

Soda Carbonator – Keg Reactor Lid Instruction manual KL10955



KegLand Distribution PTY LTD

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Warnings

- 1. All plumbing which involves connection to a mains water supply must be undertaken by a licenced plumber.
- 2. Only use approved PE Water line for unregulated mains water and 4mm ID x 8mm OD EVA Barrier hosing or PE Water line for all other hosing in your system.
- 3. Install check valves between the regulator and the keg and between the inline regulator and the soda carbonator.
- 4. Ensure all hosing is cut with a clean and straight cut and that the hosing is pushed to its full depth into any push in fittings. Failure to do so may result in the hose coming loose or leaking.



No Pre-chill Initial Setup (Consumption of less than 10L per day)

If you are going to be consuming less than 10 Litres per day then the simplest setup involves plumbing mains water directly into the carbonator keg for dispensing.

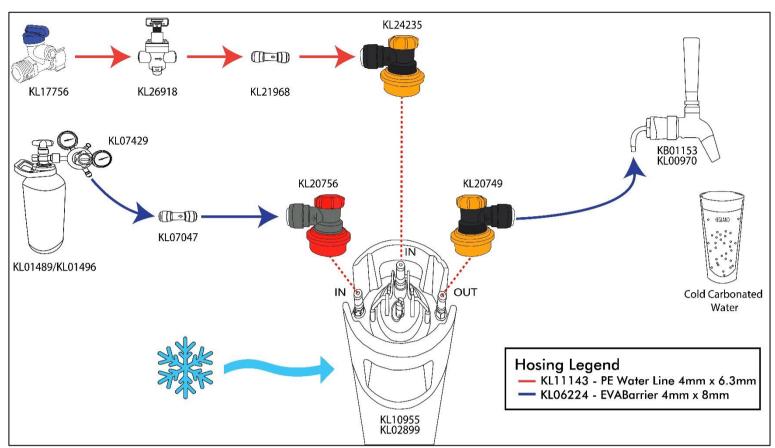
Firstly you will need a Cornelius style keg such as a new 19L ball lock keg (<u>KL02899</u>), new 9.5L ball lock keg (<u>KL02882</u>) or a 2L ball lock keg (<u>KL20893</u>).

- 1. Pull the pressure relief valve and remove the lid from the ball-lock keg.
- Insert the keg reactor lid into the keg as shown to the right. There is a specific way that this must be inserted to fit the bulky reactor lid into the opening. Insert the side of the lid furthest away from the mist nozzle first then rotate the lid such that the mist nozzle fits into the opening.
- 3. Attach your dispensing tap of choice to the liquid (OUT) post of the keg using a ball-lock liquid disconnect.



- 4. Attach your gas to the gas (IN) post using a ball-lock gas disconnect.
- 5. Set the pressure on the CO₂ regulator to your desired carbonation level (30-50 psi). A higher gas pressure correlates to a higher carbonation level and fizzier water.
- 6. It is suggested that the first time this is setup that the headspace is purged of any air. To do this pull the pressure relief valve on the reactor lid a total of 5 times with approximately a 2 second burst for each pull. Make sure the gas is connected to the in post during purging to fill the headspace with CO₂.
- 7. Connect your mains water supply to the water inlet post on the reactor lid using a ball-lock liquid disconnect. It is suggested that the pressure of your mains water supply is reduced to 10-15 psi higher than the pressure set on your CO₂ regulator. To reduce the mains water pressure we would recommend using an inline regulator with a 0-150 psi mini gauge which suits 6.35mm PE Water Line (KL26918). It is also suggested that a check valve is placed between the mains outlet and the soda carbonator. We recommend using a duotight check valve that is easy to install (KL21968).
- 8. Place the carbonator keg in the fridge and enjoy a continuous supply of cold soda water.





There are a number of different ways that the soda carbonator could be setup differently to how it is shown above. Pre-chilling the water prior to it entering the carbonator keg will allow for a greater throughput of carbonated water. If you are going to be consuming more than 10 Litres per day it is suggested that you pre-chill the water.

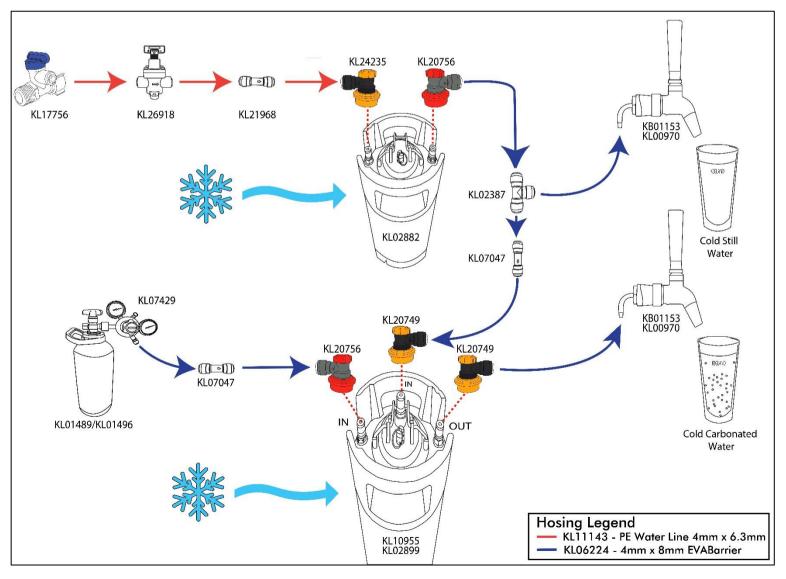


Pre-chill Plumbing Options (Consumption of more than 10L per day)

