



#### **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

Scan for Installation video



Scan for Installation video

Or click HERE



note that this system is compatible with multiple types of connections

# System Configuration

**Water Source** Filtered and Softened From Outside Home Water Into Home (1) The Carbon Filter (4) The salt from your tank (CF) removes brine tank will contaminants such regularly regenerate (2) The Sediment (3) The Softening as chlorine the media in your tank (SS) uses ion Filter eliminates softening system exchange to particulates soften the filtered water



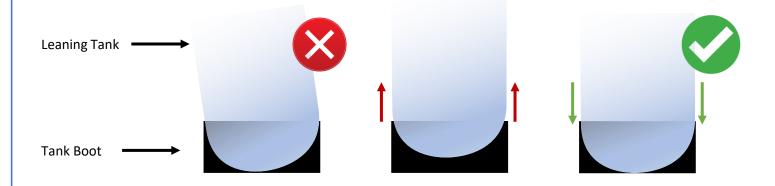


PLEASE READ INSTRUCTIONS FULLY PRIOR TO ATTEMPTING INSTALLATION. Be sure to follow all applicable plumbing codes. The system must be installed on a main water supply line



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.



# **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





Tank Head



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



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.





**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



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.





**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 presoak.



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.



# Prepping the Sediment Filter

#### This step will require the materials listed below







diment 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



#### Installing the Sediment Filter

#### This step will feature the materials listed below



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 predrill 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.



#### Installing a Shut Off Valve



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







Valve\*

1-Inch PVC Shut Off 1-inch (24-inch Long) Corrugated Wrench and Pliers Water Connectors (x1)



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 preplumb 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.



# Installing the Carbon Filter Tank

This step will feature the materials listed below





Plumbers Tape





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.



# Installing the Softener Electronic Head

This step will require the materials listed below

Tank 2







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.



# 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.



# Installing the Softening Tank

This step will feature the materials listed below





Plumbers Tape





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



Tank



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



Water Connectors (x3)

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.



# Installing the Softener Drain Line

This step will feature the materials listed below





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.



# 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.



# Installing the Brine Tank

This step will feature the materials listed below





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.



# 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.

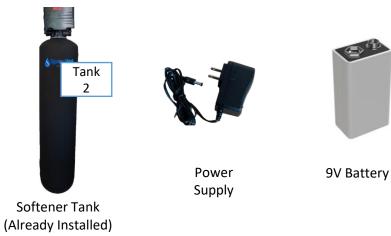


85) The system can now be tested.



# Powering the Softener Head

This step will feature the materials listed below





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.



#### Testing the System



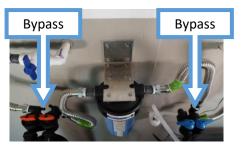
91) Before turning the water back on to the home, use the provided spanner wrench to fully tighten the sediment filter housing.



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.



# **Setting Softener Values**

This step will require the materials listed below





Mobile Device



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



100) Look up "Legacy View" 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.



# **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.

14 Day

27,000

60 mi

6 min.



112) Tap "Reserve Capacity."



113) Change the value to 10%.



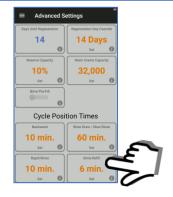
114) Tap "Resin Grains Capacity."

10 min.

Cycle Position Tim



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



116) Select "Brine Refill."



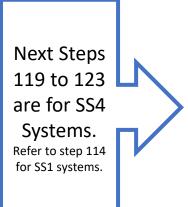
117) Change the value to 8 min.



118) Recap of settings for SS1 system.



# **Setting Softener Values**





119) Tap "Resin Grains Capacity."



120) Enter 48 for 48,000.



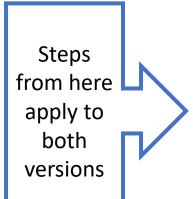
121) Select "Brine Refill."



122) Set the value to 10 minutes.



123) Correct values for SS4 system.





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.



#### 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.

