

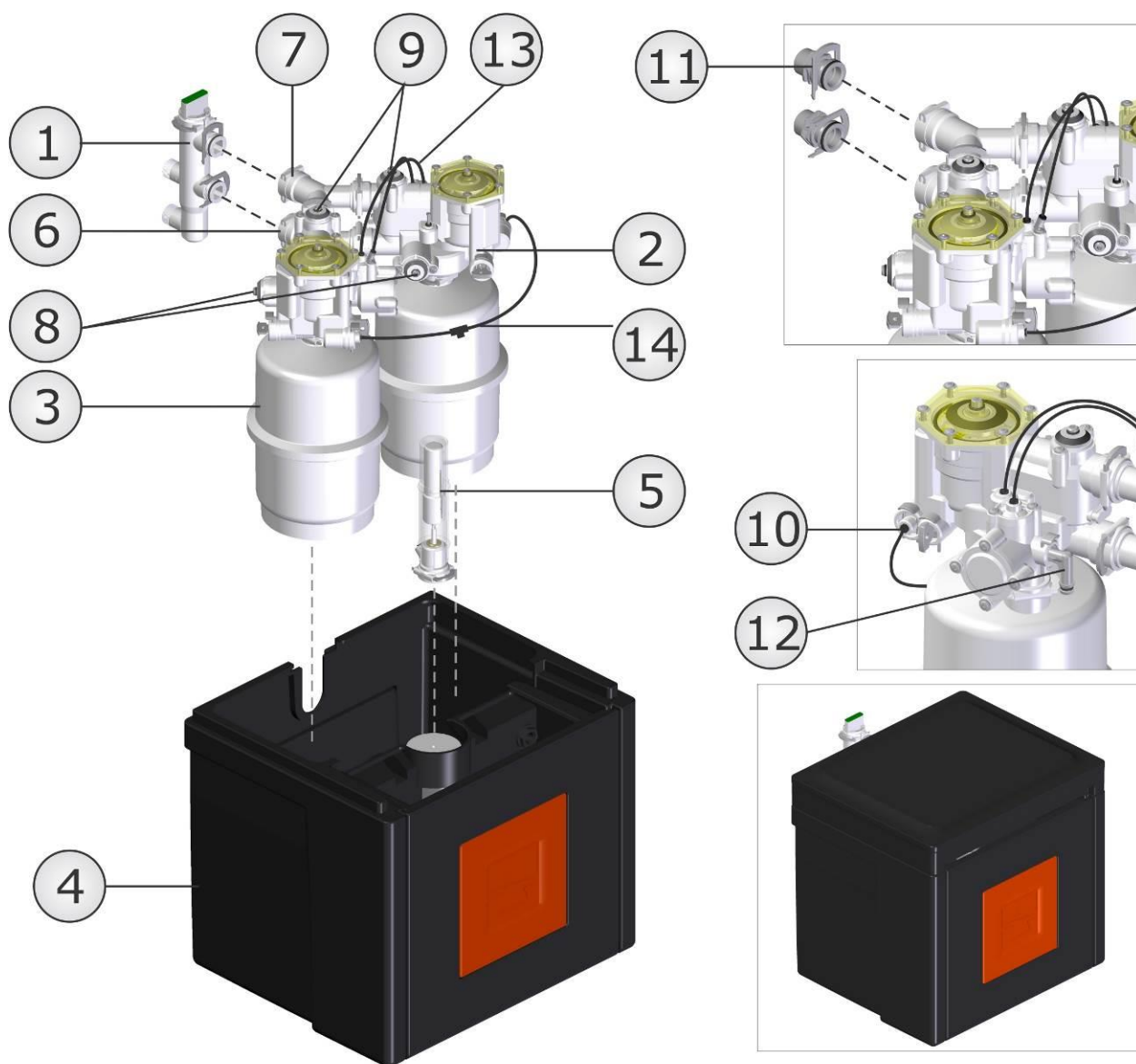
# DELTA MORAVA



# INSTALLATION GUIDE

## MORAVA

### 1. Parts:



<b>1.</b>	<b>BYPASS</b>	<b>8.</b>	<b>BLENDING REGULATOR</b>
<b>2.</b>	<b>VALVE HOUSING</b>	<b>9.</b>	<b>HARDNESS REGULATOR</b>
<b>3.</b>	<b>RESIN TANK</b>	<b>10.</b>	<b>TO BRINE VALVE</b>
<b>4.</b>	<b>CONTAINER FOR DEVICE AND SALT</b>	<b>11.</b>	<b>CONNECTIONS (1/2", 3/4", 1")</b>
<b>5.</b>	<b>BRINE VALVE (float)</b>	<b>12.</b>	<b>TO DRAIN</b>
<b>6.</b>	<b>WATER <b>INLET</b></b>	<b>13.</b>	<b>COMMUNICATION TUBES</b>
<b>7.</b>	<b>WATER <b>OUTLET</b></b>	<b>14.</b>	<b>TUBES TO BRINE VALVE</b>