CO₂ absorbs faster into pre-chilled water, allowing you to increase your carbonation rate to over 30 liters per hour. Pre-chilling may also be necessary if you live in a hot environment and the temperature of your mains water is not cold. There are two main pre-chilling options described below:

Pre-chill water with an inline keg

If you have room in your fridge then you can place a 19L keg in line with the carbonator keg. The mains water is able to be pre-chilled in the 19L keg prior to filling the carbonator keg. This only requires a soda carbonator on the 19L keg. The first keg can use a normal ball lock lid and it will not overflow as the pressure will equilibrate such that water will only flow into the keg when a tap is opened and water is dispensed from either of the kegs. It can also be setup such that both cold still water and cold carbonated water can be dispensed as shown in the below. If you only wanted to dispense carbonated water and not chilled still water then remove the duotight tee-piece (KL02387) and run hosing directly from the first keg to



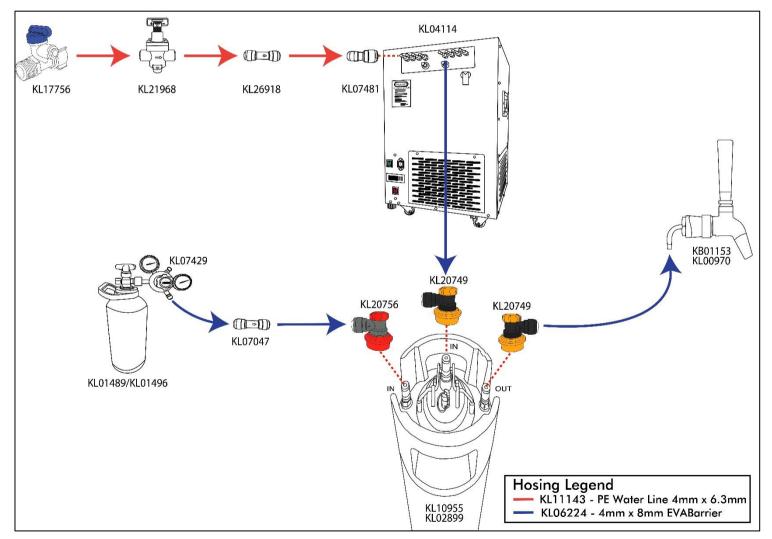


the soda carbonator on the second keg. Both kegs are required to be placed in a fridge to ensure adequate pre-chill and carbonation of the water.

Pre-chill water with a glycol chiller

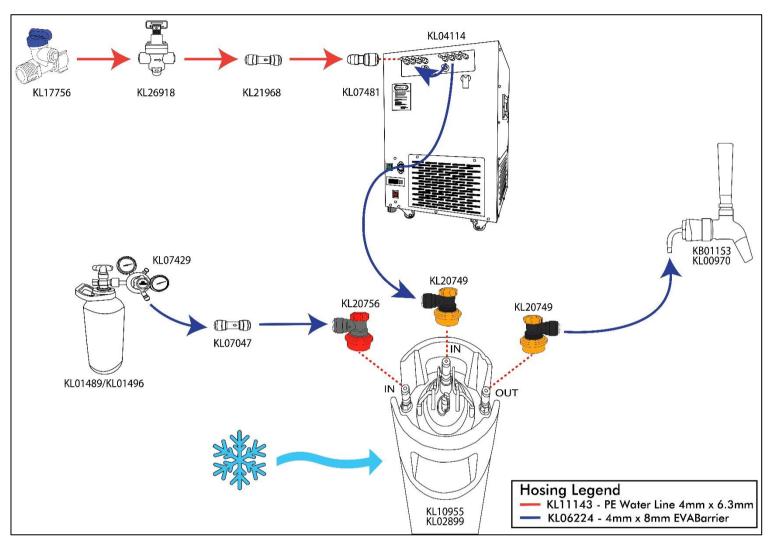
If you don't have room in your fridge for a second keg then you can pre-chill the mains water through a glycol chiller such as a G40.1 (<u>KL04114</u>). The water which has run through the glycol chiller can then enter the water inlet post on the carbonator lid. If you are in a very warm climate or your mains water is not cold then you can pass the mains water through the G40 twice to cool it down. The keg will still need to be cooled in a fridge in order to remain carbonated.







High Throughput (>10L per Day) – G40 Double Pass



Expected time to carbonate after initial setup

After setting up your soda carbonator it may take up to 24 hours for the water to be carbonated. The time is dependent on how quickly you can cool down the water in the keg. It may take several hours after the water is cold for it to be fully carbonated.

Plumbing options without access to a mains water supply

If you do not have access to a mains water supply for example if you are using tank water or bore water, we would suggest using a 12V self-priming diaphragm pump to increase the water pressure to 10-15 psi above the pressure on your regulator.

It is suggested that the pump you choose has an output pressure of at least 80psi and it has an auto pressure switch. The auto-pressure switch ensures that the pump provides a constant water pressure and switches off once that pressure is reached.