Cabinet Non-Electric Water Softener

INSTALLATION MANUAL

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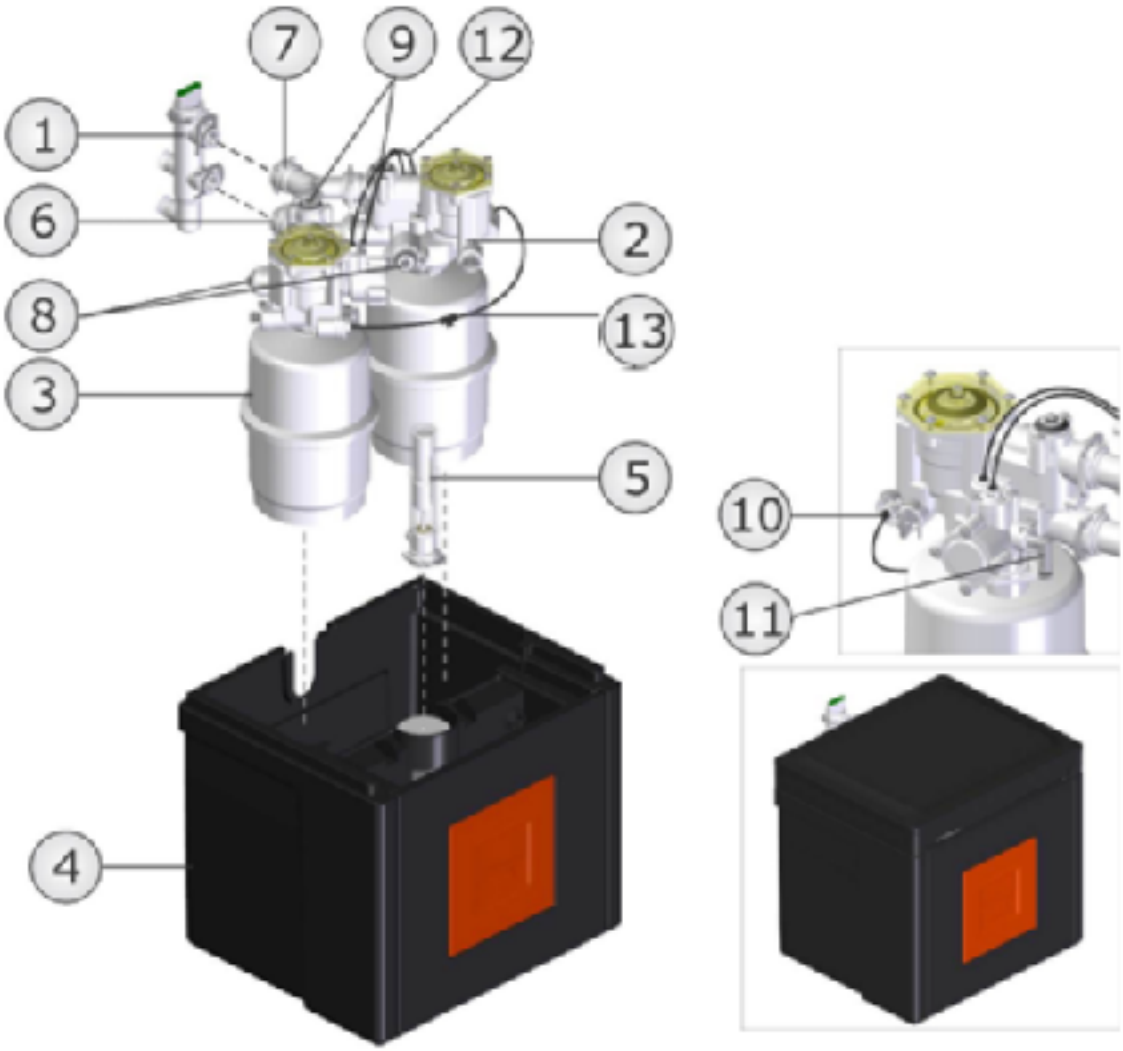
The CABINET NON-ELECTRIC water conditioning systems are tested and certified by the Water Quality Association (WQA) against NSF/ANSI Standard 44 for the effective reduction of hardness (calcium and magnesium).
In addition, the materials and components used in the construction of these systems have been tested to assure that levels of extractable contaminants do not exceed established limits set by NSF/ANSI Standard 44. They have also been evaluated under Standard 44 to assure that they are designed and constructed so their intended purpose can be accomplished when installed and operated in accordance with the manufacturer's instructions.

