



SUPERIOR SOFT-TEC

INSTALLATION AND OPERATION MANUAL

**220 Bayview Drive Unit #18
Barrie, Ontario
L4N 4Y8**



Excalibur Soft-Tec™ The No Salt Water Softener

Choose Salt Free Softness



Soft-tec™, the no salt water softener a revolutionary technological advancement for the treatment of hard water that converts water hardness minerals into calcium crystals from positive ions. These calcium crystals are neutral and cannot stick to any surfaces eliminating calcium buildup in household appliances, plumbing fixtures and piping systems in your home.



ION EXCHANGE RESIN
NSF/ANSI-61

FEATURES & BENEFITS

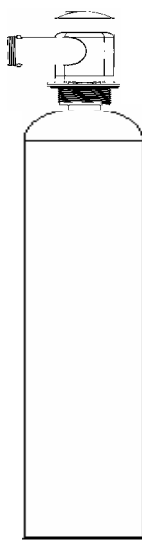
- ◆ No scale buildup on fixtures and appliances
- ◆ Scale prevention
- ◆ Essential minerals are no longer removed from the water
- ◆ Clothes are softer, cleaner, brighter
- ◆ Dishes are cleaner with less soap and no hard water spotting
- ◆ Appliances using water such as dishwasher, clothes washer, water heaters, ice makers etc. last longer and are more efficient.
- ◆ Environmentally friendly. No chemicals or salt required
- ◆ Easy setup & installation
- ◆ No electrical power required
- ◆ No drain or waste water
- ◆ Bypass valve
- ◆ No Maintenance or Repairs
- ◆ No Backwash which lowers water consumption
- ◆ No water softening salt to purchase

Make the right choice!

Excalibur Water SOFT-TEC "NO SALT" Superior Series Water Softeners



Specifications - Superior SOFT-TEC Series



Excalibur Water SOFT-TEC Superior Series NO SALT Water Conditioners with 1" Full Porting In - Out Head

Features

- Black Mineral Tanks NSF Certified
- 1.05" High Flow Distributor Bottom Stack
- High Efficiency Anion SOFT-TEC Resin
- 1" Full Porting High Flow In-Out Head
- Upper Distributor Basket
- Plastic 1" Bypass Valve
- Adapter Kit Brass Sweat or PVC

Specifications & Performance - Simplex Models

Part Number	Service Flow Rate	Resin Volume	Mineral Tank Size	PH Range	Flow Restrictor	Maximum Hardness	Shipping Weight	List Price
Series SOFT-TEC	(usgpm)	(litres)	(inches)	(Ph)	(gpm)	(grains)	(lbs)	(\$)
EWS NSB0835	10	4.0	8x35	6.2-11.0	10.0 gpm	25 Or Less	45	\$1,600.00
EWS NSB0844	10	5.0	8x44	6.2-11.0	10.0 gpm	25 - 40	55	\$1,900.00
EWS NSB0948	10	6.0	9x48	6.2-11.0	10.0 gpm	40 - 60	65	\$2,200.00

Operating Temperature : 34 - 110 Degrees F 1 - 43 Degrees C

Operating Pressure : 20 - 120 (1.27 - 8.27 BAR)

Excalibur Water Toll Free (877) 733-8999 • Phone (705) 733-8900 • Fax (705) 733-8904

Installation Instructions

1. Installation plumbing connections are to be UPFLOW in order to accommodate counter up flow service through media bed. IE: Plumb inlet raw water supply line into the UPFLOW arrow on the In Out Valve Body Head.
2. Before making service connections lubricate all o rings and spacers with a none petroleum based lubricant IE: plumbers Grease or Super Lube
3. Be sure the Flow Restrictor 10 gpm is installed in the raw water inlet to the Upflow side of the in out valve body head. Direction of flow on the Flow Restrictor should be pointing (flowing) into the valve body head.
4. You are now ready to make service connections. If soldering, make sure o ring and plastic split ring are removed from brass before applying heat. Insert retaining nut then the plastic split ring and then o ring to Bypass assembly

Startup Instructions

1. Place bypass handle to the parallel position
2. Open closest cold faucet fully and leave open. Turn on water supply to SOFT-TEC SLOWLY at first in order to lift bed slowly and displace all air from media tank
3. Once air is totally removed from media tank, open water supply fully and run closest faucet until water is clear.

