

# SOFTPRO WATER SOFTENER ALTERNATIVE INSTALLATION GUIDE

# SALT-FREE SOFTENER CONDITIONER



Please read this manual carefully before attempting installation

Read this manual thoroughly to become familiar with the device and its capabilities before installing or operating your Water Softener.

Failure to follow instructions in this manual could result in personal injury or property damage. This manual will also help you to get the most out of your Softener.

**NOTICE:** THIS PRODUCT HAS A LIMITED WARRANTY. BY INSTALLING AND OR USING THIS PRODUCT, YOU WAIVE CERTAIN LEGAL RIGHTS INCLUDING THE RIGHT TO SUE OR CLAIM COMPENSATION IN THE EVENT OF PROPERTY DAMAGE, INJURY, AND OR DEATH.

This system and its installation must comply with state and local regulations. Check with your local public works department
for plumbing and sanitation codes. In the event the codes conflict with any content in this manual the local codes should be
followed.

For installations in Massachusetts, Massachusetts Plumbing Code 248 CMR shall be adhered to. Consult your licensed plumber for installation of this system.

- This water Softener is designed to operate on pressures of 30 psi to 125 psi. If the water pressure is higher than the
  maximum, use a pressure reducing valve in the water supply line to the Softener. However, we do not recommend pressure
  above 70 psi for the softener or residential plumbing, anything over 70 psi can cause damage to the seals on the softener
  valve and your plumbing and fixtures.
- This unit can operate at temperatures between 40°F and 110°F (4°C 43°C). Do not use this water Softener on hot water supplies.
- Do not install this unit where it may be exposed to wet weather, direct sunlight, or temperatures outside of the range specified above unless you take precautions to protect it.
- Avoid pinched O-rings during installation by applying (provided with install kit) NSF certified lubricant to all seals.
- Softeners are commonly exposed to high levels of iron, manganese, sulfur, and sediments. Damage to pistons, seals, and or spacers within the control valve are not covered in this warranty due to the harsh environment.
- It is recommended to regularly inspect and service the control valve on an annual basis. Cleaning and or replacement of piston, seals, and or spacers may be necessary depending on how harsh the conditions are. An Annual Maintenance kit (Part # 60010307) is available for this purpose.
- Do not use water that is microbiologically unsafe without adequate disinfection before or after this system.
- The manufacturer reserves the right to make product improvements which may deviate from the specifications and descriptions stated herein, without obligation to change previously manufactured products or to note the change.
- This publication is based on information available when approved for printing. Continuing design refinement could cause changes that may not be included in this publication. Quality Water Treatment, Inc. reserves the right to change the specifications referred to in this literature at any time, without prior notice.
- The salt-free water conditioners is intended for use only with city or municipal provided water.

#### NOTE:

Do not remove or destroy the serial number. It must be referenced on request for warranty repair or replacement.



## **TABLE OF CONTENT**

TABLE OF CONTENT	3
WHAT TO EXPECT WITH YOUR NEW SALT-FREE	4
WATER SOFTENER/ CONDITIONER? GENERAL INSTRUCTIONS	4
UNPACKING AND INSPECTING YOUR NEW SYSTEM	5
SHIPMENT FAQ	5
PRODUCT OPERATION AND SPECIFICATIONS	6
WATER CONDITIONS FOR OPERATION	6
PARTS LIST	
Using Additional Whole House Filters	
GENERAL WATER SOFTENER TREATMENT SETUP	8
A) CITY WATER TREATMENT SETUP	8
B) WELL WATER TREATMENT SETUP	8
METAL PIPE GROUNDING GENERAL INFORMATION	8
NEW INSTALL PLUMBING GUIDE	g
A) NEW INSTALL WITH A PRE-PLUMBED WATER SOFTENER LOOP	9
B) NEW INSTALL WITH A WATER HEATER LOOP	10
C) NEW INSTALL BY RE-ROUTING A HOME'S WATER SUPPLY LINE	
INSTALLATION OVERVIEW	
INSTALLATION	
1) TANK LEVELING	12
2) UPFLOW HEAD & BYPASS VALVE INSTALLATION	12
3) SEDIMENT FILTER ASSEMBLY	14
4) PREPARE FOR THE INSTALLATION OF THE NEW WATER SOFTENER	14
5) REPLACING AN EXISTING WATER SOFTENER	15
6) PRE-FILTER INSTALLATION	16
7) CONNECT THE PLUMBING	17
8) TURNING ON THE WATER SUPPLY & INITIAL MEDIA SOAK (FOR 1-2 HOURS)	
MAINTENANCE	19
CLEAN YOUR HOT WATER HEATER	19
SEDIMENT FILTER	19
REPLACING THE SEDIMENT OR CARBON FILTER CARTRIDGE	19
	10



## WHAT TO EXPECT WITH YOUR NEW SALT-FREE WATER SOFTENER/ CONDITIONER?

Salt-free water softeners leave these minerals in the water by neutralizing them instead. To neutralize these minerals the salt-free system converts the calcium and magnesium into crystallized forms that are not able to adhere to surfaces such as pipes, dishes, and faucets. Calcium and Magnesium can have health benefits, so leaving them in your water can be beneficial.

