

2020c WATER SOFTENER

INSTALLATION INSTRUCTIONS



visit www.kinetico.co.uk

Safety Information

Read all steps, guides and rules carefully before installing and using the Kinetico softener. Check your local building and sanitation codes for installation compliance.

Adhere to all by laws including, but not limited to:

- Kinetico recommends that a qualified installer or engineer performs the installation. Failure to install the system as instructed could invalidate the warranty.
- Do not install if the supply water pressure exceeds 125 psi (8.3 BAR). Unless a suitable regularity pressure valve has been installed on the water supply to the softener, the water temperature must not exceed 120°F (48.8°C).
- Do not install the Kinetico softener in an area where the temperature can cause the unit to freeze. Freezing temperatures will damage the system.

Very important!

Where a cabinet overflow could cause damage, you must install a 1/2" (12mm) I.D. overflow line on the barbed fitting on the cabinet and run to a suitable outlet that is visible and capable of taking the overflow (ie. through the outside wall). Make sure the outlet is not higher than the barbed fitting.

- When installing a plastic component on a copper pipe in line, Kinetico recommends placing earth continuity straps ACROSS the component being fitted to ensure that the earth continuity is never broken.
- A Kinetico installation kit includes a manually operated by-pass device which enables the softener to be isolated from the water service lines for maintenance and service. This also maintains the continuity of the water supply when the system is disconnected.
- These systems are not intended to be used for treating water that is microbiologically unsafe or water that has an unknown quality without adequate disinfection before or after the system.

Important: Refer to the plumbing schematic in figure 1 before beginning installation.

NOTE: There are two 2020c compact water softener models. The High Efficiency (HE) system (part no. 11694uk) is designed for, but not limited to, most applications with general flow rate requirements.

The High Flow (HF) system (part no. 11717uk) is designed for homes requiring higher flow. If you are unsure which system is best for your application, contact Kinetico for advice.

For more information about Kinetico -
visit www.kinetico.co.uk or freephone 0800 015 1380

Kinetico UK Ltd

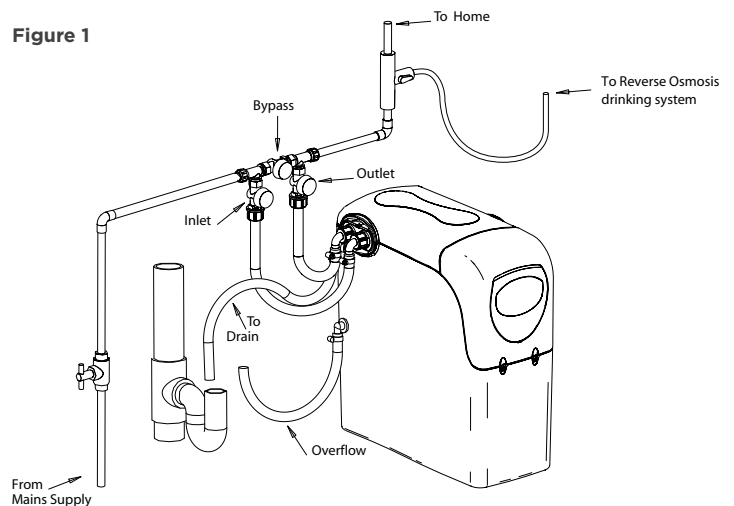
Bridge House, Park Gate Business Centre, Park Gate, Hampshire SO31 1FQ

TYPICAL INSTALLATION

A typical Kinetico 2020c Installation shown with Kinetico reverse osmosis drinking water systems.

Your installation may vary.

Figure 1



1. A non-return valve is required on the water main supply to the softener. This may be incorporated in your Kinetico installation kit.
2. Fit a pressure regulating valve, if required, on the water supply to the softener.
3. Plumb the drain line from the softener to a waste pipe through an appropriate air gap.

INSTALLATION INSTRUCTIONS

NOTE: Verify installation complies with local plumbing codes before continuing.

1 Location

Determine location to install equipment. Make sure that the unit will be on a flat surface. If sand, silt or turbidity is present, a separate prefilter should be installed.

