SpringWell

WATER FILTRATION SYSTEMS

Installation Instructions

WHOLE HOUSE FILTER &
SALT-BASED WATER SOFTENER

MODELS: CSS1, CSS4, CSS+

You get the best of both worlds when you combine the benefits of our traditional salt-based water softener and our whole house water filter, which uses the highest quality coconut shell catalytic carbon that targets the contaminants that we find in our water supplies today!

CUSTOMER SERVICE IS AVAILABLE MON-FRI 9AM-6PM EST

800-589-5592

WWW.SPRINGWELLWATER.COM

Whole House Filter and Water Softener

Scan for Installation video

Scan for Installation video

Or click HERE

System Contents

Carbon Filter Tank

Softener Tank


50’ Drain Line


Brine Tank


Tank Head for (CF)


Sediment Filter Housing


Sediment Filter


Spanner Wrench


MNPT Fittings (x4)


Bypass Valve (x2)


Electronic Head for (SS)


Power Supply


Gasket and Lube


Hose Bib Assembly


Mounting Bracket

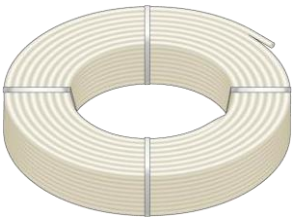

Hose Clamp

System Compatibility


Corrugated Water Connectors


PVC


Copper


Pex

These instructions will feature a combination of PVC and threaded water connectors. But, note that this system is compatible with multiple types of connections

System Configuration

Water Source From Outside Home

(1) The Carbon Filter tank (CF) removes contaminants such as chlorine

(2) The Sediment Filter eliminates particulates

(3) The Softening tank (SS) uses ion exchange to soften the filtered water

Filtered and Softened Water Into Home

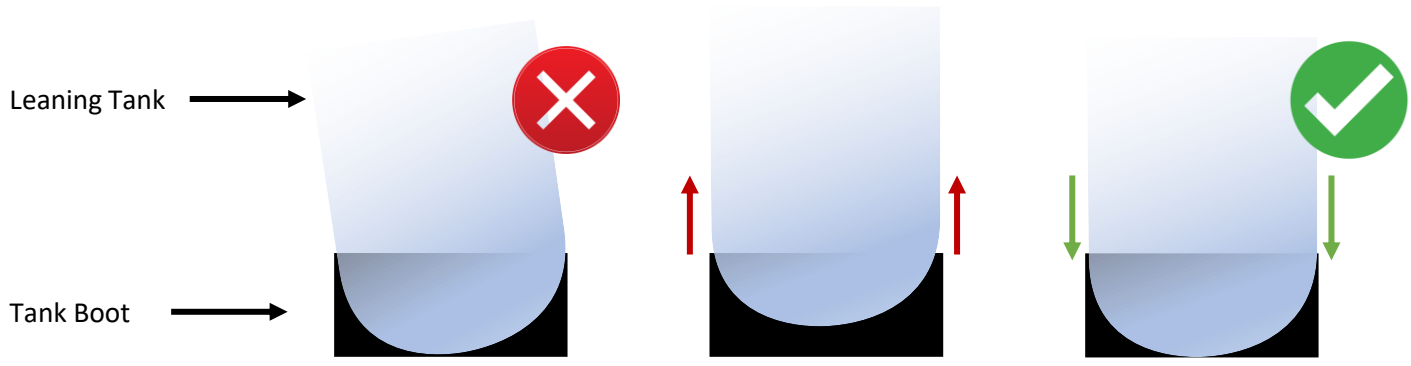
(4) The salt from your brine tank will regularly regenerate the media in your softening system

Whole House Filter and Water Softener

PLEASE READ INSTRUCTIONS FULLY PRIOR TO ATTEMPTING INSTALLATION. Be sure to follow all applicable plumbing codes. The system must be installed on a main water supply line

Caution: Do not install on well water unless you have spoken to a customer service representative first.

Level Tanks



If the tank is not perfectly straight, carefully lift the tank straight up a few inches and tap it on the ground until the tank stands vertically and fits snuggly into the tank boot.