Salt-Free Water Conditioners create hardness crystals but leave minerals present in the water. The crystals will not adhere to surfaces so you will see a reduction in scale build up. ... Salt based systems will outperform salt free for overall water softening. But the salt-free softener alternative require little maintenance, no electricity no backwashing and no salt making it a great choice for those on city water with hardness less than 20 GPG or 342 PPM especially in areas that have banned the use of traditional salt based softeners.

## **GENERAL INSTRUCTIONS**

Below are the installation instructions to get you up and running in no time. We highly recommend that you follow along in our simple installation videos.

### **Typical Install Times:**

- 3 hours for a Handyman/ Plumber
- 4 hours for DIY

### **Tools Required:**

- Drill
- Flathead Screwdriver
- Phillips Head Screwdriver
- Tongue-and-Groove Pliers (i.e. Channellock)
- Adjustable Wrench
- Pipe Cutter or hacksaw (as applicable per pipe material)

### **Additional Parts Required:**

- Teflon Tape
- For optional hose bib for treated water access: hose bib, "T" fitting and applicable plumbing fittings.
- For optional whole house carbon filters: hose bib, "T" fitting and applicable plumbing fittings.
- Ball Valve Shut-Off (Optional)
- PTFE/ Teflon Tape
- 1" PVC Nipple Connectors, Male to Male (x2)
- Applicable Plumbing and Fittings

#### For PVC Pipe:

• PVC Primer and Glue

#### For Copper, PEX, and CPVC pipe:

 Quick Connect Fittings (i.e. Optional Quick-connect Kit/ Hose or Shark Bite fittings)



## UNPACKING AND INSPECTING YOUR NEW SYSTEM

Your new SoftPro water softener system will include the following items below. Before starting, please check that you have all the items, and inspect for any possible damage that may have occurred during shipment. (This new system may have multiple shipments.)

### **SHIPMENT FAQ**

1 Is it OK if some items are delivered on its side or upside-down?

#### Yes, it is OK.

If your shipment, boxes, or other items are delivered to you on its side or upside-down, do not be alarmed. Our team takes additional precautions to ensure that your new system is properly protected. Simply turn the shipment or box right-side up and unpack it.

(2) What if there is damage to the exterior of the shipment or boxes?

#### We got your back.

If you find visual damage to the exterior of the boxes, take pictures of the boxes and/or video of the damage before unpacking them. Just because boxes are damaged does not mean the system is damaged, we make sure they are protected.

3 After unpacking, what if there is damage to the valve, tank, or other equipment?

We got you. If you find visual damage to any of the parts, please take pictures and/or video of the damage. Then please immediately send us the images/ video, and we will get parts shipped to you.

(4) After unpacking, what if there is a missing item?

**Easy.** If you are missing a part, please contact us to help get you set up properly.

## **Contact Support:**

Web link: <a href="https://qualitywatertreatment.com/support">https://qualitywatertreatment.com/support</a>



Email Address: Help@QualityWaterTreatment.com





## PRODUCT OPERATION AND SPECIFICATIONS

Specification Description		Specification Description	
Max Flow Rate	10 GPM	Maximum Vacuum	5 inch/ 127 mm Hg
Minimum Working Pressure	25 PSI	Operating Temperatures	36°F – 120°F
Maximum Working Pressure	80 PSI	pH Range	7-11

## IMPORTANT INFORMATION

- Read these instructions carefully and determine the location of all system components before beginning installation.
- Check all applicable plumbing, building, and electrical codes for installation compliance.
- Install the system on the main water supply.
- The use of Teflon tape and/or pipe thread seal paste will be needed on all threaded connections.

## WATER CONDITIONS FOR OPERATION

- The water should be free of hydrogen sulphide, a dissolved gas with a characteristic smell of rotten eggs. If present, it can coat the catalytic surface of the media and interfere with the process. The gas should be removed through adequate pre-treatment.
- The water should be free of hydrocarbons, oils, and lubricants. If present, they can coat the catalytic surface of the media and interfere with the process. Remove through adequate pre-treatment.
- The water should contain less than 1 mg/l of phosphates. Phosphates sequester dissolved hardness molecules preventing them from forming crystals and may coat the catalytic media surface and interfere with the process.
- The copper level in the water supply should be below the MCL of 1.3mg/L. If copper is present above this level, it can attach to the surface of the catalytic media and interfere with the process.
- Optimal performance should have a water hardness less than 15 GPG (256 PPM).
- Not for use if water contains iron, sulfur, manganese in the water.

#### Warning:

If this or any other system is installed in a metal (conductive) plumbing system, i.e. copper or galvanized metal, the plastic components of the system will interrupt the continuity of the plumbing system. As a result, any errant electricity from improperly grounded appliances downstream or potential galvanic activity in the plumbing system can no longer ground through contiguous metal plumbing. Some homes may have been built in accordance with building codes, which encouraged the grounding of electrical appliances through the plumbing system. Consequently, the installation of a bypass consisting of the same material as the existing plumbing, or a grounded "jumper wire" bridging the equipment and re-establishing the contiguous conductive nature of the plumbing system must be installed prior to your systems use.

#### Caution:

When adding a filtration/softening system to homes/buildings supplied by well water, we do not recommend the Sat-Free water softener systems and if if installed you void all warranties, guarantees and will not be allowed to return the system.



