been loosened or removed, you can remove the yoke by pulling it away from the meter assembly.
- 3) You can mount the optional bypass by pushing the non-threaded side of the bypass onto the meter assembly, making sure the black handle is facing up.
- 4) To secure the bypass to the meter assembly, you have to place the silver retaining clips over the tabs and tighten the screws on each side. **DO NOT OVER TIGHTEN SCREWS.**

STEP 6: Setting the water softener and start up



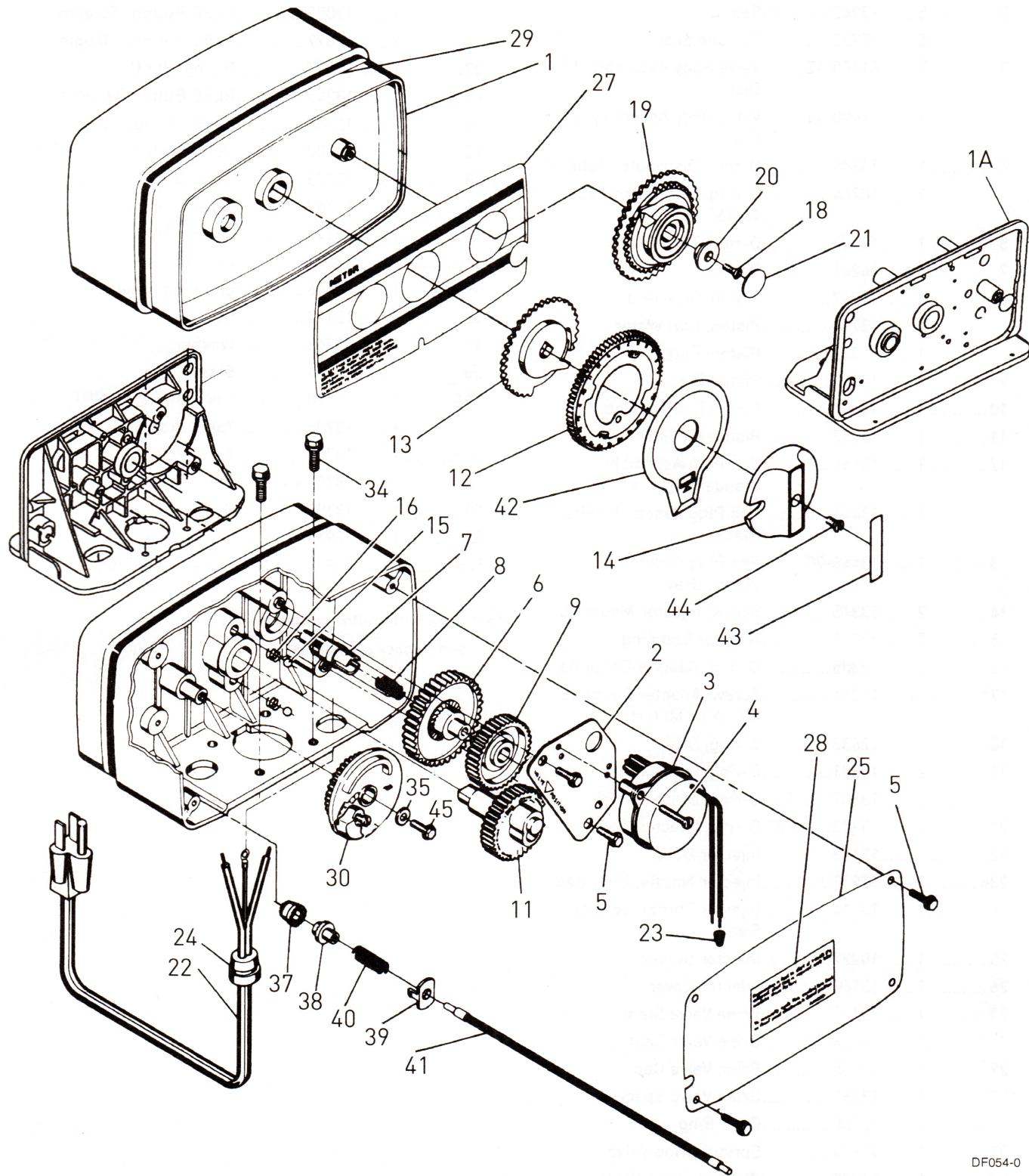
START-UP

1. After plumbing is completed, make sure the three-valve bypass or the optional bypass is in the bypass position.
2. Turn on the main water supply. Turn on a cold, soft water faucet (preferably a bathroom tub faucet or utility sink) and let it run a few minutes until the piping is free of any foreign matter (usually solder or pipe debris) resulting from the installation; then you can turn off the faucet when the water runs clear.
3. Slowly open the bypass valve(s) to the in service position and let the water slowly flow into the mineral tank. When the water stops filling the mineral tank, turn on a cold soft water faucet and let it run until the air is purged from the mineral tank and there is a full stream of water. Once the water looks clear, you can turn off the faucet.
4. Plug the electrical cord into a 110-volt outlet and set the time of day.
5. To set the time of day press and hold in the red button then turn the large 24-hour gear dial until the present time of day appears in the time of day box, at the bottom. Make sure you have chosen “a” for AM or “p” for PM. Once the current time is set, the red button can be released.
 - A. *NOTE: Make sure, when you release the red set time button that the gears are re-engaged with the 24-hour gear dial.*