Whole House Filter and Water Softener

System Specifications

SS1	
Tank Width	9”
Tank Height	48” (57” with Head)
Flow Rate	11 GPM Service
Connection Size	1”
Backwash Rate	2 GPM
Operating Pressure	25-80 PSI
Operating Temperatures	36 – 120 F
pH Range	6.5 - 10
Grain	32k
Brine Tank	18”(w) x 33”(h)

SS4	
Tank Width	10”
Tank Height	54” (63” with Head)
Flow Rate	13 GPM Service
Connection Size	1”
Backwash Rate	2.4 GPM
Operating Pressure	25-80 PSI
Operating Temperatures	36 – 120 F
pH Range	6.5 – 10
Grain	48k
Brine Tank	18”(w) x 33”(h)

CF1	
Tank Width	9”
Tank Height	48” (52” with Head)
Flow Rate	9 GPM Service
Connection Size	1”
Operating Pressure	25-80 PSI
Operating Temperatures	36 – 120 F
Sediment Filter Change/Replacement	Every 6-9 Months
Media Change/Replacement	Every 6 years or 1 Million Gallons

CF4	
Tank Width	10”
Tank Height	54” (58” with Head)
Flow Rate	11 GPM Service
Connection Size	1”
Operating Pressure	25-80 PSI
Operating Temperatures	36 – 120 F
Sediment Filter Change/Replacement	Every 6-9 Months
Media Change/Replacement	Every 6 years or 1 Million Gallons

Whole House Filter and Salt-Free Water Softener

Installing the Head on the CF (Carbon Filter) Tank

This step will require the materials listed below

Carbon Filter Tank

Tank Head

1) Unscrew the cap on top of the carbon filter tank.

2) Discard the cap as it is no longer required.

3) Locate the tank head and note the label discussing the necessary 48-hour pre-soak.

4) Align the opening on the bottom of the tank head with the pipe inside the tank.

5) Press the tank head down to allow the threads to catch.

6) Turn the tank head clockwise until it is fully tightened.

7) Insert a blunt tool into one of the connections on the head. A screwdriver handle will work.

8) Use your feet around the boot to add grip to the tank.

9) Grip the tank and use the screwdriver as leverage to fully tighten the head.

ONCE THE HEAD ATTACHES TO THE PIPE INSIDE THE TANK IT IS PERMANENT. Do not attempt to unscrew or remove the head from the tank or it will cause the components within the tank to separate causing damage and potentially cause resin to seep from the tank into your home plumbing.

Whole House Filter and Water Softener

IMPORTANT! The carbon media inside the filter system MUST soak in water for a minimum of 48 hours prior to installation

Carbon Soak Instructions (48 Hours Prior)

This step will require the materials listed below

Carbon Filter Tank (CF)

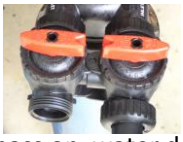

Bypass Valve


Hose Bib Assembly


MNPT Fittings (x2)


Lawn Hose Connected to Faucet

Bypass Operation


Bypass on, water does not flow through tank


Bypass off, water flows through tank

10) Insert the red bypass valve onto the connections of the tank head and press in place.

11) Fully tighten the fasteners on both valve connections securing the bypass valves.

12) Attach and tighten a MNPT Fitting onto the connections on each of the bypass valves.

13) Use the hose bib to attach the lawn hose to the inlet on the first tank. Ensure the bypass is off to allow water flow through the tank.

14) Turn on the water to the hose halfway until water exits the tank. Turn off the water and disconnect the hose.

15) Switch the tank to bypass and store for 48 hours.

Whole House Filter and Water Softener

IMPORTANT! The carbon media in the tank must be flushed prior to installation

Carbon Flush Instructions

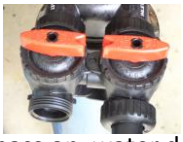
This step will require the materials listed below

Carbon Filter Tank (CF)

Hose Bib Assembly

Lawn Hose Connected to Faucet

Bypass Operation



Bypass on, water does not flow through tank

Bypass off, water flows through tank

16) After the necessary 48-hour pre-soak. Attach the hose bib assembly and water hose onto the inlet port on the tank.

17) Switch off the bypass on the tank. Note: Some water may be released from the 48-hour pre-soak.