2 Install

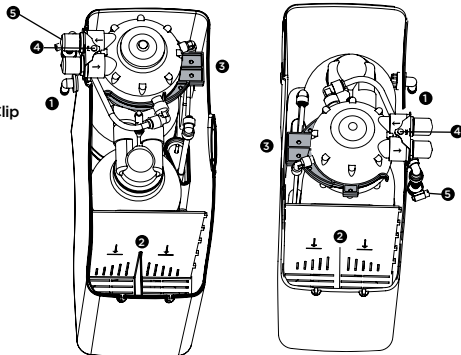
Install with by-pass valves as shown in Figure 1. Note the inlet/outlet direction in fig 2.

3 Plumb

Plumb as necessary to accommodate a by-pass valve and to complete the installation.

Figure 2

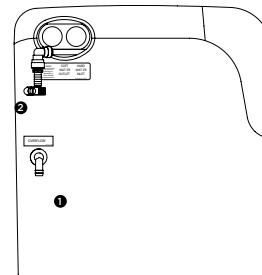
- 1 Overflow
- 2 Salt block bay
- 3 Remove module retaining Clip
- 4 In/Out retaining bracket
- 5 Drain connector



CAUTION: Do not solder brass adapters while inserted in the control module. Excessive heat may result in damage to the plastic and rubber parts. The materials used in the soldering process may attack certain types of plastics. Care should be taken during the installation process to assure that solder and flux do not come in contact with media tanks, the control module, and related plastic components.

Figure 3

- 1 Overflow
- 2 Drain fitting



4 Flush

After all plumbing is completed, but before connecting the water softener, flush both inlet and outlet lines allowing water to rinse out any debris in the lines.

5 Remove Adapters

Remove the inlet/outlet adapters from the unit by removing the retaining pin and bracket (see Figure 2, part 4) Connect the hoses to the softener's inlet/outlet adapter. Remember to use the enclosed mesh washers. Replace inlet/outlet adapters. Attach the retaining bracket to the softener valve.

NOTE: The softener has outlet ports on the left side and the right of the cabinet. This allows the inlet/outlet connections to be fitted on either side of the cabinet by reversing the components as seen in Figure 2.

6 Decals

Place the in/out and overflow decals (found in the owner's pack included with each system) on the side of the cabinet being used. See Figure 3 for decal locations.

7 Drain Line

Run a drain line to discharge point. **FOLLOW LOCAL PLUMBING CODES.** Before connecting to the unit, check for any obstructions or kinks. Slide on the stainless steel jubilee clip. Push the drain line onto the barbed fitting and tighten the jubilee clip securely.

NOTE: On drain lines that must travel more than 8 feet up and 30 feet over, it is best to take the 1/2" drain line that fits the valve and attach it in a largest diameter line or pipe. The drain line must not be restricted.

8 Remove Brine Valve

Remove brine valve and adjust setting for the water hardness and meter disc being used (as per fig. 7 & 8). Replace the brine valves and make sure the 1/4" brine line is secure. Hand-tighten the fittings.

INSTALLATION REVIEW

- 1 Test Pressure**
Test incoming pressure and fit a pressure limiting valve if the pressure is near maximum. Min./Max. Operating Pressure is 15psi/125psi.
- 2 Main Inlet Valve**
With the by-pass in the by-pass position, turn on the main inlet valve slowly and check for leaks in the plumbing.
- 3 Secure Drain Line**
Make sure the drain line is secure and using an airgap.
- 4 Pressurising**
Open the inlet valve and allow the softeners to pressurize. Water may run to drain until the unit is fully pressurised.
- 5 Brine Drum**
With the unit in service and under pressure, allow the brine drum to fill with water until the brine valve shuts off. The water level should be approximately one inch over the grid plate.

Tip: If the cabinet does not fill with water, simply lift the brine valve from the brine well and gently push down on the float rod until water starts to flow from the valve. Return the valve to the brine well.