6. To set the program wheel, pull out on the people dial (this will only pull out about 1/16”), then rotate the black program wheel with your left thumb to align the number of people in your house with your amount of compensated hardness on the Grains Per Gallon Water Hardness Scale dial. Make sure the dial is firmly back into locking position.
 - A. *EXAMPLE: If you have 2 people in the house and your grains of hardness is 25 you would line up the number two (on the people dial) with the number 25 (on the grains per gallon water hardness scale dial), As shown in the picture above. This will align the white dot with a number on the gallons label and that number represents the amount of gallons you will need to use before the unit regenerates. If you refer to the model above you can see the white dot is between the 8-9; which means you have about 850 gallons to use before regeneration.*
 - B. To find compensated hardness:
For every 1 part of iron, you add 4 grains of hardness. 1 PPM of Iron = 4 Grains of Hardness. To continue from the above example, if you have 2 people in the house, 25 grains of hardness and 2 parts of iron you would need to add 8 grains onto the 25 for a total of 33 total compensated hardness. You would then line up the number of people in the house (2) to the total compensated hardness number (33).
7. Turn the program wheel until the white dot on the outer edge of program wheel is aligned with the capacity (gallons) arrow.
8. Manually add 5 gallons of water into the brine tank. Fill the brine tank with solar salt crystals to at least the water level or fill the brine tank just below the white well cap. DO NOT use pellets, cubes, nuggets or rock salt. This type of salt can mush and plug the salt tank.
9. Turn the manual regeneration knob clockwise from the “IN SERV.” position to the “REGEN.” position. The softener will cycle through a regeneration cycle and return back to the “IN SERV.” position.
 - A. *NOTE: It may take 15 to 20 minutes before you notice anything happening. The total cycle length is about one hour and forty-five minutes to two hours long.*
10. Start-up is complete.

