FS+ System
Setup And Installation

Questions? Call (800)-589-5592
**Setup And Installation**

### System Contents

- **Conditioner Tank (FS+)**
- **Pre-Filter**
- **Sediment Filter**
- **Gasket and Lube**
- **Spanner Wrench**
- **Hose Bib Assembly (2)**
- **Mounting Bracket**

### Recommended Supplies

- **1.5-inch Tee Connector (Slip) (x2)**
- **1.5-inch Elbow Connector (Slip) (x8*)**
- **1.5-inch Adapter (Slip x Thread) (x4)**
- **1.5-Inch PVC Shut Off Valves (x3)**
- **1 Roll Plumbers Tape**
- **Primer and Cement**
- **1.5-inch PVC Pipe (10’ used in this manual)**

* The quantities are suggestions. Your system configuration may vary depending on installation area.

### System Configuration

1. Water from your source will begin by entering the Pre-Filter
2. The Conditioning Tank (FS+) will be the second tank and will neutralize any hard particulate

**Water Source From Outside Home**

**Filtered and Softened Water Into Home**

Questions? Call (800)-589-5592
**FS+ System**

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.

### Product Specs

<table>
<thead>
<tr>
<th>FS+</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank Width</td>
<td>13”</td>
</tr>
<tr>
<td>Tank Height</td>
<td>54” (58” with Head)</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>20 GPM Service</td>
</tr>
<tr>
<td>Connection Size</td>
<td>1.5”</td>
</tr>
<tr>
<td>Operating Pressure</td>
<td>20-80 PSI</td>
</tr>
<tr>
<td>Operating Temperatures</td>
<td>34 – 120 F</td>
</tr>
<tr>
<td>Flow Direction</td>
<td>Up flow</td>
</tr>
<tr>
<td>Hardness GPG Max</td>
<td>81</td>
</tr>
<tr>
<td>Ph Range</td>
<td>7.0 – 9.5</td>
</tr>
</tbody>
</table>

### Level Tanks

- Leaning Tank → ❌
- Tank Boot → ✔️

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 snugly into the tank boot.

Questions? Call (800)-589-5592
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:

- **Conditioner Tank (FS+)**
- **Hose Bib Assembly (x2)**
- **Lawn Hoses (x2) and access to a faucet**

1) Thread a Hose Bib into the inlet and outlet of the Conditioner Tank (FS+)

2) Due to weight, stage the tank near the installation area. The two connectors will allow you to route 1 hose to the tank and 1 hose away from the tank.

3) Connect the hose from the faucet into the Inlet on the tank. Connect the open hose to the outlet and lead away from your work area.

4) Run the faucet until you see water exiting the other hose.

5) Disconnect the Hose Bib adapters from the Conditioner Tank

6) Set the tank aside and allow it to sit for 48 hours.

Questions? Call (800)-589-5592
IMPORTANT! The carbon media must be flushed on both tanks prior to install

Carbon Flush Instructions

This step will require the materials listed below

Conditioner Tank (FS+)
Hose Bib Assembly (x2)
Lawn Hoses (x2) and access to a faucet

7) This step can only be performed after the tank has been soaked for 48 hours.
8) Attach the Hose Bib Assembly onto the inlet and outlet ports.
9) Attach the hoses to the tank. The hose leading to the inlet will be connected to a faucet. The outlet hose will allow the water to drain.

10) Run the hose and allow the water to flush out the tank until the water runs clear.
11) Switch the hoses to now run the water through the outlet. Allow the water to flow in the opposite direction until it runs clear.
12) Remove the hose bib assemblies from the Conditioner tank.
Assembling a Bypass Valve

13) Prior to working with the pre-plumb you must ensure the water to the main has been shut off.

14) Prep the pre-plumb and identify the water flow direction.

15) To keep the bypass accessible it is recommended to work it upwards. Start by connecting an elbow to each connection pointing them upwards.

Bypass Operation

Note: The tank does not have a built-in bypass valve. Therefore you will need to build a bypass to allow for easy system maintenance.

Bypass on. No water flow to system

Bypass off. Water flows through system

Recommended Supplies

- 1.5-inch Tee Connector (Slip) (x2)
- 1.5-inch Elbow Connector (Slip) (x4*)
- 1.5-Inch PVC Shut Off Valves (x3)
- Primer and Cement
- 1.5-inch PVC Pipe (Cut to fit)

Important: The system will be under pressure so all slip connections must be primed (1) then cemented (2) in place.

* The quantities are suggestions. Your system configuration may vary depending on installation area.
FS+ System

Assembling a Bypass Valve

16) Cut two 3” pieces of PVC for the next step.

17) Insert one piece of the cut PVC into each of the elbows facing upward.

18) Attach one of the 3-way splitters with the openings facing up and towards the other connector.

19) Cut and attach a piece of PVC approx. 1/3rd of the length to the neighboring connector.

20) This is what your bypass should look like after step 19.

21) Attach the other 3-way splitter to the opposite connector. Ensure the openings are facing up and inward.

22) Connect one of the shut off valves to the PVC leading between the connections.

23) Complete the connection by cutting a piece of PVC to fit between the connections.

