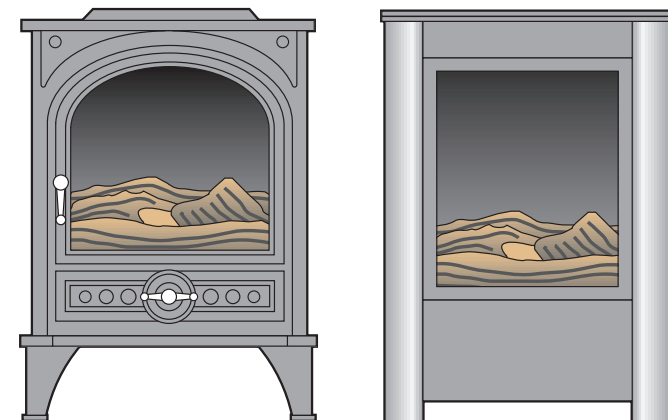


500/515

FLUELESS CAT GAS FIRED STOVE SERIES



INSTALLATION & SERVICING INSTRUCTIONS

(TO BE LEFT WITH THE CUSTOMER)



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LICENSED UNDER UK PATENT GB2275331B



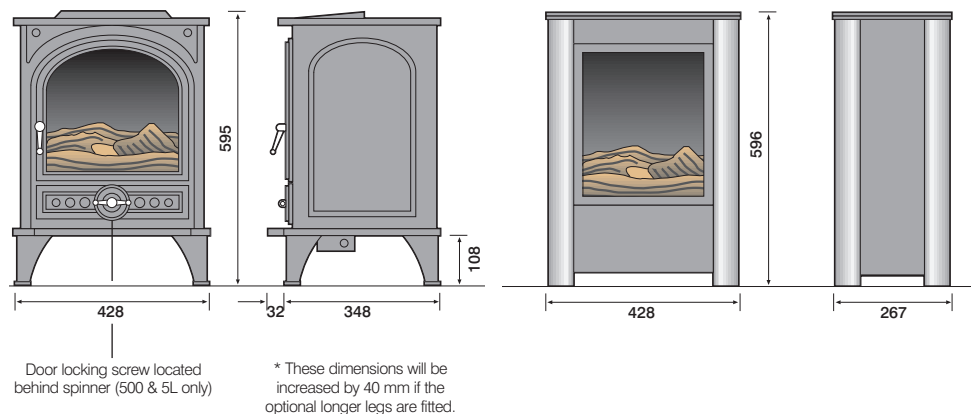
1. TECHNICAL INFORMATION

500/515		
GAS	NATURAL GAS	PROPANE
CATEGORY	I ₂ H	I3P
HEAT INPUT (GROSS) MAX	3.3kW	3.0kW
HEAT INPUT (GROSS) MIN	1.6kW	1.6kW
SUPPLY PRESSURE	20 mbar	37 mbar
BURNER PRESSURE HIGH	19.5 mbar ± 0.5 mbar	36.8 mbar ± 0.5 mbar
BURNER PRESSURE LOW	4.6 mbar ± 1 mbar	10.0 mbar ± 1 mbar
INJECTOR SIZE	82/200	92/95
GAS CONNECTION	8mm O.D TUBE	8mm O.D TUBE
GAS CONSUMPTION (HIGH)	0.28m ³ /h	0.114m ³ /h
OXYPILOT	SEAGAS NG P441 A	SEAGAS NG P451 A
CONTROL VALVE	S.I.T 0.630.700	S.I.T 0.630.700

500 SERIES DIMENSIONS

515 DIMENSIONS

Fig.1



2. IMPORTANT NOTES

This is a High Efficiency, Flueless Catalytic, Live Fuel Effect stove. It provides radiant and convected warmth both efficiently and safely utilising the latest type catalytic convector burner technology. It is recommended that it is only used as a secondary heat source.

Before installation, ensure that the local distribution conditions (identification of the type of gas and pressure) and the adjustment of the appliance are compatible. Refer to the Data label.

The stove incorporates a thermostatically controlled gas valve, which can be adjusted by the control knob on the front of the gas valve, located on the lower right hand side of the stove. The stove is designed to reduce its heat output as the temperature in the room in which it is installed rises. The main burner will automatically switch from low to off as the room temperature continues to rise. As the room temperature cools the main burner will switch from off to low and then adjust its input as required. There is a thermostat manual override lever also fitted.