18) Turn on the water and allow the tank to flush for about 3-5 min. Until the water runs clear.

19) Switch the hose bib assembly and the hose to the outlet side of the tank.

20) Flush with water in the opposite direction until the water runs clear. Approx. 3-5 min. Once done the hose and hose bib assembly can be removed.

Note: The neoprene jacket that was shipped with the tank can now be zipped onto the tank. The Springwell logos should face forward.

Whole House Filter and Water Softener

Prepping the Sediment Filter

This step will require the materials listed below

Sediment Filter Housing

Sediment Filter

O-Ring w/Lube

21) Unscrew the lid from the sediment filter Housing.

22) The O-ring will now be laid into the groove around the top of the sediment filter Housing tank.

23) Squeeze lubricant onto the O-ring then spread it using your finger.

24) Flip the O-Ring over and lubricate the opposite side as well.

25) Insert the Sediment Filter into the sediment filter Housing.

26) Replace the lid and fully tighten it

Whole House Filter and Water Softener

Installing the Sediment Filter

This step will feature the materials listed below

Prepped Sediment Filter Housing

Spanner Wrench

Mounting Bracket

Drill with 3/16” drill bit

1-inch (3-inch long) PVC Nipples (x3)*

27) Note: Plumbers tape will need to be applied to all PVC threads during the installation.

28) Install a PVC nipple onto each the inlet and outlet of the sediment filter housing. Fully tighten using pliers avoiding damage to the threads on the PVC nipples.

29) Identify the optimal area to mount the sediment filter. Note that it will be installed between both tanks. Mark your holes for pre-drilling.

30) Use a 3/16” drill bit to pre-drill the holes for the sediment filter mounting bracket. Use 4 of the provided bolts and washers to secure the bracket to the wall using a 1/2” socket.

31) Before mounting the sediment filter, identify the inlet and outlet by using the markings on top. Be sure to orient it so the incoming water can be connected to the inlet.

32) Use the remaining 4 bolts to secure the sediment filter to the mounting bracket.

Whole House Filter and Water Softener

Installing a Shut Off Valve

IMPORTANT! Be sure to turn off the water main to your home before proceeding to the next steps!

1-Inch PVC Shut Off Valve*

1-inch (24-inch Long) Corrugated Water Connectors (x1)

Wrench and Pliers

Plumbers Tape

***A shut off valve ahead of the system is recommended for easy maintenance.**

33) Expose the pre-plumb and prep to connect the system. Threaded adapters are used in this example.

34) 1” threaded adapters are featured in this guide and are installed on the incoming water supply with the threads towards the location of the carbon tank.

35) Point the threaded adapter for the opposite end of the pre-plumb towards sediment filter outlet connection.

NOTE: Plumbers tape will need to be applied to every thread when connecting all corrugated pipes.

36) It is suggested to connect a PVC shut off valve onto the threaded adapter from the incoming water supply. Ensure it is fully tightened.

37) Connect a PVC nipple to the other end of the PVC shut off valve. Ensure it is fully tightened.

38) Connect a corrugated pipe to the PVC nipple. Ensure it is fully tightened.

Whole House Filter and Water Softener

Installing the Carbon Filter Tank

This step will feature the materials listed below

Carbon Filter Tank (CF)

Plumbers Tape

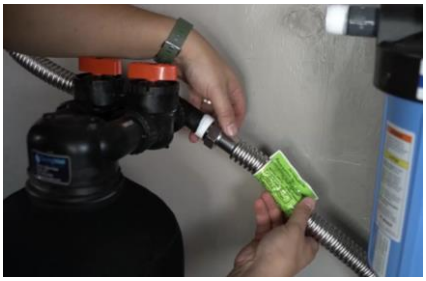
Wrench

1-inch (24-inch Long) Corrugated Water Connectors (x2)

39) Apply plumbers' tape to the inlet and outlet connections on the carbon filter tank.

40) Position the carbon filter tanks next to the sediment filter. Ensure the connections on the tank are facing backwards against the wall.

41) Connect the corrugated pipe from the shut off valve to the inlet on the Carbon filter tank. Ensure it is fully tightened.