## **PARTS LIST**

Part	Description	Qty
	SoftPro Whole House Water Conditioner Media Tank	1
	<b>Upflow tank valve</b> Media tank valve head	1
	Upper tank basket Media filter basket for upflow valve.	1
	Bypass Valve: In/Out Bypass Valve with Red Arrow Handles	1
	1" MNPT Elbow bypass Valve Connector	2

Part	Description	Qty
	Quick-Connect Hoses (Optional Addon) PVC plumbing require PVC to CPVC Adapter	2
	Flexible Water Line Connector 1" Female to Female, 18" Long, SS Corrugated	1
0000 0000 0000 0000	Pre-Filter System: Blue Sediment Filter Housing, Mounting Bracket, Phillips Head Screws (4), Bolt Head Screws (4), and Washers (4)	1
	O-ring, Pre-filter Assembly with O-ring lubricant	1
	Pre-filter cartridge Carbon filter is provided by default. Sediment filter is provided if a whole house carbon filter is ordered.	1
	Pre-Filter Housing Wrench	1

NOTE: Additional fittings will be needed to adapt to your plumbing.

NOTE: Up flow head may come loose in packaging. Please check head if on tank by hand tightening only.

NOTE ON PVC PLUMBING: If PVC plumbing and using quick-connect hoses, install a PVC to CPVC adapters at the ends of the supply side and return side pipes.

## **Using Additional Whole House Filters Or Other Treatment Systems?**

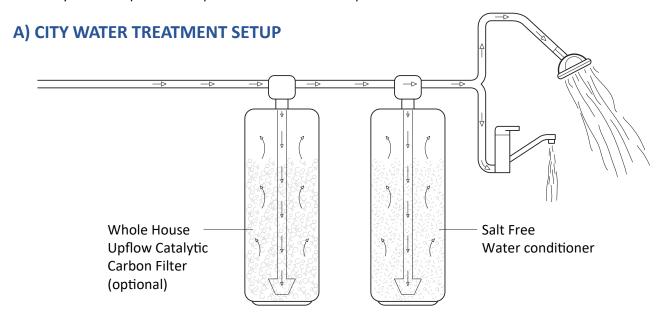
If you have additional water treatment filters (i.e. whole house filter, iron filter or pH neutralizer), those systems should always be installed before the water softener or water conditioner.

The water softener is the final treatment systems in your complete water treatment. (The exception is for a UV Disinfection System, which will be placed after the water softener.)



## **GENERAL WATER SOFTENER TREATMENT SETUP**

The following shows common setups for A) city water, and B) well water sources. These system setups include optional additional filter options.



## Treated/ Untreated Water Hose Bib Options:

If you want filtered, soft water access, you can install a tee fitting, hose bib and plumbing after the softener. Soft water uses include washing cars and pets.

You can also install an untreated prior to flowing into the treatment system. Untreated water uses are include testing the source water and washing items that do not need soft wate

## METAL PIPE GROUNDING GENERAL INFORMATION

## Do you have existing copper water pipes?

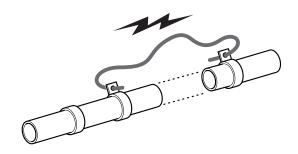
Prior to a new installation of the water softener, in all cases where metal pipe was originally used and is later interrupted by poly pipe or the bypass valve or by physical separation, an approved ground clamp with no less than #6 copper conductor must be used for grounding continuity, to maintain proper metallic pipe bonding.

Refer to your local building code.

#### **CAUTION:**

If the ground from the electrical panel or breaker box to the water meter or underground copper pipe is tied to the copper water lines and these lines are cut during installation of the Noryl bypass valve and/or poly pipe, an approved grounding strap must be used around the two lines that have been cut in order to maintain continuity.

The length/ size of the grounding strap will depend upon the number of units being installed and/or the amount of copper pipe being replaced with plastic pipe.





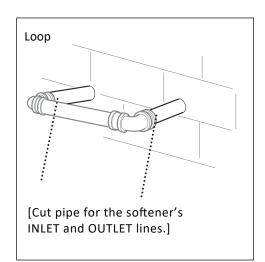
## **NEW INSTALL PLUMBING GUIDE**

Refer to the appropriate new installation scenario. This guide is intended as a general reference. Your specific installation may vary from this guide.

**CAUTION: CUTTING COPPER PIPES?** Install grounding straps prior to cutting.

- A. NEW INSTALL WITH A PRE-PLUMBED WATER SOFTENER LOOP
- **B. NEW INSTALL ON A WATER HEATER LOOP**
- C. NEW INSTALL BY RE-ROUTING A HOME'S WATER SUPPLY LINE

#### A) NEW INSTALL WITH A PRE-PLUMBED WATER SOFTENER LOOP



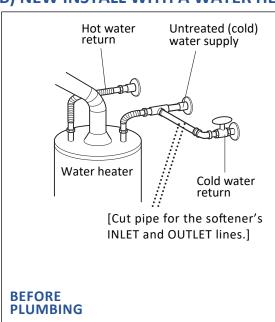
- 1) Switch-off the breaker to the hot water heater. At the electrical control panel, temporarily switch off the power feeding the water heater unit.
- 2) Shut-off the water main.
- 3) Drain any existing water from both the cold and hot water pipes. Simply, open all of the sink and bathtub faucets to empty the remaining water in the pipes. Drain completely.

**TIP:** In addition, you can also remove a shower head (since it is located high) to create a vacuum so pipes can drain better.