This stove incorporates a combustion monitoring system (ODS). It must not be adjusted or put out of operation. If replaced then manufacturers original parts must be used.

The stove is designed to fit various types of situations as listed in the Installation Requirements.

This stove must be installed in accordance with these instructions and with the rules in force and only used in a sufficiently ventilated space. A minimum of 100cm² purpose provided ventilation is required for this appliance. An openable window or louvre is also required. This appliance is factory set for operation on the gas type, and at the pressure stated on the appliance data plate.

The room size should be a minimum of 40m³ (1412f1:3) to allow adequate circulation of air and ensure the correct operation of the stove. This volume may include adjacent spaces but these spaces must not be separated by a door.

The stove must not be installed in a bedroom, bathroom or any sleeping area. The appliance does not require a flue system of any type as the catalytic converter cleans the flue products to provide a complete combustion system.

The stove must be installed by a competent person in accordance with Gas Safety (Installation and Use) Regulations 1998 or rules in force. It is strongly recommended that a CORGI registered engineer is used for this purpose, as they are the only persons approved by the HSE under the above regulations.

On initial light up of a new appliance, the 'newness' will burn off within the first few hours of operation. During this period some smoke may be emitted from outlet grille, this should be no cause for concern. Accordingly, the room should be well ventilated with all windows and doors open during this period.

All surfaces except the controls and the drop down on the 515 stove are considered to be working surfaces

Fig.2



3. INSTALLATION

This stove must be installed on a non-combustible hearth and be of sufficient size to accommodate the stove. If the appliance is to be sited near a disused natural draught flue it is recommended that the old flue should be partially sealed off to prevent draughts, however some ventilation will be required to prevent condensation.

In the event that the stove is sited in a disused or unserviceable fireplace served by a natural draught flue, any existing under grate draught device should be sealed off to prevent loss of heat or creation of draughts. The passageway into the flue should be partially sealed to prevent excessive draughts, however some ventilation will be required in the old flue to prevent condensation and dampness. Advice should be sought from your local building control officer.

ROOM SIZING

The room size should be a minimum of 40m³ (e.g. 14' x 14' x 7'6") to allow adequate circulation of air and ensure the correct operation of the stove. This volume may include adjacent spaces but these spaces must not be separated by a door,

SITE REQUIREMENTS

This stove may be installed in any room in a home; however there are exceptions, and the stove may not be used in bedrooms, bathrooms or shower rooms.

Installations in living rooms and conservatories are popular, however other rooms such as kitchens, dining rooms and hallways are permitted, providing a suitable natural gas supply is available, and room sizing and ventilation requirements are strictly adhered to.

The stove is designed to be versatile, and as such will operate correctly when exposed to normal gentle draughts experienced within the home. It is not recommended, however that the stove be installed in areas where it is likely to be exposed to persistent strong draughts, that may be generated by outside doors or windows, air vents of other. It is recommended that the stove should not be installed within 1 metre of any air vent.

CLEARANCES TO NON-COMBUSTIBLES

Non-combustible surfaces are defined as brick, metal, marble, concrete etc, and also a number of man-made materials impervious to flame. If in doubt refer to the material manufacturer for further information before proceeding with installation.

Clearances to the sides of the stove is 50mm (2in), however clear and easy access to the controls located on the lower right hand side of the stove must be allowed for, and we would therefore recommend that at least 100mm (4") be allowed. Clearance to the front of the stove is 500mm (2ft). Care must be taken that no brickwork or other incombustible material protrudes into the area immediately around the base of the stove or area underneath the stove in a way that is likely to affect natural airflow into or around the appliance.

For the 500 series the back of the stove may be installed directly against a non-combustible wall. For the 515 stove it is recommended there should be a minimum clearance of 25mm (1") between the top plate and non-combustible wall.

Installation into 'inglenook' type fireplaces is acceptable. However it is recommended that there is at least 460mm (18") clearance above the outlet grille.

CLEARANCES TO COMBUSTIBLE MATERIALS

Combustible materials are defined as wood, fabrics, or other materials likely to combust if exposed to flame. Generally, any material, which is likely to discolour, melt or misshape when exposed to moderate heat, should be considered as a combustible material of surface. Any fire surround to be used in conjunction with this stove should be rated at a minimum of 100°C.