## 2. Precautions:

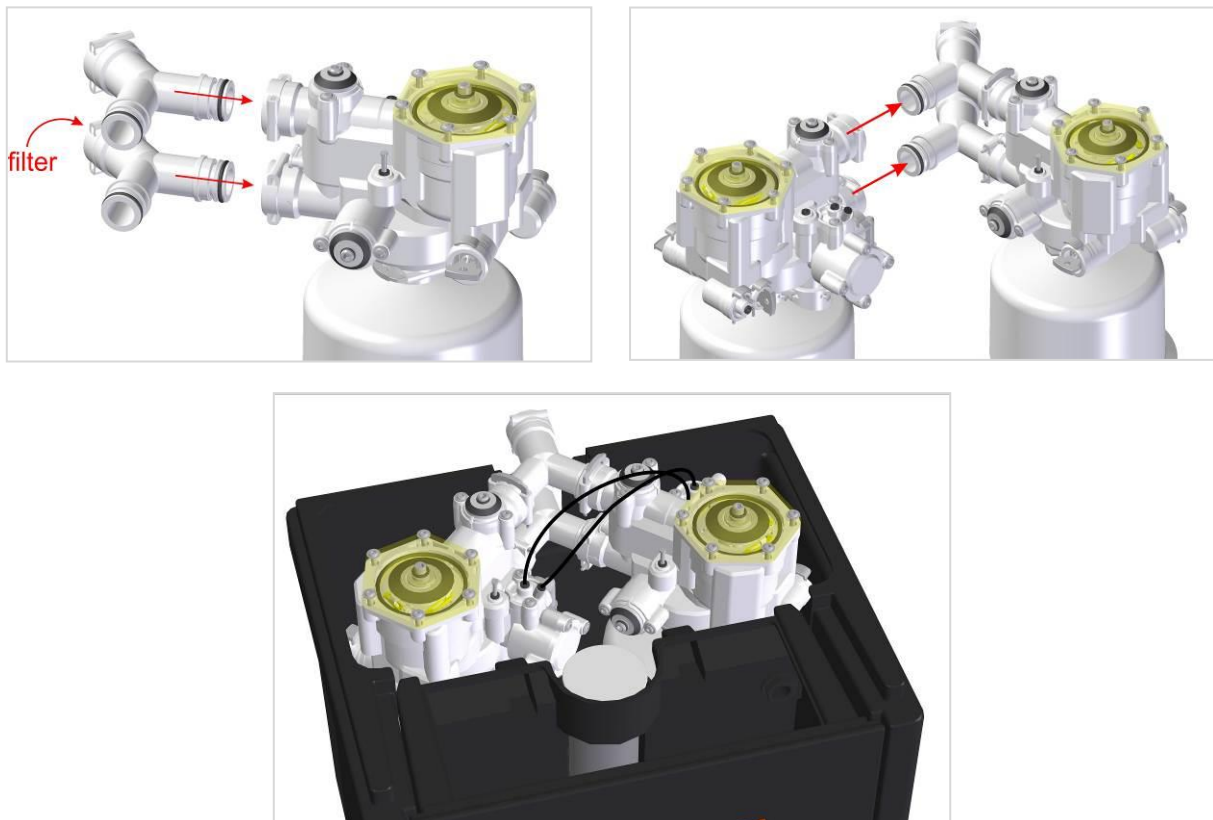
- Make sure you have all necessary tools on hand before you begin with the installation.
- Follow all local legal regulations.
- **Read this manual carefully.** If you have any questions or remarks, please contact your Delta supplier.
- Check incoming pressure: minimum 1 bar (dynamic), maximum 8 bar (static)(15 PSI – 116 PSI). If necessary reduce incoming pressure.
- Do not install the Delta Softener close to a heating source (environment temperature must be below 40°C).
- Protect softener and drain (12) against frost.
- Make sure you have the latest installation manual at hand. Check with your Delta supplier.