Important: *These systems are not intended for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the systems. For best results use clean grades of water softener salt.*

Parts



1.	BYPASS	**8.**	BLENDING REGULATOR
2.	VALVE HOUSING	**9.**	HARDNESS REGULATOR
3.	RESIN TANK	**10.**	TO BRINE VALVE
4.	CONTAINER FOR DEVICE AND SALT	**11.**	TO DRAIN
5.	BRINE VALVE (float)	**12.**	COMMUNICATION TUBES
6.	WATER **INLET**	**13.**	TUBES TO BRINE VALVE
7.	WATER **OUTLET**		

Precautions

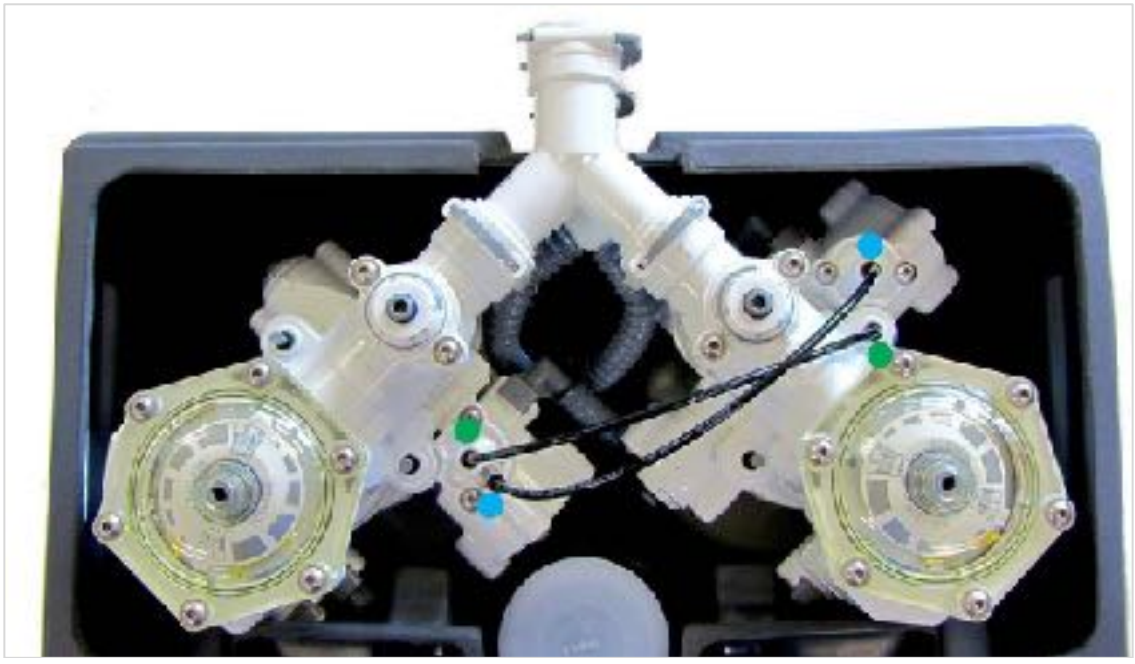
- Follow all local legal regulations.
- **Read this manual carefully**. If you have any questions or remarks, please contact your supplier.
- Check incoming pressure: minimum 15 PSI (dynamic), maximum 80 PSI (static). If necessary reduce incoming pressure.
- Do not install the softener close to a heating source (environment temperature must be below 104°F) or freezing conditions.
- Protect softener and drain against frost.

Installation

1. Close main valve and make sure pressure is released from piping. This can be done by opening at least one tap.

2. Make sure the communication tubes are connected correctly.
   See picture below: the two quick-release couplings marked with a green dot should be connected by a communication tube; the same should be done for the two couplings marked with a blue dot.

There are Green Dot stickers on the valves for your reference.



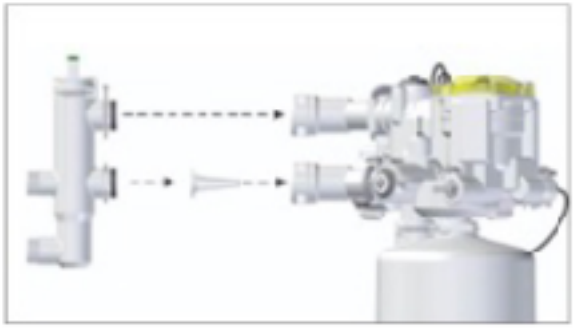
3. Installing the bypass and connecting the main water source.