Clearance to the sides of the stove are 100mm (4in) but curtains, drapes and other fabrics are not permitted within a distance of 500mm (20in) of the stove sides and back. No such materials are permitted directly above the stove regardless of distance. Clearance to the front of the stove is 1000mm (39in). Clearance to the rear of the stove is 70mm (2 3/4in) from the back of the top casting.

It is not permitted to install the stove onto carpet, rugs or fabric materials of any kind.

Installations into 'inglenook' type fireplaces are acceptable, providing adequate consideration is given to any wooden cross-members and such like.

A combustible shelf may be fixed to the wall above the stove, providing that it complies with the dimensions given below.

The shelf depth may be greater than 150mm (6") up to a maximum of 457mm (18") but the height must also be increased accordingly. An increase in height of 25mm is required for every 12.5mm of additional shelf depth. For shelves that are too low, protective devices can be used such as metal heat deflectors, but it must be assured that the shelf does not reach an unacceptable temperature before relying on such a solution.

As with all heating appliances, any decorations, soft furnishings, and all coverings (i.e. flock, blown vinyl and embossed paper) positioned too close to the stove may discolour or scorch.

Maximum depth of shelf 500 series stove	Maximum depth of shelf 515 stove	Minimum distance from top of stove to underside of shelf
150mm (6in)	70mm (2,3/4in)	330mm (13in)
457mm (18in)	377mm (14,3/4in)	940mm (37in)

VENTILATION

A minimum of 100 cm² purpose provided ventilation is required for this stove. An openable window or equivalent is also required. The requirements of any other flued appliance operating in the same room or space must be taken into consideration when assessing ventilation.

Any ventilation fitted must comply with BS 5871 and BS 5440 part 2. Ventilation fitted under, or within immediate vicinity of the appliance must not be used as it may adversely effect performance of the ODS system. The stove MUST NOT be installed in a bedroom, bathroom or any sleeping area.

For Republic of Ireland, see relevant rules in force.

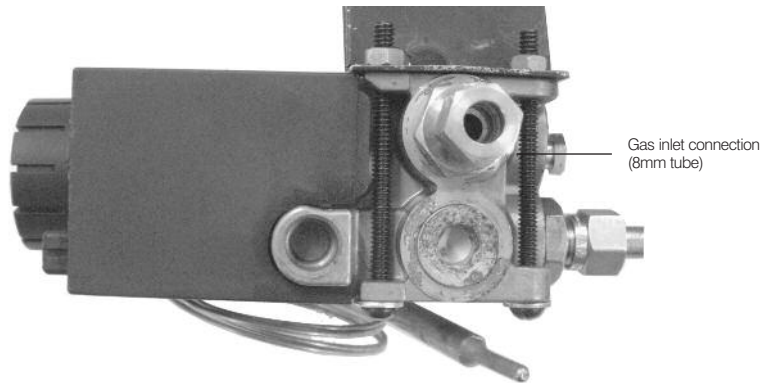
GAS CONNECTION

The gas inlet connection to the stove is located at the right hand side of the stove underneath the stove casting (see Fig 3). The gas supply may connect to the stove over the hearth or by concealed connection below the stove. Concealed pipes should not be routed through walls without being protected by sleeving or conduit. No more than 1.5m of 8mm dia pipe must be used to avoid unnecessary pressure drops.

An inlet pipe prior is supplied with the 515 stove. It is recommended that this inlet pipe is connected to the gas inlet prior to placing the stove in position.

If a concealed gas connection is to be made, the supply pipe should always be sleeved through walls and floors using the shortest possible route.

Fig.3



4. CUSTOMER BRIEFING

Advise the customer how to use the stove,

Point out that the operating procedure is in the User Instructions.

Explain to the customer that the stove has a flame sensing and oxygen depletion monitoring system.

Point out the explanation of this system in the User Instructions.

Advise that if the monitoring system repeatedly shuts off the stove, it should be switched off and a specialist consulted.

Advise that if the stove goes out for any reason, wait at least 3 minutes before re-lighting

Advise the customer that due to newness of materials the stove may give off a smell for a period of time after commissioning and that this is Quite normal and any odours should disappear after a few hours operation.

Stress that no extra coals or logs must be added over and above those supplied with the stove and that any replacement parts must only be authorised ESSE spares.

Recommend that the stove is regularly serviced at least once a year by a qualified person.

Hand these Instructions and The User Instructions to the customer .