FOR TECHNICAL HELP CALL 1-800-982-1652

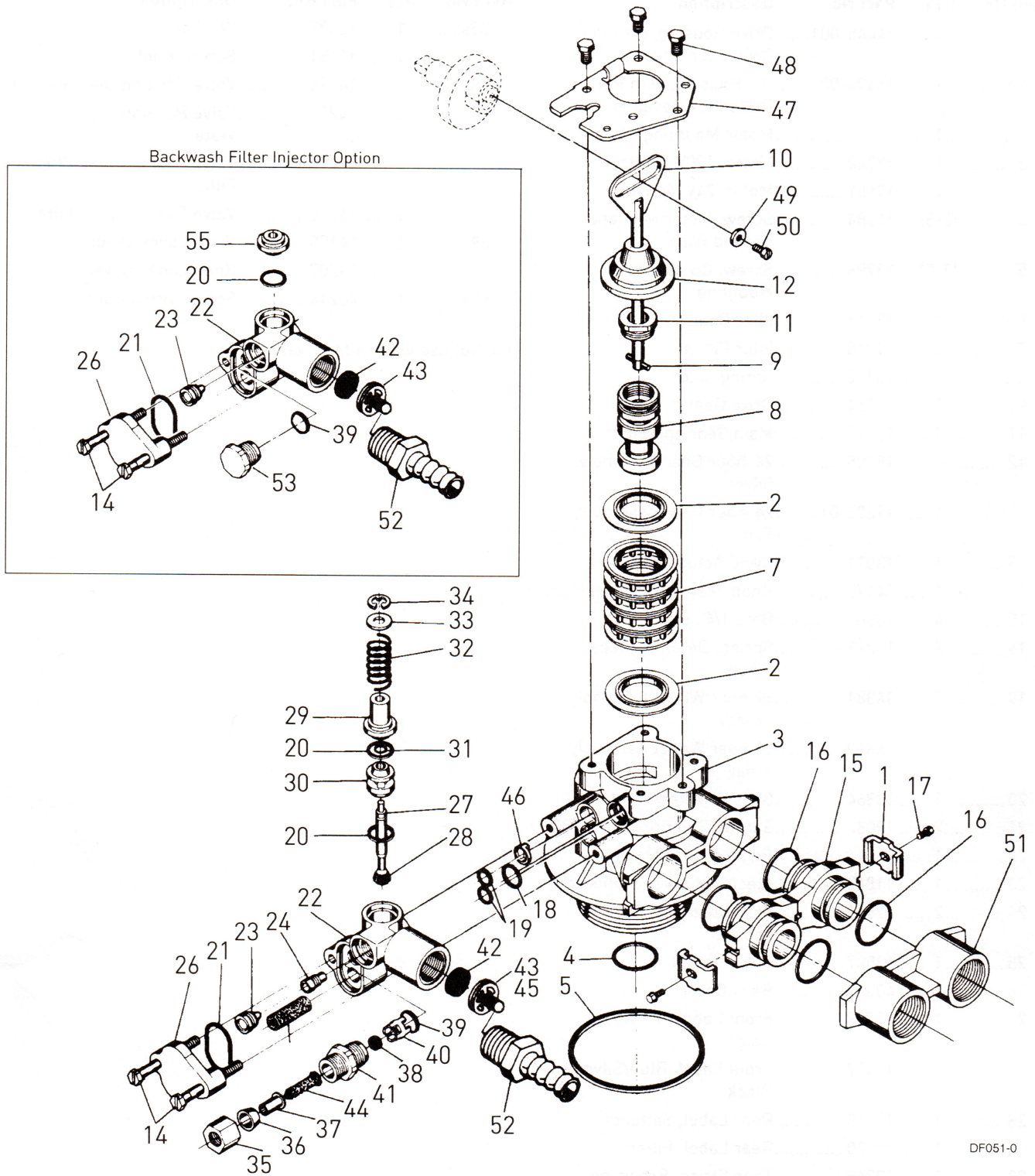
MODEL 5600 CONTROL VALVE DRIVE ASSEMBLY



MODEL 5600 CONTROL VALVE DRIVE ASSEMBLY *CONTINUED*

Item No.	QTY	Part No.	Description	Item No.	QTY	Part No.	Description
1	1	14488-001	Drive Housing, with Pin Drilled for Cover	41	1	14043	Cable Assembly, Standard
1A	1	15494-03	"L" Housing, with Pin Drilled for Designer		1	14910	Cable Assembly, Extended, Right Angle
2	1	13175	Motor Mounting Plate	42	1	14176	Valve Position Dial, Standard
3	1	18743	Motor, 120V, 60 Hz		1	14278	Valve Position Dial, Low Water
	1	13494	Motor, 24V, 60 Hz		1	15478	Valve Position Dial, Filter
4	2-3	11384	Screw, Motor Mtg. and Ground Wire	43	1	14175	Knob Label, Beige
5	2-4	13296	Screw, Component Mounting		1	14207	Knob Label, Silver
6	1	13017	Idler Gear	44	1	15151	Screw, Knob
7	1	13018	Idler Pinion	45	1	40214	Screw, Brine Cam
8	1	13312	Spring, Idler				
9	1	13164	Drive Gear				
11	1	13170	Main Gear and Shaft				
12	1	19205	24-hour Gear Assembly, Silver				
	1	19205-01	24-hour Gear Assembly, Tan				
13	1	13802	Cycle Actuator Gear				
14	1	14177	Knob, Manual Regeneration				
15	2	13300	Ball, 1/4" Dia.				
16	2	19080	Spring, Compression, 6700				
18	1	13748	Screw, Program Wheel				
19	1	60405-15	Program Skipper Wheel Assembly, Specify Hardness Capacity				
20	1	13806	Program Wheel Retainer				
21	1	13953	Cover Label, Program Wheel				
22	1	11842	Electrical Cord				
23	2	12681	Wire Connector				
24	1	13547	Strain Relief				
25	1	40338	Back Cover				
27	1	13955	Front Label, Beige				
	1	13958	Front Label, Silver				
28	1	13310	Rear Label, Softener				
	1	18520	Rear Label, Filter				
29	1	13957	Tape Stripe, Beige				
	1	13960	Tape Stripe, Silver				
30	1	60514	Brine Cam Assembly, 3-18				
	1	60514-01	Brine Cam Assembly, 6-36				
	1	60514-02	Brine Cam Assembly, Minutes				
34	2	12473	Screw-drive Mounting				
35	1	12037	Washer				
37	1	13830	Drive Pinion, Program Wheel				
38	1	13831	Clutch, Drive Pinion				
39	1	14253	Spring Retainer				
40	1	14276	Spring				

MODEL 5600 CONTROL VALVE DRIVE ASSEMBLY



MODEL 5600 CONTROL VALVE DRIVE ASSEMBLY *CONTINUED*