- 4) Cut the water line softener loop and cut/ unplug the appropriate drain line. Place a bucket to catch the water from the softener loop.
- 5) Identify and label the inlet (supply), and the outlet plumbing pipes.
  - To identify the inlet (supply pipe), very slightly, turn open the water main supply to identify which pipe is the water supply line. The pipe with water flowing out (supply side), should be labelled: "INLET".

    Label the other pipe: "OUTLET".

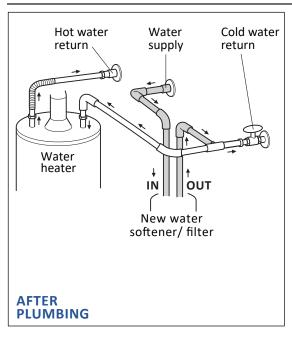
#### B) NEW INSTALL WITH A WATER HEATER LOOP



- 1) Check that untreated water supply return was plumbed. Refer to the illustration.
  - This untreated water line supplies the water heater and the home.
- 2) Turn off the water heater.
  - a) For electrical heaters: Switch-off the breaker to the hot water heater. At the electrical control panel, temporarily switch off the power feeding the water heater unit.
  - b) For gas heaters: Turn off the pilot light.
    (After installation, re-light the pilot light.
- 3) Shut-off the water main.
- 4) Shut-off the water heater valve, if applicable.
- 5) Drain any existing water from both the cold and hot water pipes. Simply, open all of the sink and bathtub faucets to empty the remaining water in the pipes. Drain completely.

**TIP:** In addition, you can also remove a shower head (since it is located high) to create a vacuum so pipes can drain better.

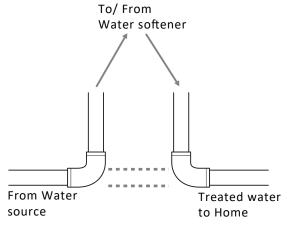




- 6) Cut the untreated water line loop. Use a bucket to catch any water from the softener loop.
  - Cut the water line softener loop and cut/ unplug the appropriate drain line. Use a bucket to catch any water from the softener loop.
     (Use the appropriate cutting tool for the different types of pipes (copper, PVC, PEX, CPVC, etc.)
- 7) Identify and label the inlet (supply), and the outlet plumbing pipes.
  - To identify the inlet (supply pipe), very slightly, turn open the water main supply to identify which pipe is the water supply line. The pipe with water flowing out (supply side), should be labelled: "INLET".

    Label the other pipe: "OUTLET".
- 8) Plumb the new softener water lines to the water softener location. Refer to the illustration.

### C) NEW INSTALL BY RE-ROUTING A HOME'S WATER SUPPLY LINE



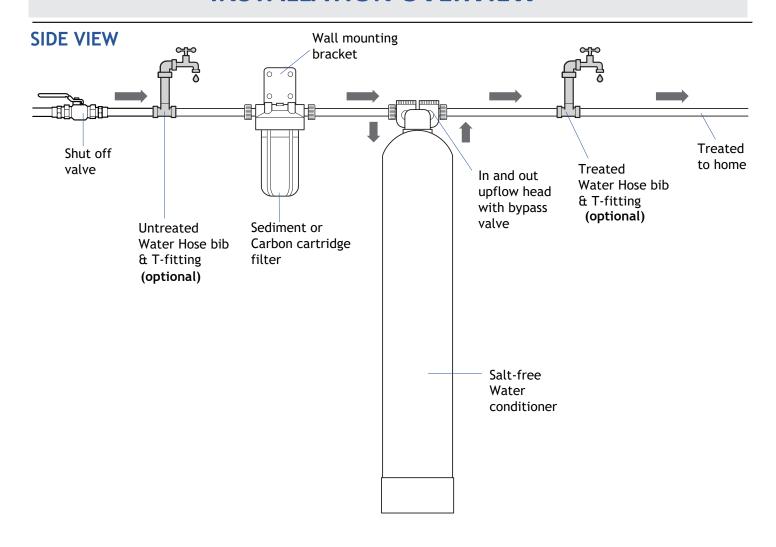
[Cut existing pipe and plumb NEW softener water lines]

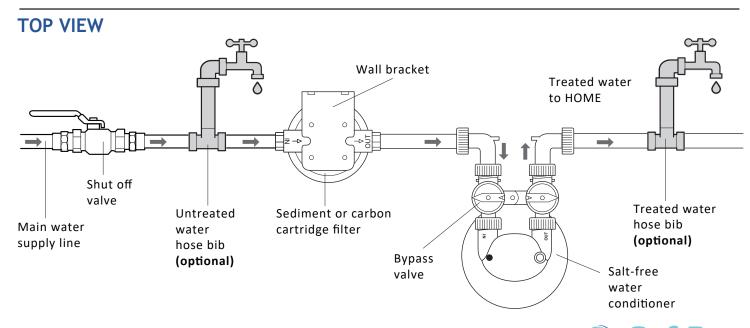
- 1) Locate the main water supply line entering into the home.
- 2) Switch-off the breaker to the hot water heater. At the electrical control panel, temporarily switch off the power feeding the water heater unit.
- 3) Shut-off the water main.
- 4) Drain any existing water from both the cold and hot water pipes. Simply, open all of the sink and bathtub faucets to empty the remaining water in the pipes. Drain completely.
- TIP: In addition, you can also remove a shower head (since it is located high) to create a vacuum so pipes can drain better.
- 5) Cut the water main to plumb in the softener loop. Use a bucket to catch any water from the water main.
- 6) Plumb the new softener water lines to the water softener location.
- 7) Identify and label the inlet (supply), and the outlet plumbing pipes.
  - To identify the inlet (supply pipe), very slightly, turn open the water main supply to identify which pipe is the water supply line.