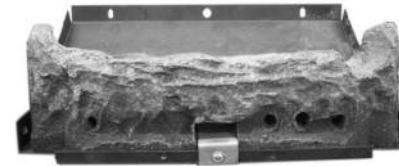
5. POSITIONING THE LOGS

500 SERIES STOVE

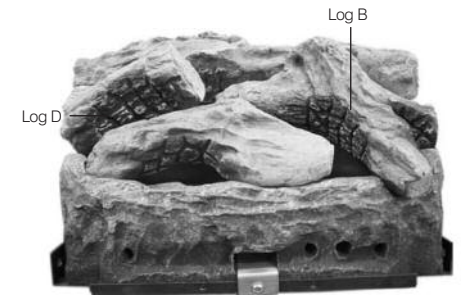
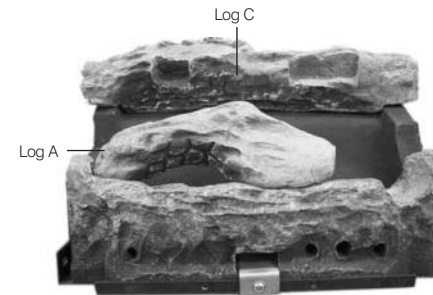
Remove the door locking screw (if fitted) located behind the spinner (fig 1) and open the stove door.

515 STOVE

Remove the top panel. Slacken the bottom two door frame securing screws. Remove the top two door frame securing screws and remove the door frame.



A) Position the backboard as shown onto the burner tray ensuring it is correctly seated behind the flame strip (see above).



B) Lay log A as shown. Lay log C as shown

C) Lay log B as shown. Lay log D as shown

Warning: Do not add any extra logs or coals.

500 SERIES STOVE

Close the stove door and replace the door locking screw (if fitted) and spinner. Under no circumstances should the stove be operated with the door open, without the door attached or the glass damaged.

515 STOVE

Replace the door frame and top panel. Under no circumstances should the stove be operated without the door frame attached or the glass removed or damaged.

6. COMMISSIONING THE STOVE

The stove is fitted with a pilot light which is also an oxygen depletion sensor (O.D.S), piezo spark, flame sensing device and thermostat. The control is located behind the right hand foot of the stove on the 500 series stove and behind the drop down door on the 515 stove (Fig 2). The pilot light is located centrally behind the front log piece.

Should the stove be extinguished for any reason wait 3 minutes before re-ignition is attempted. A safety interlock prevents re-ignition of the pilot flame until the thermocouple has cooled sufficiently.

Connect a suitable pressure gauge to the burner pressure test point (Fig 5).

(a) Lighting the Pilot

1. Turn control knob to PILOT IGNITION POSITION (Fig 4).
2. Press control knob downwards and hold it in.
3. Press ignitor button fully downwards to obtain a spark. Repeat until the pilot lights.
4. Continue to hold the knob in for about 10 seconds after the pilot ignites. Release the control knob.

If the pilot goes out repeat steps 2, 3 and 4.

(b) High setting

Push the thermostat lever down to the 'thermostat' position (Fig 4). Turn the control knob to FULL FLAME POSITION (Fig 4). Check that the HIGH burner setting pressure is in accordance with that given in the TECHNICAL INFORMATION section. The pressure is factory set and should not require adjustment but if necessary adjust the HIGH FLAME SCREW (Fig 6). For access to this remove the control plastic cover (Fig 4).

(c) Low setting

Turn the control knob to LOW FLAME Position (Fig 4) which is just before the snap off position. Check that the LOW burner setting pressure is in accordance with that given in the TECHNICAL INFORMATION section. The pressure is factory set and should not require adjustment but if necessary adjust the LOW FLAME SCREW (Fig 6).

(d) Turning the Stove Off

From any heat setting depress control knob fully and turn clockwise to PILOT POSITION (Fig 4). Disconnect the pressure gauge; replace the test point sealing screw and test for gas soundness.

(e) Turning the Pilot Off

From any heat setting or the PILOT position depress control knob fully and turn clockwise to OFF position.

