



## **Micromat EC. <40kW Commissioning Guide.**

This sheet is intended as a quick reference guide and should be read in conjunction with the installation guide for the boiler supplied.

The ignition electrode gap should be set to 4 mm from the burner.

All component earth wiring connections should be checked for security and continuity. This includes the burner to burner door and the control panel.

The flue route and integrality must be inspected to ensure compliance with the prevailing regulations.

The boiler must be placed in the commissioning mode prior to carrying out any adjustments to the combustion system.

Once power has been applied to the boiler and it has passed through the Deaeration program. The Black button (between the Red and Green buttons) on the fascia panel of the boiler should be pressed twice until 10 Min Test appears in the display window.

Once in this mode the fan speed and thus the output of the boiler can be adjusted via the + & - buttons on the fascia. For a period of 10 minutes.

Press the Red button until Fan Speed is displayed. The effect of pressing the + or - button in the commissioning mode can now be seen.

Once the analyzer has been inserted into the heat exchanger via the hole in the top right of the unit, adjustments can be carried out.

It is advisable to check the combustion figures on Low and High fire prior to carrying out any adjustments.

**Adjusting the high fire has a marked effect on the low fire figures.  
Whereas adjusting the low fire has little effect on the high fire figures.**

The Low fire adjustment is carried out via the Cross Headed governor accessed via the large Slotted Head Screw in the center of the gas valve. [1]

The low fire adjustment is a governor.

Therefore turning the screw clockwise will increase the through put of gas passing to the burner. A maximum of ¼ turn per adjustment is advised.

The High fire adjustment is carried out via the small Slotted Head Screw recessed adjacent to the unused pilot adjuster screw. [2]

The high fire adjustment is a Gate type restrictor.

Therefore turning the screw clockwise will close the gate and thus restrict the quantity of gas passing through to the burner. A maximum of ¼ turn per adjustment is advised.

The figures that should be achieved are:

LOW FIRE	9.5 %	CO <sub>2</sub>	Natural Gas
	11.5 %	CO <sub>2</sub>	LPG
HIGH FIRE	9 %	CO <sub>2</sub>	Natural Gas
	11 %	CO <sub>2</sub>	LPG

(When a boiler is to be commissioned which burns LPG, the conversion kit detailed in the O/M manual must be used.)

Once the correct figures have been obtained the Green Test button should be pressed to allow the boiler to stop operating.

*[If problems are being experienced obtaining the correct flue gas emission figures, the following procedure should be followed to rest the gas valve to a common starting point. The high fire adjuster must be fully closed, this is achieved by turning the adjusting screw clockwise. (Care must be taken not to over tighten this screw as this will damage the internal components.)*

*From this fully closed position the screw must rotated 4-5 complete turns anti-clockwise. If ignition is not successful following this adjustment, the low fire adjuster must be used to achieve a stable flame.]*

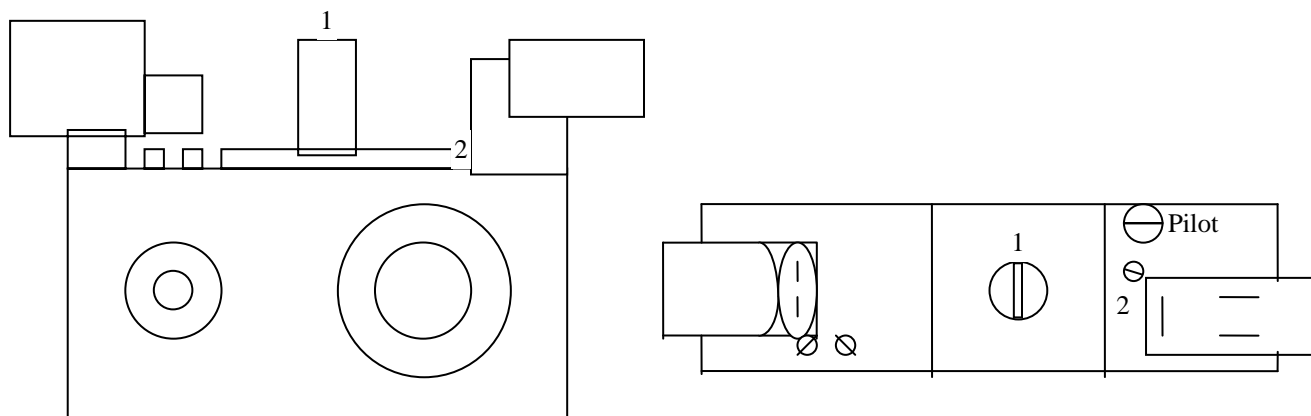
The unit should then be placed in the commissioning mode once again, whilst the figures are rechecked and where necessary readjusted.

Once the boiler has been fully commissioned as described in the installation manual supplied with the unit, a final check should be carried out to ascertain the security of the connections within the flue system.

The boiler should be placed in the commissioning mode and firing at maximum output. As the unit is increasing in output the case should be replaced and the Analyzer should be connected to the 5mm-silicone tube protruding from the bottom of the back plate of the unit.

This tube is intended as a drain for the air inlet duct of the concentric flue system. If the flue system is leaking products of combustion into the fresh air duct the analyzer will show the concentrations of CO<sub>2</sub>.

**1 = Low Fire Adjuster. 2 = High Fire Adjuster**



### **MicroMat Sit NovaMix Gas Valve**