



**Installation, Servicing and Operation Manual**

**Canterbury Slim Line Gas Stove  
&  
Lincoln Slim Line Gas Stove**

This book contains fitting, servicing and operation instructions for the Broseley Fires Canterbury and Lincoln slim line gas stoves.

Natural Gas and Propane instructions are included in this book.

**PLEASE LEAVE THESE INSTRUCTIONS WITH THE  
USER**

Revision: GB10A

## Introduction

### **THANK YOU FOR PURCHASING A GAS FIRED STOVE**

Broseley Fires Ltd, a family run company, was founded as an appliance and design development company in 1975.

Since then we have built up an enviable reputation for the quality, reliability and fuel efficiency of our stoves.

These instructions have been carefully prepared to guide the installer and end-user through the relevant methods and standards for installation of your new Gas Stove.

Correctly installed and operated, your stove will give you many years of warmth and reliability. Therefore, we would suggest that you read the whole instruction manual prior to handing it to your installer. That way you will have a clearer picture of what is involved.

### **General Installation Requirements**

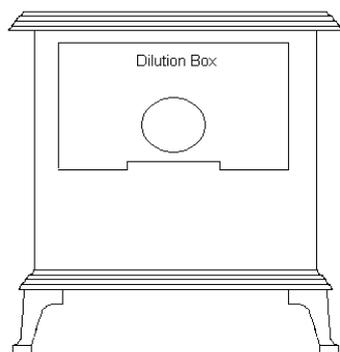
It is required by law that the complete assembly, installation and commissioning of gas-fired stoves is carried out by a professionally qualified and accredited gas fitter listed on the "gas safe" register.

**THE INSTALLATION MUST BE IN ACCORDANCE WITH THE 'GAS SAFETY INSTALLATION AND USE REGULATIONS' IN CONJUNCTION WITH THESE INSTRUCTIONS AND THE RELEVANT 'BRITISH STANDARDS CODES OF PRACTICE' REQUIREMENTS AND THE RELEVANT 'LOCAL AND NATIONAL BUILDING REGULATIONS'.**

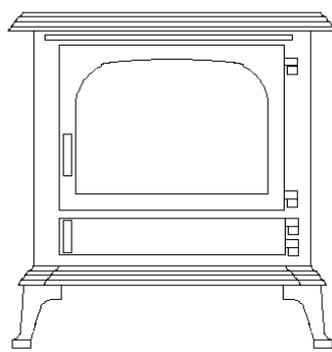
## Technical Information

	<b>Natural Gas G20/I2H</b>	<b>Propane G31/I3P</b>
Heat Input (Gross)	5.5Kw	4.3Kw
Supply Pressure	20 mbar	37mbar
Gas Rate	0.66 m3/Hr	0.25 m3/Hr
Injector Size	C.A.T. 16/360	C.A.T. 10/150