3.1. Set the Bypass in "bypass" mode, **not** in "service".

3.2. Clip the bypass (knob facing up) to the softener.

3.3. Connect your inlet water supply to the inlet of the bypass (arrow pointing in towards the softener).

Pay attention that the inlet filter doesn't fall out.



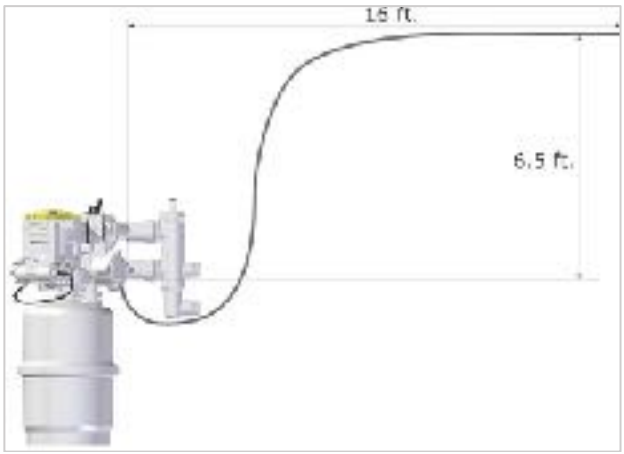
3.4.

Feed the unconnected end of the drain line *(gray spiral tube- 1/2 inch ID)* through the back of the cabinet past the bypass and gently pull the slack out of the cabinet, and connect it to a **minimum 1 1/2 inch drain with air gap.**

Unit comes with 8ft 1/2 inch ID drain line.

Protect the drain against frost and heat (min temp. 41°F, max temp. 104°F).

CAUTION: *For the installation of the flexible drain hose to the fixed piping, please follow local legislation.*



Note: Maximum height and distance of flexible drain hose

Settings

1. <u>Hardness regulator:</u>

Measure the hardness of incoming water by means of a hardness test kit (not supplied by Delta). Delta uses grains settings of $CaCO_3$.
Adjust the hardness regulator to the measured value. This requires a hex key number 5.

Note: Always set regulator on both units to the same setting.

2. <u>Blending regulator:</u>

With the blending regulator, you can determine the outgoing hardness. Depending on the desired residual hardness, set outgoing hardness with a hex key number 5. The setting is proportional, i.e. 1/10 – 1/5 – 1/… of total incoming hardness. **Most people prefer "0" hardness**

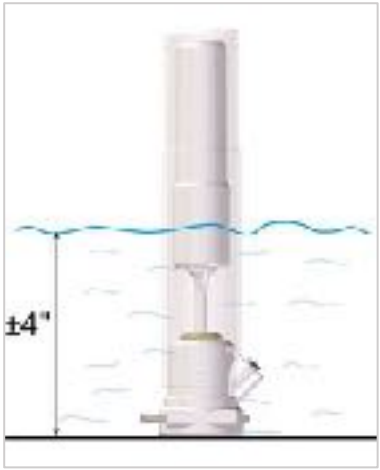
Note: Always set regulator on both units to the same setting.

Start up

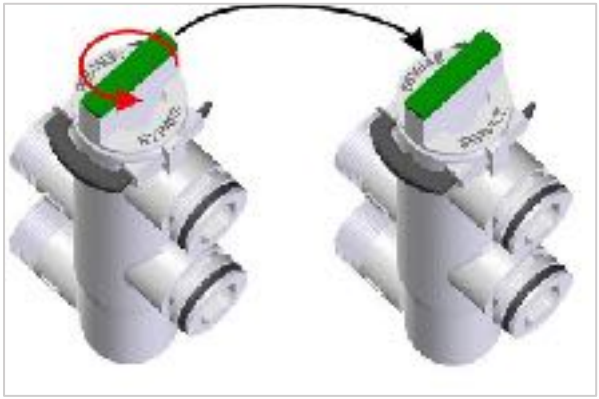
1. Leave Bypass in “bypass” mode, open main valve and flush for several minutes in order to avoid impurities from entering the softener.