Fig.4

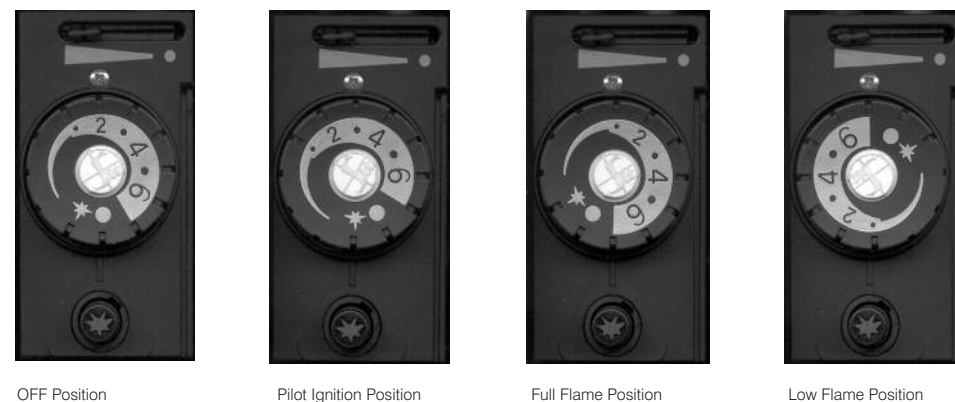
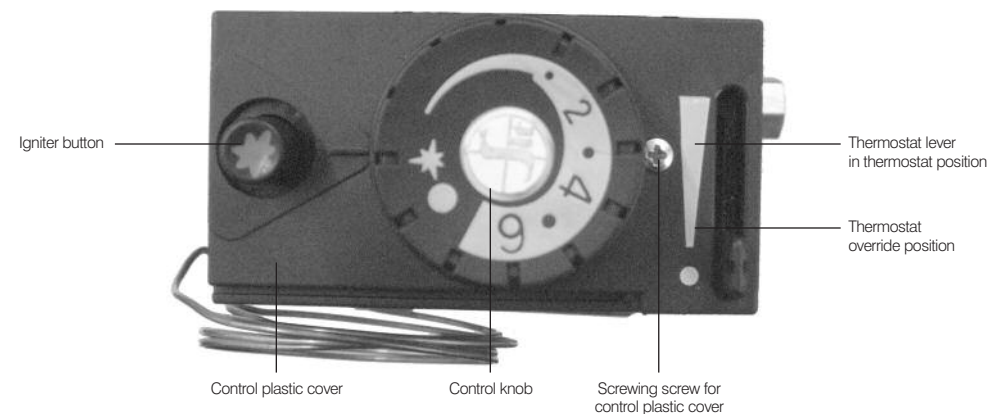


Fig.5

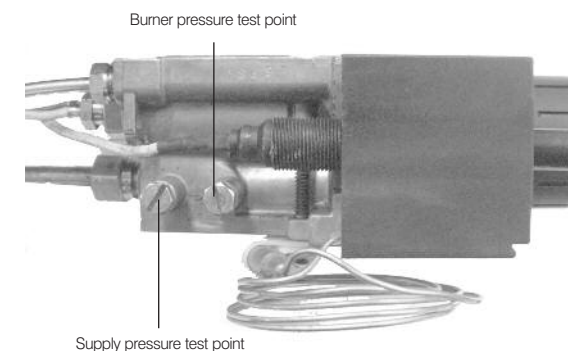
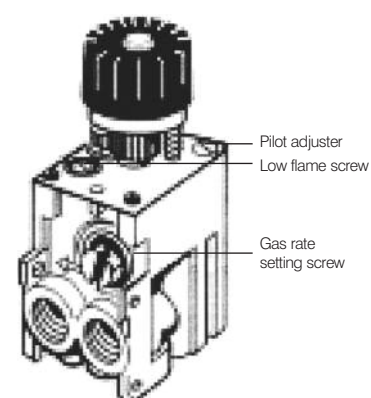


