



Clean Water Made Easy

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5700-E Softener Installation & Start-Up Guide

Thank you for purchasing a Clean Water System! With proper installation and a little routine maintenance your system will be providing filtered water for many years.

Please review this start-up guide entirely before beginning to install your system, and follow the steps outlined for best results.



Questions?

Call us toll-free: 1-888-600-5426 or 1-831-462-8500

Email us: support@cleanwaterstore.com

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Table of Contents

Packing List	2
Pre-Installation	4
Best Practices for Piping & Drain Installation.....	4
How Your Softener Works.....	5
Fig 1: How Your Softener Works	5
Fig 2 - Typical Softener 5700-E piping installation with ball valve and hose bib after the filter along with pre- and post-filtration if necessary:.....	6
Fig 3: 5700-E from the rear showing the inlet and outlet end-connector fittings 1" or 1-1/4" NPT in Noryl plastic. Brass end-connectors are also available for connecting to copper tubing.	7
Fig 4 5700-E Bypass/Service Mode Knob Positions.....	7
Installation Instructions.....	8
Attaching the brine line tubing to the brine tank & the 5700-E brine valve.....	11
Fig 8 5700-E Brine Line Installation	11
Initial Manual Backwash.....	23
Maintaining Your 5700-E Softener System	24
Troubleshooting the 5700-E Softener.....	27
More Troubleshooting Tips	29
Brine Solution Not Being Sucked In During Regeneration	29
System Not Backwashing Adequately	29
System Not Programmed Correctly – PROGRAM SETTINGS	29
Brine Tank Not Filling With Enough Water	29

Packing List

Model Size: 24K Grain Softener:

Quantity	Description
1	5700-E backwash control valve & bypass valve
1	Pipe connector kit (either 1" or ¾")
1	8" x 44" filter tank with distributor tube
1	Media funnel
1	¾ cubic foot box of softening media (resin)
1	18" x 33" black brine tank

Model Size: 32K Grain Softener:

Quantity	Description
1	5700-E backwash control valve & bypass valve
1	Pipe connector kit (either 1" or ¾")
1	10" x 44" filter tank with distributor tube
1	Media funnel
1	1 cubic foot box of softening media (resin)
1	18" x 33" black brine tank

Model Size: 48K Grain Softener:

Quantity	Description
1	5700-E backwash control valve & bypass valve
1	Pipe connector kit (either 1" or ¾")
1	10" x 54" filter tank with distributor tube
1	Media funnel
1	1 cubic foot boxes of softening media (resin)
1	½ cubic foot box of softening media (resin)
1	18" x 33" black brine tank

5700-E Softener Installation & Startup Guide

Model Size: 64K Grain Softener:

Quantity	Description
1	5700-E backwash control valve & bypass valve 1
1	Pipe connector kit (either 1" or ¾")
1	12" x 52" filter tank with distributor tube
1	Media funnel
2	1 cubic foot boxes of softening media (resin)
1	18" x 33" black brine tank

Model Size: 80K Grain Softener:

Quantity	Description
1	5700-E backwash control valve & bypass valve 1
1	Pipe connector kit (either 1" or ¾")
1	13" x 54" filter tank with distributor tube
1	Media funnel
2	1 cubic foot boxes of softening (resin)
1	½ cubic foot box of softening media (resin)
1	18" x 33" black brine tank

*NOTE: All Fine Mesh Resin Softeners will come with a box of gravel

Pre-Installation

1. Review your packing list and make sure you have received all the parts before beginning installation. Please ensure that all parts are included before scheduling a plumber or installer to come to the site.
2. If you are going to be turning off the water to the house and you have an electric water heater, shut off the power to the water heater before beginning installation in case water heater is accidentally drained.
3. Pick a suitable location for your filter system on a dry level spot where it won't be exposed to freezing temperatures. A minimum of 20 PSI is required. Maximum pressure is 90 PSI.
4. Get all of your plumbing parts together before beginning installation. Installation typically takes 3 to 5 hours. However after installation the Softener must be allowed to run through a complete backwash and rinse cycle (also called 'regeneration'). You don't have to be present for this first backwash necessarily, but it does take 90 minutes.
5. After the system is installed and running, your water may be discolored, or full of sediment/rust, particularly if this is older piping that has been exposed to iron or manganese for some time. Typically this clears up over a day or two, but can persist for weeks if the pipe is old galvanized iron pipe that is corroded.

Best Practices for Piping & Drain Installation

1. See typical installation (see Fig 2). The softener is installed after the pressure tank.
2. Make sure to connect the IN pipe to the 5700-E inlet and the OUT to the outlet (see Fig 3). As you face the 5700-E control from the front, the water enters on the right and exits on the left. From the back (see Fig 3) the water enters on the left and exits on the right. The inlet and outlet are attached to the bypass valve which is marked with arrows as well.
3. Make sure there is a working gate or ball valve before the 5700-E Softener and also one after as shown in the diagram (Fig 2). The pressure gauges are optional but a hose bib (a faucet that you can attach a garden hose to) is strongly recommended after the softener and before the second ball valve. This makes it easy to rinse your new softener on start-up and gives you a place to test the water before it enters your household plumbing.
4. If you will be using copper piping, do not sweat the copper pipe directly on to the 5700-E control valve. Avoid heating up the 5700-E control valve plastic with the torch.

5. You do not need unions to install your 5700-E control. If you need to remove it, the 5700-E has quick-release couplings that make it easy to put the softener on by-pass and remove the filter system from the piping.
6. The drain line tubing (not supplied) is connected to a drain from the drain outlet using flexible $\frac{1}{2}$ " ID tubing. Note that the drain can run up above the 5700-E control and into a drain, it does not have to drain down, as the filter backwashes under line pressure from your well pump. Most plumbing codes require an air-gap connection, so that if your sewer or septic tank backs up, it cannot cross connect with the drain tubing.

How Your Softener Works

See Fig 1. In the softener, water enters the top of the tank and flows down through the media and up the distributor tube. Hardness minerals are drawn to the resin beads in the softener. During backwash, the water flow is reversed and water flows down the distributor tube and up through the media, lifting and expanding the softening media, and removing any trapped particles. After the backwash stage, salt brine is automatically drawn in from the brine tank which then slowly rinses through the softening resin for 1 hour, allowing the hardness minerals to be swapped out with harmless sodium or potassium ions. This entire automatic process, called 'regeneration' takes about 90 minutes. Typically the softener filter is set to regenerate every 14-21 days, during the middle of the night when no water is being used.

