

THE

essencia
EXPRESS PURIFIER
4L (1 gal) 1500W

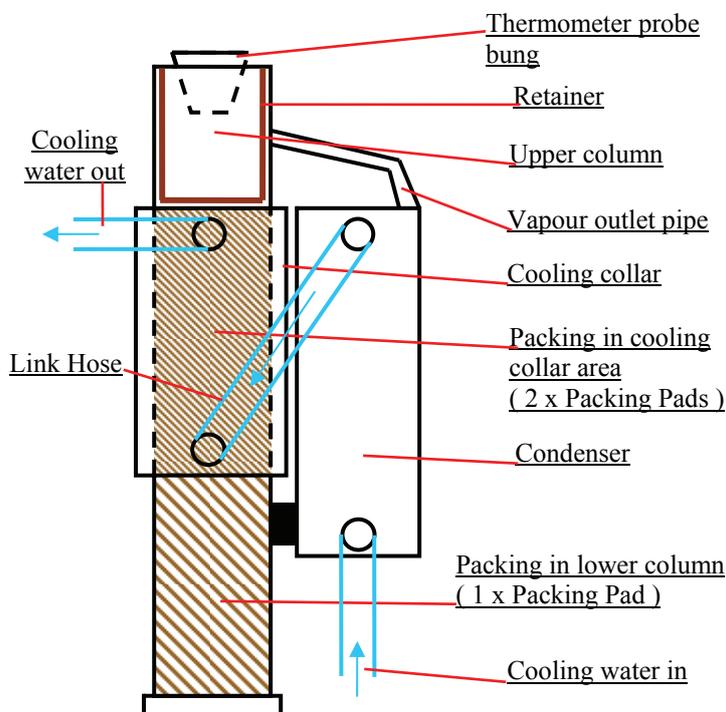
Instructions

Assembly.

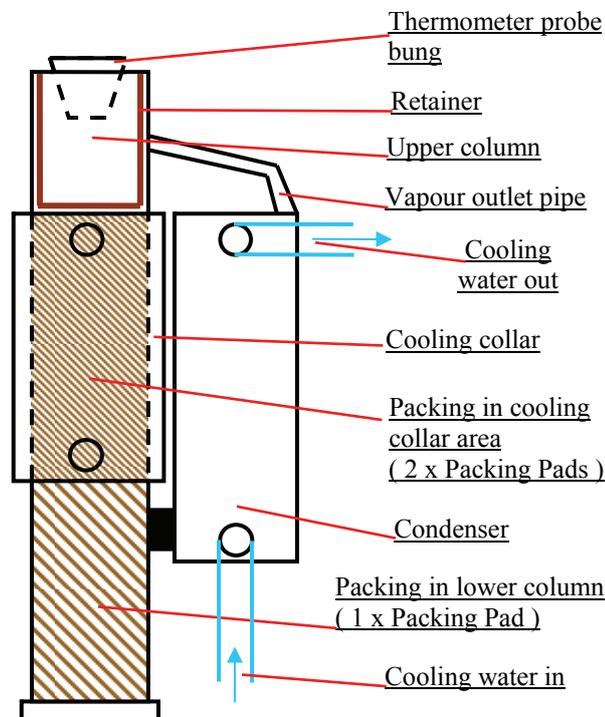
1. Fit the reflux column/condenser to the domed lid ensuring the silicon gasket sits between the column and the **outside** surface of the lid. Tighten until a good seal is achieved (do not over tighten).
2. Fit the thermometer probe fully into the rubber bung (wetting the bung will make this easier).
3. Locate the boiler on a firm, heat resistant base ensuring the water hoses reach a cold water supply and drain.



Condenser Configuration



Reflux Configuration



Condenser Only Configuration

The *essencia* Express condenser comes assembled in the **reflux configuration**. While this configuration provides the maximum purification performance, it needs the cooling water flow rate to be maintained at a **precise** level.

In the **condenser only configuration** a high level of purification is achieved and the purifier is less sensitive to the cooling water flow rate (as long as the flow rate is above 350 ml (12 fl oz) per minute).

To change from the **reflux configuration** to the **condenser only configuration**, simply remove the link hose from the top of the condenser and transfer the 'cooling water out' hose to the top of the condenser as shown in the above diagrams.

Water Purification:

Condenser Only Configuration.

1. Pour 4 L (1 gal) of water into the boiler.
2. Place the opened clamping ring onto the boiler so it rests at the base.
3. Fit the lid and condenser unit. Fit the clamping ring. Fit the bung (with the thermometer probe in place) firmly into the top of the reflux column.
4. Plug in the element ensuring the plug is pushed fully and firmly into the element base. Switch on.
5. Start running the cooling water at around 450 ml (15 fl oz) per minute (this will vary slightly depending on the temperature of the cooling water).
6. Distilled water will start to flow approx. 18 minutes after switch on. The head temperature should sit at 98°C (208°F) while collecting the distilled water. The distilled water should flow at a rate of approx. 2 L (2 qt) per hour.
7. Be **very careful** not to allow the boiler to run out of water. Draw off a **maximum of 2.5 L (2.5 qt)** of distilled water then **turn off the boiler**.

Note: It is **very** important that the distillate collection tube remains above the level of the collected distillate. **Never** let the distillate collection tube become immersed in the collected distillate.

Reflux Configuration.

The same procedure as above except that the cooling water flow rate will be **very critical** (250 ml (8.5 fl oz) per minute when the cooling water temperature is 18°C (64°F).

Note: Cold water temperatures vary greatly between winter and summer, and in different locations. You will find you have to adjust the average flow of the cooling water to maintain optimum performance.

Cleaning.

To clean the reflux column, packing and condenser.

1. Fit the bung (with the thermometer probe in place) firmly into the top of the reflux column.
2. Place the condenser/reflux column (still attached to the lid) upside down into a bucket, a large jug, pot or similar holding vessel. Leave the tubing and thermometer **outside** the holding vessel.
3. Dissolve one teaspoon of citric acid in 600 ml (20 fl oz) of hot water. Pour this into the up-turned base of the reflux column until full. Make sure the end of the distillate collection tube is outside the holding vessel and higher than the edge of the up-turned lid.
4. Leave soaking for around 20 minutes. The digital thermometer will show the temperature of the fluid inside the reflux column. Do not proceed further until the temperature has dropped below 40°C (104°F).
5. Lift the lid from the holding vessel just enough to allow you to reach the thermometer probe and bung. Remove the bung and allow the citric acid solution to drain into the holding vessel. Transfer the lid, reflux column, condenser and tubing to a laundry tub or similar.
6. Keeping the lid and condenser inverted, flush the reflux column and packing thoroughly with cold water. To flush the condenser, stick the end of the distillate collection tube up the tap. Water will flow through the condenser and out the bung hole in the top of the column.
7. Empty the citric acid solution from the holding vessel and rinse thoroughly.



Place into holding vessel



Pour into up-turned base



Remove bung and drain



Flush column and packing



Flush condenser via tube

Note: The packing will need to be replaced periodically as it does wear out. New *essencia* Condenser Packing Sets are available from your specialist home brew store.

To keep up to date with the latest products and information, or if you need questions answered, visit the website at www.essencia.co.nz