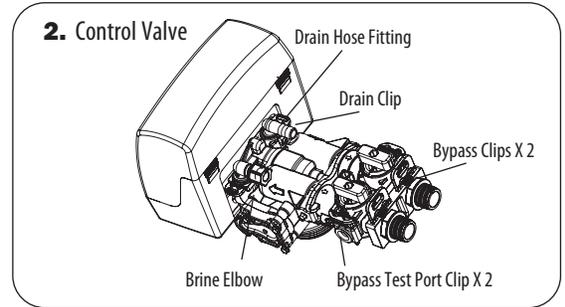
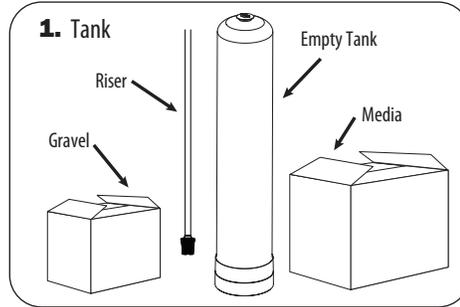
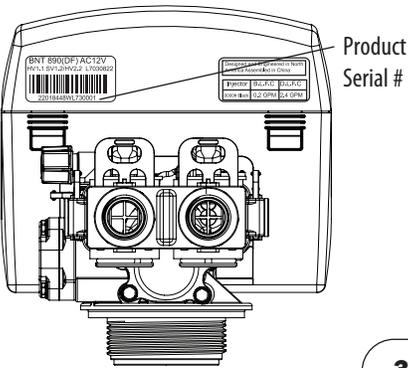


# 285HE Valve Softener Quick Set Up Manual

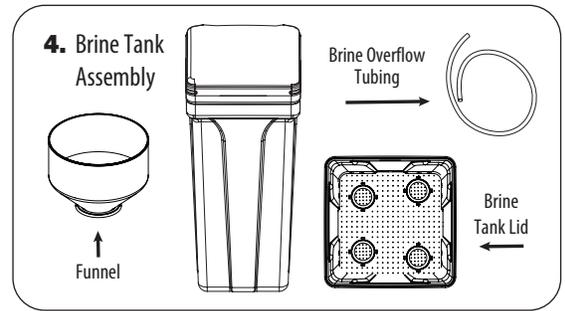
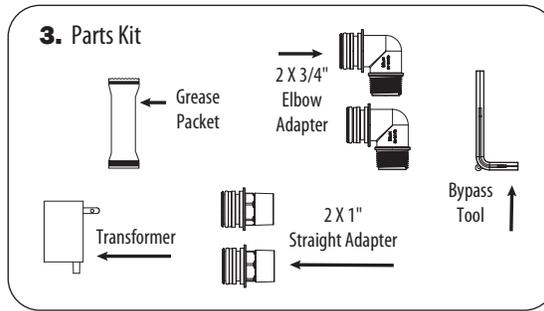
## Step 1 – Inspection

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)



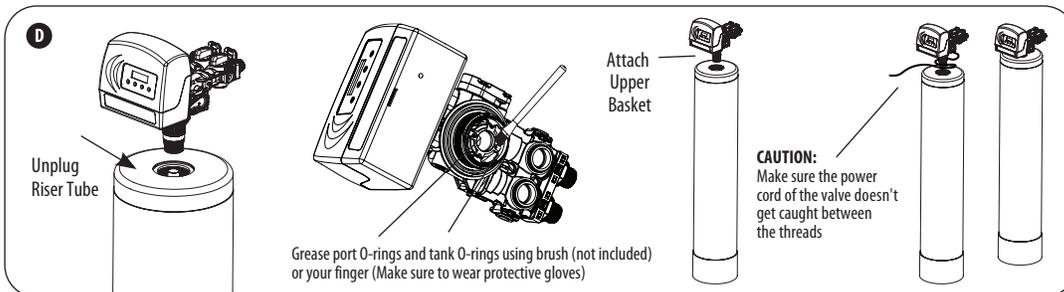
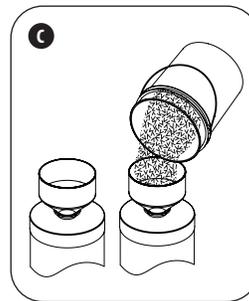
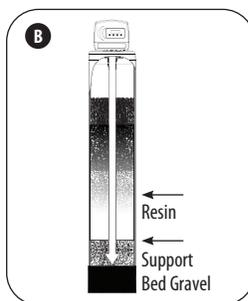
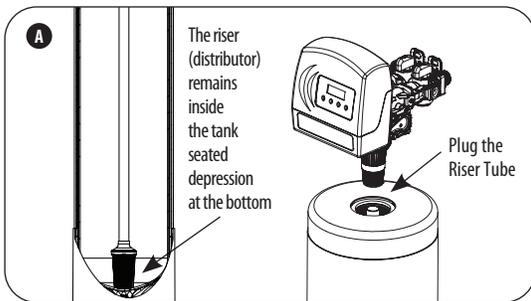
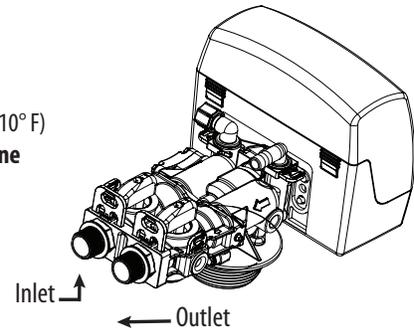
### The items you will expect are:

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



## Step 2 – Installation & Preparations

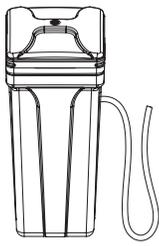
1. Determine the best location for your water Softener, bearing in mind the location of your water supply lines, drain line and 120 volt AC electrical outlet. Subjecting the softener to temps below 0° C (32° F) or above 43° C (110° F) will void the warranty. **Please notice the inlet and outlet labels 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.**
2. **Media Installation:** Media and gravel will be shipped separately in boxes. Instructions below.