You are now ready to enjoy your new Excalibur Water Systems SOFT-TEC NO SALT WATER CONDITIONER.

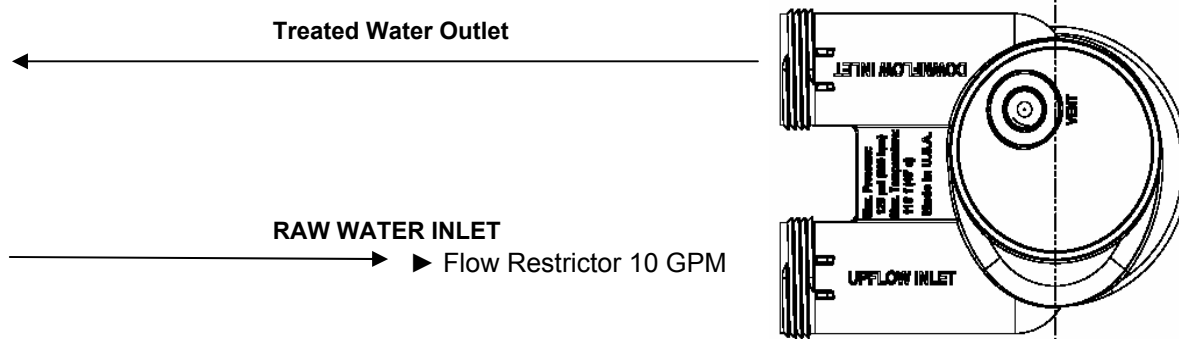
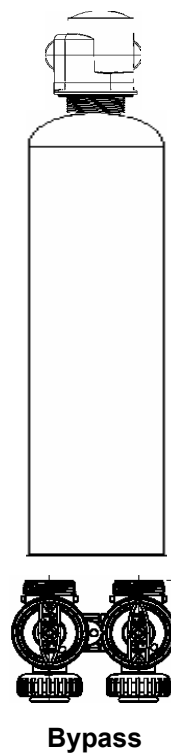
Excalibur Water Systems SOFT-TEC Line Art Installation Information

Line Art Drawings SOFT-TEC Conditioners

Side View



Front View



The Flow Restrictor must be installed on the Raw Water Inlet on the UPFLOW INLET side prior to entering the IN-OUT Valve shown above.

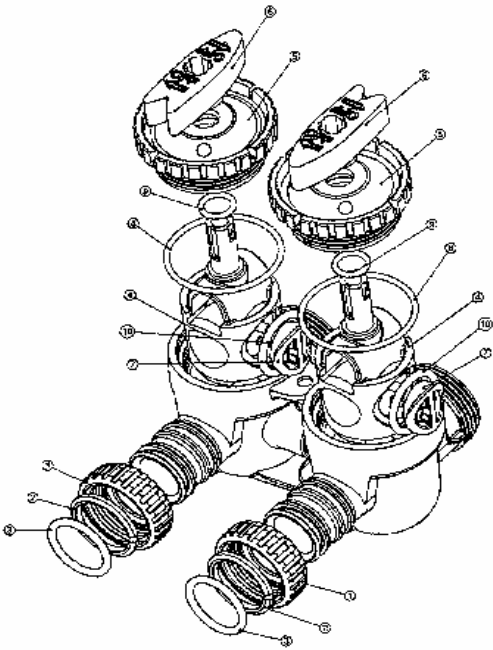
All SOFT-TEC Conditioners must be plumbed in the UPFLOW position which means that the raw water inlet must be supplied to the UPFLOW side of the In-Out Valve shown above.