STARTUP INSTRUCTIONS

- 1 IMPORTANT:**
Using a Phillips head screwdriver, manually cycle the softener to the backwash position by turning the black dot on the white control disc to the letter "w" in the word "backwash" on the clear cap. You will hear a rush of water and air going to the drain. When the vessel has finished its cycle, repeat the procedure on the next tank and allow it to finish its cycle. See Figure 4.
 - 2 Trapped Air**
After the unit is pressurized, open the outlet valve, ensure isolation valve is closed. Open a tap in the house to release trapped air from the lines.
- NOTE:** When the installation is complete, plumbing lines must be chlorinated for sanitisation. Common household bleach may be used. The amount of bleach needed can vary depending on plumbing size, length and fixtures.
- 1 Lid Removal**
If you have installed the softener in a confined area that will not permit the hinged lid to be opened, remove the lid and hinges from the cabinet. Insert the alternate connectors provided into the slots on the cabinet previously occupied by the hinges. Place the lid on the cabinet. See Figure 5. The alternate connectors will permit easy removal of the lid for access to the salt bay.

Figure 4

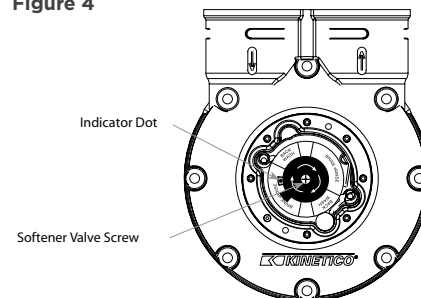
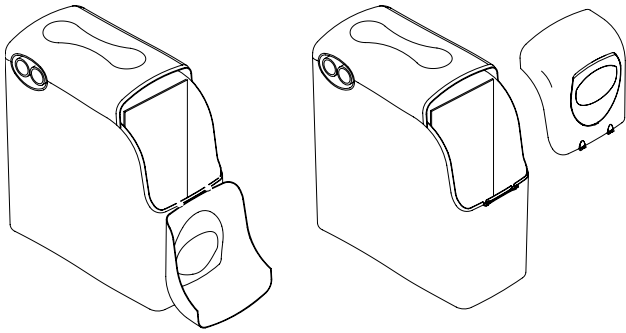


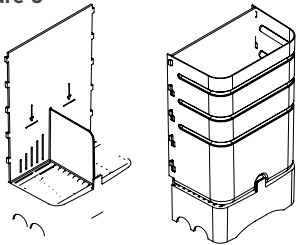
Figure 5



Show the customer how to load salt into the cabinet. Remind the customer that they have the option of using block (where available) or tablet salt. If you are using tablet salt, you may wish to install a salt bay extension as shown in Figure 6 (part no. 10716 - sold separately). Before leaving the installation site, check plumbing for leaks and clean up work area. Test the water at a softened water tap. Explain the system to the customer including the by-pass and how to load salt.

KINETICO DOES NOT RECOMMEND USING GRANULAR SALT

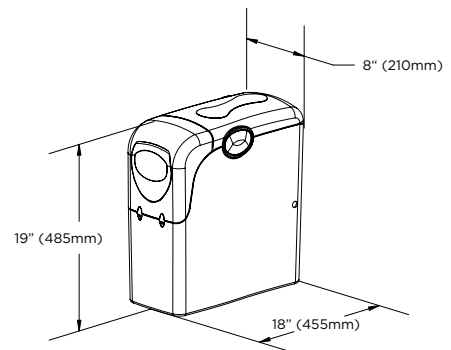
Figure 6



2020c compact water softener (HE)

Salt Setting	1	2	3	4	5	6
.22kg	0-93ppm	94-184ppm	185-272ppm	273-358ppm	359-441ppm	442-523ppm
.3kg	0-115ppm	116-227ppm	228-336ppm	337-441ppm	442-544ppm	545-600ppm
Litres between regenerations	1479	740	493	370	296	247

