

#### **Installation Instructions**

# **ULTRA Whole House Well Water Filter System Combo**

Model UWS1, UWS4

This is the ultimate combo system for anyone who has high levels of iron, manganese, and hydrogen sulfide. We've combined our whole house well system, with our whole house carbon filtration system and salt free water softener to give you a powerful system that not only removes contaminants but also prevents limescale/calcium build up on your pipes, faucets, fixtures, and more.



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



SpringWell

SpringWell

800-589-5592

WWW.SPRINGWELLWATER.COM

Scan for Installation video



Scan for Installation video

Or click **HERE** 

## **System Contents**



Well Water Filter Tank (WS)



Carbon Filter Tank (CF)





Softening Tank (FS)



Sediment **Filter Housing** 



Sediment Filter



**Spanner** Wrench

Hose Bib

Assembly



Mounting **Bracket** 



Gasket and Lube



50' Drain Line



Hose Clamp



Tank Head

for Carbon



**MNPT Fittings** (x6)



**Bypass** Valves (x3)



Electronic Head for Well Water Filter (Tank 1)



Power Supply

# 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



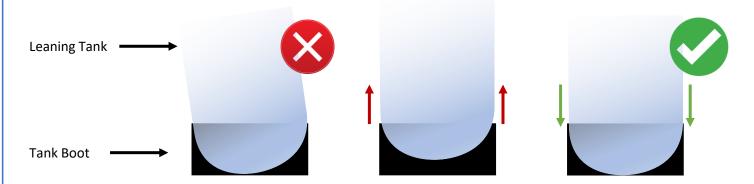


PLEASE READ INSTRUCTIONS FULLY PRIOR TO ATTEMPTING INSTALLATION. Be sure to follow all applicable plumbing codes. The system must be installed on a main water supply line

#### **System Configuration**



#### **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



WS1	
Tank Width	10"
Tank Height	54" (64" with Head)
Flow Rate	12 GPM Service
Connection Size	3/4"
Backwash Rate	5 GPM
Operating Pressure	25-80 PSI
Operating Temperatures	36 – 120 F
pH Range	6.5 - 10

WS4	
Tank Width	13"
Tank Height	54" (64" with Head)
Flow Rate	18 GPM Service
Connection Size	3/4"
Backwash Rate	7 GPM
Operating Pressure	25-80 PSI
Operating Temperatures	36 – 120 F
pH Range	6.8 – 10



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



# **Product Specs**



FS1	
Tank Width	6"
Tank Height	35" (39" with Head)
Flow Rate	12 GPM Service
Connection Size	1"
Max Pressure	75 PSI
Operating Temperatures	35 – 110 F



FS4	
Tank Width	9"
Tank Height	48" (52" with Head)
Flow Rate	15 GPM Service
Connection Size	1"
Max Pressure	75 PSI
Operating Temperatures	35 – 110 F



#### 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

#### Media Soak Instructions (48 Hours Prior)

This step will require the materials listed below



Carbon Filter Tank (CF)



Conditioner Tank (FS)



**Bypass Valve** 



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 bypass valves onto the tank head connections of both of of the tanks 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 on both tanks.



13) Use the hose bib to attach a 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 and adapter.



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

Repeat these steps with both the tanks.





**IMPORTANT!** The carbon media must be flushed on both tanks prior to install

#### Carbon / Media Flush

This step will require the materials listed below



Carbon Filter Tank (CF)



Conditioner Tank (FS)



Hose Bib Assembly



Lawn Hose Connected to Faucet

#### **Tank Identification**

Carbon Water Filter Model: CF1 (800) 589-5592 Springwellwater.com

The Carbon Filter (CF) tank identification on the tank head.

Salt-Free Water Softener Model: FS1 (800) 589-5592 springwellwater.com

The Future Soft (FS) tank identification on the tank.