Item No.	QTY	Part No.	Description	Item No.	QTY	Part No.	Description
1	2-4	13255	Adapter Clip (Clock or Meter)	37	1	10332	BLFC Tube Insert
2	5	13242	Seal	38	1	12094	BLFC Button, .25 gpm
	5	17772	Silicone Seal		1	12095	BLFC Button, .50 gpm
3	1	61400-12	Valve Body Assembly, 1" Dist.		1	12097	BLFC Button, 1.0 gpm
	1	61400-11	Valve Body Assembly, 3/4" Dist.	39s	1	12977	O-ring, BLFC
4	1	13304	O-ring, Distributor Tube, 1"	40	1	13245	BLFC Button Retainer
	1	10244	O-ring, Distributor Tube, 13/16"	41	1	13244	BLFC Fitting, 3/8"
5	1	12281	O-ring, Top of Tank	42	1	00000	DLFC Button, Specify Size
7	4	14241	Spacer	43	1	13173	DLFC Button Retainer
8	1	13247	Piston, Standard	44	1	12767	Screen, Brine Line
	1	13781	Piston, Low Water	45	1	15348	O-ring, DLFC (not shown)
	1	13852	Piston, Filter	46	1	13497	Air Disperser
9	1	10696	Piston Pin	47	1	13546	End Plug Retainer
10	1	13001	Piston Rod Assembly	48	3	12112	Screw
11	1	12953	Piston Retainer	49	1	13363	Washer
12	1	13446	End Plug Assembly Standard, White	50	1	13296	Screw
	1	13446-10	End Plug Assembly Filter, Black	51A	1	13398	Yoke, Brass, 1" NPT
13	1	13446-20	End Plug Assembly Low Water, Gray		1	13708	Yoke, Brass, 3/4" NPT
14	2	13315	Screw, Injector Mounting	51B	1	18706	Yoke, Plastic, 1" NPT
15	2	19228	Adapter Coupling		1	18706-02	Yoke, Plastic 3/4" NPT
16*	4	13305	O-ring, Adapter Coupling	52	1	13308	Drain Hose Barb
17*	2-4	13314	Screw, Adapter Coupling (Clock or Meter)	53	1	13918	BLFC, Plug
18	1	12638	O-ring, Drain	54s	1	13857	Brine Valve, Plug
19	2	13301	O-ring, Injector				
20s	2	13302	O-ring, Brine Spacer				
21	1	13303	O-ring, Injector Cover				
22	1	13163	Injector Body				
23s	1	10913U	Injector Nozzle, Undrilled				
24	1	10914	Injector Throat, Specify Size				
25	1	10227	Injector Screen				
26	1	13166	Injector Cover				
27	1	13172	Brine Valve Stem				
28	1	12626	Brine Valve Seat				
29	1	13165	Brine Valve Cap				
30	1	13167	Brine Valve Spacer				
31	1	12550	Quad Ring				
32	1	11973	Spring, Brine Valve				
33	1	16098	Washer, Brine Valve				
34	1	11981-01	Retaining Ring				
35	1	10329	BLFC Fitting Nut				
36	1	10330	BLFC Ferrule				

