



## **ProCon Boiler Combustion Commissioning Quick Reference Guide**

This sheet is intended as a quick reference guide and should be read in conjunction with the operating and maintenance manual for the boiler supplied by MHG Heating Ltd.

Prior to undertake any commissioning/recommissioning the ignition spark gap must be adjusted.

Two types of combined ignition/rectification electrodes can/have been used within the Streamline range.

In either case the spark gap from the electrode to the burner should be set to 4 – 5mm. Where an earth rod is present a similar gap should be maintained aligned longitudinally along the burner.

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 its internal system checks. The boiler must be placed in the commissioning mode to ensure correct adjustment of the combustion at its Maximum and Minimum output levels.

In the commissioning mode the boiler will operate in Maximum or Minimum output mode continually until the safety thermostat operates. Ignoring all external enabling signals.

To place the boiler into the commissioning mode the RADIATOR TEMPERATURE and STORED HOT WATER TEMPERATURE Buttons must be pressed simultaneously for 10 seconds.



Following the successful entry into the commissioning the screen will display 100%. This equates to the target modulation rate.

A cursor will also appear adjacent to the SPANNER symbol.



If the display indicates a flow temperature and the cursor appears adjacent to the engineer figure. The boiler will operate at 50% output.

To enter the full commissioning mode repeat the step detailed above.

Whilst in the commissioning mode the modulation of the unit can be adjusted by pressing the + & - buttons.

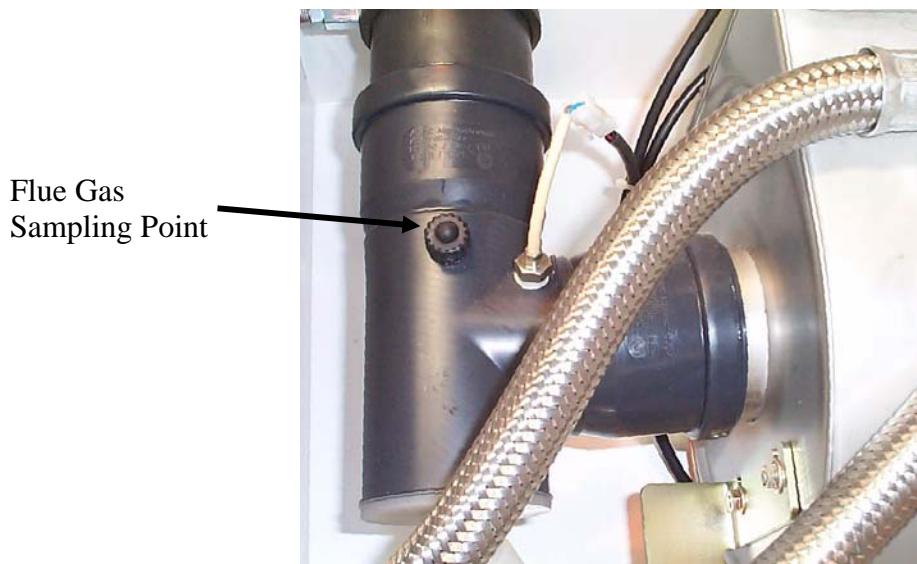
The % reading on the display screen will vary between 100% Maximum output to 0% Minimum output.

It is advisable to check the combustion figures on Maximum and Minimum outputs prior to carrying out any adjustments.

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

Carefully remove the flue gas sampling test point cap from the flue collector and insert the sampling tube of your analyser to a distance of approximately 20 mm.

### **Flue Gas Sampling Point**



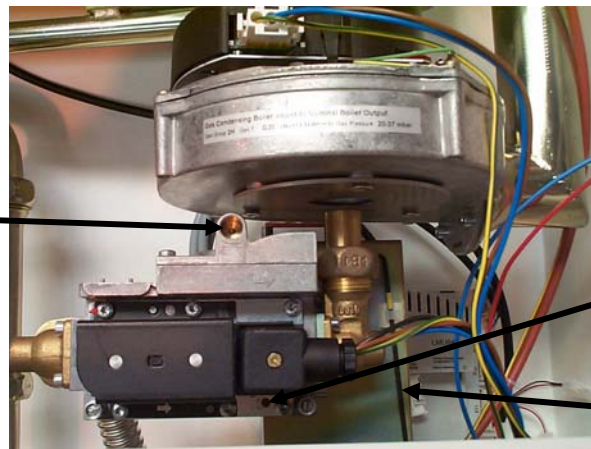
### **The combustion figures that should be achieved are:**

MIMIMUM OUTPUT	9.0 %	CO <sub>2</sub>	Natural Gas
	11.5 %	CO <sub>2</sub>	LPG
MAXIMUM OUTPUT	8.5 %	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.)

MHG Heating Ltd ©  
**Gas Valve Adjustment Points.**

Low fire Adjustment  
Undertaken Here  
(With a suitable sized  
Allen Key)



High Fire adjustment  
Undertaken Here  
(With a suitable  
sized Allen Key)

Supplied  
Allen Key

Once suitable figures have been achieved the unit should be allowed to cycle through its ignition program at least once.

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

Upon completion ensure that the flue gas sampling test point cap is securely reinserted into the flue collector.

If the boiler is left in either of the commissioning modes it will not respond to enable signals from the attached system controls.

## **Boiler Display Configuration**