2. Fill salt container with salt in the provided space.

3. Add water in the salt container until the water level is approx. 4” high. (the float on the brine valve must be afloat)



4. Turn the bypass <u>slowly</u> to “service” mode.

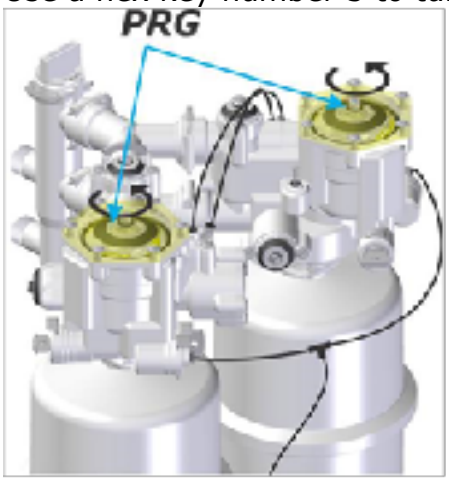


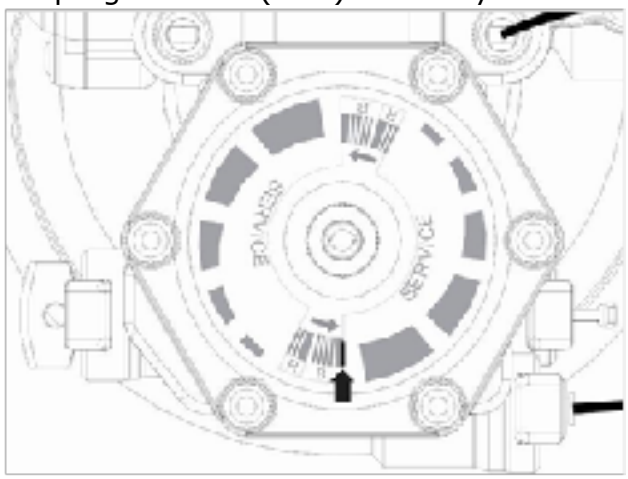
5. Open a tap after the softener so a flow runs through it. Some air may flow from the tap; this comes from the softener. This will happen only once; at start-up. Once only water flows from the tap, and no more air, close the tap.

6. Perform a manual regeneration.

6.1.
Choose one unit to perform a manual regeneration.

6.2.
Use a hex key number 5 to turn the program disk (PRG) manually.





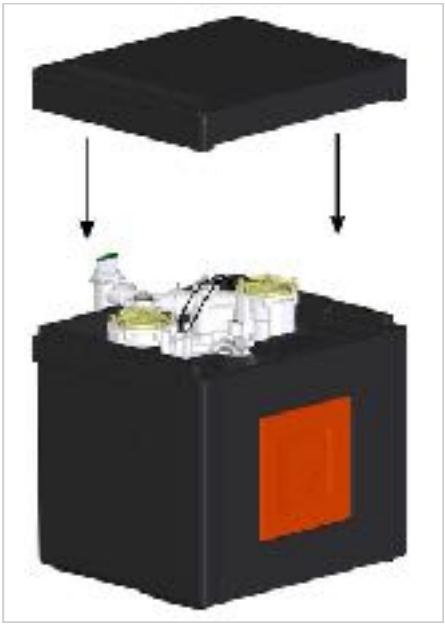
Turn Regeneration Disk counter clockwise until it is in above position. When the arrow and the small line on the transparent cover reach the area marked by "B" (brining), a regeneration will start. Immediately, the Regeneration Disk will drop down a little (you will be able to see and hear this).

6.3.
Let regeneration perform until it stops automatically. The estimated time is approx. 12 minutes. When regeneration has stopped, no more water flows to the drain. This is a clear indication that the regeneration stage is over.