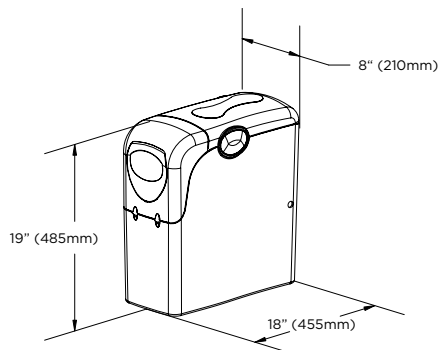
Maximum Hardness	35gpg (600ppm)
Media Tank Size	6" x 13" (152mm x 330mm)
Cabinet Dimensions @ base	H 19" x D 18" x W 8" (H 485mm x D 455mm x W 210mm)
Resin per tank	4.4 litres
Tank Freeboard	PACKED
Salt used per cycle	0.22kg or 0.3kg
Regeneration Time	11 Minutes
Service Flow Rate @ 15 psi drop	24 l/m
Service Flow Rate @ 30 psi drop	41 l/m
Backwash Rate	2.7 l/m
Resin Type	Non solvent-fine mesh
Pipe connections - in/out	3/4"
Min./Max. Operating Pressure	15/125 PSI (0.83 BAR/8.3 BAR)
Min./Max. Operating Temperature	35° - 120° F (2° - 49°C)
Minimum Operating Flow	0.18 l/m
Water used per cycle	18.9 litres



2020c compact water softener (HF)

Salt Setting	1	2	3	4	5	6
.22kg	0-75ppm	76-149ppm	150-220ppm	221-289ppm	290-357ppm	358-423ppm
.3kg	0-92ppm	93-181ppm	182-268ppm	269-352ppm	353-435ppm	436-515ppm
Litres between regenerations	1479	740	493	370	296	247

Maximum Hardness	30gpg (515ppm)
Media Tank Size	6" x 13" (152mm x 330mm)
Cabinet Dimensions @ base	H 19" x D 18" x W 8" (H 485mm x D 455mm x W 210mm)
Resin per tank	4.4 litres
Tank Freeboard	PACKED
Salt used per cycle	0.22kg or 0.3kg
Regeneration Time	11 Minutes
Service Flow Rate @ 15 psi drop	32 l/m
Service Flow Rate @ 30 psi drop	51 l/m
Backwash Rate	2.7 l/m
Resin Type	Monosphere
Pipe connections - in/out	3/4"
Min./Max. Operating Pressure	15/125 PSI (0.83 BAR/8.3 BAR)
Min./Max. Operating Temperature	35° - 120° F (2° - 49°C)
Minimum Operating Flow	0.18 l/m
Water used per cycle	18.9 litres

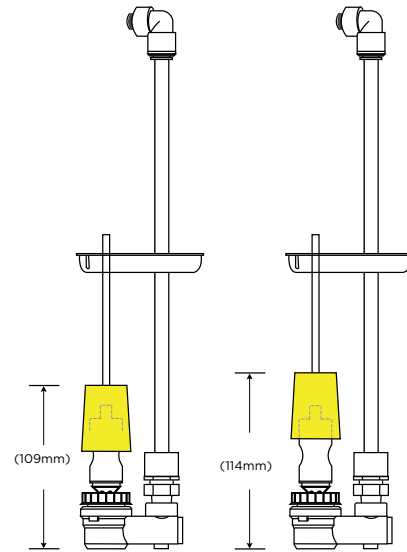


On page 11, there is a diagram of the brine valve that is used in the 2020C water softener. There are 2 brine valve settings that can be selected dependant on the incoming water hardness (see disc chart on page 8 and 9).

Figure 7 shows the 0.22kg setting with the yellow float cup pushed completely down the rod when the valve is de-pressurised.

Figure 8 shows the 0.3kg setting which has the yellow float cup raised by 6mm. The top of the float cap should be in line with the black mark on the rod when the valve is de-pressurised..

Refer to your authorised Kinetico dealer for your warranty information. Alternatively, you can visit our website: www.kinetico.co.uk



Kinetico UK Ltd

Bridge House, Park Gate Business Centre, Park Gate,
Hampshire SO31 1FQ

t 01489 566970

f 01489 566976

e enquiries@kinetico.co.uk

© Kinetico UK Ltd 2011. Kinetico reserves the right to amend details or specifications without notice, prices are correct at time of print, E&OE.
All trademarks are registered to Kinetico Inc. Newbury, Ohio.