Fig 1: How Your Softener Works

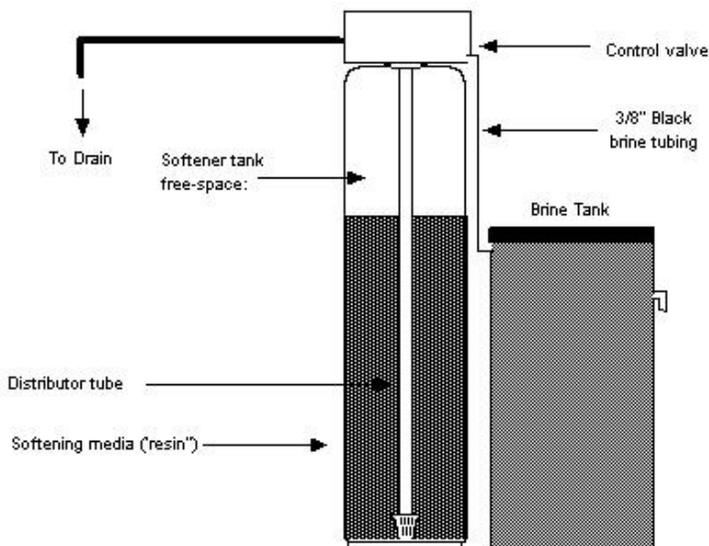


Fig 2 - Typical Softener 5700-E piping installation with ball valve and hose bib after the filter along with pre- and post-filtration if necessary:

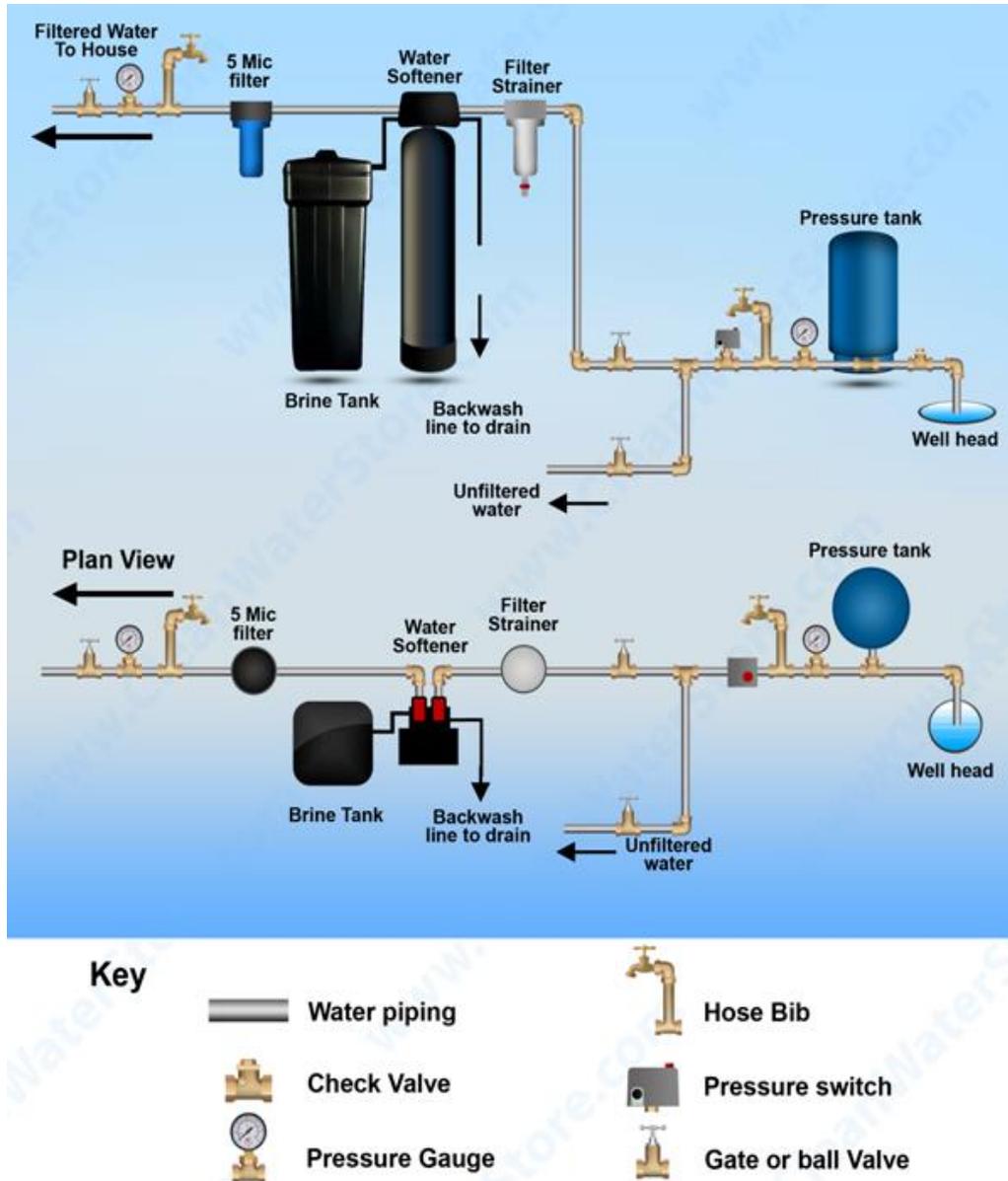


Fig 3: 5700-E from the rear showing the inlet and outlet end-connector fittings 1" or 1-1/4" NPT in Noryl plastic. Brass end-connectors are also available for connecting to copper tubing.

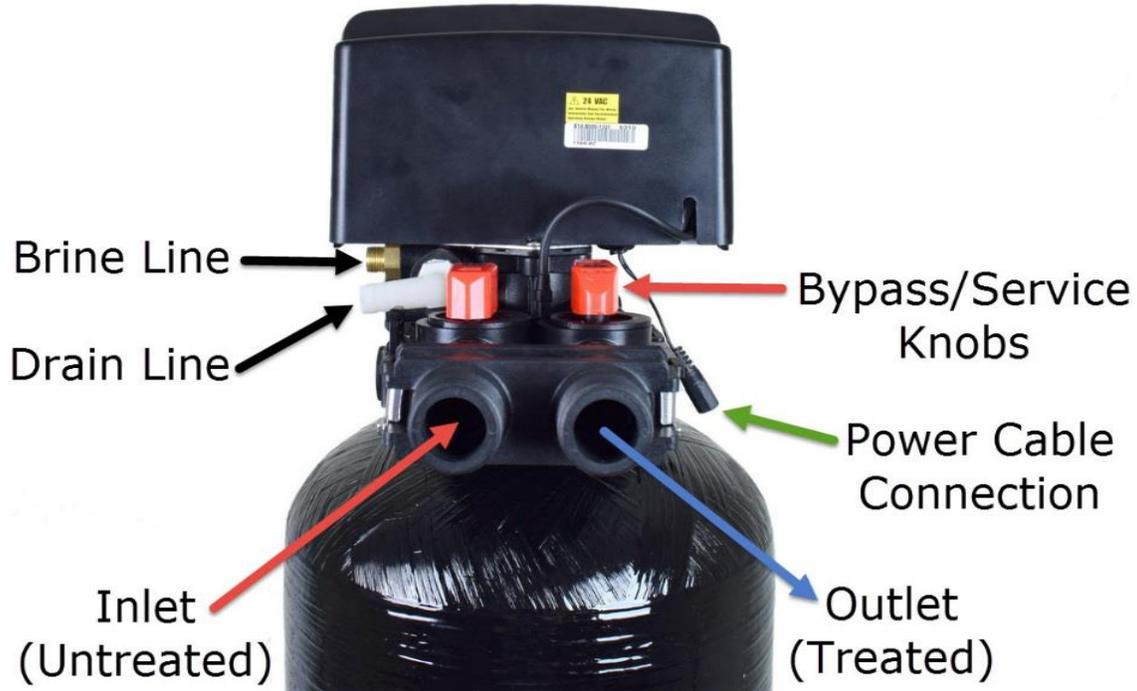
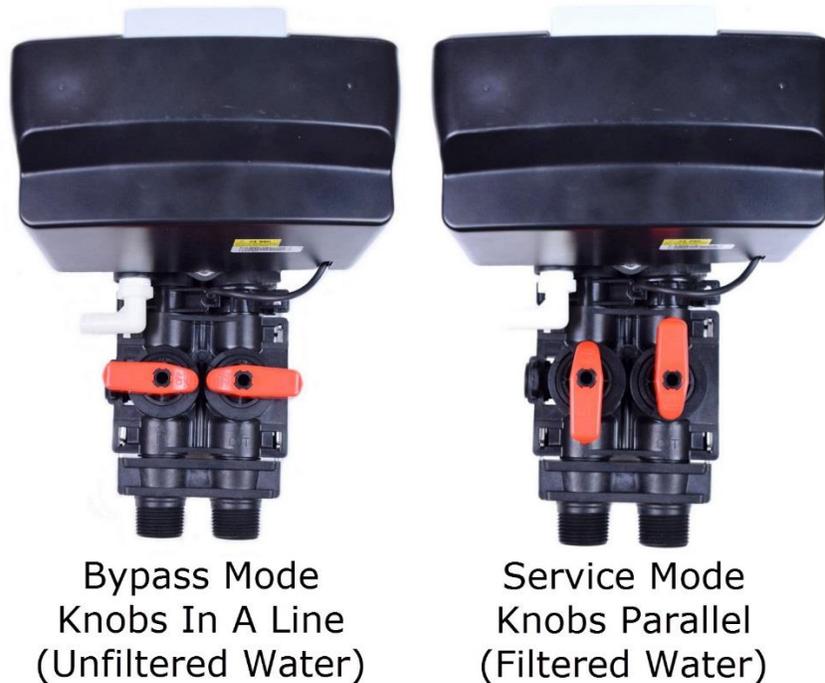