24) This is what the bypass will look like after step 23.

Questions? Call (800)-589-5592
### Assembling a Bypass Valve

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>Cut two more 3” pieces of PVC for the next step.</td>
</tr>
<tr>
<td>26</td>
<td>Insert one piece of the cut PVC into each of the 3-way splitters facing upward.</td>
</tr>
<tr>
<td>27</td>
<td>To limit the height of the other valves, elbows are suggested. Connect one to both sides of the bypass assembly facing outwards.</td>
</tr>
<tr>
<td>28</td>
<td>Cut two more 3” pieces of PVC for the next step.</td>
</tr>
<tr>
<td>29</td>
<td>Insert the PVC pieces into each of the elbows.</td>
</tr>
<tr>
<td>30</td>
<td>The bypass should look like this after steps 25 thru 29.</td>
</tr>
<tr>
<td>31</td>
<td>Connect a shut off valve to both sides of the bypass assembly.</td>
</tr>
<tr>
<td>32</td>
<td>Assembly of the bypass valve is now complete.</td>
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</tbody>
</table>

Questions? Call (800)-589-5592
Prepping the Pre-Filter

This step will require the materials listed below

**Pre-Filter Housing**

**Sediment Filter**

**O-Ring w/Lube**

33) Unscrew the lid from the Pre-Filter Housing.

34) Insert the Sediment Filter into the Pre-Filter Housing. Ensure it sits beneath the edges of the housing.

35) The O-Ring will now be laid into the groove around the top of the Pre-Filter Housing tank.

36) Squeeze the lubricant onto the O-Ring then spread it using your finger.

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

38) Replace the lid and fully tighten it.

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Installing the Pre-Filter

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

- Prepped Pre-Filter Housing
- Housing
- Mounting Bracket
-德拉V 1/2” Socket and Ratchet
- 1.5-inch Adapter (Slip x Thread) (x2)
- 1.5-inch Elbow Connector (Slip) (x2*)
- Plumbers Tape
- 1.5-inch PVC Pipe (Cut to fit)
- Drill with 3/16” drill bit

* The quantities are suggestions. Your system configuration may vary depending on installation area.

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

40) Install a PVC adapter onto one side of the Pre-Filter Housing. Fully tighten.

41) Repeat on the other side. Fully tighten.

42) Identify the optimal area to secure the mounting bracket and mark for pre-drilling. The bracket should mount to a stud due to weight.

43) Pre-drill the holes for the mount using the 3/16” drill bit.

44) Use 4 of the provided bolts and washers to secure the mounting bracket in place using a half inch socket.

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Installing the Pre-Filter (cont.)

45) Take note of the in versus out flow markings on the top of the pre-filter housing. Mount the pre-filter housing to allow for optimal routing for your plumbing.

46) The other 4 bolts will be used to secure the pre-filter housing to the bracket.

47) Fully tighten the bolts.

48) Now connect the pre-filter to the incoming side of the bypass you built earlier. Start by adding a length of PVC to lead towards the inlet of the pre-filter.

49) Add an elbow facing towards the pre-filter inlet.

50) Add another length of PVC to reach the inlet connection of the pre-filter.

51) Connect an elbow pointing towards the pre-filter inlet.

52) Add a final piece of PVC to connect the incoming water flow to the inlet on the pre-filter.

53) The pre-filter is now installed. Your system should look similar to this.

Questions? Call (800)-589-5592
Installing the Tank

This step will require the materials listed below:

- Conditioner Tank (FS+)
- Plumbers Tape
- 1.5-inch Adapter (Slip x Thread) (x2)
- 1.5-inch Elbow Connector (Slip) (x2*)
- 1.5-inch PVC Pipe (Cut to fit)

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

* The quantities are suggestions. Your system configuration may vary depending on installation area.

55) Connect a 1.5-inch adapter to the inlet and outlet on the tank. Fully tighten.

56) Make note of the water flow direction on the tank.

57) The Conditioner (FS+) Tank will now be installed. Stage it inline with the pre-filter.

58) Cut a piece of PVC to bridge between the outlet of the pre-filter to the inlet on the FS+ tank and install into the pre-filter.

59) Connect the PVC to the inlet on the FS+ tank.

60) Start to build the connection to the FS+ tank from the other side of the bypass. Insert a piece of PVC into the shut off valve.

Questions? Call (800)-589-5592
61) Add an elbow pointing in alignment with the outlet connection on the FS+ tank.

62) Add a length of PVC to the elbow to align with the connection of the FS+ tank.

63) Add an elbow to the PVC pointing towards the outlet on the FS+ tank.

64) Add a length of PVC to close the gap between the connections.

65) The system connections should look similar to this upon completion.

66) Prior to turning the water back onto the system use the spanner wrench to fully tighten the pre-filter housing to avoid any leaks.
Testing the System

67) There is a slot in the mounting bracket to store the spanner wrench.

69) Start with the bypass on to check it for leaks prior to flushing the combo system.

70) Fully turn on the cold water on a bathtub faucet in your home.

71) Turn the bypass off and allow water to flush through the system. Allow the system to flush for at least 5 minutes. Check for leaks.

Congratulations, the installation is now complete.