

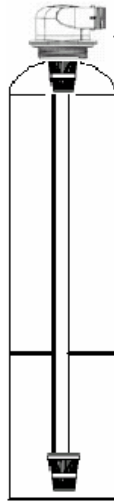
**SUPERIOR SOFT-TEC™
NO SALT WATER SOFTENER
Installation & Operation Manual**



Barrie, Ontario Canada
L4N 4Y8

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EXCALIBUR SUPERIOR SOFT-TEC™ NO SALT WATER SOFTENER INSTALLATION MANUAL



In your home when you replace a traditional salt based Water Softener or if you never had a Water Softener in your home, when the Soft-tec™ No Salt Water Softener is installed, you may notice the water is becoming harder in the beginning as the piping scale begins dissolving and the water hardness is a consequence of the descaling. The hardness and scale build-up will improve daily as the Soft-tec™ No Salt Water Softener continues to dissolve the existing scale. The plumbing took years to develop the scale build up and will only take a short period of time for the Soft-tec™ No Salt Water Softener to cleanup the existing scale. The treated water after going through the Soft-tec™ No Salt Water Softener immediately starts dissolving the scale building in the plumbing system and appliances. The scale after flowing through the Soft-tec™ No Salt Water Softener comes off one molecule at a time just like it went on. The Soft-tec™ No Salt Water Softener in thirty (30) to one hundred twenty (120) days will remove all scale from existing faucets and appliances. In excessively hard water you may have a build up of loosened scale after flowing through the Soft-tec™ No Salt Water Softener in the bottom of the hot water heater and dishwasher from the Soft-tec™ No Salt Water Softener descaling and you will need to clean out the loosened scale from the bottom of the water heater and dishwasher in the first few months until the scale is completely dissolved in the entire plumbing

system and appliances. The Soft-tec™ No Salt Water Softener may cause you to remove the faucet aerators and clean out any scale build up and then put the aerators back on the faucets as scale can reduce water pressure. This will diminish as the Soft-tec™ No Salt Water Softener continues to dissolve the scale until it is completely gone from the plumbing system.

If you use a dishwasher and replace a traditional Water Softener salt based or have never had a Water Softener, you may notice some calcium spotting in the Soft-tec™ No Salt Water Softener will eliminate the spotting after the Soft-tec™ No Salt Water Softener removes all the scale buildup. In the meantime as the Soft-tec™ No Salt Water Softener continues to dissolve the calcium add a cup of household vinegar to the rinse cycle to eliminate any short term calcium spotting problem while the pipes are descaling.

GENERAL SOFT-TEC™ NO SALT WATER SOFTENER INSTALLATION PROCEDURES

The Soft-tec™ No Salt Water Softener fittings and/or bypass valve are designed to accommodate minor plumbing misalignments that may occur during the Soft-tec™ No Salt Water Softener installation. On the Soft-tec™ No Salt Water Softener do not use Vaseline oils or other hydrocarbon lubricants when installing your Soft-tec™ No Salt Water Softener or spray silicone anywhere. A Soft-tec™ No Salt Water Softener may have silicone lubricant used on the black o-rings during the Soft-tec™ No Salt Water Softener installation, but is not necessary.

Avoid any type of lubricants including silicone when installing your Soft-tec™ No Salt Water Softener on clear or red lip seals. Do not use pipe dope or other sealants on the Soft-tec™ No Salt Water Softener connecting threads. Teflon tape must be used on the Soft-tec™ No Salt Water Softener instead of pipe dope or pipe sealants.

SOFT-TEC™ NO SALT WATER SOFTENER INSTALLATION SITE REQUIRMENTS

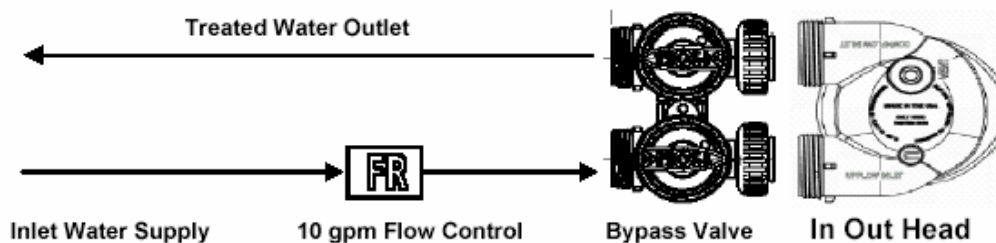
- Water pressure 20 – 125psi
- Water temperature 5°C to 30°C or 40°F to 100°F

- The Soft-tec™ No Salt Water Softener should be on a firm level surface.