#### **Bypass Operation**



Bypass on, water does not flow through tank



Bypass off, water flows through tank



16) Start with the Carbon Filter (CF) Tank and connect the hose bib adapter and hose to the inlet side of the tank.



17) Turn off the tank bypass. Some water will escape the tank.



18) Run the water to flush the tank until the water runs clear. Approx. 3 to 5 min.



19) Relocate the hose bib adapter and 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.



21) Repeats steps 16 through 20 on both tanks.





Note: If your tank was shipped with a jacket, it can be zipped around the tank prior to or after the installation is completed.

# Installing the Well Water Filter Electronic Head

This step will require the materials listed below





22) Unscrew the cap on top of the well water filter tank.



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



24) Locate the opening at the bottom of the well water filter electronic head.



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



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



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



## Installing the Well Water Filter Electronic Head



28) Install a bypass valve onto the connections on the electronic head.



29) Insert the rubberized connections into the electronic head openings and press it in place.



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



31) Attach and tighten a MNPT Fitting onto each of the connections on the bypass valve.



32) Apply plumbers' tape to both MNPT Fittings.



### Prepping the Sediment Filter

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



Sediment Filter Housing



Sediment Filter



O-Ring w/Lube



33) Unscrew the lid from the sediment filter Housing.



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



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



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



37) Insert the Sediment Filter into the pre-filter Housing.



38) Replace the lid and fully tighten it



#### Installing the Sediment Filter

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



Prepped sediment Filter Housing





Mounting Bracket



Pliers



Drill with 3/16" drill bit



1-inch (3-inch long) PVC Nipples (x2)



Plumbers Tape



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



39) 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.



40) Identify the optimal area to mount the sediment filter. Ensure that it aligns to allow room for the carbon filter tank ahead of the sediment filter. Also note that the distance from the outlet of the sediment filter is close enough to the preplumb. Mark your holes for pre-drilling.



41) 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.



42) 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.



43) 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!



1-Inch PVC Shut Off Valve\*



1-inch Corrugated Water 1-inch (3-inch long) Connector (x1)



**PVC Nipple** 





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.



44) 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.



45) 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.



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



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



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



#### Installing the Tanks Part 1

# This step will require the materials listed below



Well Water Filter Tank (WS)



49) Position the well water tank next to incoming pre-plumb with its connections facing back



50) Connected the corrugated pipe to the incoming side on the back of the well water filter. Ensure it is fully tightened.

# Installing the Drain Line (Well Water Filter)

This step will feature the materials listed below



50' Drain Line



Hose Clamp



Zip Ties



51) Locate the drain valve on the left side of the well water filter head. It is a compression connection.



52) Remove the blue lock tab securing the drain valve in place.



53) Pull the drain valve straight out.



54) Slide a hose clamp over an end of one of the provided drain lines.





55) Press the barbed connector on the valve onto the end of that drain line until it is fully seated.



56) Slide the hose clamp over the connection and begin to tighten it.



57) Prior to fully tightening, position the hose clamp to align as shown here. Now, fully tighten.



58) Insert the drain valve back into the tank head. Ensure the drain line isn't pinched.



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



60) Thread the drain line towards your drain and cut away the excess leaving some slack.



61) 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.



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



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





Note: The connections on the tanks will need to be prepped with plumbers tape prior to installation.

### Installing the Tanks - Part 2

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



Carbon Filter (CF) (Tank 2)



**Future Soft** (FS)



Wrench





1-inch (24-inch Long) Corrugated Water Connectors (x4)



64) Connect a corrugated water connector to the outlet side of the well water filter. Ensure it is fully tightened.



65) Connect the other end of the connector to the inlet side of the carbon filter tank. Ensure it is fully tightened.

Note: The inlet and outlet on this tank are opposite the well water filter.



66) Connect a water connector to the outlet side of carbon filter tank. Ensure it is fully tightened.



67) Connect the other end to the inlet on the sediment filter. Ensure it is fully tightened.



68) Connect another connecter to the outlet side of the sediment filter. Ensure it is fully tightened.