The pipe with water flowing out (supply side), should be labelled: "INLET". Label the other pipe: "OUTLET".



## **INSTALLATION OVERVIEW**

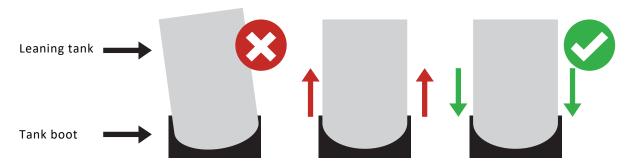




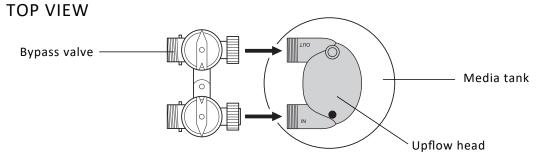
## 1) TANK LEVELING

If the tank is not sitting perfectly vertical in the tank boot, simply follow below.

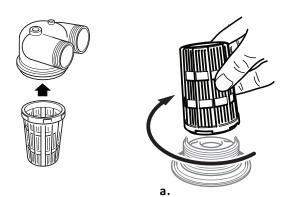
- 1. Gently lift the tank straight up a few inches.
- 2. Then gently tap the tank on the ground a couple of times until the tank sits snuggly in the tank boot.



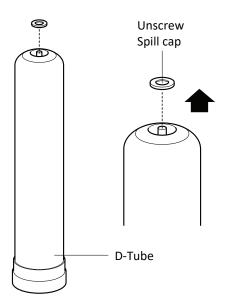
## 2) UPFLOW HEAD & BYPASS VALVE INSTALLATION



- 1. Attach the white upper basket/ cone to the bottom of the upflow valve head.
- a. Twist the cone to lock into place. The upper basket/ cone will seat in once installed. Give a little tug to check that is installed properly.



2. Remove the protective cap from the top of the carbon filter tank.



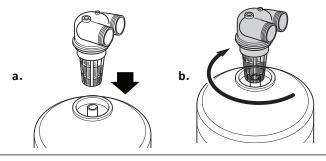


#### 3. Install the upflow valve to the tank as follows.

- **a.** Place the top of the distribution tube (white pipe located in the tank) through the bottom center of the upper basket cone.
- **b.** Then screw on the upflow valve assembly onto the tank.

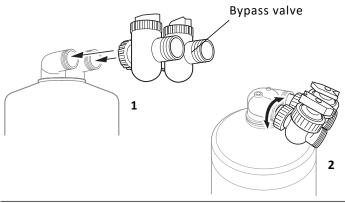
#### HAND-TIGHTEN ONLY, DO NOT OVER-TIGHTEN.

**Note:** As you complete this installation step, the upflow valve will drop into a socket on the tank once the distribution tube clears the O-ring from the bottom of the control valve. You'll feel it drop and then just hand tighten.



#### 5. Attach the bypass valve to the upflow valve.

**a.** Align the two connection fittings onto the bypass valve and hand-tighten to secure it.



#### HAND-TIGHTEN ONLY, DO NOT OVER-TIGHTEN.

Do not force the screwing of the upflow head or bypass valve. It should screw on very easily.

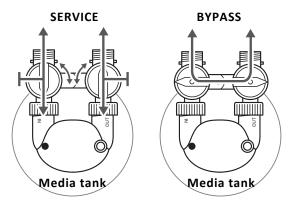
## ATTENTION: DO NOT USE LUBRICANTS OR TEFLON TAPE ON THE MEDIA TANK NOR UPFLOW HEAD THREADS.

The installed O-rings was previously lubricated with a non-petroleum-based lubricant. Never use Vaseline, WD-40, etc.

**NOTE ON D-TUBE CENTERING:** It is acceptable and common that the distribution tube (the white pipe) in the tank is not completely centered. The upflow valve will pull it to the center as it is screwed onto the tank.

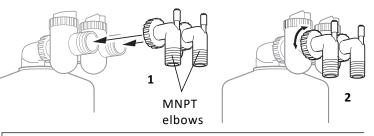
**NOTE ON BYPASS VALVE:** The bypass valve fitting is designed with a 1/4" flexibility to allow for proper pipe alignment. It will not leak and is intended to have some flexibility.

## 4. Set the existing softener bypass valve to the BYPASS position.



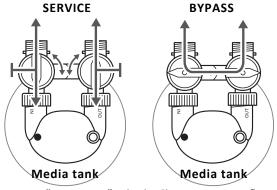
## 6. Attach the two (2) MNPT elbow connectors to the bypass valve.

a. Hand-tighten to secure the fittings.



**NOTE:** The bypass valve(s) included with this system are designed for multiple SoftPro water systems. This may result in the arrows on the bypass valve(s) pointing differently than shown. If the arrows on your bypass valve(s) do not match the diagram, remove the red arrows by pulling them straight up, turn them 180° to match the drawing, and push them back down onto the stem.

**NOTE:** The bypass valve comes pre-assembled and ready to install with the O-Rings, Split Rings, and Quick Connect Nuts.