The Soft-tec™ No Salt Water Softener inlet/outlet plumbing will be installed down stream of outdoor spigots. The Soft-tec™ No Salt Water Softener installation an inlet shutoff valve and plumbing to the Soft-tec™ No Salt Water Softener bypass valve located at the left rear upflow inlet as you face the Soft-tec™ No Salt Water Softener. There are a variety of Soft-tec™ No Salt Water Softener installation fittings available. When assembling the Soft-tec™ No Salt Water Softener installation fitting package (inlet/outlet) connect the fitting to the plumbing system first and then attach the Soft-tec™ No Salt Water Softener nut, split ring and o-ring. Heat from soldering solder or solvent cements may damage the Soft-tec™ No Salt Water Softener nut, split ring and o-ring. Solder joints should be cool and solvent cement should be set before installing the Soft-tec™ No Salt Water Softener nut, split ring and o-ring. Avoid getting solder flux, primer and solvent cement on any part of the Soft-tec™ No Salt Water Softener o-rings, split rings and bypass valve.

INSTALLATION INSTRUCTIONS FOR THE SOFT-TEC™ NO SALT WATER SOFTENER

1. The ¾ inch stainless steel flow restrictor supplied in the box with the Soft-tec™ No Salt Water Softener must be installed on the raw water inlet on the uplow inlet side prior to the Soft-tec™ No Salt Water Softener. The ¾ inch stainless steel flow restrictor must be installed prior to the Soft-tec™ No Salt Water Softener to maintain the Soft-tec™ No Salt Water Softener warranty.



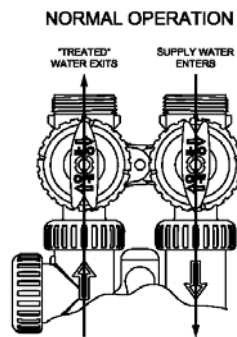
2. Before making water service connections to the Soft-tec™ No Salt Water Softener lubricate all o-rings, split rings and nuts with a non-petroleum based lubricant, example” Silicone Grease number 3005.
3. The Soft-tec™ No Salt Water Softener installation plumbing connections must be in an upflow configuration to accommodate the Soft-tec™ No Salt Water Softener counter upflow service through the media bed. This will provide proper fluidization of the Soft-tec™ No Salt Water Softener media. The plumbing inlet connection on raw water supply pipe into the Soft-tec™ No Salt Water Softener into the upflow arrow on the in/out distributor valve body.
4. You are now ready to make service pipe connections into the Soft-tec No Salt Water Softener. If soldering, make sure Soft-tec No Salt Water Softener o-rings and plastic split rings are removed from brass adapters before applying heat. After soldering complete connect the Soft-tec No Salt Water Softener by inserting retaining nut, then the plastic split rings and then the o-rings to the bypass control valve.
5. SOFT-TEC™ NO SALT BYPASS VALVE

The Soft-tec™ No Salt Water Softener bypass valve is typically used to isolate the Soft-tec™ No Salt Water Softener control valve from the plumbing system, water pressure in order to perform Soft-tec™ No Salt Water Softener control valve repairs or maintenance. The bypass valve is particularly unique due to its versatility and design features. The 1 inch Soft-tec™ No Salt Water Softener full flow bypass valve incorporates four positions including a diagnostic position that allows to work on a pressure system while still providing untreated bypass valve water to the residence. The bypass valve is completely non-metallic, all composite design. The Soft-tec™ No Salt Water Softener bypass valve consists of two interchangeable plug valves that are operated independently by red arrow shaped handles. The handles identify the water flow direction of the

water. The plug valves enable the bypass valve to operate in four positions.

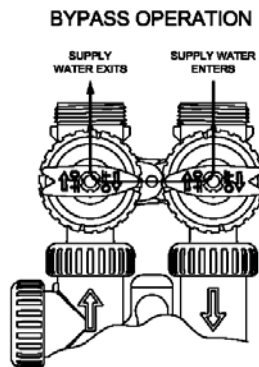
A) NORMAL OPERATION POSITION

The inlet and outlet handles point in the direction of water flow of the Soft-tec™ No Salt Water Softener indicated by the engraved arrows on the bypass valve. Water flows through the bypass valve during normal operation and this position also allows the bypass valve to isolate the Soft-tec™ No Salt Water Softener resin bed during the regeneration cycle.



