

# SIMPLEX<br/>WATER<br/>SOFTENERS



**O&M MANUAL** 

# **QUICK INSTALLATION CHECKLIST**

- The installation site should be a flat level surface in a frost-free environment.
- Water pressure required is a minimum of 2.0 bar maximum of 8.0 bar
- Access to a drain that is open, level and accessible.



1. Vessel 2. Brine tank 3.Brine well 4. Brine grid & 4 feet 5. Overflow adaptor 6. Media 7. Riser tube 8. Clack valve 9. Clack connector kit 10. Clack basket 11. Brine hose.

# **1.0 VESSEL ASSEMBLY**

- Place the vessel on a level flat surface, in its final placement is possible or as close to.
- Take the riser tube and place inside the vessel "basket" end first.
- You will feel the basket nestle in the dip in the centre of the base of the vessel.
- The riser tube will sit level with the top of the tank
- If the tube is sitting proud then the tube is not seated correctly.



# 2.0 ADDING THE MEDIA

Firstly fill the vessel around 20% - 30% with water

This is to help protect the riser basket and the tank from scoring

Cap off the top opening of the riser tube, taping over the opening should be sufficient and is important so that NO media enters the tube.



Please read the Media Safety Datasheet before installing any of our water treatment systems.

Scan the QR Code or visit: https://pumpexpress.co.uk/media-safety-datasheets/



Media Safety Datasheets

Now pour the media into the gap between the riser tube and lip of the tank.

STOP pouring when the media reaches around two thirds of the tank.

**DO NOT FILL THE VESSEL FULLY WITH MEDIA** – this will drastically reduce the efficiency

# 3.0 INSTALLING THE CLACK VALVE

(The valves are preset for backwashing to begin at 2am, all softeners are preset to treat water of 300 hardness)

Assemble the inlet & outlet connectors are per diagram/picture





When connectors are assembled, align each squarely, with the ring end first into the inlet or outlet ports on the valve, securely hand tighten.

(DO NOT over tighten, and take care NOT to cross thread)





Take the Clack Distributer (cone shaped basket) and attach by inserting the wider end first into the underside of the Clack Valve.

This will connect via a bayonet connection, so will need a partial twist to secure.





# 4.0 CONNECTING THE CLACK VALVE TO THE VESSEL

Carefully position the Clack Valve over the vessel aligning the Distributor Basket opening with the riser tube.

Ensuring alignment, gently push the valve down so the tube enters the valve basket.

Steadily rotate the completed Clack valve ensuring not to cross thread until it is hand tight (DO NOT over tighten). Orange circles represent brine hose insertion location, see step six for more information.





#### **5.0 BRINE TANK ASSEMBLY**

Place the Brine tank grid smooth side down on a flat clean surface.

Take the 4 feet and carefully tap into place in the 4 smaller holes in the grid. You will feel them lock into place.



Place the assembled Brine Grid feet first into the Brine Tank.





Then take the Brine Well (large diameter tube) and push into the larger hole in the grid.





Towards the top of the brine well is a Push Fit Connector that petrudes from the Brine well.

Aim the Push fit connector in the direction you wish to feed it from using the brine hose.

(it is advised to position the Brine tank so you can connect the pipe through to the Brine Well at the shortest point see pic.)

Carefully drill a hole **10mm** to enable the brine hose (**part 11**) to pass through and push the hose into the push fit connector on the brine well (**part 3**)(shown in figure 1)



FIGURE 1



An overflow adaptor is provided (**part 5**). Decide on a location on the brine tank for the overflow point to be positioned. Ideally it should be positioned closest and directed towards the drain. Carefully drill a hole of **20mm** (**shown in figure 2**) towards the top of the tank then connect the overflow (**shown in figure 3**)





FIGURE 2

FIGURE 3

#### **6.0 CONNECT THE TANK TO THE VESSEL**

Now take the brine hose free end, and push it into the clack valve (shown in figure 4) with the fixtures facing you, insert the hose into the left hand valve (shown by the orange circle).



FIGURE 4

# Connecting the drain line

The drain line (**shown by the red circle**) should be plumbed in to the nearest drain. We suggest using the following items. These are not included.

1 x 3/4" stainless steel socket

1 x 3/4 to 1/2" stainless steel reducing bush

½" pipe to drain

**BUILD COMPLETE!** Your unit is now ready to be connected to you water supply and powered up!

# **MORE RESOURCES**

Please scan QR codes for further helpful resources, and trouble shooting.

Please read the safety datasheet before installing any of our water treatment systems.







Pump Express Website

# WARRANTY

This product is guaranteed for the period of one year from the date of purchase against mechanical and/or electrical defects. This guarantee is only valid if the unit has been installed and used in accordance with these instructions.

# **SPECIFICATION**

| Size of Vessel            | 1017 | 1024 | 1035 | 1044 | 1054 | 1354 | 1465 | 1665 | 1865 |
|---------------------------|------|------|------|------|------|------|------|------|------|
| Resin volume (litres)     | 10   | 20   | 30   | 40   | 50   | 75   | 100  | 150  | 200  |
| Service flow rate (m3/hr) | 0.5  | 0.7  | 1.2  | 1.6  | 2.0  | 3.0  | 5.0  | 6.0  | 8.0  |
| System Capacity (m3)*     | 1.6  | 3.3  | 5.0  | 6.7  | 8.3  | 12.5 | 20   | 25   | 33   |
| Salt per regen (Kgs)      | 1.5  | 3    | 4.5  | 6    | 7.5  | 11.3 | 15   | 22.5 | 30   |

<sup>\*</sup> Calculated at 300ppm CaCO3

# **RE-PROGRAMMING YOUR SIMPLEX WATER SOFTENER**

Please note Simplex Softeners come pre programmed.

Press "Set Clock" button - hours will flash. Use up and down buttons to set hours

- 1. Press "Next" button, set minutes and press "Next"
- 2. Press "Next" and "Up" buttons together and hold until screen changes
- Set hardness based on raw water hardness of water supply (from water analysis or test on site)
- 4. Press "Next". Leave next setting at 2 0
- 5. Press "Next". Set the day override (preset at 4)

Press "Next". Set the regeneration time (preset at 2am)