Fig.6



7. SERVICING INSTRUCTIONS

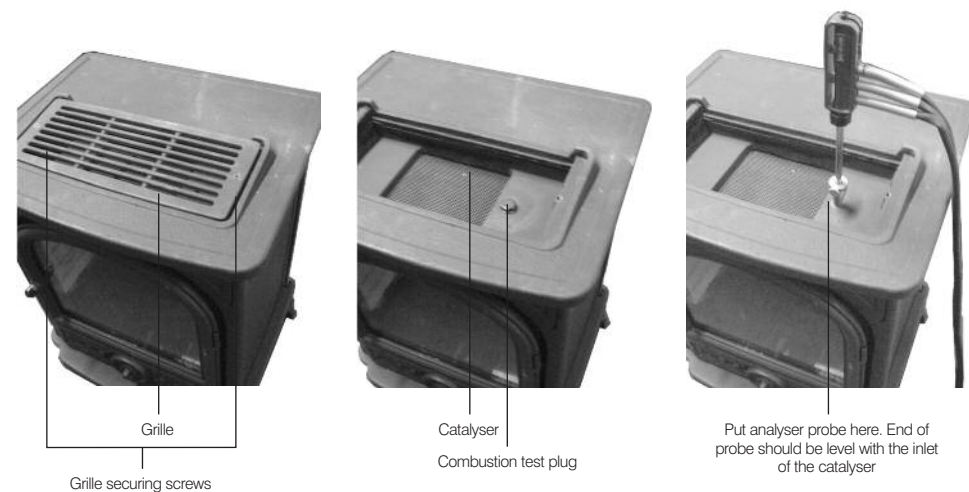
The stove is fitted with a pilot light and flame-sensing device which is also an oxygen depletion sensor (O.D.S). This is not adjustable and must not be put out of action. If any parts of this system requires replacement only original manufacturers parts must be used.

The following servicing procedure should be carried out regularly and only by a qualified person.

- i. Ensure that the fire is turned off and is cold.
- ii. Remove the logs, backboard and front log piece in the reverse order to that described in (5) POSITIONING THE LOGS.
- iii. Carefully remove any deposits of dirt, lint etc, from the burner flame strip, tray, aeration holes and pilot assembly with a soft brush.
- iv. Clean the pilot aeration 'hole'.
- v. Inspect the catalyst for sign of damage and dirt. The expected life of the catalyst is in excess of 11,000 hours (10 years of normal use). After this time the catalyst should be replaced. If there are any deposits of dirt or soot on the catalyst clean with a soft brush and a vacuum cleaner.
- vi. Due to the intense temperatures reached in the stove, some surface cracks may appear on the ceramic components. This is quite normal and will not affect the safe operation of the stove. Replace the front log piece, back board and logs as described in (5) POSITIONING THE LOGS.
- vii. Check the high and low burner setting pressures as described in (6) COMMISSIONING THE STOVE
- viii. Check the safe operation of the appliance.
 - x.
 - a) With the stove cold remove the grille and the combustion test plug (Fig 7). Light the stove on HIGH and after 15 minutes check the combustion performance is in accordance with (Fig 8).
 - b) If the Co figures are more than given in (Fig 8) below the catalyser this suggests that either the aeration holes on the burner require cleaning or the ceramic fuel bed components are incorrectly placed. Turn OFF the appliance and investigate and correct.
 - c) If the Co figures are more than given in (Fig 8) above the catalyser this suggests that the catalyser is due for changing.
 - xi Check that the purpose provided air vent is non-obstructed.

Should any replacement components be required they must only be authorised ESSE spares.

500 SERIES



515 STOVE

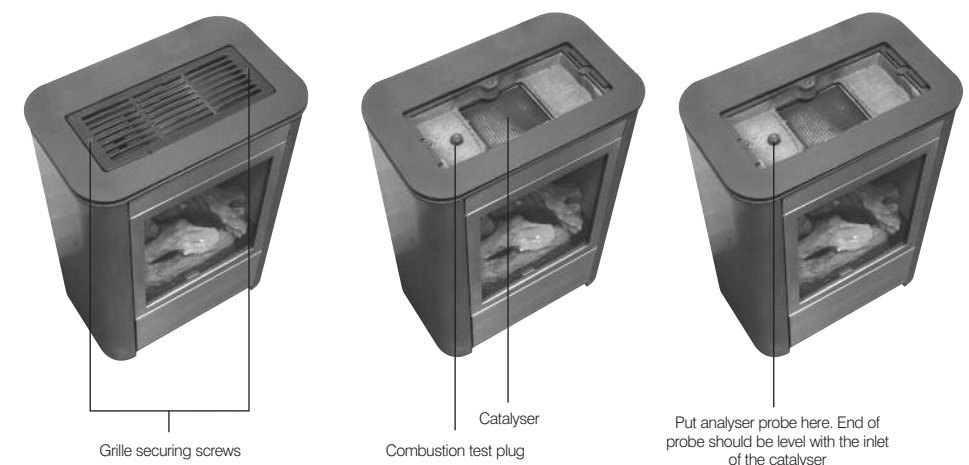


Fig. 8

	Above Catalyser	Below Catalyser
Coppm	Less than 10	Less than 300
Co ² %	Approx. 3.5-4.5	Approx. 3.5-4.5