42) Connect another corrugated pipe to the outlet side of the carbon filter tank. Ensure it is fully tightened.

43) Connect the other end of that corrugated pipe to the inlet side of the sediment filter. Ensure it is fully tightened.

Whole House Filter and Water Softener

Installing the Softener Electronic Head

This step will require the materials listed below

Tank 2

Softener Tank

Electronic Head

44) Unscrew the cap on top of the softener tank.

45) There is a blue cap inside that also needs to be removed. Both caps can be discarded.

46) Locate the opening at the bottom of the electronic head.

47) Align the opening on the bottom of the tank head with the pipe inside the tank.

48) Press the tank head down to allow the threads to catch.

49) Turn the tank head clockwise until it is fully tightened. Hand tight is OK.

Whole House Filter and Water Softener

Installing the Softener Electronic Head

50) The neoprene tank jacket can now be zipped around the tank.

51) Install the blue bypass valves onto the connections on the electronic head.

52) Insert the rubberized connections into the electronic head openings and press it them place.

53) Fully tighten the fasteners on both valve connections securing the bypass valves.

54) Attach and tighten a MNPT Fitting onto the connections on each of the bypass valves.

55) Apply plumbers' tape to both MNPT Fittings.

Whole House Filter and Water Softener

Installing the Softening Tank

This step will feature the materials listed below

Tank 2

Softener Tank

Plumbers Tape

Wrench

1-inch (24-inch Long) Corrugated Water Connectors (x3)

NOTE: The inlet on the two tanks are opposite one another.

Softening Tank Detail

56) Position the softening tank so the connections are facing back.

57) Connect the corrugated pipe to the outlet on the sediment filter.

58) Connect the other end of that pipe to the inlet on the softening tank.

59) Install a water connector to the outlet side of the softening tank.

60) Connect the other end of the connector to the inlet on the pre-plumb.

61) The water connections should look similar to this.

Whole House Filter and Water Softener

Installing the Softener Drain Line

This step will feature the materials listed below

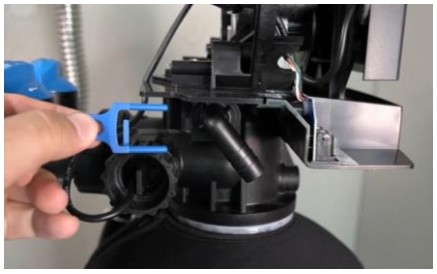
Softener Tank
(Already Installed)

50’ Drain Line

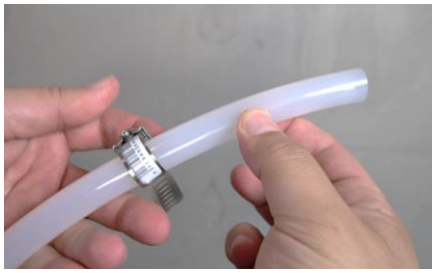
Zip Ties

Hose
Clamp

62) Locate the drain on the left side of the electronic tank head on the softener tank.



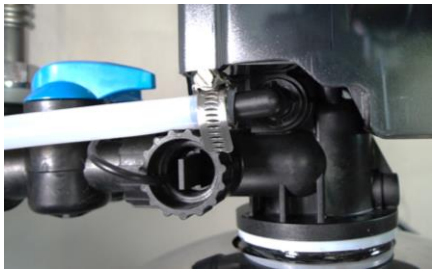
63) Pull out the blue tab behind the drain valve, then pull the valve out from the tank head.



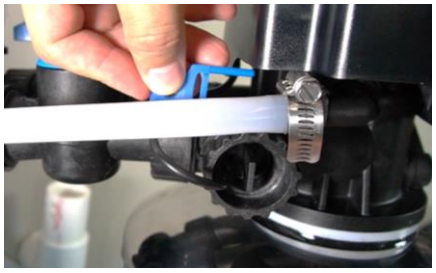
64) Slide the provided hose clamp over the end of the drain line.

65) Press the drain line over the barbed end of the drain valve you pulled out of the tank head.

66) Align the hoes clamp over the connection, then align the screw on the hose clamp so that it runs parallel to the connection on the drain valve. Tighten the clamp.



67) Insert the drain valve back into the tank head. Ensure the drain line isn’t pinched.