## Stove Dimensions



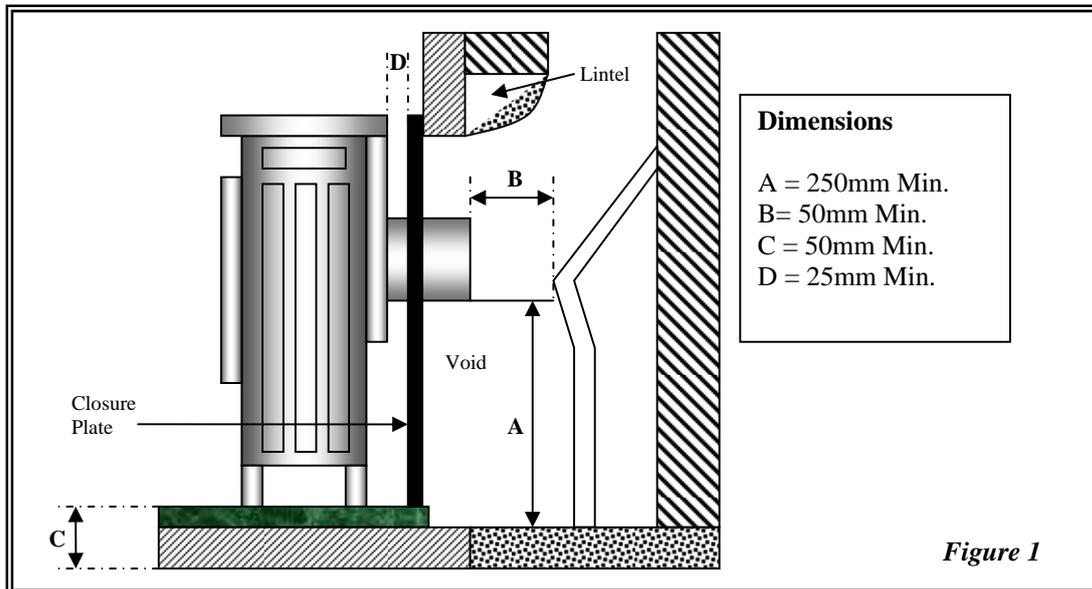
**Rear View**



**Front View**

	<b>Canterbury</b>	<b>Lincoln</b>
<b>Height</b>	<b>660mm</b>	<b>660mm</b>
<b>Height to centre of Spigot</b>	<b>460mm</b>	<b>475mm</b>
<b>Depth (not inc. Ash Lip)</b>	<b>250mm</b>	<b>220mm</b>
<b>Overall Depth</b>	<b>330mm</b>	<b>320mm</b>
<b>Width</b>	<b>575mm</b>	<b>570mm</b>
<b>Flue Spigot Diameter</b>	<b>125mm</b>	<b>125mm</b>
<b>Weight</b>	<b>66Kg</b>	<b>64Kg</b>

## Sitting the Appliance



The gas supply connection to the appliance is in the centre underneath the stove. The connection requires an 8mm-diameter semi-rigid pipe, not more than 1 meter in length.

The appliance can be installed in any adequate area suitable for solid fuel fires and stoves. It can use a class 1, class 2 and pre-cast flue.

To ensure maximum and efficient use of the stove, we recommend the following hearth specifications.

The hearth must be at least 300mm at any angle in front of the incandescent heat source (the burner surface) and the burner surface requires a clearance of 150mm each side. The effect of this will mean the hearth must extend about 20mm in front of the legs of the stove. The hearth must be made of non-combustible material at least 12 millimeters thick.

On all installations, no combustible material such as carpet should cover the hearth. To prevent this from happening, the hearth should be at least 50mm above the level of the floor. If this is not possible, a fender/kerb of a similar height should be placed around the edge of the hearth.

If the appliance has to be located in an opening, there must be a clearance of a minimum of 100mm each side of the stove. The rear of the appliance should have a minimum 25mm air gap between the stove and the back wall. There must be a minimum clearance of 610mm from any combustible surface. i.e. skirting board or beams.

## Stove Assembly

To flue the stove into an existing fireplace *Figure 1* shows the critical dimensions required. Please check that the following components are included before you start on the assembly:

### Stove Box – Canterbury and Lincoln

- 1 x cast iron stove body
- 1 x flue spigot

### Burner Box - Natural Gas – Canterbury and Lincoln

- 1 x burner unit
- 1 x stainless reflector
- 2 x large coal matrix
- 4 x small front coals
- 14 x small loose coals
- 1 x instruction booklet
- 4 x burner fixing and screws (2 x Self Tapping to hold to the rear of the stove)
- 2 x Spacers for burner (Used on Lincoln only)
- 3 x Self Tapping Screws for the stainless reflector

### Burner Box – Propane – Canterbury and Lincoln

- 1 x burner unit
- 1 x stainless reflector
- 2 x large coal matrix
- 4 x front coals
- 3 x loose coals
- 1 x instruction booklet
- 4 x burner fixing screws (2 x Self Tapping to hold to the rear of the stove)
- 2 x Spacers for burner (Used on Lincoln only)
- 3 x Self tapping screws for the stainless reflector

The stove assembly is the same on both stoves Canterbury and Lincoln the only difference being the access to the stove.