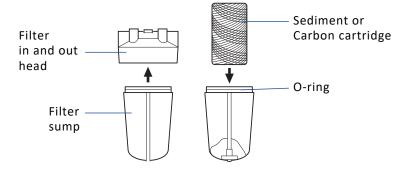


The system is "in service" which allows water to flow in and out of the tank. In this position the system would be considered ON.

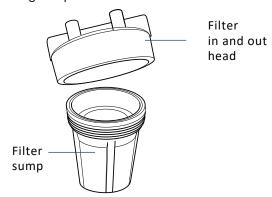
The system is "in bypass" which will direct water straight to the home without going in and out of the tank. In this position the system would be considered OFF.



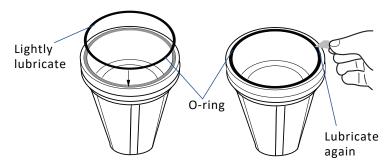
## 3) SEDIMENT FILTER ASSEMBLY



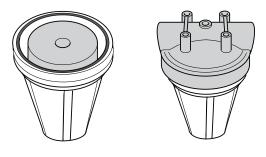
1) Unscrew the cover to remove from the blue pre-filter housing sump.



- 2) Lubricate and install the O-ring.
- a. Use the provided lubricant and lightly wipe onto the O-ring. Cover the entire O-ring.
- b. Insert the lubricated O-ring into the groove on top of the housing.
- c. Add more lubricant lightly to the top of the installed O-ring.



Place the pre-filter cartridge into the housing. (Remove the plastic covering from the cartridge.)



4) Set the pre-filter aside until installation.

## 4) PREPARE FOR THE INSTALLATION OF THE NEW WATER SOFTENER

## **ii** Using Additional Whole House Filters Or Other Treatment Systems?

If you have additional water treatment filters (i.e. whole house filter, iron filter or pH neutralizer), those systems should always be installed before the water softener.

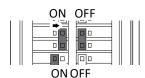
The water softener is the final treatment systems in your complete water treatment. (The exception is for a UV Disinfection System, which will be placed after the water softener.)

- 1) Verify and clear the location of the new water softener system.
  - a. Clear and clean the areas.
  - b. Prepare the softener's inlet and outlet water pipe connections.
- 2) Turn off the hot water heater.
  - a. For electrical water heaters:

Switch off the breaker to the hot water heater.

i.) At the electrical control panel, temporarily switch off the power feeding the water heater unit.



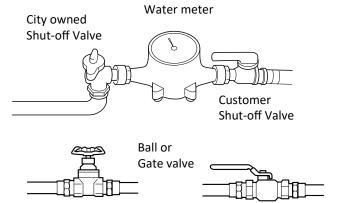


b. For natural gas water heaters:

Turn the gas supply off at the water heater as per your model's instructions.

(Note. The pilot light will need to be re-lighted after installation is complete.)

- 3) Shut-off the main water supply.
- Close the water main shut-off valve to the home. It is usually located in the front of the property.
- Alternatively, if you have a shut-off valve as water enters home (usually a ball or gate valve in the front of the building), then you can opt shut-off the home water supply there.



4) Drain any existing water from both the cold and hot water pipes.Simply, open all of the sink and bathtub faucets

Simply, open all of the sink and bathtub faucets to empty the remaining water in the pipes. Drain completely.

#### Helpful tip:

In addition, you can also remove a shower head (since it is located high) to create a vacuum so pipes can drain better.

5) Label the inlet (supply), and the outlet plumbing pipes.

The pipe with water flowing into the softener control valve (supply side) should be labelled: "INLET".

To identify the inlet (supply pipe), very slightly, turn open the water main supply to identify which pipe is the water supply line. The pipe with water flowing out (supply side), should be labelled: "INLET".

Label the other pipe: "OUTLET".

## 5) REPLACING AN EXISTING WATER SOFTENER

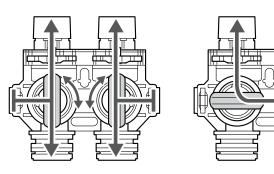
#### REMOVE THE OLD WATER SOFTENER

If applicable, the following guide is typical of how common water softeners are removed. Use as applicable to replacing a salt-based softeners or salt-free conditioner. If you find that your existing setup is unconventional, please take pictures and videos to send to our support team to review.

1) Set the existing softeners bypass valve to the bypass position. When set to bypass mode, water will not enter into the media tank.

#### SERVICE

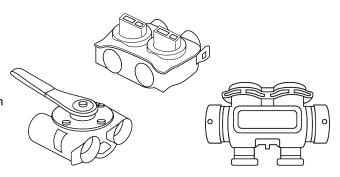
#### **BYPASS**



Examples of some different types of bypass valves:

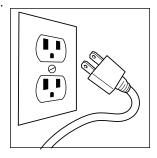
Bypass valve models may vary by manufacturer (examples below). The bypass valve is attached at the rear of the water softener control valve. It is where the pipe (copper, PEX, PVC, CPVC) connects to the water softener pipe.

If the bypass valve includes the inlet and outlet valves, then close both the inlet and outlet valves. If the bypass valve has one stem, close the plunger into the stem or pull handle as shown in the first image.





2) Disconnect power supply, if applicable.
a. Unplug the power supply plug to your old, existing water softener.