## 3. Installation:

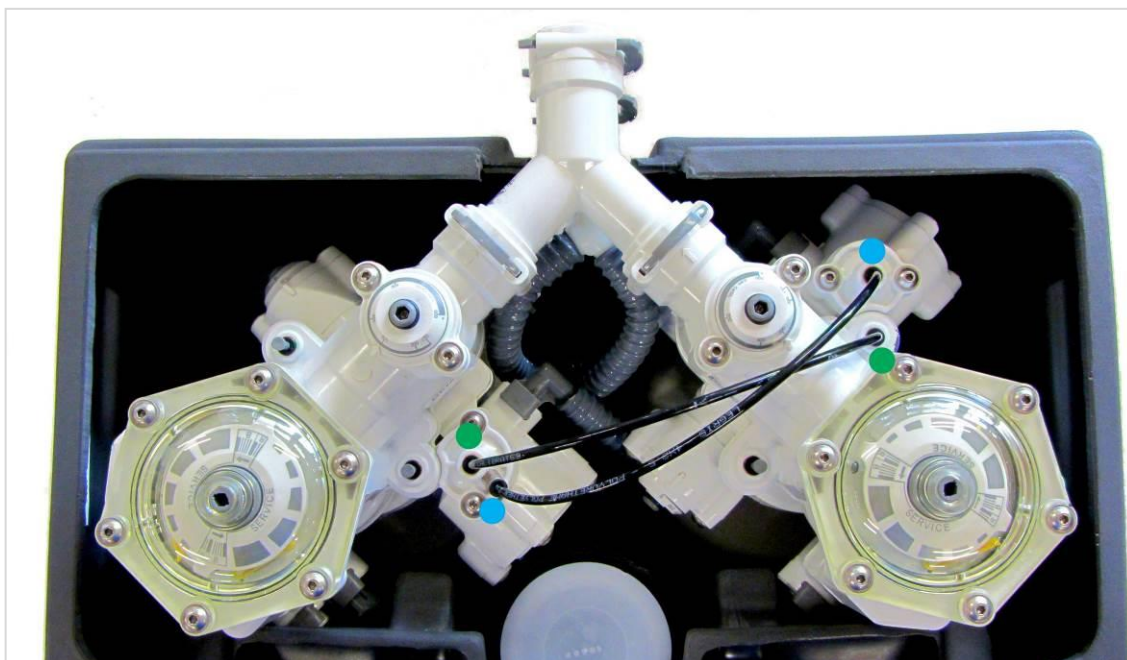
3.1 Close main valve and make sure pressure is released from piping. This can be done by opening at least one tap.

3.2 Connect the two units by means of the provides Y-pieces. You can find them in the salt compartment. The Y-piece with the filter inside, needs to be mounted at the inlet of the valve. (= bottom connection) The other must be mounted at the other connection.

First connect the Y-piece to one unit and afterwards to the other unit. Secure them with the provided clips (4 pieces). You don't need to take the units out of the container to do this.

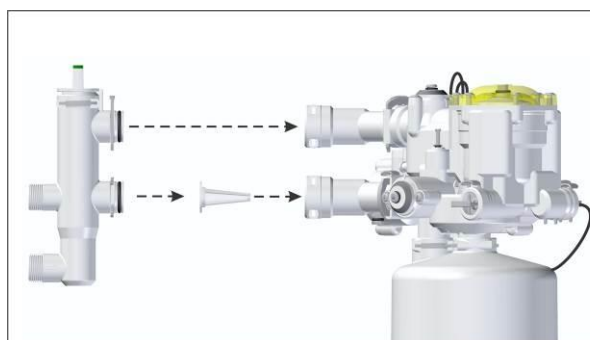


- 3.3 Check if all communication tubes are connected correctly.  
See picture below: the two quick-release couplings marked with a green dot should be connected by a communication tube (Ø4mm); the same should be done for the two couplings marked with a blue dot.