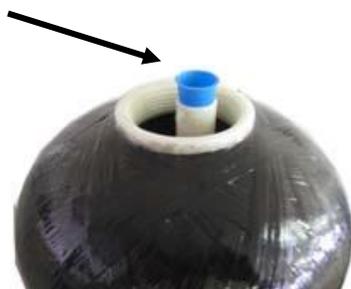
Fig 4 5700-E Bypass/Service Mode Knob Positions



Installation Instructions

1. Unscrew by hand the entire 5700-E control valve from top of tank if it was shipped screwed on. Place distributor tube in tank if not already inside tank. If not already done, make sure blue cap is on top of distributor tube, or wrap the top of distributor tube with electrical or duct tape. The idea is we do not want any media to go down the distributor tube.

Plug or tape top of distributor tube when adding media to prevent media from entering. Remove when finished.



2. Next add the softening resin using the media funnel provided. Tank will be approximately 2/3 to the 3/4 full. NOTE: If you are using a softener with fine mesh resin, you will want to first add the gravel provided before adding resin
3. Remove cap or tape from top of distributor tube. Be careful not to pull up distributor tube when removing cap or tape.
4. Attach plastic top screen to the under-side of the 5700-E control valve. It is a funnel-shaped plastic screen that snaps on to the control valve and prevents resin from being backwashed out to drain during the regeneration cycles.



5. NOTE Regarding Teflon tape and pipe sealants: It is OK to use Teflon tape and pipe sealant on the water pipe connector threads, where you attach your pipes or plumbing to the 5700-E. DO NOT USE any Teflon tape or pipe joint compound on the tank itself or on the threads where the 5700-E threads into the tank.
6. Install the 5700-E backwash control-timer valve on to the top of the filter tank by hand, do not over-tighten. Tighten with hands, there is no need for a pipe wrench or other wrench.
7. See the bypass image below. Note the pipe connectors, while the other end is what gets attached to the control valve. The 5700-E valve is usually shipped in by-pass position. Leave in bypass position for now.

5700-E By-Pass (1) & Pipe Connectors (2)



Bypass Mode
Knobs In A Line
(Unfiltered Water)

Service Mode
Knobs Parallel
(Filtered Water)

8. Lubricate the by-pass valve o-rings on the pipe connectors only with some vegetable oil or silicone grease and connect the bypass assembly to the 5700-E control by sliding the bypass valve firmly into the body of the 5700-E. **DO NOT USE OIL OR PETROLEUM GREASE ON ANY PART OF THE 5700-E CONTROL VALVE.** O-rings are OK to lubricate but not the main tank threads.
9. Make sure the by-pass valve is in the bypass position (above) when starting the installation. Follow the IN and OUT arrows on the bypass valve and control valve for proper connection of water piping. Leave in the BY-PASS position for now.
10. Now install your water pipes to the 5700-E bypass end connectors. Our preferred method is to wrap the pipe threads with 2 or 3 wraps of Teflon tape, then apply a thin coating of white non-hardening Teflon joint compound paste (available at all hardware stores) before attaching the pipe fittings. Make sure the inlet is installed to the 'In' pipe connector on the bypass valve and outlet is on the "Out" connector. **Note:** Arrows on bypass valve should be visible from the top of the bypass valve.
11. Connect some flexible tubing from the drain connection on the 5700-E control valve to a suitable drain such as a septic tank or drain to a sewer. It is OK to run the drain line up and over the Softener, up to 4 feet above the top of the tank. If the drain line will be more than 20 feet, and especially if your system is a 2.0 or 2.5 cubic foot size, use larger diameter tubing such as $\frac{3}{4}$ " or 1". Note that it is desirable to be able to run the drain line into a bucket in order to test the backwash flow rate in the future. This is why hard piping the drain line is discouraged, however, if you do use hard PVC piping for the drain line, and you are able to remove the hard PVC drain piping and attach flexible tubing should you ever desire for testing purposes, it is OK to use rigid PVC pipe for the drain. Make sure the drain tubing is firmly clamped to the barbed fitting with a hose clamp to prevent leaks.
12. Next, connect the solution tank to the 5700-E control valve with the black tubing, provided with the brine tank.

Attaching the brine line tubing to the brine tank & the 5700-E brine valve

13. Insert 3/8" diameter tubing into the brine tank connection. Screw the nut with the sleeve and Ferrell attached to prevent leaking.

Fig 8 5700-E Brine Line Installation



14. To connect the brine tank, begin by sliding the plastic brine injector nut on to the brine tubing by putting the tubing through the non-threaded side of the nut. Next, slide the black (or clear) compression ring on to the tubing with the narrower diameter going on first. Then slide the taller, white compression ring on to the tubing with the wider diameter going on first. The two compression rings should lay flush against each other on the tubing. Slide them in to the brine injector nut and place the brine tubing into the brine valve. Finally, push the brine injector nut, which now has the compression rings inside of it, on to the threading of the brine valve and rotate the nut clockwise, screwing it on to the brine valve. Tighten it down to finger tightness. The tubing should be firmly attached and not slide out if pulled on.



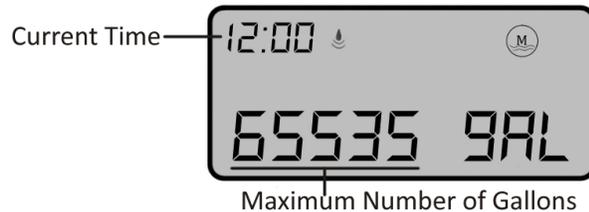
15. Add approximately 5 gallons of water to the brine tank, and then fill the brine tank with salt, using about 300 lbs, or 6 50-lb bags. It is OK to use any kind of water softening salt, however we find that extra coarse salt works better than pellets. You do not have to add water to the brine tank again after this first time during the start-up.
16. See the over-flow barbed fitting on the side of the brine tank. You do not have to connect this to a drain. If the safety float were to malfunction, there is a small chance that the brine solution will drip out of this fitting. If this would cause a big mess where you have installed the softener, hook some tubing to this and run to a bucket, floor pan or floor drain. Normally no brine will leak out of this fitting.
17. Now you are ready to turn on the water to the system. Turn on the water and leave on bypass and check for leaks. Leave the ball valve after the softener closed, so water is still off to the house, but connect a garden hose and open up the hose bib after the softener and allow the water to run. This will help to clear out any foreign material that may be in the pipes from the piping installation. If you do not have a valve installed after the softener and you do not have a hose bib, you will need to turn the water on inside the house to let the water run. Use a bathtub or laundry sink or other fixture that does not have an aerator screen.
18. Leave the water running out of the garden hose at a slow rate. Now you can turn the bypass valve to the service position. First open the Inlet Side of the bypass valve. Second slowly open the Outlet Side of the bypass until it is in the full service position. Make sure you are turning the bypass valve knobs in the correct direction which is counter-clockwise as you face the bypass valve knobs.
19. Now turn on the garden hose to full force and let the water until it turns relatively clear. The water may have some color at first.
20. You are now ready to plug in your Softener 5700-E control valve and start programming. Your valve does require some modifications to the programming specific to your application.
21. Plug your 5700-E control valve into an outlet. After being plugged in, the screen may display "WAITING PLEASE" while it finds the service position. Next you will need to program the system to work as a Softener. There are a few settings that must be changed before the system can be put into service.