*not used with meter controls

s = used in backwash filter

TROUBLESHOOTING

Problem	Cause	Correction
1. Softener fails to regenerate.	A. Electrical service to unit has been interrupted.	A. Assure permanent electrical service (check fuse, plug, pull chain or switch).
	B. Timer is defective.	B. Replace timer.
	C. Power failure.	C. Reset time of day.
2. Softener delivers hard water.	A. Bypass valve is open.	A. Close bypass valve.
	B. No salt in brine tank.	B. Add salt to brine tank and maintain salt level above water level.
	C. Injectors or screen is plugged.	C. Replace injectors and screen.
	D. Insufficient water flowing into brine tank.	D. Check brine tank fill time and clean brine line flow control if plugged.
	E. Hot water tank hardness.	E. Repeated flushings of the hot water tank is required.
	F. Leak at distributor tube.	F. Make sure distributor tube is not cracked. Check O-ring and tube pilot.
	G. Internal valve leak.	G. Replace seals and spacers and/or piston.
3. Unit uses too much salt.	A. Improper salt setting.	A. Check salt usage and salt setting.
	B. Excess water in brine tank.	B. See problem number 7.
4. Loss of water pressure.	A. Iron build-up in line to water conditioner.	A. Clean line to water conditioner.
	B. Iron build-up in water conditioner.	B. Clean control and add resin cleaner to resin bed. Increase frequency of regeneration.
	C. Inlet of control plugged due to foreign material loose from pipes by recent work done on plumbing system.	C. Remove piston and clean control.
5. Loss of resin through drain line.	A. Air in water system.	A. Assure that well system has proper air elimination control, Check for dry well condition.
6. Iron in conditioned water.	A. Fouled resin bed.	A. Check backwash, brine draw and brine tank fill, increase frequency of regeneration, increase backwash time.
7. Excessive water in brine tank.	A. Plugged drain line flow control.	A. Clean flow control.
8. Salt water in service line.	A. Plugged injector system.	A. Clean injector and replace screen.
	B. Timer not cycling.	B. Replace timer.
	C. Foreign material in brine valve.	C. Clean or replace brine valve.
	D. Foreign material in brine line flow control.	D. Clean brine line flow control.
9. Softener fails to draw brine.	A. Draw line flow control is plugged.	A. Clean drain line flow control.
	B. Injector is plugged.	B. Clean or replace injectors.
	C. Injector screen plugged.	C. Replace screen.
	D. Line pressure is too low.	D. Increase line pressure (minimum 20 psi (1.3 bar) at all times).
	E. Internal control leak.	E. Change seals, spacers and/or piston assembly.
10. Control cycles continuously.	A. Faulty timer mechanism.	A. Replace timer.
11. Drain flows continuously.	A. Foreign material in control.	A. Remove piston assembly and inspect bore, remove foreign material and check control in various regeneration positions.
	B. Internal control leak.	B. Replace seals and/or piston assembly.
	C. Control valve jammed in Brine or Backwash position.	C. Replace seals and/or piston assembly.
	D. Timer motor stopped or jammed.	D. Replace timer.