69) Connect the other end of that connector to the inlet side of the future soft tank. Ensure it is fully tightened.





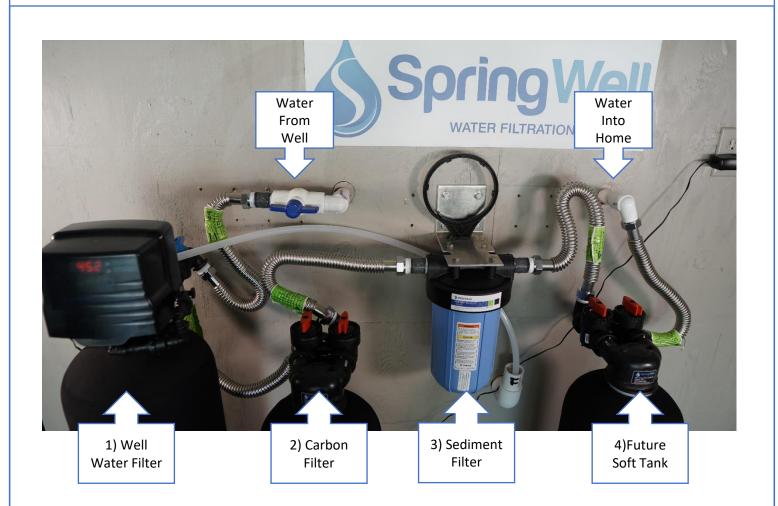
70) Connect another water connector to the outlet side of the future soft tank. Ensure it is fully tightened.



71) Prep the pre-plumb connection leading back into the home.



72) Connect the other end of the connector to the pre-plumb leading back into the home. Ensure it is fully tightened.





### Powering the Tank Head

This step will require the materials listed below



Well Water Filter Tank (Already Installed)



Power Supply



9v Battery



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



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



75) Lift off the cover on the electronic head.



76) Locate the battery connection beneath the display. Connect a 9v battery then store it in the tray.



77) Replace the tank head cover.



You are ready to test the system



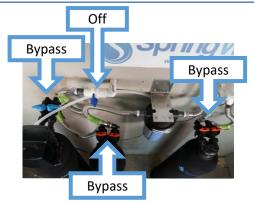
#### Testing the System



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



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



80) Before turning on the water to the home ensure the shut off valve to the system is in the off position. The tanks should be in bypass position



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



82) If no leaks are detected, open the shut off valve to allow water flow through the tank bypasses. Check all connections for leaks.



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



84) Turn off the bypass to the carbon filter and the softener tank and allow water to flow through them.



Note: If you see water seeping out from beneath the tank head on the Carbon Filter (CF), please proceed page 23 for the solution.



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



# **Setting Well Water Head Values**

This step will require the materials listed below





Mobile Device



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



86) Look up "Legacy View" in the app store and install it.



87) Open the app and select the Aeration Filter.



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



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



90) The tank should regen while water is not used in the home..



91) Tap on the time tile then change the value to 2:00 am. Hit OK.



92) Tap "Filter Backwash Frequency."



93) Change the frequency to 5 days. Hit OK.



# Setting Well Water Filter Values



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



95) Select "Advanced Settings."



96) Tap "Air Charge Frequency."



97) Change the value to 1 day.



102) Tap "Backwash."



103) Change the value to 10 min.



104) Tap "Rest."



105) Set the value to 0 min.



98) Select "Air Draw."



99) Set the value to 20 min.



100) Select "Rapid Rinse."



101) Set the value to 5 min.



# Setting Softener Values



102) Tap the Menu Icon.



103) Select "Regenerate Now."



Note: The well water filter will run approx. 45 minutes. You will not be able to use water to the home during this time.



104) If you are ready, select OK on the regenerate confirmation

Once the regenerations on the tank is completed, the system is ready to use.





# Water Leak from Carbon Filter 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.