Reclaim the existing salt or potassium chloride from the brine tank, if applicable. Remove any good, usable salt or potassium chloride that you would like to keep and reuse from your old unit. Discard any clumps.

#### Disposal:

Dispose unusable salt or potassium chloride properly into the garbage. Do not dispose onto lawns, gardens, plants, or trees, etc.

- 4) Disconnect & remove the old brine tank, if applicable.
  - a. Disconnect brine tube line from the softener control valve.
  - b. Disconnect the brine drain overflow line from the brine tank, if applicable.
  - c. Remove the brine tank from the area.

- 5) Disconnect & remove the old media tank.
  - a. Disconnect both the inlet and the outlet plumbing lines to the old softener. Use a bucket to capture any residual water in the pipes.
  - b. Disconnect the drain tube from the softener valve, if applicable.
  - c. Remove the old media tank from the area.

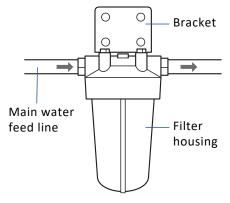
**6)** Clear and clean the area for the new water conditioner system.

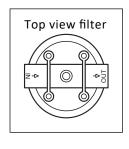
#### **Proper Disposal:**

Please dispose of the old media and brine tank properly.

You are now ready to install your new water softener system.

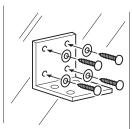
## 6) PRE-FILTER INSTALLATION





- 1) Install the pre-filter mounting bracket to the wall.
- a. Locate an appropriate location that will align pre-filer with the plumbing connections and the water conditioner unit.

  Mark the four (4) holes for pre-drilling using a 3/16" drill bit.
- b. Use the four (4) bolts and washers to secure the mounting bracket to the wall using a ½" socket.

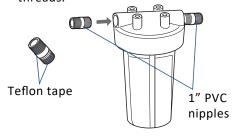


#### NOTF:

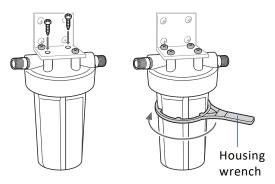
The Sediment/ carbon cartridge Filter Housing comes with a 1" threaded female inlet/outlet and will require additional fittings to adapt to your plumbing. A shut-off valve is recommended prior to the Sediment / Carbon cartridge Filter.

NOTE: The pre-filter unit is built with 1" threaded female inlet/outlet connections. This may require additional fittings to adapt to your plumbing (typically, two (2) 1" male threaded nipples).

- **2)** Install a 1" PVC nipple to both ends of the pre-filter cover.
  - a. Wrap PTFE/ Teflon tape to all nipple threads.



- **3)** Align the pre-filter accordingly to your inlet and outlet flow pattern.
- 4) Attach the pre-filter to the mounting bracket with the four (4) included bolts.



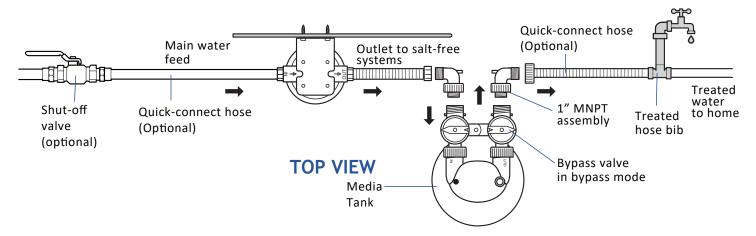
**5)** Hand-tighten the pre-filter housing, and then use the supplied filter housing wrench and lightly snug the housing. DO NOT OVER-TIGHTEN.



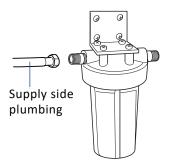
## 7) CONNECT THE PLUMBING

#### **Optional Shut-Off Valve**

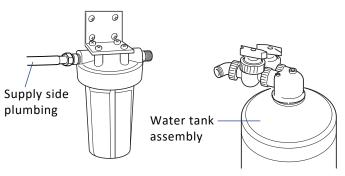
**NOTE:** This shut-off ball valve can be installed prior to the water lines connecting to the pre-filter unit.



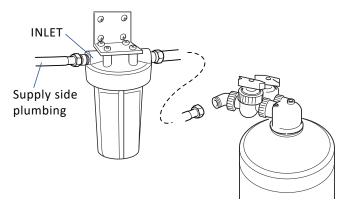
- 1) Connect the supply side plumbing to the pre-filter unit.
  - a. From the supply side plumbing, attach the quick-connect hose or flexible water line connector to the INLET side of the pre-filter.



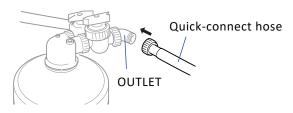
- 2) Position the water conditioner tank assembly appropriately.
- **Optional Treated and/or Untreated Water Bib Installation** If an additional hose bib is desired, please install the appropriate hose bibs at this time.



- 3) Wrap PTFE/ Teflon tape to both of the MNPT elbow connector threads that are installed on the bypass valve.
- 4) Connect the pre-filter to the water conditioner tank.
- a. Connect the OUTLET side of the pre-filter to the INLET side of the bypass valve on the water conditioner tank. Use a flexible water line connector.



- **5)** Connect the water conditioner to the water return plumbing.
- a. Connect the OUTLET side of the bypass valve to the plumbing entering the home.
   Use either the quick-connect hose, or a flexible water line connector for PVC plumbing.