Normal Operation

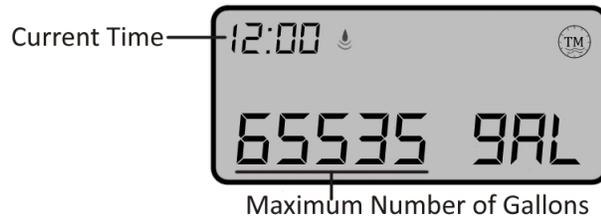
Time Mode: Home screen will display days and hours left until the unit regenerates.



Meter Mode: Meter mode tracks the number of gallons used instead of regenerating on a specific time. In this mode immediate regeneration will occur once the unit hits its target calculated number of gallons based on hardness settings.



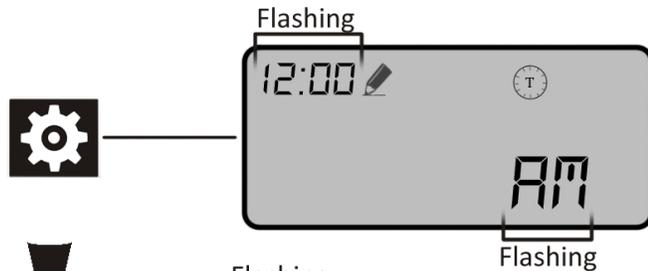
Timed Meter Mode: Timed Meter Mode tracks the number gallons used, like the Meter Mode, but waits until its set time to regenerate instead of immediately. A buffer period is factored in to prevent you from running out of soft water. The water droplet to the right of Current Time signifies the unit tracking water flow. We recommend T for the operation of your softener, to backwash by gallons, but also with a day limit. Change the setting, then press the down arrow to proceed to the next step.



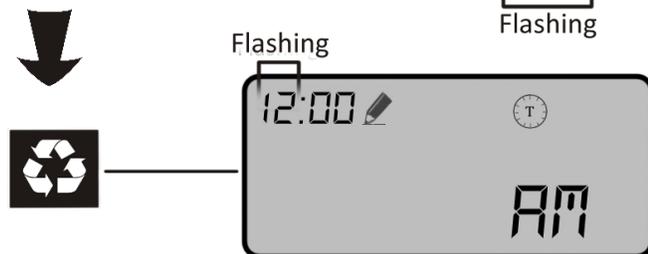
Meter & Timed Meter Menus

The following menus will allow you to change the current time, unit hardness, and calendar day override settings within the Meter and Timed Meter Modes.

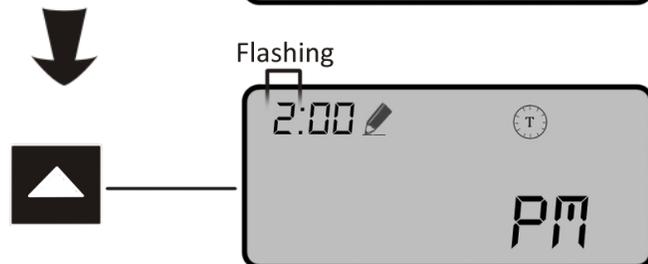
Current Time settings: Press the gear to begin menus. Current time and period of the day will be flashing.



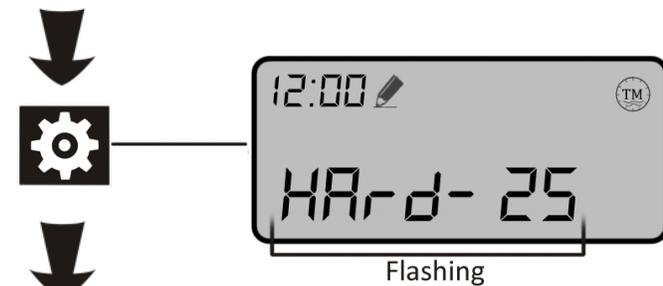
After pressing the Regen button, only the hour portion will be flashing.



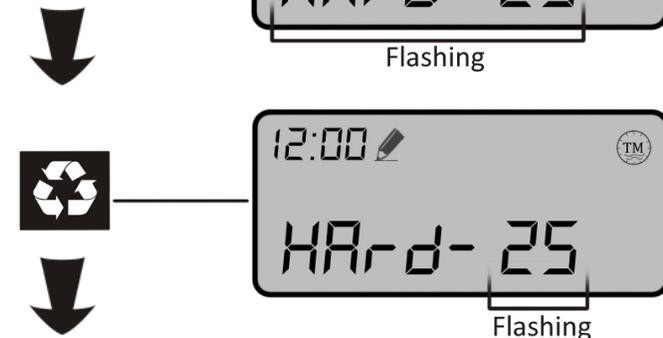
Use the up and down arrows to adjust the time. Press the gear again to switch to the minute portion. Note, once the timer passes a 12 hour period it will automatically change A.M. to P.M.



Unit Hardness settings: Hard-25 will be flashing.



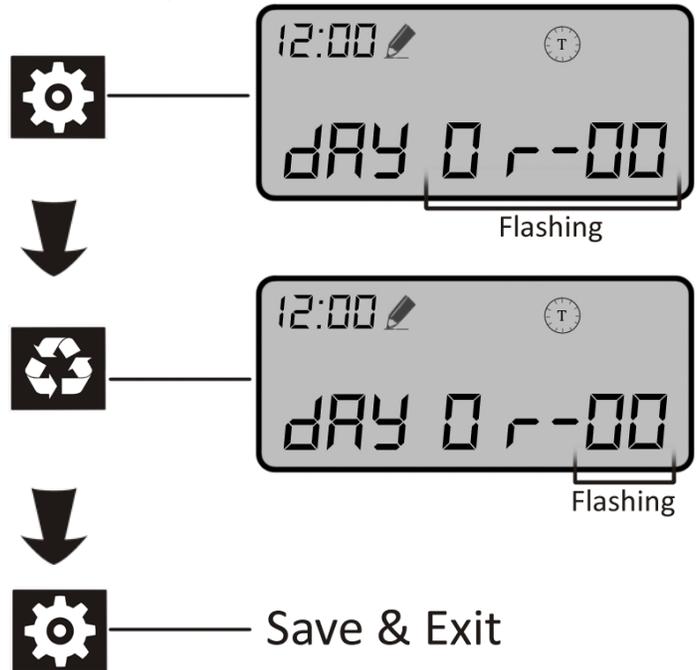
Pressing the Regen button will allow changes to hardness to be made. The unit has a range of 1-99 grains per gallon.



Meter and Time Meter Menus continued..