GENERAL SERVICE HINTS FOR METER CONTROL

Problem	Cause	Correction
1. Softener delivers hard water.	A. Reserve capacity has been exceeded.	A. Check salt dosage requirements and reset program wheel to provide additional reserve.
	B. Program wheel is not rotating with meter output.	B. 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 not, replace timer).
	C. Meter is not measuring flow.	C. Check output by observing rotation of small gear on front of timer (program wheel must not be against regeneration stop for this check) each tooth to tooth is approximately 30 gallons (113.5 L) (if not, replace meter).

MODEL 5600SF TROUBLESHOOTING

Problem	Cause	Correction
1. Filter fails to backwash.	A. Electrical service to unit has been interrupted.	A. Assure permanent electrical service (check fuse, plug, pull chain or switch).
	B. Timer is defective.	B. Replace timer.
	C. Power failure.	C. Reset time of day.
2. Filter "bleeds" iron.	A. Bypass valve is open.	A. Close bypass valve.
	B. Excessive water usage.	B. Reduce days between, backwashing (see timer instructions), make sure that there is not a leaking valve in the toilet bowl or sinks.
	C. Hot water tank rusty.	C. Repeated flushings of the hot water tank is required.
	D. Leak at distributor tube.	D. Make sure distributor tube is not cracked, check O-ring and tube pilot.
	E. Defective or stripped filter medium bed.	E. Replace bed.
	F. Inadequate backwash flow rate.	F. Make sure filter has correct drain flow control, be sure flow control is not clogged or drain line restricted, be sure water pressure has not dropped, increase backwash flow rate according to specifications for your unit, see your dealer for recommendations.
3. Loss of water pressure.	A. Iron or turbidity build-up in water filter.	A. Reduce days between backwashing so filter backwashes more often, make sure filter is sized large enough to handle water usage.
	B. Inlet plugged due to foreign material broken loose from pipes by recent work done on plumbing system.	B. Remove piston and clean control.
4. Loss of filter medium through drain line.	A. Broken or missing top screen.	A. Replace top screen, must have 0.020" wide slots.
5. Drain flows continuously.	A. Foreign material in control.	A. Remove piston assembly and inspect bore, remove foreign material and check control in various cycle positions.
	B. Internal control leak.	B. Replace seals and/or piston assembly.
	C. Control valve jammed in rinse or backwash.	C. Replace piston, seals and spacers (and drive motor if necessary).

SERVICE INSTRUCTIONS

Replace Time Brine Valve, Injectors and Screen

1. Unplug electrical cord from outlet.
2. Turn off water supply to conditioner:
 - A. If the conditioner installation has a "three valve" bypass system, first open the valve in the bypass line, then close the valves at the conditioner inlet and outlet.
 - B. If the conditioner has an integral bypass valve, put it in the **Bypass** position.
 - C. If there is only a shut-off valve near the conditioner inlet, close it.
3. Relieve water pressure in the conditioner by putting the control in the **Backwash** position momentarily. Return the control to the **In Service** position.
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 valve body O-rings.
6. Replace brine valve.
 - A. Pull brine valve from injector body, also remove and discard O-ring at bottom of brine valve hole.
 - B. Apply silicone lubricant to new O-ring and reinstall at bottom of brine valve hole.
 - C. Apply silicone lubricant to O-ring on new valve assembly and press into brine valve hole, shoulder on bushing should be flush with injector body.
7. Replace injectors and screen.
 - A. Remove injector cap and screen, discard O-ring. Unscrew injector nozzle and throat from injector body.
 - B. Screw in new injector throat and nozzle, be sure they are seated tightly. Install a new screen.
 - C. Apply silicone lubricant to new O-ring and install around oval extension on injector cap.
8. Apply silicone lubricant to three new O-rings and install over three bosses on injector body.
9. Insert screws with washers through injector cap and injector. Place this assembly through hole in timer housing and into mating holes in the valve body. Tighten screws. (Be sure to reinstall brass spacers with injector on model **4600** valve.)
10. Reconnect brine tube and drain line.
11. Return bypass or inlet valving to normal **In Service** position. Water pressure automatically builds in the conditioner.