The **Canterbury Stove** is accessed through the main door via a threaded handle. This handle is removed by turning anticlockwise, this allows access to the inside of the stove. After installation please replace the handle and lock using the grub screw located on the handle.

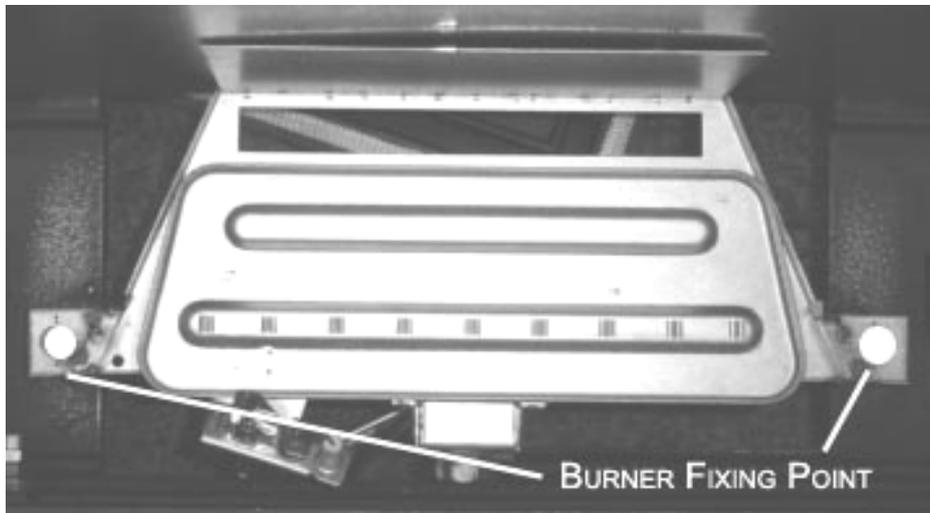
The **Lincoln Stove** is accessed through the lid of the stove via 4 bolts located on the left and right hand sides of the stove (2 each side). Once removed the lid should lift off and access to the stove is available. All installation can take place through the top of the stove there is no need to remove the glass from the stove. It is important that the lid bolts are replaced before leaving the stove with the user

## Fitting the Burner

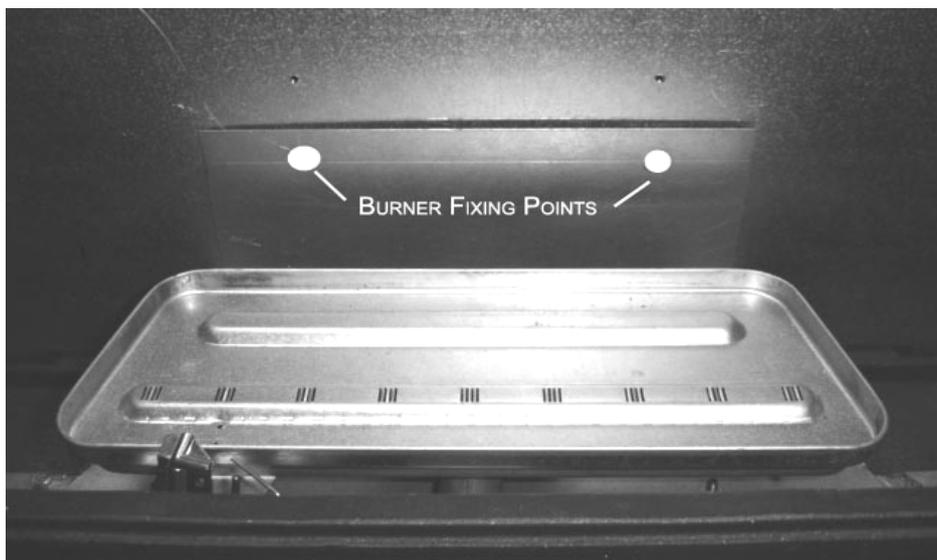
- 1) Insert the burner into the stove locating the burner bracket on to the fixing lugs provided. Insert the burner end with the control knob first followed by the other end of the burner locating the burner bracket onto the up stands provided.

