

V-TUF STEAM & HIGH TEMPERATURE OPERATION WITH HOT BOX

With the aid of the V-TUF Super-heated steam/water performance kit. You can customise your "hotbox" for many demanding & specialised cleaning processes, including historical restoration & renovation projects.

First of all, three important rules MUST be followed:

RULE 1:

It is recommended that you use 'weeping type' triggers for this operation. If you are not using 'weeping type' triggers but are using standard total shut off triggers you <u>MUST</u>



fit the <u>STEAM VALVE for HOT BOX OUTLET line - C1.510HBKIT</u>. <u>This must always be open</u>, and must be fitted to the temperature line, as this will prevent a high temperature explosion which can result in serious or fatal injury.

- The pressure of cleaning must be set by the steam valve at least 15 bar less than the set pressure of the pressure washer.

- The steam valve will release the excess water/steam out the dump port when operating and when the trigger is closed.

- This is to act as a pressure release valve which will help prevent a locked line of steam during operation and when the spray gun is closed.

- The relief pressure hose <u>VTK11401A</u> must be fitted at all times and exhausted to the floor away from humans or animals.

RULE 2:

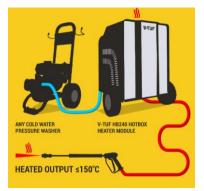
If you wish to take a break – you must turn the thermostat knob (picture) anti-clockwise to 0 degC and run the water cool. Do this every time!



RULE 3:

It is also a requirement to fit the <u>STAINLESS STEEL M22F x 3/8M HIGH PRESSURE FILTER -</u> <u>B14.1114SSFILT</u> to the inlet to the hot box along with the <u>M22F x 3/8M M3 SCREW COUPLING -</u> <u>B14.1014</u> as this will prevent any grit that be picked up from jamming the flow switch magnet with will prevent the burner switching off when the flow has stopped. This action will prevent a high temperature explosion which can result in serious or fatal injury. Please ensure this high-pressure filter is clean before you commence any work.





SUPER HEATED STEAM PERFORMANCE KIT:

Set up the <u>PRESSURE GAUGE 0 to 300BAR CALIBRATING KIT MSQ - C6.030KIT</u> below on the cold side of the HOT BOX. Remove the gauge kit once calibration is complete.



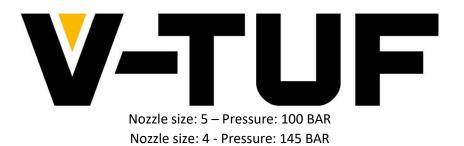
To select the ultimate pressure suited to the surface you are cleaning, and make sure that you have the correct nozzle size (see below) to suit that pressure.

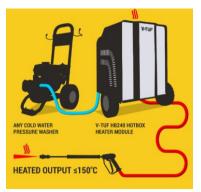


Please see the recommended jet size & pressure cart on the following page:

For temperatures 100 °C to 150 °C

Nozzle size: 9 - Pressure: 30 BAR Nozzle size: 8 - Pressure: 40 BAR Nozzle size: 7 – Pressure: 50 BAR Nozzle size: 6 – Pressure: 70 BAR





For temperatures 50 °C to 90 °C

Nozzle size: 9 - Pressure: 50 BAR Nozzle size: 8 - Pressure: 60 BAR Nozzle size: 7 – Pressure: 80 BAR Nozzle size: 6 – Pressure: 110 BAR

If you are using standard jet sizes, or a twin jet surface cleaner, please refer to the details below:

Nozzle size: 09 (or 2x size 045 in surface cleaners) - Pressure: 30 BAR Nozzle size: 08 (or 2x size 040 in surface cleaners) - Pressure: 40 BAR Nozzle size: 07 (or 2x size 035 in surface cleaners) – Pressure: 50 BAR Nozzle size: 065(or 1x size 035 & 1x size 030 in surface cleaners) – Pressure: 60 BAR Nozzle size: 06 (or 2x size 030 in surface cleaners) – Pressure: 70 BAR Nozzle size: 05 (or 2x size 025 in surface cleaners) – Pressure: 100 BAR Nozzle size: 04 (or 2x size 020 in surface cleaners) - Pressure: 145 BAR

These nozzles are calibrated with the standard hot box fuel injector size of 1.35 80H

To maintain efficient and effective cleaning above 100 deg C with your V-TUF HOTBOX there are certain very important settings that must be in place:

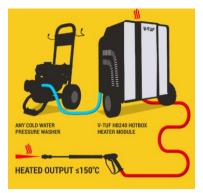
- 1. For optimal cleaning effectiveness, turn the pressure adjustment knob (anti- clockwise to lower pressure) on your V-TUF pressure washer.
- 2. Calibrate the pressure (before switching the HOT BOX on) to the correct nozzle size as shown in the list on the previous page.



Picture 1

2. Please the jet into the end of the spray lance and then check your calibration on cold. Once you are happy with this then turn the thermostat of your HOTBOX on highest temperature (clock-wise – see below)





Picture 2

Important points:

1. Run machine on this setting and you will notice the hot water will start steaming.

- 2. Proceed with cleaning.
- 3. Please note when the unit is very hot, the trigger can only be closed off for very short periods.

4. If you wish to take a break – you must turn the thermostat knob (picture 2) anti-clockwise to 0 degC and run the water cool. **Do this every time!**

5. Before disconnecting any couplings the system must be cooled down! ...you must turn the thermostat knob (picture 2) anti-clockwise to 0 degC and run the water cool. **Do this every time!**