SOFT-TEC Bypass Valve Assembly

Bypass Valve			
Drawing No.	Order No.	Description	Quantity
1	CLK V3151	Nut 1" Quick Connect	2
2	CLK V3150	Split Ring	2
3	CLK V3105	O-Ring 215	2
4	CLK V3145	Bypass 1" Rotor	2
5	CLK V3146	Bypass Cap	2
6	CLK V3147	Bypass Handle	2
7	CLK V3148	Bypass Rotor Seal Retainer	2
8	CLK V3152	O-Ring 135	2
9	CLK V3155	O-Ring 112	2
30	CLK V3156	O-Ring 214	2

(Not Shown) Order No. CLK V319101, Description: Bypass Vertical Adapter Assembly

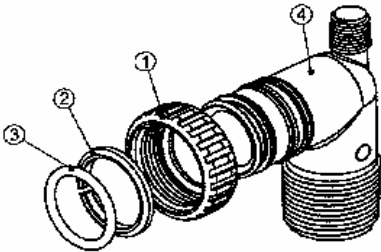
Order No.	Description	Quantity
CLK V3151	Nut 1" Quick Connect	2
CLK V3150	Split Ring	2
CLK V2105	O-Ring 215	2
CLK V319101	Bypass Vertical Adapter Assembly	2



SOFT-TEC Installation Fitting Assembly

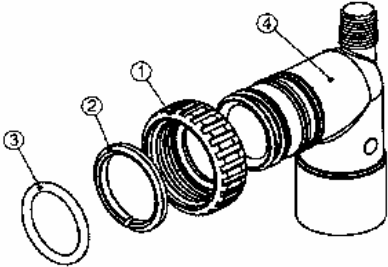
Order No: V3007
Description: Fitting 1" PVC Male NPT Elbow Assembly

Drawing No.	Order No.	Description	Quantity
1	V3151	Nut 1" Quick Connect	2
2	V3150	Split Ring	2
3	V3105	O-Ring 215	2
4	V3149	Fitting 1 PVC Mule NPT Elbow	2



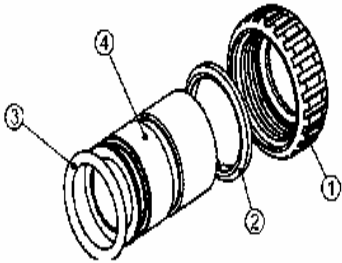
Order No: V3007-01
Description: Fitting 1/4 " & 1" PVC Solvent 90 ASY

Drawing No.	Order No.	Description	Quantity
1	V3151	Nut 1" Quick Connect	2
2	V3150	Split Ring	2
3	V3105	O-Ring 215	2
4	V3149	Fitting 1/4 & 1 PVC Solvent 90	2



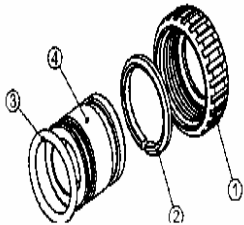
Order No: V3007-02
Description: Fitting 1" Brass Sweat Assembly

Drawing No.	Order No.	Description	Quantity
1	V3151	Nut 1" Quick Connect	2
2	V3150	Split Ring	2
3	V3105	O-Ring 215	2
4	V3188	Fitting 1 Brass Sweat	2



Order No: V3007-03
Description: Fitting 1/4 " Brass Sweat Assembly

Drawing No.	Order No.	Description	Quantity
1	V3151	Nut 1" Quick Connect	2
2	V3150	Split Ring	2
3	V3105	O-Ring 215	2
4	V3188-01	Fitting 1/4 Brass Sweat	2



1190/1190FP

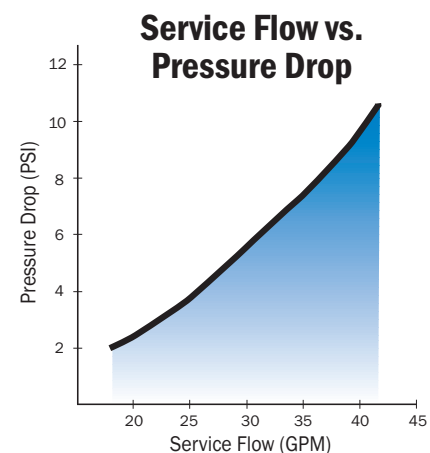
In-Out Head



1190/1190FP In-Out Head The 1190 1" In-Out Head is designed for downflow applications or upflow.