- 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 O-ring and tank O-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.

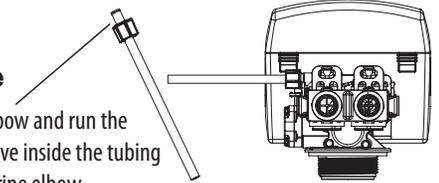
### Step 3 Assembling Brine Tank

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.



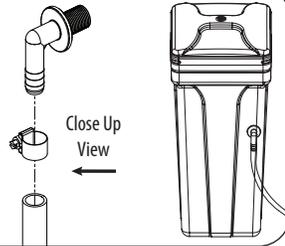
### Step 4 Attaching Brine Tubing to the Valve

Unscrew the nut from the brine elbow and run the tubing through nut. Insert the sleeve inside the tubing and screw the nut back onto the brine elbow.



### 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 O-ring seals.



**WEAR DUST MASK**

**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.
3. Power / Program the Valve Plus Key Pad Configuration

#### Key Pad Configuration:

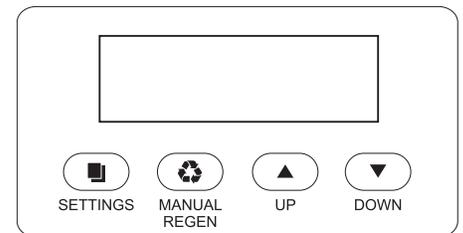
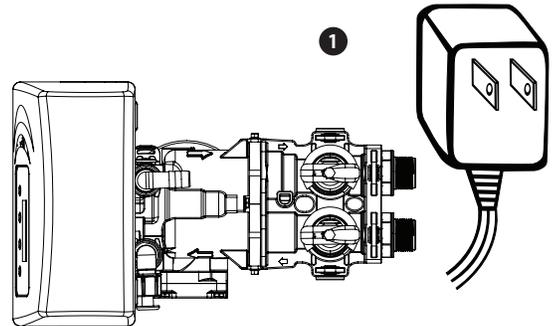
- This function is to enter the basic set up information required at the time of installation.
- This function is to accept the values if changed and advance to the next page in the menu.
- These buttons are used to increase or decrease the value of the settings while in the programming mode.

#### SALT SETTING:

Choose HIGH EFFICIENCY to minimize salt usage. Your system will regenerate a little more often but your salt usage can be reduced by 20% compared to the STANDARD setting. Choose STANDARD when you need to maximize your capacity but still operate the system with good efficiency. Choose IRON & MN if you have problem water containing these minerals. The high salt setting will be needed since these minerals are more difficult to clean out of the resin bed. Note: A resin cleaner will also need to be periodically added to the brine tank to insure proper operation.

#### WATER TYPE:

This setting will determine if the BACKWASH OVERRIDE function will be on or off. Select MUNICIPAL if the water source is clean (<1NTU turbidity) and the system will skip the back wash cycle based on the setting in BACKWASH OVERRIDE. Select WELL / OTHER if any Iron or Manganese is present or if the water source is not clean (< 1NTU turbidity). The system will back wash every time. This setting determines the time of day to perform a scheduled regeneration.



Key Pad

#### Settings

Press **SETTINGS** key  
(3 SECONDS / BEEP)

**TIME OF DAY**  
12:01 PM

Press **SETTINGS** key

**YEAR**  
2016

Press **SETTINGS** key

**MONTH**  
AUGUST

Press **SETTINGS** key

**DAY**  
21

Press **SETTINGS** key

Press **SETTINGS** key

**SET HARDNESS**  
20 GRAINS

Press **SETTINGS** key

**SET PEOPLE**  
4

Press **SETTINGS** key

**SALT SETTING**  
HIGH EFFICIENCY

STANDARD

IRON & MN

Press **SETTINGS** key

Press **SETTINGS** key

**WATER TYPE**  
MUNICIPAL

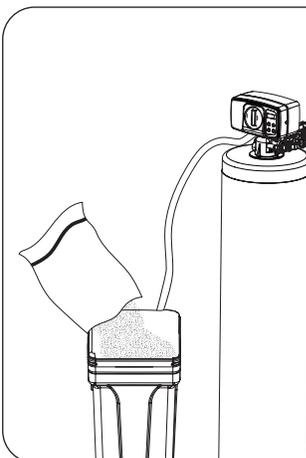
WELL / OTHER

Press **SETTINGS** key

**REGEN TIME**  
2:00 AM

Press **SETTINGS** key

**PROGRAMMING COMPLETE**



#### 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.