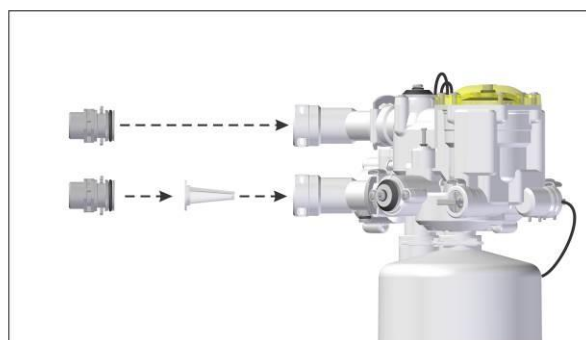


- 3.4 Cut open main water supply in order to install direct connections to the Delta Softener or to install the Delta Bypass (recommended). Follow the arrows on both Bypass and softener for water inlet and outlet.  
**Pay attention that the inlet filter doesn't fall out.**

3.4.1



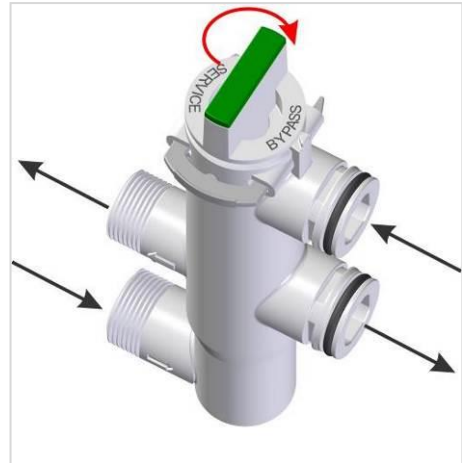
*with Delta Bypass*



*with direct connections*

The Delta Bypass has a  $\frac{3}{4}$ " connection. The direct connections on the water softener are available in  $\frac{1}{2}$ ",  $\frac{3}{4}$ " and 1".

**Caution:** before installing the softener, set the Bypass in "bypass" mode, **not** in "service".

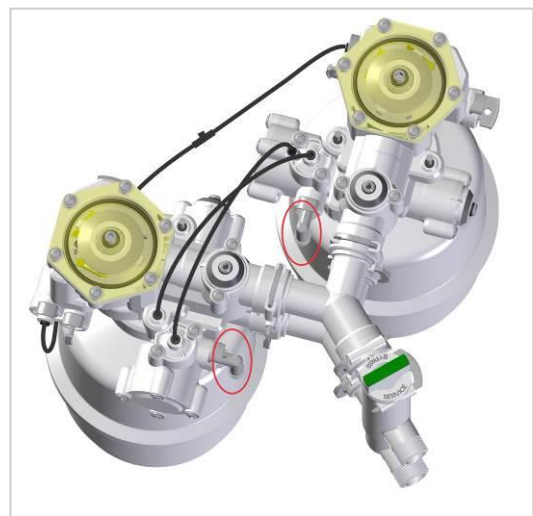


### 3.4.2

Connect both drain outlets (#12) to a local drain by means of the provided 13mm flexible drain pipe. **(through a free flow off)** In order to guarantee that the device will keep on functioning perfectly in the future, this drain pipe is spirally reinforced to avoid later blocking and/or kinks.

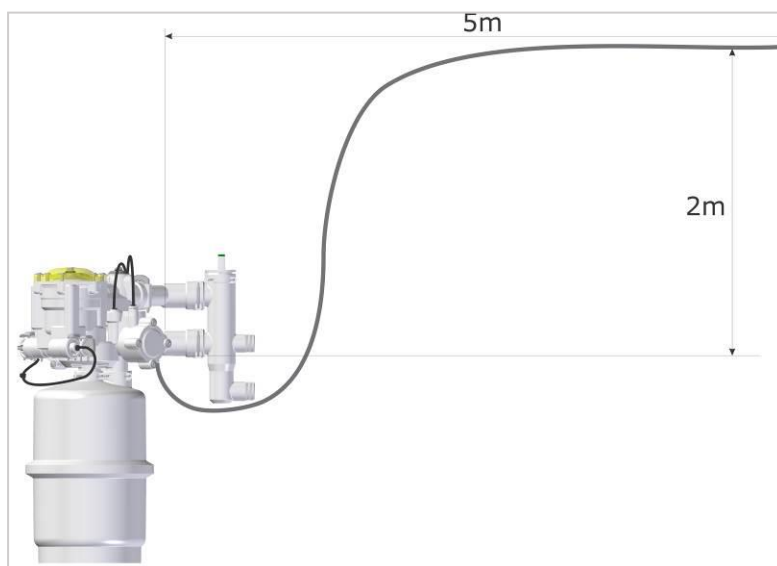
It is possible that both drains are connected with each other through a Y-piece. In this case, connect the Y-piece to the local drain.

Please protect the drain against frost and heat (min. temp. 5°C, max. temp. 40°C).