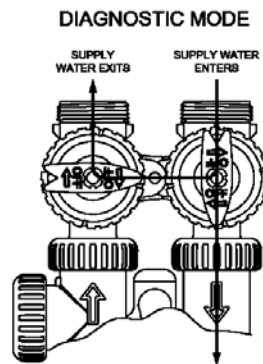
B) BYPASS POSITION

The inlet and outlet handles point to the centre of the bypass valve. The bypass valve is isolated from the water pressure contained in the plumbing system. Untreated water is supplied to the plumbing system



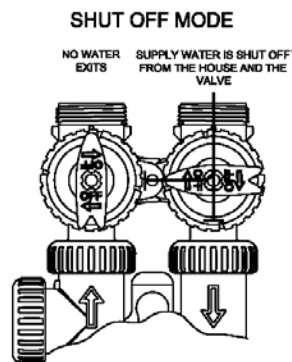
C) DIAGNOSTIC POSITION

The inlet handle points in the direction of water flow and outlet handle points to the centre of the bypass valve. System water pressure is allowed to flow to the Soft-tec™ No Salt Water Softener control valve and the plumbing system while not allowing water to exit from the control valve to the plumbing system.



D) SHUTOFF POSITION

The inlet handles points to the centre of the bypass valve and the outlet points to the direction of flow. The water is shut off to the plumbing system. If water is available on the outlet side of the Soft-tec™ No Salt Water Softener, it is an indication of water bypass around the system.



SOFT-TEC™ NO SALT WATER SOFTENER
STARTUP INSTRUCTIONS

1. Place the Soft-tec™ No Salt Water Softener bypass valve handle to the parallel position.
2. Open the closest cold water faucet fully to the Soft-tec™ No Salt Water Softener and leave open. Then turn on the water supply to the Soft-tec™ No Salt Water Softener slowly at first in order to lift the Soft-tec™ No Salt Water Softener media beds lowly to displace all air from the Soft-tec™ No Salt Water Softener media tank.
3. Once the air is totally removed from the Soft-tec™ No Salt Water Softener media tank, open the water supply fully to the Soft-tec™ No Salt Water Softener and keep the closest faucet to the Soft-tec™ No Salt Water Softener fully open until the water is clear.
4. You are now ready to enjoy your Soft-tec™ No Salt Water Softener.

5 YEAR WARRANTY

Lifetime Tank Warranty

Soft-Tec™ Superior No Salt Water Softener

Thank you for your purchase of our Soft-Tec™ SUPERIOR NO SALT WATER SOFTENER. For proof of purchase, please retain your Invoice/Sales Order Copy.

Warranty ~ Offered

Excalibur Water Systems warrants its products to be free from defect in materials and workmanship to the original owner from the date on the proof of purchase as described below.

Warranty ~ Working Procedures

If during the suitable warranty period, a part is defective, then Excalibur Water Systems will repair or replace that part at no charge to the original owner, with the exception of charges for nominal shipping, service and/or installation.

Warranty ~ Coverage Outlined

Excalibur Water Systems guarantees, to the original owner, a period of 5 years, the VALVE BODY to be free of defects in materials and workmanship and to perform its proper functions. Other parts to be free of defects in materials and workmanship and to perform their normal functions to the original owner, the MINERAL TANK will not rust, corrode, leak, burst or in any other form fail to perform their proper functions for a LIFETIME period of 20 YEARS.

Warranty ~ Service

In the event you require service, your local Excalibur Water Systems Dealer will provide all necessary service and installation for your Superior Water Softener. To obtain warranty service within 30 days of discovery of the defect, notification must be given to your local Excalibur Water Systems Dealer.

General Provisions

The above warranties are effective provided the Soft-Tec™ SUPERIOR WATER SOFTENER is operated at water pressures not exceeding 125psi and at water temperatures not exceeding 120°F; also provided that the Soft-Tec™ water softener is not subject to abuse, misuse, alteration, neglect, freezing, accident or negligence; and provided further that the Soft-Tec™ water softener is not damaged as the result of any unusual force of nature such as, but not limited to flood, hurricane, tornado or earthquake. Excalibur Water Systems is excused if failure to perform its warranty obligations is the result of strikes, government regulation, materials shortages or other circumstances beyond its control.

THERE ARE NO WARRANTIES ON THE Soft-Tec™ WATER SOFTENER BEYOND THOSE SPECIFICALLY DESCRIBED ABOVE. ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED TO THE EXTENT THEY MIGHT EXTEND BEYOND THE ABOVE PERIODS. THE SOLE OBLIGATION OF EXCALIBUR WATER SYSTEMS UNDER THESE WARRANTIES IS TO REPLACE OR REPAIR THE COMPONENT OR PART PROVES TO BE DEFECTIVE WITHIN THE SPECIFIED TIME PERIOD AND EXCALIBUR WATER SYSTEMS IS NOT LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. NO DEALER, AGENT, REPRESENTATIVE OR OTHER PERSON IS AUTHORIZED TO EXTEND OR EXPAND THE WARRANTIES EXPRESSED ABOVE.

Certain provinces or states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damage, therefore limitations and exclusions in this warranty may not apply to you. This warranty extends you specific legal rights as you may have other rights which vary from province to province or state to state.

Excalibur Water Systems is a manufacturer of water treatment products.

Barrie, ON
Canada

