



TURBO 500
WATER
DISTILLATION
MANUAL

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WATER DISTILLATION

ASSEMBLY

1. FIT THE BOILER LID TO THE COLUMN

You will not need the copper and ceramic saddles for water distillation.

Fit the O-ring to the base of the column. Place the washer on the threaded bush and slide the bush through the hole in the lid from inside.

Screw the bush into the column firmly. You may need to shake the column to let the bush clear the saddles. Top up column with saddles by adding one at a time through the holes in the bottom flange.

To tighten the bush firmly a pair of long nose pliers can be used to grip and turn the inner grating.

2. THERMOMETERS

Fit the one with the metal probe into the hole at the very top of the column (A). Leave the other plastic temperature probe to test the outlet water.

Mount thermometer A in the mounting bracket provided. Thermometer B does not need to be mounted to the bracket as you will need this to test the outlet water supply. Clip the panel onto the Condenser near the bottom. Use a wire tie up any loose wiring.

3. FIT TUBES

Connect the 1,100mm (3'7") length of tubing onto the Water inlet. (C). This will connect to the faucet adaptor and supply cooling water.

Connect the 1,500mm (5') length of tubing onto the Water outlet (F). (This is the condenser column fitting at the top right of the still). Water will flow from this to your outlet drain/sink. The main column fitting on the top left side of the still does not require a tube attached for water distillation.

Connect the 850mm (2'9") length of tubing onto outlet. (E). The distilled water will flow from here to your collecting jug. It is essential that this tube

should not be sitting in water at any time, otherwise this could cause a pressure vacuum inside the boiler and it could implode.

Fitting (D) does not require a tube attached for water distillation.



OPERATING INSTRUCTIONS

Distilling 20 litres (2.6 US Gal) of water will take about 8-10 hours from start to finish (excluding heating time) and will produce approx. 18L of distilled water.

You will need to have:

- Clock or timer
- 1 litre calibrated jug
- Large vessel to collect distilled water
- Cooling water supply.

Under normal conditions the water supply will need to be about 600mls (1 - 1/4 pints) per minute at a temperature of 20°C. If the tap water is cooler then it will need to be lower (500mls) and if warmer it should be higher (700mls).

STEP 1

Place the boiler body on a firm, level, bench where the waste can discharge into a drain or sink. Add water to your boiler, do not fill beyond the maximum level line on the boiler.

STEP 2

Place the Column and Boiler lid assembly onto the Boiler Base. Ensure you can clearly see the thermometers. Fasten the four clips that hold the lid onto the Boiler. Check the sealing gasket is sitting firmly onto the Boiler with no gaps.

STEP 3

Fit the Water flow controller to your faucet/tap. Remove the aerator from your faucet/tap.

Attach the water flow controller. You may need to use the enclosed adaptor depending on the thread on your faucet/tap. If your faucet/tap does not have an aerator thread, your Still Spirits stockists will be able to supply a push on faucet connector. Connect the water inlet tube (C) to the flow controller. Place the Water outlet tube (F) into the sink or drain. Place the distillate outlet tube (E) into the collection jug or vessel. Position the outlet of the tube so that it cannot become submerged under the distillate.

STEP 4

Connect the power supply and turn on the Boiler. The water will take 60 - 80 minutes to heat to boiling temperature.

STEP 5

Before the water begins to boil, turn on the cooling water. Use the clock or timer and the graduated 1 litre jug to adjust the flow to approximately 600mls (1 pint 4 oz) per minute so that the outlet water flow is at approx. 55°C (131°F) (Use the plastic thermometer to check temperature). This should stay stable for the entire distillation period with the temperature at the top of the column stabilising at approx. 100°C (212°F).

STEP 6

When distillation has finished the temperature at the top of the column will drop to approx. 30°C (86°F). After you have collected 18 litres of water, turn the boiler power off and disconnect from the power outlet. It is important not to let all the water boil off as this could burn the bottom of the boiler. Turn off the cooling water supply. Be careful when discarding remaining water left in boiler as this will be hot.

STEP 7

The distilled water must be filtered through the EZ Filter carbon filter system to ensure any unwanted flavours and aromas from previous washes are removed.

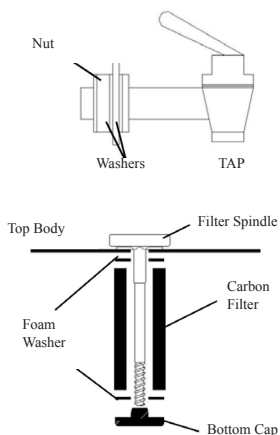
EZ FILTER ASSEMBLY INSTRUCTIONS

Fit the tap to the lower reservoir. Place the lower lid on top. Remove the cartridge from its plastic wrap and the washers from their pack.

Soak the EZ filter cartridge in a glass of clean water until the cartridge is fully submerged and air bubbles have stopped escaping from it. This is necessary to remove mineral salts from the carbon and flush out any carbon dust. You should do this for every new cartridge.

Slide the Filter Spindle through the hole in the top reservoir and then slide the other components onto the spindle where it projects below the base of the reservoir in the following order:

1. Washer
2. Carbon Filter Cartridge
3. Washer
4. Bottom Cap Screw the Bottom Cap by hand onto the Filter Spindle, taking care not to over tighten. A firm tightness is sufficient. Sit the top reservoir onto the lid.



OPERATION

Add the distilled water to the top reservoir and fit the lid in place and allow the water to pass through the filter into a collecting reservoir.

20L of water should take between 10-12 hours to filter through the EZ Filter.

STILL SPIRITS WEBSITE

Filled with comprehensive information for both the experienced distiller and the novice just starting out plus an extensive recipe section of over 60 drinks!

www.stillspirits.com



ALCOHOL DISTILLATION

In New Zealand it is legal to distil your own spirits and liqueurs for personal consumption.

However please note that in certain countries alcohol distillation may be illegal and you may require a licence. Ask for advice or contact your local Customs & Excise Department.

In Australia it is illegal to use this unit to produce alcohol for consumption without a licence from the Customs & Excise Department.

In the USA and Canada it is illegal to use this unit to produce alcohol for consumption without a licence from the relevant authorities.

In the UK it is illegal to manufacture spirits without a distiller's licence which is required under the provisions.

ALCOHOL FOR BIO FUEL

On 30th June 2007 the UK Government made it legal for people to produce up to 2500 litres without the need to pay duty or to hold a permit. Always check with car manufacturers as to the level you can add.

The USA authorities have recently allowed distillation for fuel alcohol and you can get a permit from the Federal Government very cheaply.

Your local Still Spirits stockist