Calendar Day Override setting:
Allows user to set a time to regenerate by if the unit hasn't met its set meter amount within that time period.

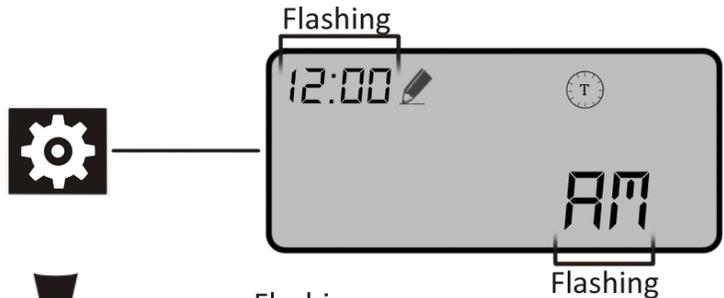
Pressing the Regen button allows you to change the days. Default setting is 0 days, but can range from 0-99 days. The recommended setting for a softener is 14 days, depending on usage.



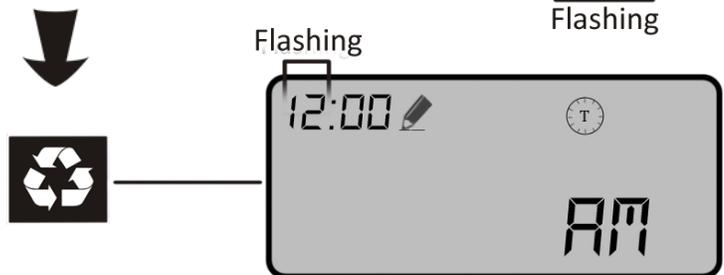
Time Menus

The following menus will let you change the Current Time and the Regeneration Day for Time Mode only.

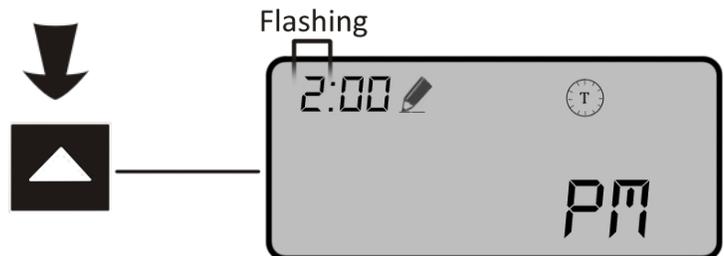
Current Time settings: Press gear to begin menus. Current time and period of the day will be flashing.



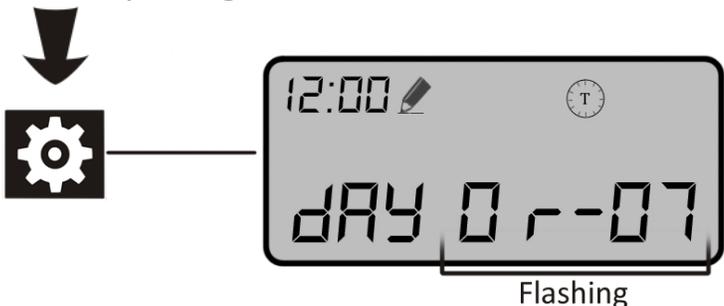
After pressing the Regen button, only the hour portion will be flashing.



Use the up and down arrows to adjust the time. Press the gear again to switch to the minute portion. Note, once the timer passes a 12 hour period it will automatically change A.M. to P.M.

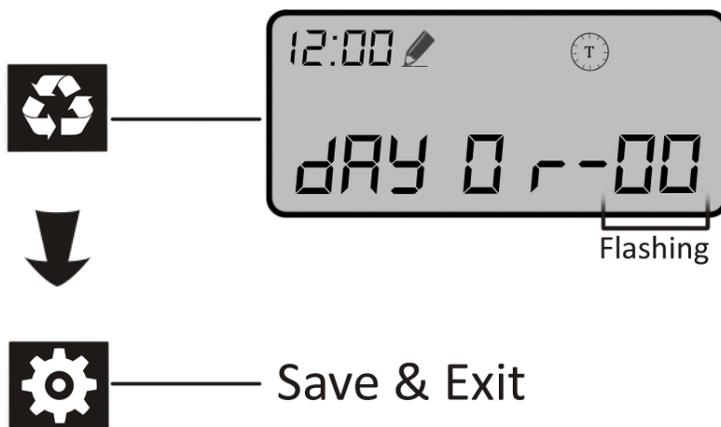


Pressing the gear again brings you to the Regeneration day setting.



Time Menus Continued..

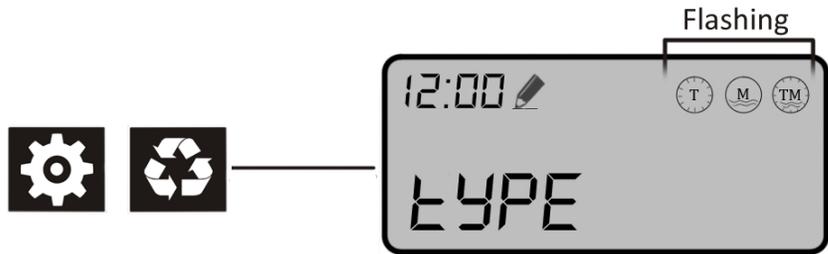
Using the up and down arrows, you can set the number of days you wish to have between regenerations. The unit has a range of 1-99 days. Default setting is 7 days. The recommended setting for a softener is 14 days, depending on usage.



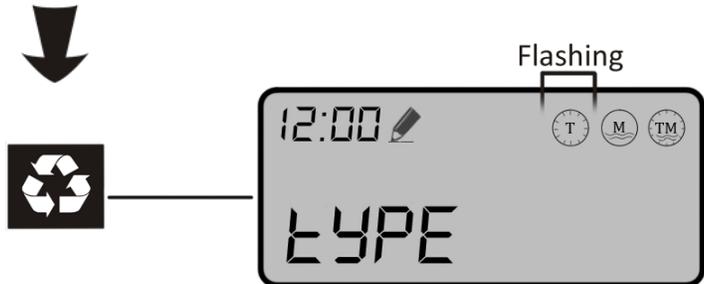
Advanced Menu

Within the Advance Menu the Regeneration Mode, Regeneration Cycle Period Lengths, and Unit Capacity are adjustable.

To enter, press both the Gear and Regen button at the same time. All mode types will be flashing.

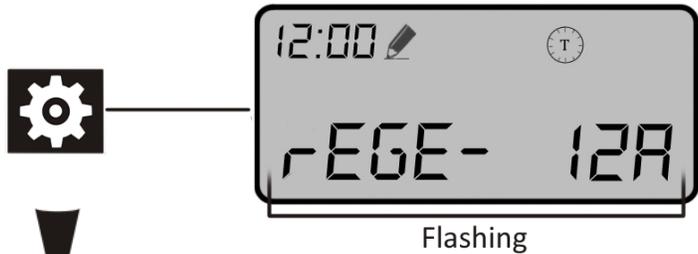


Press the Regen button again to select the mode type you wish to be in. Use the up and down arrow to scroll through the modes.

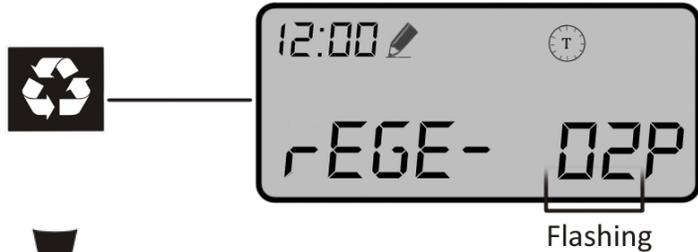


Advanced Menus Continued..