Please note with the Lincoln model 2 spacers are required. These spacers are to be located on top of the lugs and under the burner brackets. The longer screws are then used.

Use the burner fixing screws to secure the burner in place.



- 2) Next fix the rear of the burner bracket to the rear of the stove (dilution box) using the self tapping screws and washers provided.

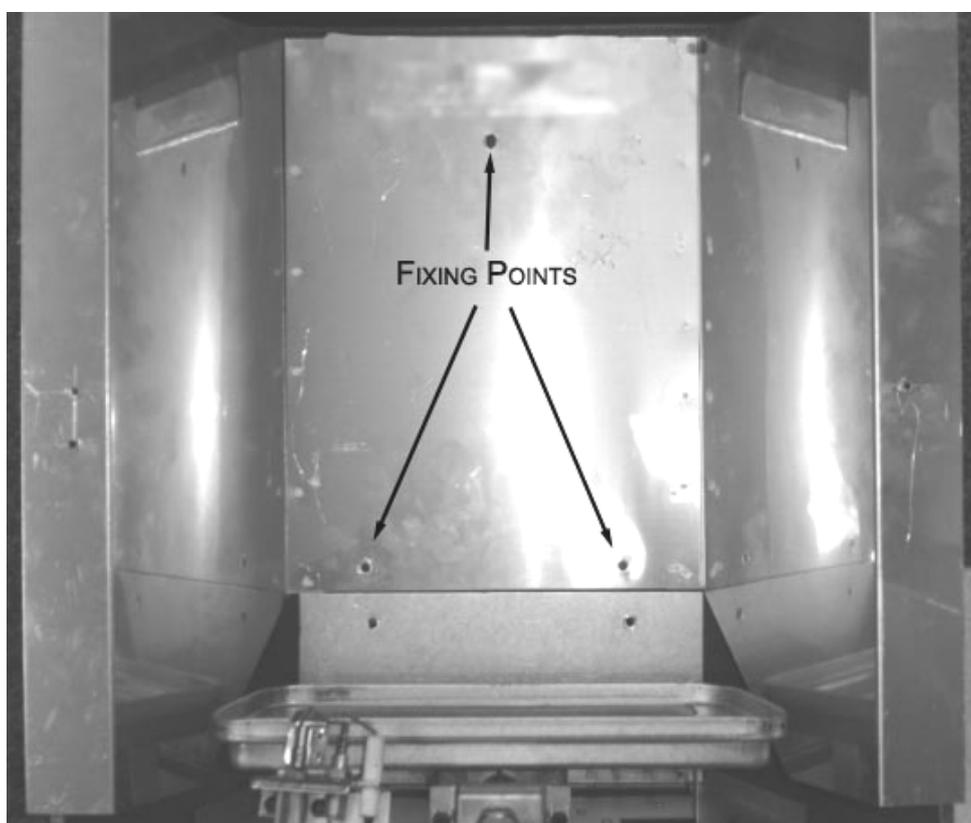


## Fitting the Stainless Reflector Plate

After fixing the burner in position fit the stainless reflector plate to the rear of the stove (dilution box) using the holes and fixing screws supplied.

Remove the protective film once the plate has been fitted, this will insure no damage to the plate incurs.

To insert the reflective plate into the stove insert the bottom of the plate first, then give the plate a slight bend inwards on both sides (to clear the door) and finally bring the top of the plate into place. When fitting the plate into the Lincoln stove the plate simply drops down through the top of the stove.



## **Flue Connection**

Firstly you will need to attach the flue spigot to the rear of the stove using the 4 screws supplied.

The stove must be installed in accordance with current gas and buildings regulations BS5871: Part1.