**When another drain pipe is used, the guarantee on the unit is expired.**

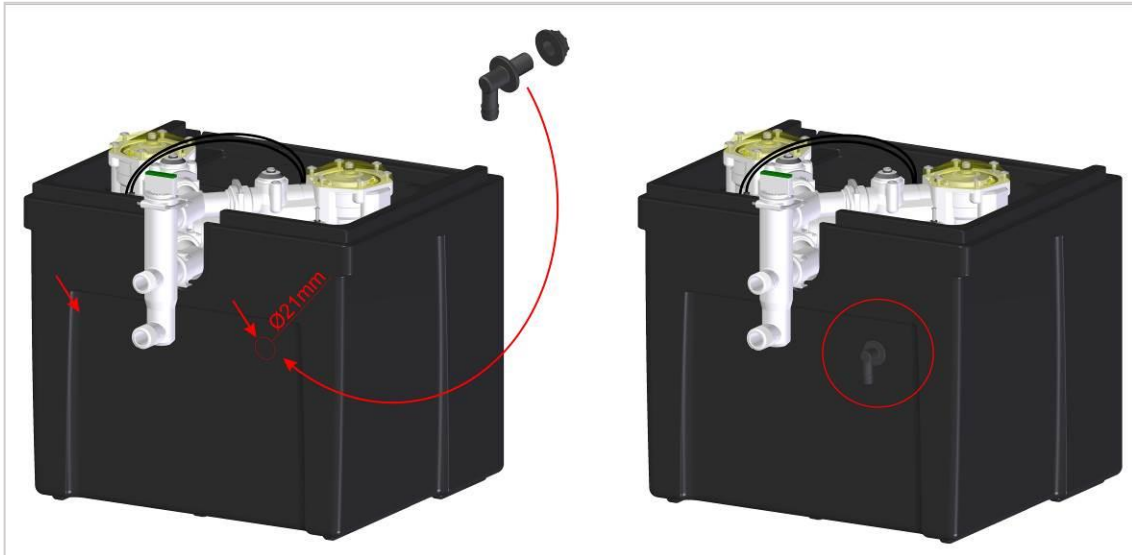
**CAUTION:** For the installation of the flexible drain hose to the fixed piping, please follow local legislation.



*maximum height and distance of flexible drain hose*



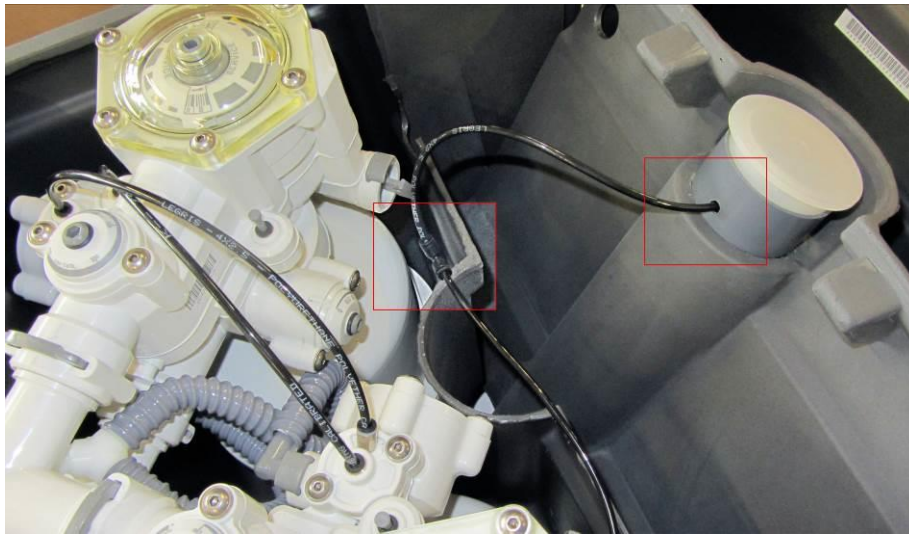
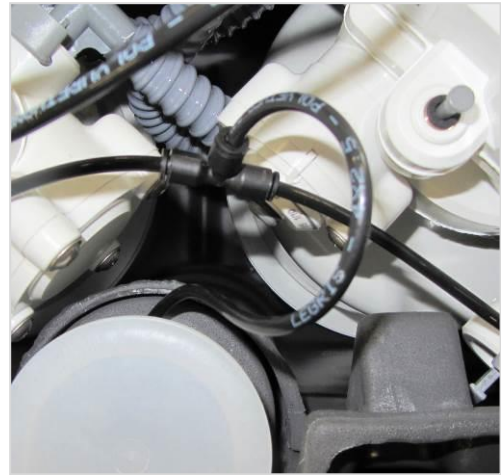
- 3.5 Make sure to install the supplied overflow tap. First, pierce a hole (Ø21mm) in the side wall of the container. For the positions of the hole, there are two markings at the back of the container. They are situated around 15cm from the top of the container. (see figure below) Once the hole has been drilled, mount the overflow tap and secure it with the supplied nut. After drilling, remove all bits of plastic that have fallen into the container. A separate instruction leaflet with detailed information has been added to the device.