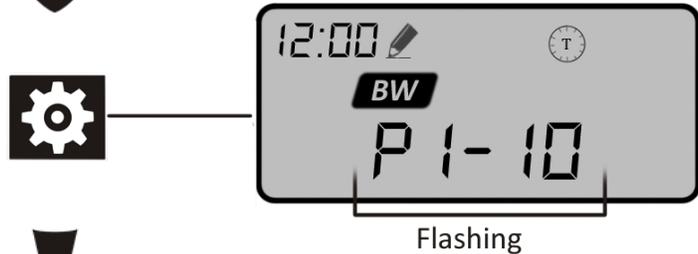
After selecting the mode, the time of day the unit is set to regenerate will appear.



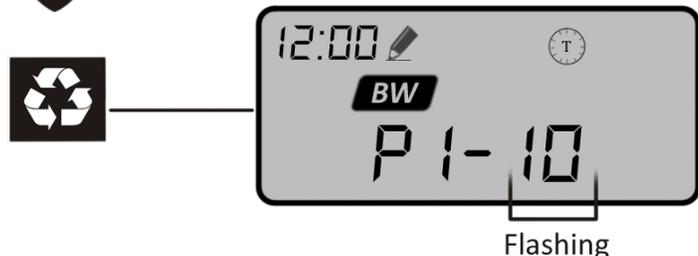
Pressing the Regen button will allow the time to be changed. Use the up and down arrows to adjust the hours and A.M. and P.M. settings.



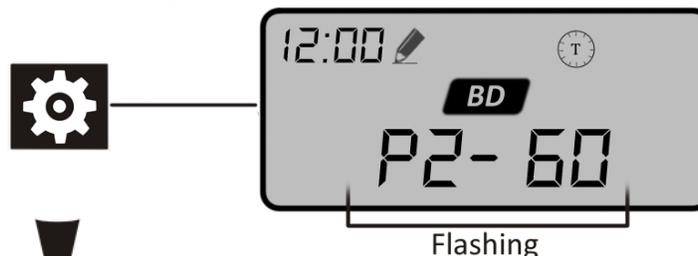
Pressing the gear again will bring you to phase 1, Backwash. BW will be present and P1-10 will be flashing.



Total minutes spent in backwash will be flashing. The unit can be programmed for 0-99 minutes. The recommended setting for a softener is 10 minutes

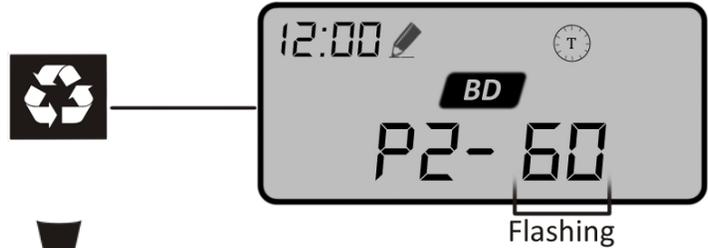


Next menu displays brine draw settings. BD will be present and P2-60 will be flashing.

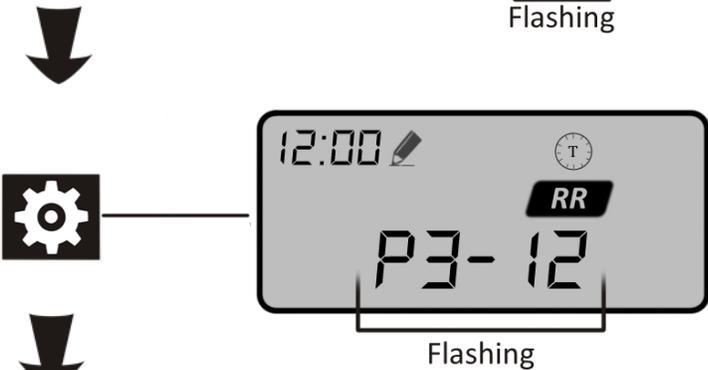


Advanced Menus Continued..

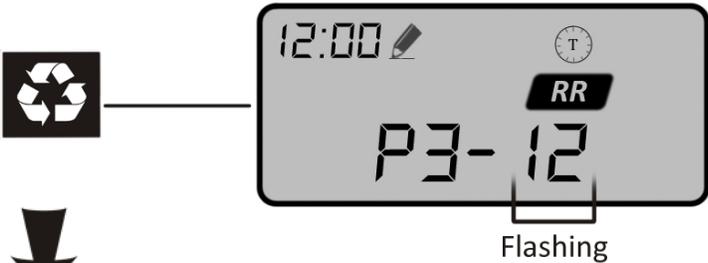
Total minutes the unit draws brine will be flashing. Unit can be set anywhere from 0-99 minutes. The recommended setting for a softener is 60 minutes.



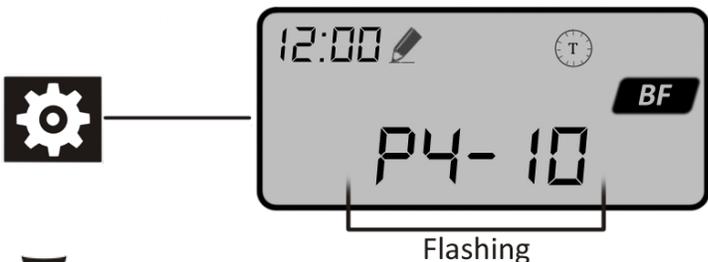
This menu displays Rapid Rinse settings. RR will be present and P3-12 will be flashing.



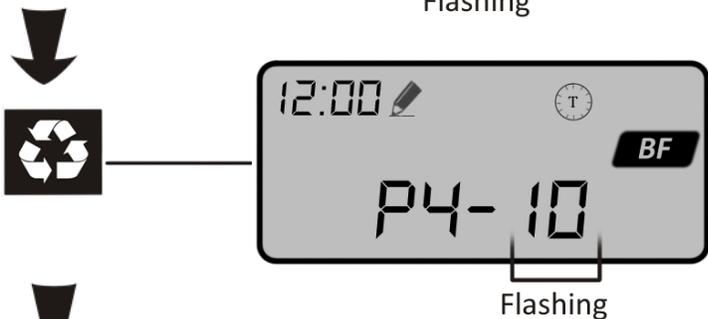
Total minutes the unit rinses will be flashing. Unit can be set anywhere from 0-99 minutes. The recommended setting for a softener is 10 minutes, depending on usage.



This menu displays Brine Refill settings. BF will be present and P4-10 will be flashing.



Total minutes the unit fills the brine tank for will be flashing. Unit can be set anywhere form 0-99 minutes. For 32K grain softeners set to 12 min; 48K grain softeners set to 20 min; 64K grain softeners set to 26 min; 80K grain softeners set to 32 min.