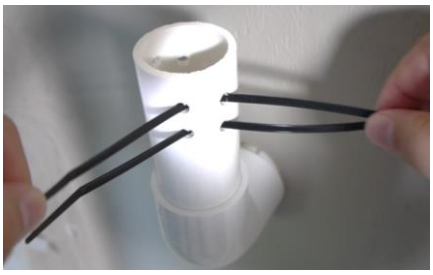


68) Insert the blue tab to lock the drain valve back in position.

Whole House Filter and Water Softener

Additional Softener Head Steps

69) Lead the line towards the drain near your pre-plumb and trim away the excess.



70) To ensure the drain line doesn't come out from the drain a pair of zip ties are recommended. They can be inserted through two pairs of holes drilled high up in the drainpipe.

71) Pushing the zip ties inwards will create a loop.

IMPORTANT! Ensure the drain lines you installed are not pinched or kinked or it will impede the flow of water from the system.

72) Insert the drain line into the zip tie loops and secure in pace. The excess can then be trimmed off the zip ties.

Whole House Filter and Water Softener

Installing the Brine Tank

This step will feature the materials listed below

Softener Tank
(Already Installed)

Brine
Tank

50’ Drain Line

Zip Ties

73) Position the brine tank next to the softener tank with the drain valve pointing towards the softener.

74) Press the remaining drain line over the barbed valve leading out from the brine tank.

75) Thread the drain line into the drainpipe and trim off the excess drain line.

76) Use the previous steps (69 to 72) to secure the drain line to the drainpipe.

77) Remove the lid from the brine tank.

78) Remove the white cap from the brine well inside the brine tank.

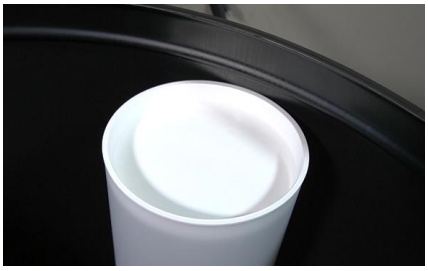
79) Release the regen line from the softener head by removing the zip ties. Use care not to damage the line.

Whole House Filter and Water Softener

Installing the Brine Tank

80) Insert the regen line into the brine tank through the opening above the drain line you installed earlier.

81) The regen line will be inserted to the connection just inside the brine well. Push the line all the way in. Once inserted it will be secure.



82) Replace the lid to the brine well.

83) The brine tank will need to be filled with 4 to 5 bags of salt pellets.

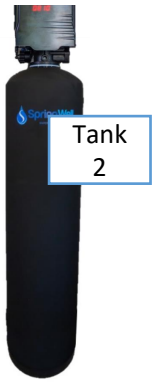
84) The lid to the brine tank cab be replaced.

85) The system can now be tested.

Whole House Filter and Water Softener

Powering the Softener Head

This step will feature the materials listed below



Softener Tank
(Already Installed)

Power
Supply

9V Battery

86) The power cord will be connected to the connection on the far left beneath the electronic tank head.

87) The power adapter will then be plugged into a power supply that isn't controlled by a switch.

88) Lift off the cover to the electronic head.

89) Locate the battery connection beneath the display. Connect a 9v battery.

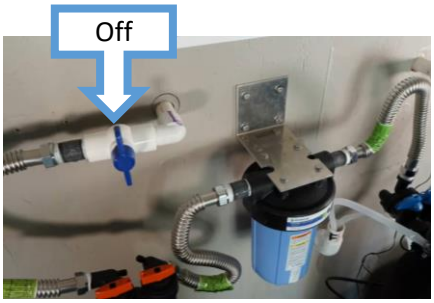
90) Replace the tank head cover.

Whole House Filter and Water Softener

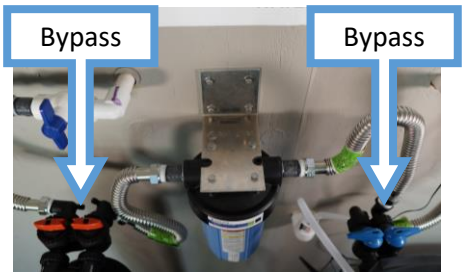
Testing the System

91) Before turning the water back on to the home, use the provided spanner wrench to fully tighten the sediment filter housing.