- 3.6 Check if the brine valve is mounted correctly. This brine valve is mounted in the brine tube and it must sit all the way at the bottom, with the right side up. (see figure below) In order to check this, you need to remove the cover from the brine tube.



- 3.7 Verify if the brine valve is connected to the softener in the right way. The black tube Ø4mm comes from the brine valve, through the hole in the brine pipe and is then connected with the small T-piece. This T-piece connects the two pieces of brine tube that come from both units. Make sure that all tubes are fitted in the connections as far as possible. Check if there are no kinks in the tube and that the tube is not squeezed together.



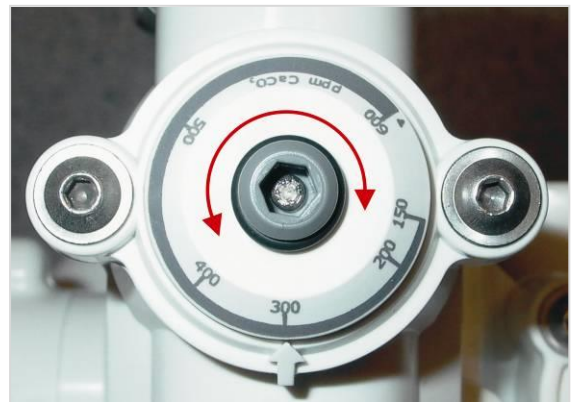
Pay attention:  
Watch carefully that you don't squeeze the tube when opening or closing the tilt drawer for the salt.

#### 4. Settings:

- 4.1 Hardness regulator:  
=part number 9 on the illustration on page 2

Measure the hardness of incoming water by means of a hardness test kit (not supplied by Delta). Delta uses ppm settings of  $\text{CaCO}_3$ .  
(10 ppm  $\text{CaCO}_3$  = 1°fh) (1°dh = 1,78°fh)

Adjust the hardness regulator to the measured value. This requires a hex key number 5.



Remark: always set regulator on both units to the same setting.

- 4.2 Blending regulator:  
= part number 8 on the illustration on page 2

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.  $1/10 - 1/5 - 1/\dots$  of total incoming hardness.



Remark: always set regulator on both units to the same setting.

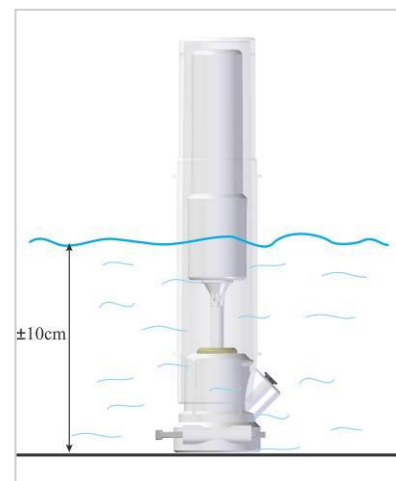
## 5. Start up:

- 5.1 Leave Bypass in "bypass" mode, open main valve and flush for several minutes in order to avoid impurities from entering the softener. When you do not use a Bypass, open the main valve slowly as described in **5.4**.

- 5.2 Fill salt container with salt in the provided space. Do not put salt tablets in the compartment where the softener is installed. **Use only specific salt tablets that are suitable for softeners.**

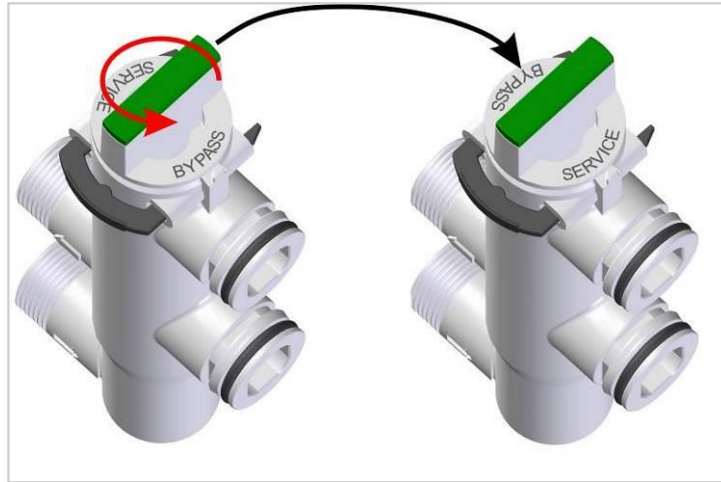


- 5.3 Add water in the salt container until the water level is approx. 10cm 4" high. (the float on the brine valve must be afloat)





- 5.4 Turn the bypass slowly to "service" mode. Open the main valve when you do not use a Bypass.