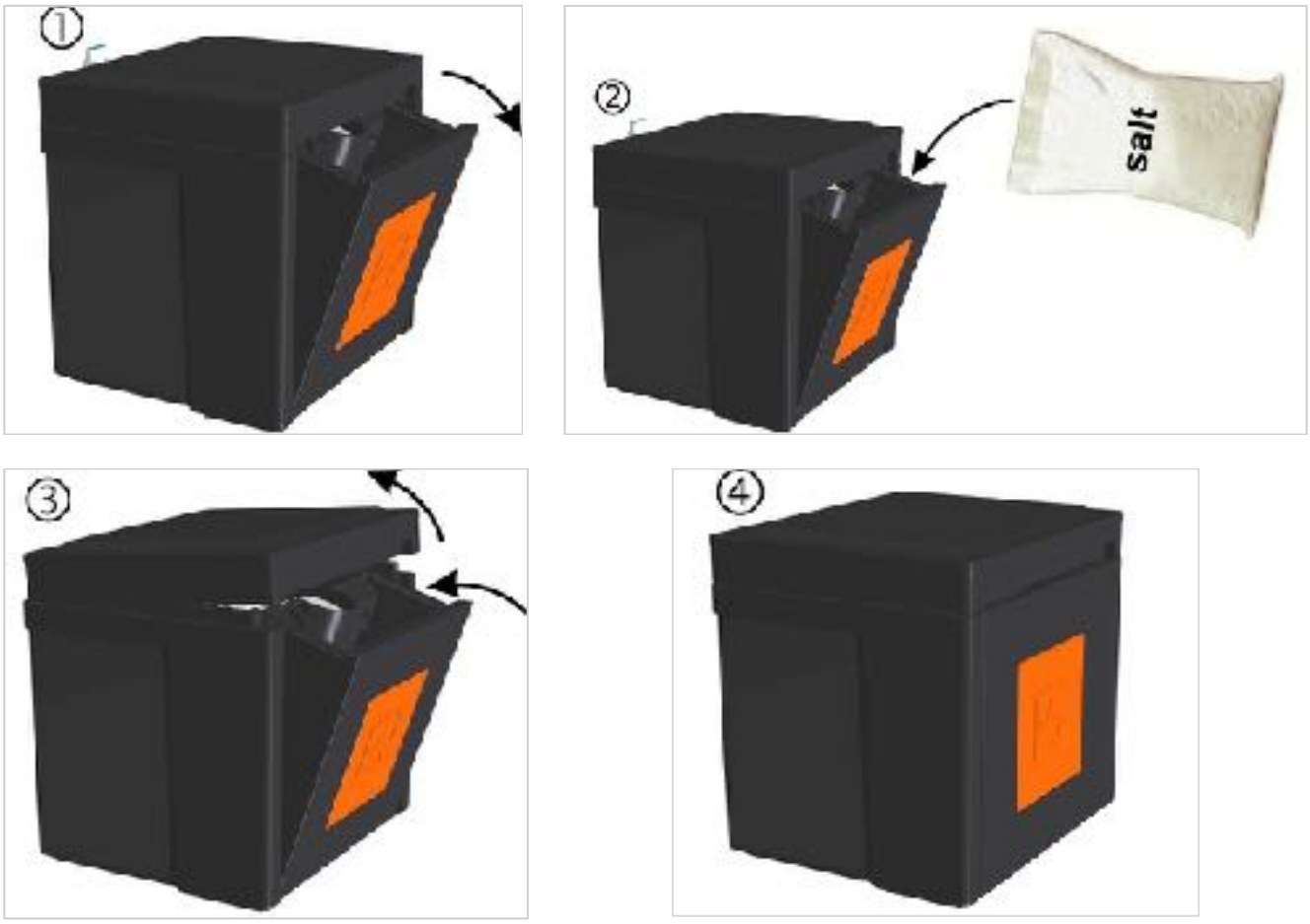
6.4.
Perform a manual regeneration on the other unit.

6.5.
Open a facet after the softener for several minutes to allow residual water to be flushed from the tubing.

7. Put the cover on to the container. Before you do this, make sure that the tilt drawer for the salt is closed.



8. Refilling salt.
To refill the container with salt, you don’t need to remove the cover. Just pull the tilt drawer, so that it tilts out of the container. If you pull out the drawer far enough it will stay fixed in the open position. In this position you can easily refill the drawer with salt tablets.
When you are done refilling the salt, just lift the cover a little bit and push the tilt drawer back in the container. If the drawer is back in its position, the cover fits back on the container.



Note: Watch carefully that you don’t squeeze the tube when opening or closing the tilt drawer for the salt.

Performance Data Sheet

PRODUCT: **Cabinet Non-Electric (CAB-NE)**

SPECIFICATIONS:

Service Flow Rate at 15 psi drop	11.4 gpm
Resin per tank	0.12 cu ft
Capacity	7,700 grains
Salt used per cycle	1.32 lbs
Operating Pressure Range	15 – 80 psi *
Operating Temperature Range	33 – 120°F (1 – 50°C)
Maximum Drain Flow Rate	0.8 gpm

* For a correct regeneration, a minimum outlet pressure of 12 psi is required.

Distributor:

It is recommended that a water softener is installed by a professional. Although the CAB-NE softener is probably the easiest and safest softener on the market, it is imperative that all necessary precautions are taken and **local legislation is followed**.
This installation guide is written to help the professional installer keeping in mind that this person has essential knowledge about hydraulic softeners and domestic plumbing.

Proper working of the softener will be determined by proper installation.
An annual control of your CAB-NE softener will guarantee optimal functioning and a long operating life.