NOTE: Be sure to shut off any bypass line.

12. Check for leaks at all seal areas. Check drain seal with the control in the **Backwash** position.
13. Plug electrical cord into outlet.
14. Set time of day and cycle the control valve manually to assure proper function.
 - A. Make sure control valve is in the **In Service** position.
15. Make sure there is enough brine in the brine tank.
16. Rotate program wheel counterclockwise until it stops at **Regeneration** position.
17. Start regeneration cycle manually if water is hard.

Replace Timer

1. Unplug electrical cord from outlet.
 2. Turn off water supply to conditioner:
 - A. If the conditioner installation has a "three valve" bypass system, first open the valve in the bypass line, then close the valves at the conditioner inlet and outlet.
 - B. If the conditioner has an integral bypass valve, put it in the **Bypass** position.
 - C. If there is only a shut-off valve near the conditioner inlet, close it.
 3. Relieve water pressure in the conditioner by putting the control in the **Backwash** position momentarily. Return the control to the **In Service** position.
 4. Pull cable out of meter cover. Remove the control valve back cover.
 5. Remove screw and washer at drive yoke. Remove timer mounting screws. The entire timer assembly now lifts off easily.
 6. Put new timer on top of valve. Be sure drive pin on main gear engages slot in drive yoke (rotate control knob if necessary).
 7. Replace timer mounting screws. Replace screw and washer at drive yoke.
 8. Return bypass or inlet valving to normal **In Service** position. Water pressure automatically builds in the conditioner.
- NOTE: Be sure to shut off any bypass line.**
9. Plug electrical cord into outlet.
 10. Set time of day, program wheel, and salt usage. Cycle the control valve manually to assure proper function. Be sure to return the control valve to the **In Service** position.
 11. Replace the control valve back cover. Be sure grommet at cable hole is in place.
 12. Make sure there is enough brine in the brine tank.
 13. Rotate program wheel counterclockwise until it stops at **Regeneration** position.
 14. Start regeneration cycle manually if water is hard.
 15. Plug cable into meter cover, rotate cable to align drive flat if necessary.

SERVICE INSTRUCTIONS *CONTINUED*

Replace Piston Assembly

1. Unplug electrical cord from outlet.
2. Turn off water supply to conditioner:
 - A. If the conditioner installation has a "three valve" bypass system, first open the valve in the bypass line, then close the valves at the conditioner inlet and outlet.
 - B. If the conditioner has an integral bypass valve, put it in the **Bypass** position.
 - C. If there is only a shut-off valve near the conditioner inlet, close it.
3. Relieve water pressure in the conditioner by putting the control in the **Backwash** position momentarily. Return the control to the **In Service** position.
4. Pull cable out of meter cover. Remove the control valve back cover.
5. Remove screw and washer at drive yoke. Remove timer mounting screws. The entire timer assembly now lifts off easily. Remove end plug retainer plate.
6. Pull upward on end of piston yoke until assembly is out of valve.
7. 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.
8. 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.
9. Place timer on top of valve. Be sure drive pin on main gear engages slot in drive yoke (rotate control knob if necessary).
10. Replace timer mounting screws. Replace screw and washer at drive yoke.
11. Return bypass or inlet valving to normal **In Service** position. Water pressure automatically builds in the conditioner.

NOTE: Be sure to shut off any bypass line.

12. Plug electrical cord into outlet.
13. Set time of day, program wheel, and salt usage. Cycle the control valve manually to assure proper function. Be sure to return the control valve to the **In Service** position.
14. Replace the control valve back cover. Be sure grommet at cable hole is in place.
15. Make sure there is enough brine in the brine tank.
16. Rotate program wheel counterclockwise until it stops at **Regeneration** position.
17. Start regeneration cycle manually if water is hard.
18. Plug cable into meter cover. Rotate cable to align drive flat if necessary.