92) While the water is still off, open a cold bathtub faucet all the way.



93) Before turning on the water to the home ensure the shut off valve to the system is in the off position.



94) Ensure that the valves on both tanks are set to bypass.

95) Turn on the water to the home and inspect the shut off valve for any leaks.

96) If no leaks are detected, open the bypass valve to allow water flow through the tank bypasses.

97) If no leaks are detected from the bypass, turn off the bypass to the carbon filter tank and allow water to flow through it.

98) Turn off the bypass to the softener tank and allow water to flow through it.

99) Allow water to run through the system for 5-10 minutes. It is normal to see a small amount of sediment during this time.

If you notice water leaking from the carbon filter tank head collar, please proceed to page 23 for directions on how to adjust.

Whole House Filter and Water Softener

Setting Softener Values

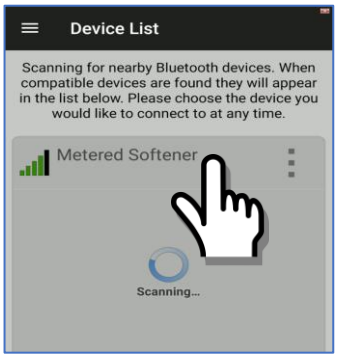
This step will require the materials listed below

Softener Tank
(Already Installed)

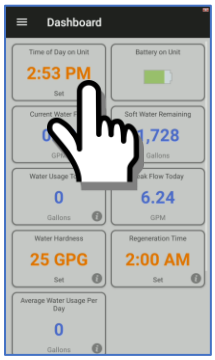
Mobile
Device

Note: The electronic tank head must be powered and installed prior to setting the tank values.

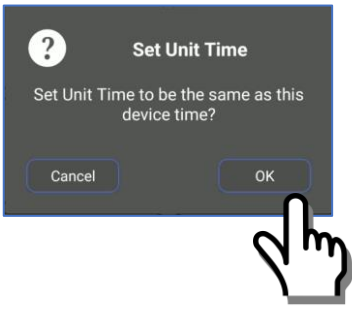
100) Look up "SpringWell" in the app store and install it.



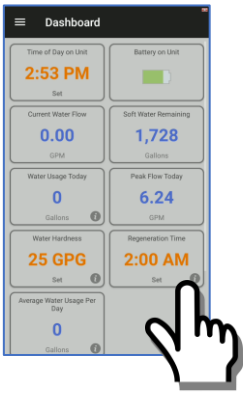
101) Open the app and select your softener from the list.



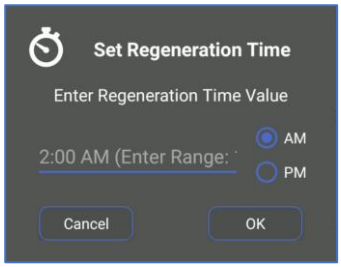
102) Tap "Time of Day on Unit" to change the time.



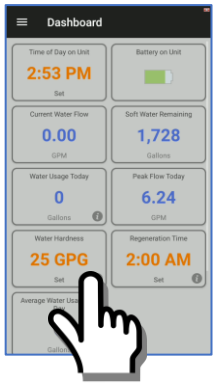
103) Select "OK" to set the time on to the same time as your device.



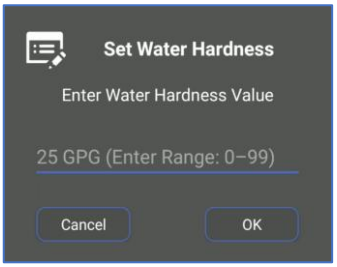
104) To modify the regen time tap on that tile. 2:00am is the default time.



105) Note: You want the system to regen while water is not being used.



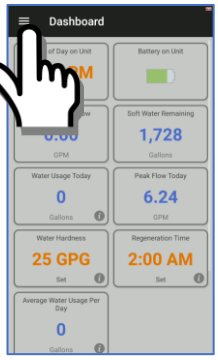
106) Tap "Water Hardness" to correct the value to your conditions.



