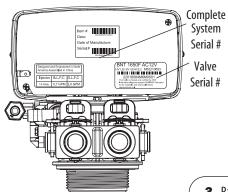
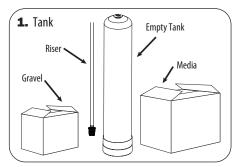


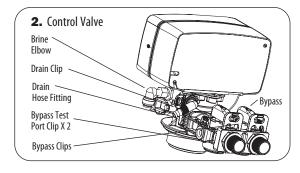
165 Valve Softener Quick Set Up Manual

Step 1 - Inspection

Check to make sure you received everything supplied by the factory and that there is no visible or concealed damage. In case of missing items, please contact customer service immediately and have the Product Serial # handy. (Product Serial # can be found at the back of the control valve, see below)

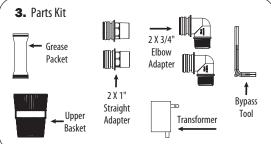


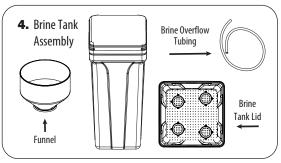




The items you will expect are:

- **1.** Empty Media Tank, Riser, Gravel and Media
- 2. Control Valve
- 3. Parts Kit
- 4. Brine Tank Assembly and Funnel

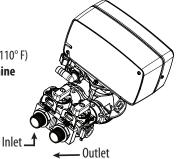




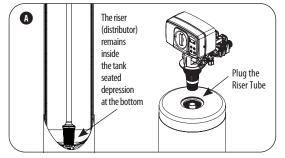
Step 2 - Installation & Preparations

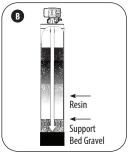
1. Determine the best location for your water Softener, bearing in mind the location of your water supply lines, drain line and 120 volt AC electrical outlet. Subjecting the softener to temps below 0° C (32° F) or above 43° C (110° F) will void the warranty. **Please notice the inlet and outlet labels on the valve as shown here to determine the position of the equipment: For DF Softener** - The inlet should be on the left hand side of the valve and out on the right hand side.

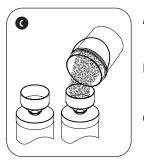
Media Installation: Media and gravel will be shipped separately in boxes. Instructions below.



Downflow Valve





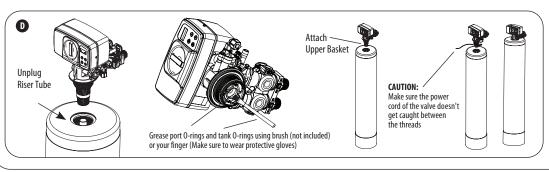


- A. Pull tank and verify that riser tube is centered in the bottom of tank. **Temporarily plug the open end of riser with tape.**
- **B.** Fill tank one quarter full of water to protect distribution during gravel installation. Place the media into the tank in the order indicated.
- C. With funnel provided, slowly and carefully add the gravel and media leveling each layer as it is placed into the tank. Pour it evenly around the hole to ensure it is well distributed in the tank.

D. Lube the bottom 0-ring and tank 0-ring.

Then attach upper basket to valve by turning basket clockwise to lock in place.

Remove tape from riser tube. Carefully place basket over the riser tube and push the valve on the tank. Thread the valve on the tank by turning it clockwise. Making sure to not cross thread the valve. The valve should be hand tightened.



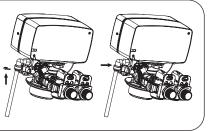
Step 3 **Assembling Brine Tank**

For installation of brine tank at the installation site, pull the other end of the brine tube from the hole on the brine tank. Complete the assembly as shown.



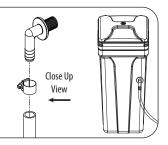
Step 4 **Attaching Brine Tubing to the Valve**

Remove blue clip from brine elbow fitting. Attach brine tank tubing to brine elbow fitting and reinsert blue clip.



Step 5 **Attaching Tubing to** the Overflow Fitting

Place one end of tubing in hot water for 5 seconds, then attach to overflow fitting.



CAUTION

Make sure that the unit is de-pressurized before installing or replacing media. Do not use petroleum based lubricants as they will cause swelling of 0-ring seals.



WEAR DUST MASK

KEYPAD

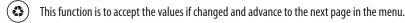
WATER LINE NOTE: Outside faucets used to water lawns and gardens should not supply softened water. A new water line is often required to be connected to supply hard water to the inlet of the water softener and to the outside faucets.

Step 6 - Startup Instructions

- **1.** Connect the transformer to the valve. Plug the 12-volt transformer into a 120 VAC 60 Hz outlet.
- **2.** Open the brine tank / cabinet salt lid and add water until there is approximately 3" (75 mm) of water in the tank. Do not add salt to the brine tank at this time.



This function is to enter the basic set up information required at the time of installation.



These buttons are used to increase or decrease the value of the settings while in the programming mode.

TIME 08:27 AM

3. Power and Program the Valve

Attach the Transformer cable to the valve and plug in the transformer to the 110V Power outlet. You will notice the two screens on right will alternate.

1. Press **SETTINGS** Key (3) to advance to **TIME OF DAY**. **TIME OF DAY** will flash. TIME OF DAY will flash.

2. Press the UP or DOWN key (▲) (▼) to adjust the TIME OF DAY. Press & hold the UP or DOWN key (▲) (▼) to quickly advance the hour and minutes. is displayed press **SELECT** key to advance to the **HARDNESS** setting. **HARDNESS** will flash. HARDNESS

3. Press the **UP** or the **DOWN** key (▲) (▼) to adjust the **HARDNESS** (Min 1.Max 199). When desired hardness is displayed press **SELECT** to advance to the **PEOPLE** setting (Min1/Max9). People will flash.

4. When desired number of people is displayed press **SELECT** to complete programming.

4 Add salt to the brine tank/cabinet

Put 40 kgs of crystal water softener salt in the brine tank. The unit will automatically fill the water to the correct level when it regenerates.

Automatic Raw Water Bypass During Regeneration

The regeneration cycle can last 80 minutes after which softened water service will be restored. During regeneration, un-softened water is automatically bypassed for use in the household. Hot water should be used as little as possible during this time to prevent un-softened water from filling the water heater. This is why automatic regeneration is set for sometime during the night and manual regenerations should be performed when little or no water will be used in the household.

Manual Regeneration Using Keypad

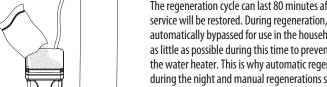
Press "Setting Key" once for Delayed Regenerations or hold for 5 seconds for Immediate Regeneration.

Below is the sequence of Regeneration cycles

1. Backwash 3. Rinse

2. Brine Draw and Slow Rinse

4. Brine Refill



BACKIJASH BRTNF RTNSF RFFTLL