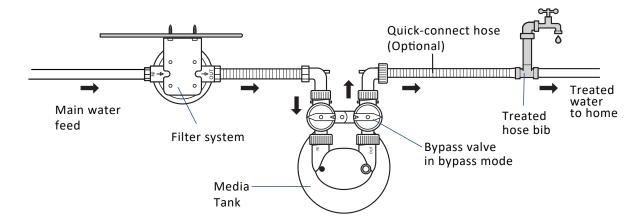


- 6) Turn the hot water heater back ON.
- a. For electrical water heaters:

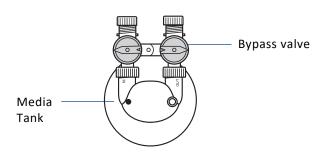
  Switch the breaker to power the hot water heater.
- b. For natural gas water heaters:Re-light the gas pilot light as per your model's instructions.



## 8) TURNING ON THE WATER SUPPLY & INITIAL MEDIA SOAK (FOR 1-2 HOURS)



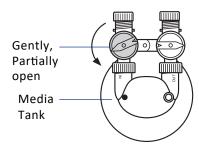
- 1) With the bypass valve set to BYPASS mode, slowly turn the water back on at the water main shut-off valve allowing the plumbing and pre-filter to slowly fill with water.
  - a. Check for any leaks.



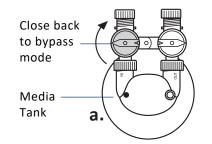
2) On the INLET side of the bypass valve only, slowly partially open the INLET side counter-clockwise into SERVICE mode.

## Do not fully open. (Keep the OUTLET side in the BYPASS mode.)

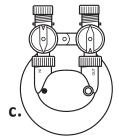
- a. This will allow the water to gently fill the media tank.
- b. Allow water to completely fill the tank, about 5-10 minutes.
- c. Check for any leaks.



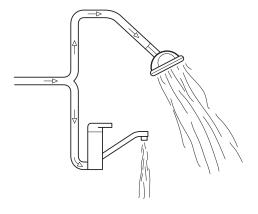
- 3) Media Soak Process
  - a. Once the media tank is full of water, return the INLET bypass side to BYPASS mode. This will allow the water to flow back to the home while the media soaks.
    - >> Check for any leaks.
  - b. Allow the media to soak for 1 to 2 hours.
  - c. After 1 to 2 hours, then place the bypass valve into SERVICE mode (both INLET and OUTLET sides of the bypass valve).
    - >> Check for any leaks.







- 4) Flush/ Bleed any air gaps from the tank.
  - a. Open a shower head and sink faucet until the water runs clear and smooth.





## **MAINTENANCE**

#### **CLEAN YOUR HOT WATER HEATER**

Cleaning and restoring the plumbing system are a major benefit of the system. To minimize the time required to complete the descaling process, we strongly recommend cleaning your hot water heater after a period of 3 weeks.

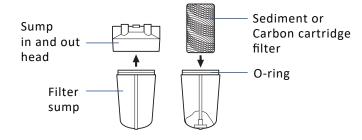
- Turn off the heat source, attach a hose to the drain valve at the bottom of the tank and flush the heater by opening the drain valve. After the water heater is filled with water, turn the heat source back on.

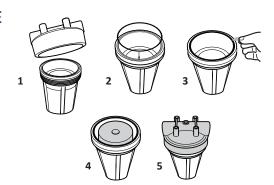
#### **SEDIMENT FILTER**

It is recommended that the sediment filter be replaced every six months.

Note: if you are using the Basic system that comes with a carbon cartridge instead of the sediment then replace the carbon cartridge every three months.

#### REPLACING THE SEDIMENT OR CARBON FILTER CARTRIDGE





- 1) Turn off the main water supply to the Sediment / Carbon Filter System and bypass all tanks.
- 2) Run a faucet (cold water) inside the house to relieve the pressure. (Leave faucet open).
- 3) Unscrew the Blue Filter Housing clockwise using the supplied Filter Wrench.
- 4) Remove the existing Sediment Filter and discard.
- 5) Remove the O-Ring and wipe the groove clean. Lubricate a new O-Ring with a coating of clean silicone grease. Replace O-Ring and press the O-Ring down into the groove with fingers.
- 6) Place a new Sediment / Carbon Pre-Filter onto the Standpipe in the Filter Housing.

- 7) Screw the Filter Housing onto the Filter cover and hand tight. Lightly snug the housing with the spanner wrench making sure not to over-tighten.
- 8) Turn on main water supply slowly to allow the Sediment Filter System to fill with water and expel air from lines. Put tanks back in service, out of bypass.
- 9) Check for leaks.

**Note:** This step is important to ensure the proper filter seal. Make sure the O-Ring is seated level in the groove. If the O-Ring appears damaged, stretched, or crimped it should be replaced.

## **TROUBLESHOOTING**

Problem	Solution
Water leaking at the top of the tank around the head.	You may need to turn the head to tighten it. The tank head is pre-installed hand-tight, do not overtighten the head (just turn it snug).
Water pressure is slowing.	It is recommended that the Sediment Filter be replaced every 6 months depending on the amount of sediment present in the water supply. If the system has been working properly and the pressure is slowing, it may be time to change the Sediment Filter. Check the Sediment Filter and replace if necessary.