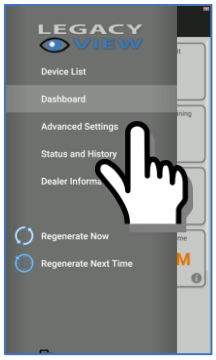
107) Enter the value from your hard water test.

Whole House Filter and Water Softener

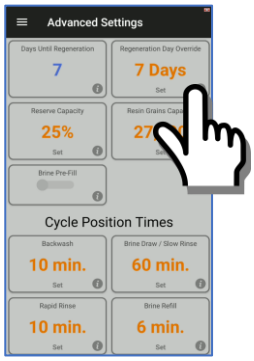
Setting Softener Values



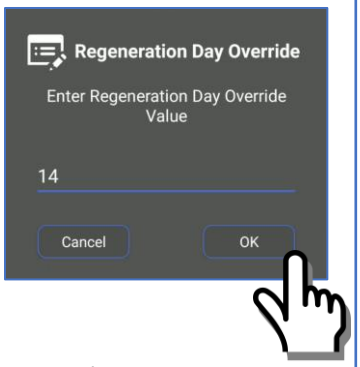
108) Select the menu icon in the upper left-hand corner.



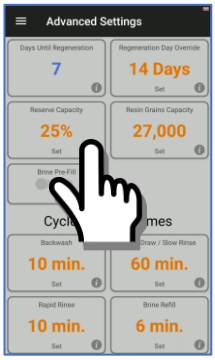
109) Select “Advanced Settings.”



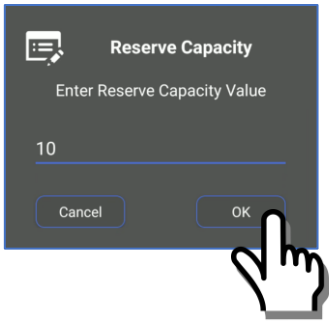
110) Tap “Regeneration Day Override.”



111) Change the value to 14 days.



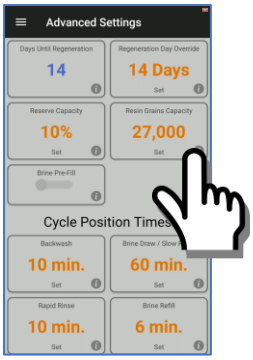
112) Tap “Reserve Capacity.”



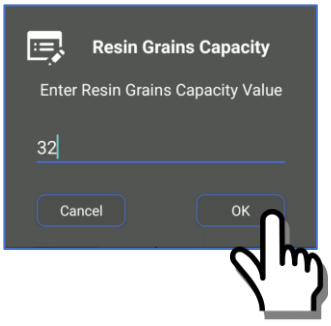
113) Change the value to 10%.

Next Steps 114 to 118 are for SS1 Systems.

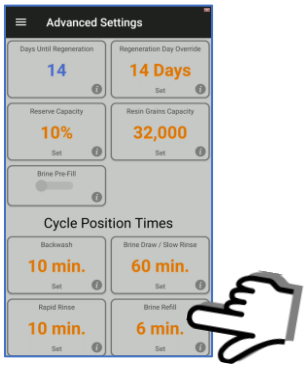
Skip to step 119 for SS4 systems.



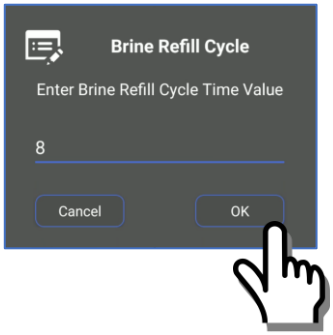
114) Tap “Resin Grains Capacity.”



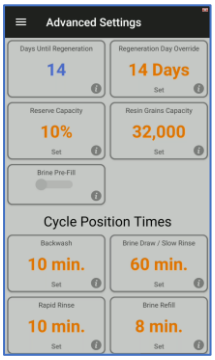
115) Change the value to 32 for 32,000.



116) Select “Brine Refill.”



117) Change the value to 8 min.