Replace Seals and Spacers

1. Unplug electrical cord from outlet.
2. Turn off water supply to conditioner.
 - A. If the conditioner installation has a "three valve" bypass system, first open the valve in the bypass line, then close the valves at the conditioner inlet and outlet.

- B. If the conditioner has an integral bypass valve, put it in the **Bypass** position.
 - C. If there is only a shut-off valve near the conditioner inlet, close it.
3. Relieve water pressure in the conditioner by putting the control in the **Backwash** position momentarily. Return the control to the **In Service** position.
 4. Pull cable out of meter cover. Remove the control valve back cover.
 5. Remove screw and washer at drive yoke. Remove timer mounting screws. The entire timer assembly now lifts off easily. Remove end plug retainer plate.
 6. Pull upward on end of piston rod yoke until assembly is out of valve. Remove and replace seals and spacers with fingers.

Replace Meter

1. Unplug electrical cord from outlet.
2. Turn off water supply to conditioner:
 - A. If the conditioner installation has a "three valve" bypass system, first open the valve in the bypass line, then close the valves at the conditioner inlet and outlet.
 - B. If the conditioner has an integral bypass valve, put it in the **Bypass** position.
 - C. If there is only a shut-off valve near the conditioner inlet, close it.
3. Relieve water pressure in the conditioner by putting the control in the **Backwash** position momentarily. Return the control to the **In Service** position.
4. Pull cable out of meter cover.
5. Remove two screws and clips at bypass valve or yoke. Pull resin tank away from plumbing connections.
6. Remove two screws and clips at control valve. Pull meter module out of control valve.
7. Apply silicone lubricant to four new O-rings and assemble to four ports on new meter module.
8. Assemble meter to control valve. Note, meter portion of module must be assembled at valve outlet.
9. Attach two clips and screws at control valve. Be sure clip legs are firmly engaged with lugs.
10. Push resin tank back to the plumbing connections and engage meter ports with bypass valve or yoke.
11. Attach two clips and screws at bypass valve or yoke. Be sure clip legs are firmly engaged with lugs.
12. Return bypass or inlet valving to normal **In Service** position. Water pressure automatically builds in the conditioner.

NOTE: Be sure to shut off any bypass line.

13. Check for leaks at all seal areas.
14. Plug electrical cord into outlet.
15. Set time of day.
 - A. **Make sure control valve is in the In Service position.**
16. Rotate program wheel counterclockwise until it stops at **Regeneration** position.
17. Start regeneration cycle manually if water is hard.
18. Plug cable into meter cover. Rotate cable to align drive flat if necessary.

SERVICE INSTRUCTIONS *CONTINUED*

Replace Meter Cover and/or Impeller

1. Unplug electrical cord from outlet.
2. Turn off water supply to conditioner:
 - A. If the conditioner installation has a "three valve" bypass system, first open the valve in the bypass line, then close the valves at the conditioner inlet and outlet.
 - B. If the conditioner has an integral bypass valve, put it in the **Bypass** position.
 - C. If there is only a shut-off valve near the conditioner inlet, close it.
3. Relieve water pressure in the conditioner by putting the control in the **Backwash** position momentarily. Return the control to the **In Service** position.
4. Pull cable out of meter cover.
5. Remove four screws on cover.
6. Lift cover off of meter module, discard o-ring.
7. Remove and inspect impeller for gear or spindle damage, replace if necessary.
8. Apply silicone lubricant to new o-ring and assemble to the smallest diameter on meter cover.
9. Assemble cover to meter module. Be sure impeller spindle enters freely into cover. Press firmly on cover and rotate if necessary to assist in assembly.
10. Replace four screws and tighten.
11. Return bypass or inlet valving to normal **In Service** position. Water pressure automatically builds in the conditioner.

NOTE: Be sure to shut off any bypass line.

12. Check for leaks at all seal areas.
13. Plug electrical cord into outlet.
14. Set time of day
 - A. **Make sure valve is in the In Service position.**
15. Rotate program wheel counterclockwise until it stops at
16. position.
17. Start regeneration cycle manually if water is hard.
18. Plug cable into meter cover. Rotate cable to align drive flat if necessary.