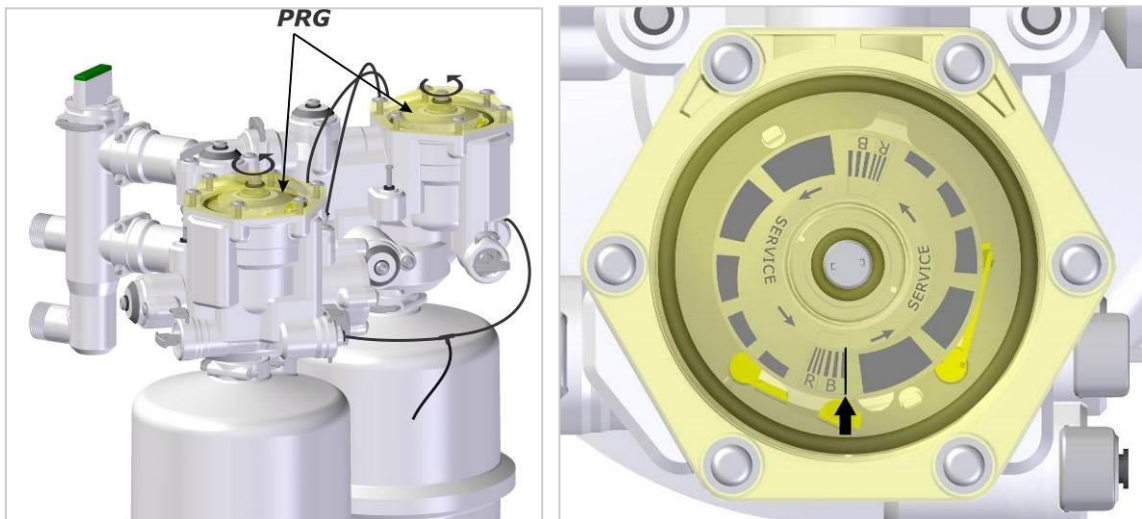


- 5.5 Open a tap behind the softener so a flow runs through it. Some air may flow from the tap; this comes from the softener. This will happen only once; at start-up. Once only water flows from the tap, and no more air, close the tap.

- 5.6 Perform a manual regeneration.

5.6.1

Choose one of both units to perform a manual regeneration. Use a hex key number 5 to turn the program disk (PRG) manually.



Turn PRG 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), the regeneration will start. Immediately, the PRG will drop down a little (you will be able to see and hear this). "R" stands for refill (refilling the container with water at the end of the regeneration stage). To make sure the softener is in regeneration, there should be a small water flow to the drain, and the water level in the container should drop.

#### 5.6.2

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.