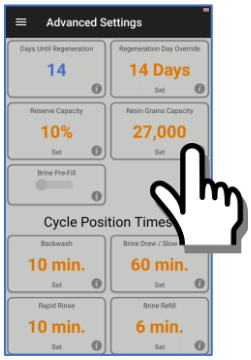


118) Recap of settings for SS1 system.

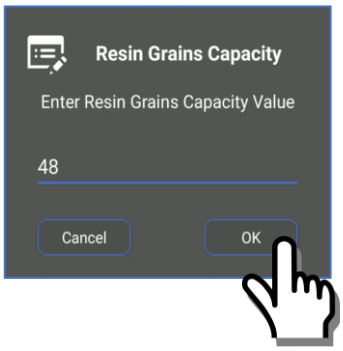
Whole House Filter and Water Softener

Setting Softener Values

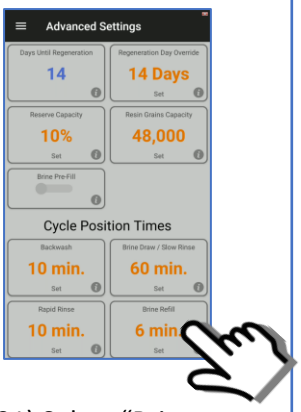
Next Steps 119 to 123 are for SS4 Systems.
Refer to step 114 for SS1 systems.



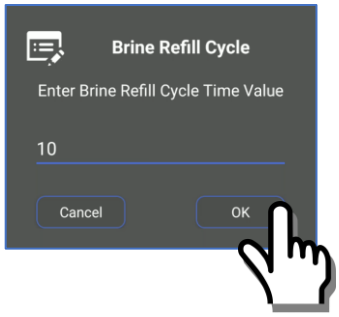
119) Tap "Resin Grains Capacity."



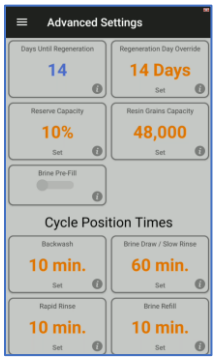
120) Enter 48 for 48,000.



121) Select "Brine Refill."

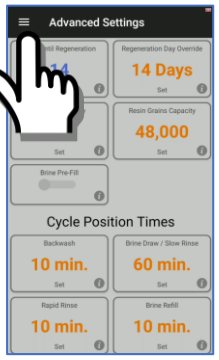


122) Set the value to 10 minutes.



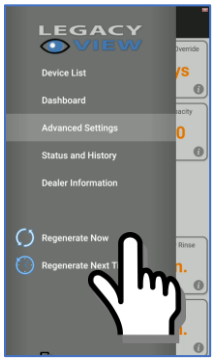
123) Correct values for SS4 system.

Steps from here apply to both versions

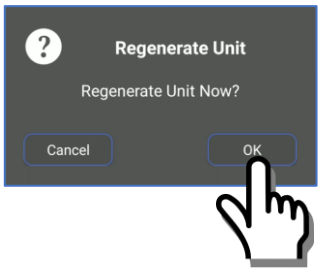


124) Tap the menu icon in the upper left-hand corner.

125)The next step will force you to regen your system. During this time you will not be able to use your water for 90 minutes.



126) Select "Regenerate Now."



127) Select "OK" from the pop up and the system will regen for 90 minutes.

128) Once the regen is done, your system is ready to use.

Whole House Filter and Water Softener

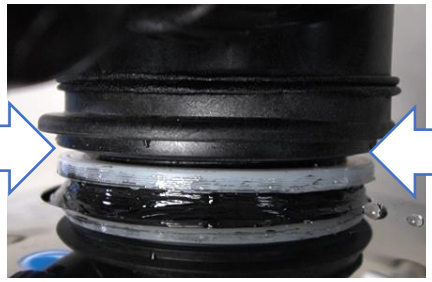
Water Leak from Tank Head

Water leaking from the tank head collar indicates the head is either not tight enough, or that the O-ring became bunched.

Turn the shut off valve to the off position.

Disconnect the carbon filter tank from the system

Slowly unthread the head from the tank approx. half a rotation.



You only need to expose a small gap between the tank collar and the tank head.

Fully re-tighten the head onto the tank. The O-ring will now be able to reseat.

Reconnect the tank to the system and proceed back to page 19 to test the system again.