Molded out of a rugged thermoplastic resin, the 1190 Head features a $\frac{1}{4}$ " FPT air vent port which can be drilled out to accept an air relief valve. The 1" Head is fully ported to provide maximum flow rates. The 1190 incorporates a standard $2\frac{1}{2}$ " tank connection and features parallel inlet and outlet ports to easily adapt to standard plumbing connections or Clack's all-plastic, four-way bypass valve. A full line of $\frac{3}{4}$ " and 1" plumbing connections are available.

The 1190 Head is also available with a removable fill port cap (1190FP) to allow easy access to the media bed. The 1190FP includes a removable upper distributor basket providing access to the top of the riser pipe, allowing water to be drained from the tank when replacing media. The 1190FP includes a utility wrench to be used with the removable cap. A full line of top and bottom distributors is available.



ORDER NUMBER	DESCRIPTION	CARTON QUANTITY
D1220	1190 In-Out Head	12
D1220-01	1190 In-Out Head w/Fill Port (includes wrench)	12

1190/1190FP Accessories

Installation Fitting Assemblies



Order Number: V3007
1" PVC Male NPT Elbow Assembly



Order Number: V3007-01
 $\frac{3}{4}$ " x 1" PVC Solvent Elbow Assembly



Order Number: V3007-02
1" Brass Sweat Assembly



Order Number: V3007-03
 $\frac{3}{4}$ " Brass Sweat Assembly

Typical Installations



**1190 In-Out Head with
optional bypass**



**1190 In-Out Head with
optional bypass and
vertical adaptor assembly**

Note: On upflow service the bypass will give two-way function capabilities (service and bypass). The red bypass handles also need to be reversed to indicate proper service flow direction.

ORDER NUMBER	DESCRIPTION	CARTON QUANTITY
V3006	Bypass Assembly	24
V3191-01	Bypass Vertical Adapter Assembly	24 sets
V3193	Wrench	Bulk

EXCALIBUR WATER SOFT-TEC **CONDITIONER**

In the home when you replace a salt based softener or if you never had a softener in a home you may notice that the water is becoming harder in the beginning as piping scale begins dissolving and this Harding is a consequence of the Descaling. It will improve daily as the existing scale melts away. The plumbing took years to develop scale and it only takes a short time to clean it up. The treated water immediately starts dissolving scale build up in the pipes. The scale comes off one molecule at a time just like it went on. In the Thirty to 120 days after installing the Soft-tec conditioner all Descaling should be completed and you will be left with conditioned water from every tap and know that your pipes are free of calcium build up. In excessively hard water you may have a build up loosen scale in the bottom of the water heater and dishwasher from the Descaling and you will need to clean out the loosen scale from the bottom of the water heater and dishwasher the first few months until the scale is dissolved in the pipes. You also may need to clean out the aerators on the faucets from time to time as the scale may get caught in the aerators. This also will diminish as the scale dissolves in the pipes

If you use a dishwasher and replace a salt based softener or have never had a softener you may notice some calcium spotting. This will diminish to the residual level of the calcium present in your water supply when the Descaling is finished. In the mean time add a half cup of household vinegar to the rinse cycle to eliminate any short term calcium spotting problems while the pipes are Descaling. IF YOU DO NOT USE PHOSPHATE FREE SOAP YOU CAN GET SOAP RESIDUAL ON THE GLASSES. YOU SHOULD SWITCH TO A PHOSPHATE FREE DISHWASHER DETERGENT .THE TARGET STORE HAS A PHOSPHATE FREE DISHWASHER SOAP CALLED "METHOD"YOU CAN ALSO FIND AN EXCELLENT SOAP CALLED"ELECTRASOL GEL PAK WITH JET DRY RINSE INCORPORATED. YOU CAN FIND THE ELECTRASOL SOAP IN WALL MART OR YOU CAN LOOK ON INTERNET AT TO FIND A LOCATION NEAR YOU. THE SOAP IS ALSO AVAILABLE AT EPINSONS. Remember to reduce your soap usage to the level you used with a softener. Any spotting left on the glasses will easily wipe off. When you are running the dishwasher run the dishwasher on high temperature. BE SURE TO TUN OFF THE DRY CYCLE.

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