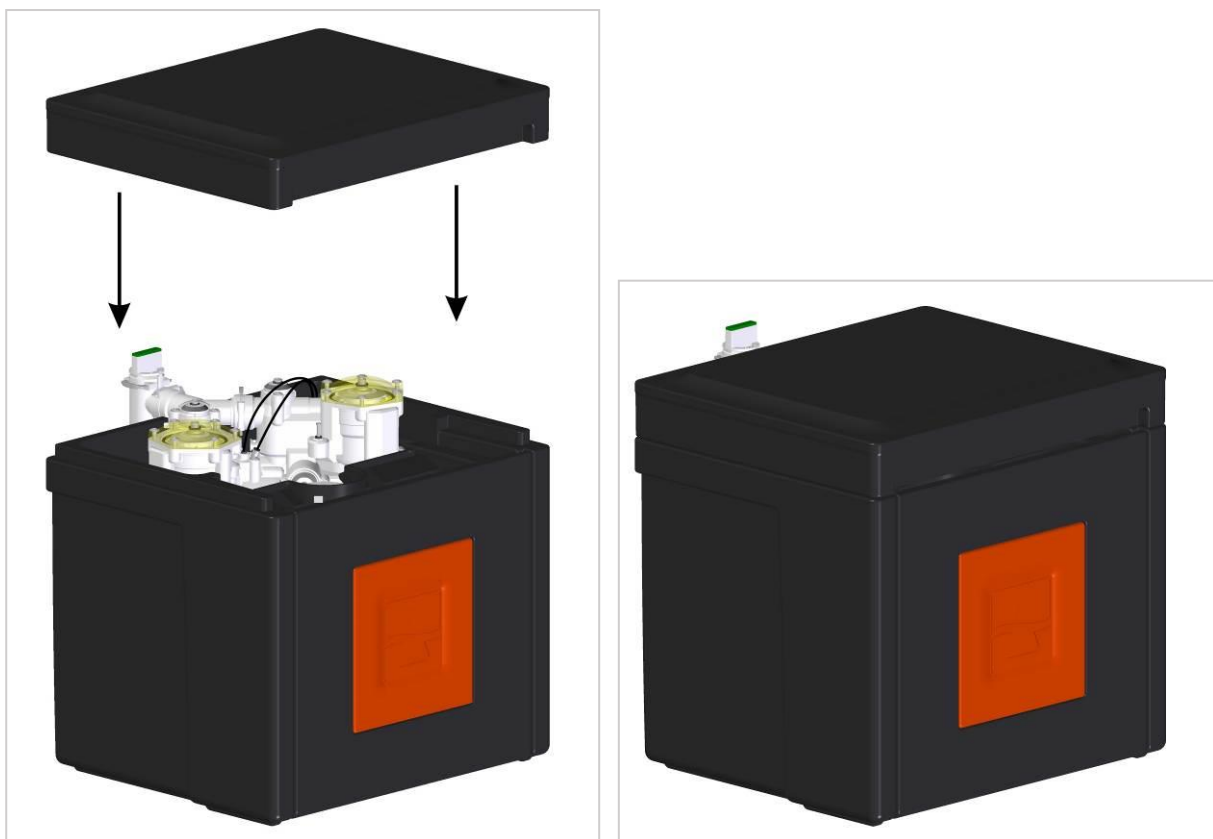
#### 5.6.3

Open a tap behind the softener for several minutes to allow residual water to be flushed from the tubing.

#### 5.6.4

Check outgoing hardness with a "hardness test kit" (not supplied by Delta). Adjust blending if necessary.

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

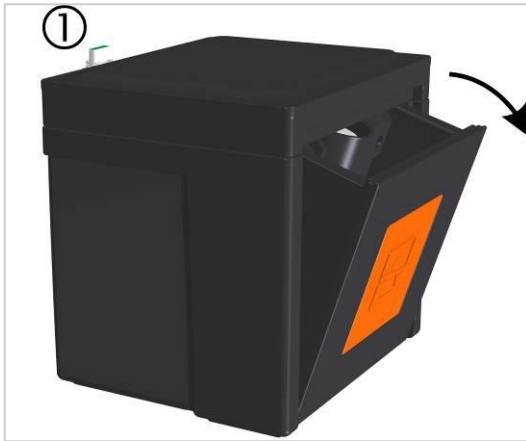


**Do not forget to connect the overflow with a drain.**

#### 5.8 Refilling salt.

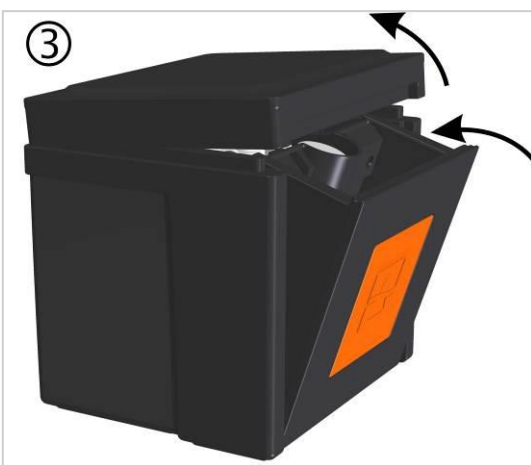
To refill the container with salt, you don't need to remove the cover. Just pull the tilt drawer, so that it tilts out of the container. If you pull out the drawer far enough it will stay fixed in the open position. In this position you can easily refill the drawer with salt tablets.

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.



Pay attention:

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



REMARKS:

It is recommended that a water softener is installed by a professional. Although the DELTA 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 service** of your softener will guarantee optimal functioning and a long operating life.