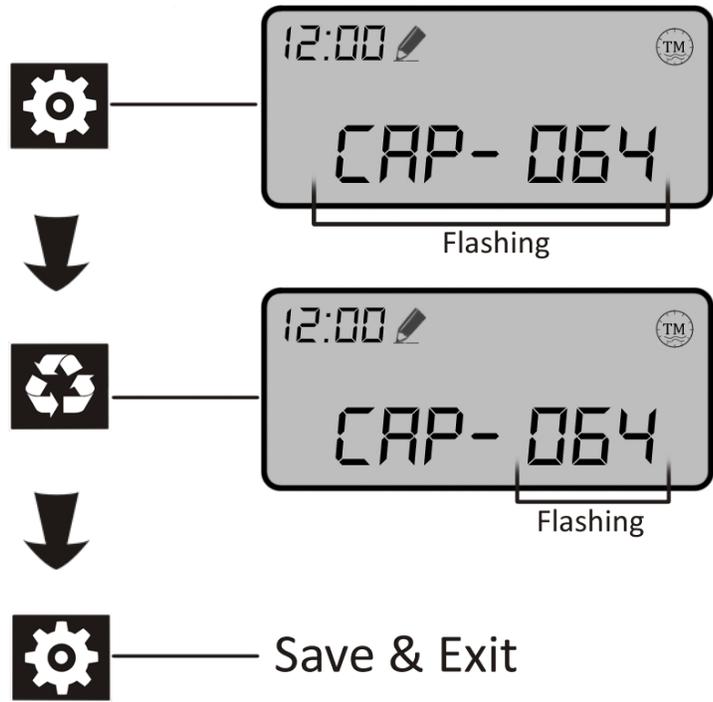


Advanced Menus Continued..

This last menu is to change the unit's capacity.

Unit has a range of 1-199 Capacity (for Meter and Timed Meter Modes only). Multiply capacity setting by 1000 to get grains.

Example: A setting of 064 is equal to 64,000 grain capacity.



*Gallons = (Capacity/Hardness) x .75 (Timed Meter Mode only)

*Gallons = (Capacity/Hardness) (Meter Mode only)

Immediate Regeneration

While in service position, hold the Regen button in for 5-6 second to initiate an immediate regeneration.

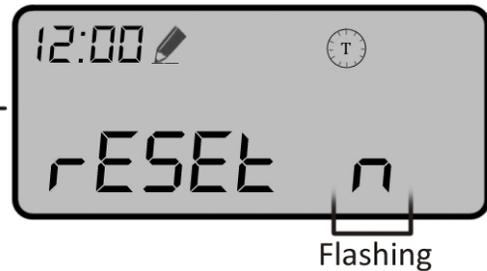
Pressing the Regen button again will jump to the next cycle phase. Holding the two arrow buttons together will terminate Immediate Regeneration and return the unit to service position.



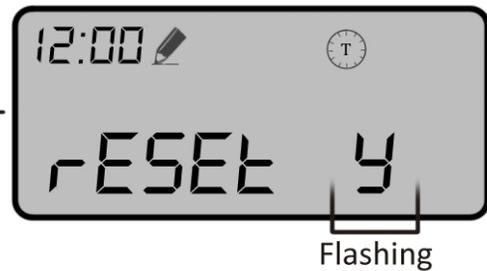
Restore Factory Settings

Hold the Regen button while plugging in the power supply to the unit. After the unit has powered up release Regen button.

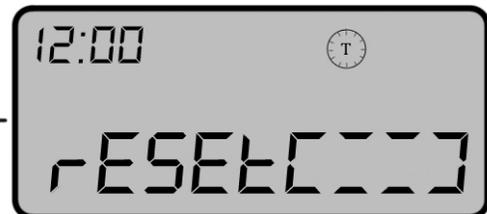
Next press the Regen button again to select no next to reset.



Using the down arrow, scroll to yes.



Hitting the Gear will begin resetting the unit.



Power Outage Memory.

During a loss of power, all program settings will be stored in permanent memory. The current valve position, cycle step and time of day are all stored as well, but upon power up a reset of the current time will be necessary.

If the unit were to lose power during a regeneration stage, the valve will return back to its prior position when the outage occurred. *The unit will take 4 -5 minutes to reset back to that position.*

Initial Manual Backwash

1. Now you can start the initial manual backwash. This will regenerate the softening resin, which is required before using your treated water. Press and hold the regen button (Button with 3 arrows) until BW flashes and the number of minutes that you programmed (10 is default) will display. Now, unplug the valve to stop the cycle, and proceed to the following step.
2. Very slowly turn the Inlet knob on the bypass valve towards the service position, but DO NOT open the valve all the way. We want to allow all of the air in the tank to escape before allowing the water to flow freely. Keep the Outlet knob in bypass. The bypass valve knobs may be a little stiff at first.
3. At this point the softener will be in a backwash mode, which is the first of five cycles it goes through during regeneration. The backwash takes 8 minutes. After 8 minutes, the 5700-E will begin to suck up the brine solution from the brine tank.
4. After another 10 to 15 minutes the brine tank will be sucked dry of the salt brine. Check to make sure that the brine tank has no water after this cycle.
5. After 60 minutes of being in this Cycle 2, referred to as the brining cycle, it will move to the next cycle, Cycle 3, which is a 6 minute second backwash cycle. The next cycle, Cycle 4 is a 10 minute rapid rinse. Finally Cycle 5 refills the brine tank.
6. Check to make sure at the end of the cycles that the brine tank is filled with enough water to cover salt. You can change the level of the brine by adjusting the level of the float assembly. For most users though it is not necessary to adjust the float, it comes set to the correct level.
7. After the regeneration process is complete, turn on the water to the house and run the water in the house for a few minutes.

Maintaining Your 5700-E Softener System

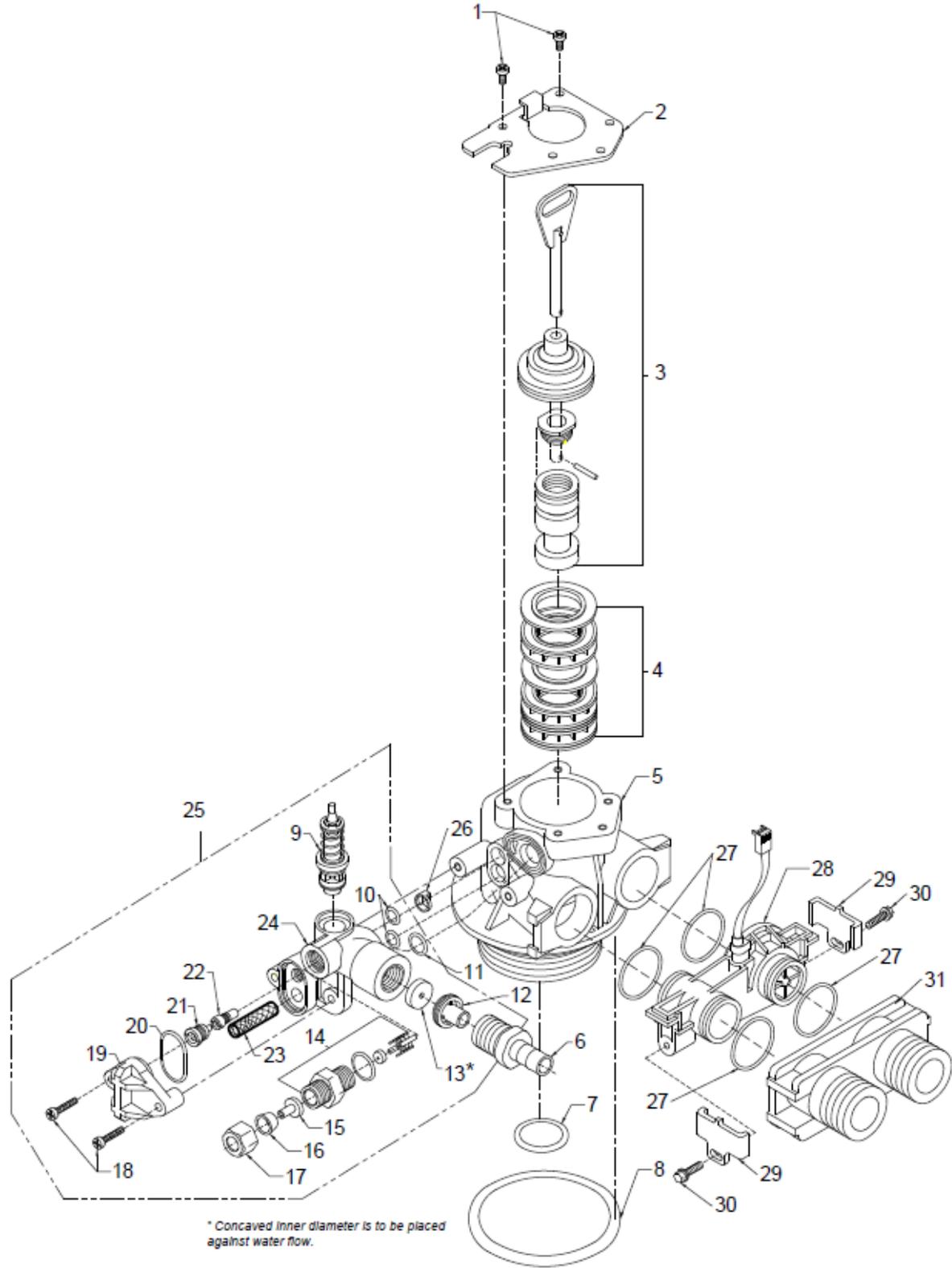
Adding Salt to the Brine Tank:

Be sure to check the level of salt every few months (typically 3-4 months). You will see that the salt level will drop after a certain period of time based on your usage, at which point you will want to add more salt as you did the first time.

Clean the Injector

Once a year, clean the brine tank and the brine injector. (Refer to the Diagram on the next page)

1. Shut off water to filter or put filter on bypass.
2. Release water pressure by turning the center knob on the timer assembly by a few degrees clockwise.
3. Unplug the control valve from the electrical outlet.
4. Unscrew the bolts (#18) near the brine line fitting using a small screw driver. Using this small screwdriver, remove the injector nozzle (#21) and throat (#22), unscrewing counter-clockwise. You may need to use a paper clip or other piece of wire to remove the lower nozzle once it is unscrewed.
5. Replace and/or clean parts the throat and nozzle in muriatic acid or vinegar.
6. Put the system back in service and plug in the control valve. Make sure the timer assembly is advanced so the piston is in the service position. If you are not sure, wait two hours until the timer assembly does this automatically.
7. Next clean the potassium perm tank by removing the felt pad and cleaning in muriatic acid, citric acid or vinegar, or better yet just replacing the felt pad if you want. Clean the float and rinse the pot perm tank out. It's better to use rubber gloves when you are doing this to avoid the possibility of staining your hands with potassium permanganate. If your hands do become stained you can clean them with vinegar or lemon juice.



5700-E Softener Installation & Startup Guide

Ref. Number	Part Number	Part Description	Qty. Req'd.
1	20561X250	Screw - Hex Hd. 10-24 x 1/2"	3
2	20561X249	End Plug Retainer	1
3	20561X254	Piston & End Plug Assy.	1
4	20561X253	Seal & Spacer Kit	1
5	20561X203	Body - Softener Only	1
6	20561X256	Straight Hose Barb	1
7	20561X204	O Ring - Dist. Tube	1
8	20561X205	O Ring - Valve to Tank	1
9	20561X225	Brine Valve Assy.	1
10	20561X219	O Ring - Injector	2
11	20561X218	O Ring - Drain	1
12	20561X246	Retainer - Drain Line Flow Button	1
13	20251X275	1.2 GPM Flow Control Button	1
	20251X266	1.5 GPM Flow Control Button	1
	20251X268	2.4 GPM Flow Control Button	1
	20251X267	2.0 GPM Flow Control Button	1
	20251X270	3.5 GPM Flow Control Button	1
	20251X272	5.0 GPM Flow Control Button	1
14	20561X241	BLFC Brass Fitting	1
15	20251X303	Insert - Brine Line	1
16	20251X305	Ferrule - Brine Line	1
17	20251X304	Nut - Compression for Brine Line	1
18	20561X214	Screw - Injector Mounting	2
19	20561X226	Injector Cover	1
20	20561X221	O Ring - Injector Cover	1
21	20251X205	Inj. Nozzle # 1 White	1
	20251X241	Inj. Nozzle # 2 Blue (64k only)	1
	20251X235	Inj. Nozzle # 2 PVC (-IP units only)	1
22	20251X206	Inj. Venturi # 1 White	1
	20251X242	Inj. Venturi # 3 Blue (64k only)	1
	20251X236	Inj. Venturi # 2 PVC (-IP units only)	1
23	20251X204	Injector Screen	1
24	20561X222	Injector Body	1
25	20561X260	Injector Assy. Specify # Inj. & DLFC	1
26	20561X248	Air Dispenser	1
27	20561X216	O Ring - Bypass Adaptor	4
28	20564X200	Meter Assy.	1
29	20564X202	Clip - Bypass Adaptor	2
30	20561X217	Screw - 8-18 x 5/8"	2
31	20561X288	3/4 in plastic yoke	1

Troubleshooting the 5700-E Softener

PROBLEM / SYMPTOM	POSSIBLE CAUSE	SOLUTION
Water softener 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 problem 7.
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 softening resin 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.

5700-E Softener Installation & Startup Guide

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 (1.3 bar)
	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.

More Troubleshooting Tips

Brine Solution Not Being Sucked In During Regeneration

Most problems occur when the 5700-E is not drawing in the brine. Make sure the injector is drawing in the brine:

1. Remove the brine tank tubing where it enters the 5700-E control valve.
2. Press and hold the regen button (Button with 3 arrows) until BW flashes and the number of minutes that you programmed (10 is default) will display. After the display stops blinking and it is in a backwash cycle, press the regen button again, and it will advance to the next cycle, which is the Brine Cycle, where it is supposed to suck in the brine solution.
3. If it is sucking strongly, check the brine tank float inside the brine well and make sure there are no rubber bands around it, and that it is free of obstructions. In some cases it may need to be replaced or cleaned, if there is suction at the control valve, but no brine is being drawn in.
4. If there is NO suction at the control valve port where you removed the brine line tubing, then the injector should be cleaned.
5. If the injector has been cleaned and there is still no suction check to make sure there is obstruction in the backwash line; that the backwash line does not go up and over the softener more than several feet (which causes pressure loss and the injector not to work correctly); finally check to make sure there is enough pressure. If possible increase your water pressure to softener from your well pump and see if a slightly increased pressure makes the injector work. We recommend a minimum 30 PSI but it does work better if there is 40 to 50 minimum PSI.

System Not Backwashing Adequately

The other main problem that may occur is if you do not have enough backwash flow rate to properly clean the water softener. You can verify the backwash flow rate by running the drain line into a bucket and timing it when the 5700-E is in Cycle 1 or backwash. A 1.0 or 1.5 cubic foot system should have 2.0 gallons per minute and a 2.5 cubic foot system should have 4.0 gallons per minute of backwash.

System Not Programmed Correctly – PROGRAM SETTINGS

In some cases, the 5700-E may not be programmed correctly, try to verify the correct programming.

Brine Tank Not Filling With Enough Water

Sometimes if the brine tank is not filling adequately, it is possible that the float assembly in the tank is set too low. You would want the float to be several inches above the air check valve inside the tank. This will allow for enough water to be added to the tank before shutting the brine fill cycle. If necessary, pull the float assembly rod up to the appropriate height, and cut the rod at that height, leaving while keeping the rubber washers the adequate space to hold the float in place.