Before you install the stove, make sure the chimney flue outlet is correctly positioned to align with the flue outlet on the stove and that the chimney is in good condition. If not, a chimney liner must be installed or a suitable class II gas flue used. A draught is necessary to ensure the products of combustion are fully evacuated. Due to the internal dilution/diversion system in the stove, it is not obligatory to line the chimney but local conditions will apply. The flue will have to be inspected by a CORGI registered installer and passed as suitable/sound.

The Gas Stove is suitable for both Class I & II and pre-cast flues (The Building Regulations 2000).

Ideally it is recommended that a minimum height of 610mm from the stove should be established before any significant changes of the direction of the flue. Horizontal or negative gradients should be avoided. The flue must have a minimum height of 3 metres to insure adequate draught.

Prior to installation, the installer should insure that the flue is free from obstruction and any dampers must be fixed in a permanently open position. Ensure the chimney is not closed and that it has been swept and subsequently smoke tested.

Make sure that rain, birds or any foreign body cannot get into the chimney to cause damage or blockage. This problem can normally be overcome by fitting an approved gas cowl. It is essential for the effective running of your stove that the chimney draws properly to allow the products of combustion to escape.

## **Ventilation (GB only)**

The gas stove is rated at less than 7kw and therefore does not normally require additional ventilation in the room (BS5871 – part II).

## **Gas Connection**

A minimum 15mm-diameter gas supply pipe must be used to within 1 metre of the installation with the final connection to the stove to be completed with the suitable 8mm semi-rigid gas pipe. The 8mm pipe should be connected to the inlet of the gas valve using the nut and 8mm olive provided. Support the control whilst finally tightening the supply pipe.

## Pressure Testing

Always make sure that there is adequate gas pressure and volume to the stove. The relevant pressures are on the ID plate on the gas control knob.

1. **For natural gas, this is 20mbar for LPG 37mbar** measured at the inlet connection to the stove with the appliance in the full rate position.
2. Ensure that the gas pressure to the stove is maintained when it is operating at the same time as other appliances in the building and that a suitable pressure gauge is used i.e. a manometer. **Any service call as a result of incorrect gas pressure will be chargeable.**

## Arranging the Layout of the Coals – Natural Gas

Only the ceramics supplied with this appliance should be used. The ceramics should only be laid as described. Replacement ceramics are available from your dealer.

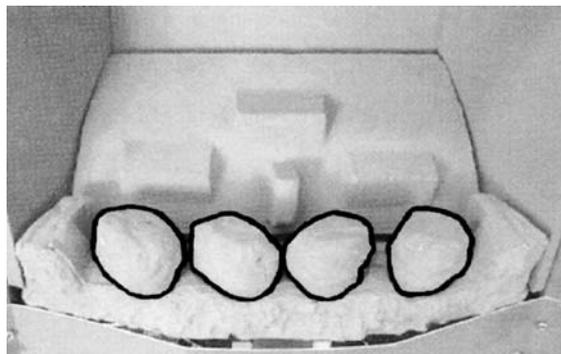
Whilst arranging the ceramics, ensure that the pilot is not obstructed.

Broseley Fires Ltd accepts no responsibility for any injury sustained whilst handling hot ceramics.

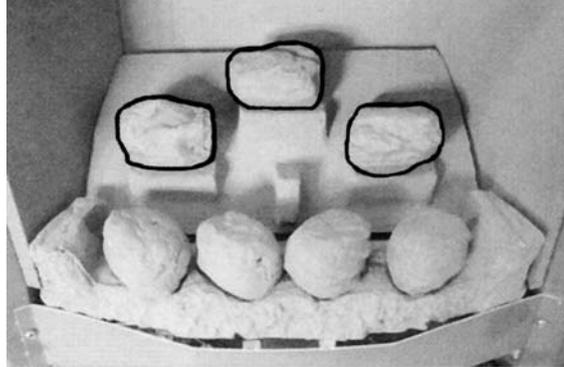
**Before any ceramics are placed in position ensure that the burner is operating correctly.**

**Ceramics which are found to be placed other than in accordance with these instructions will result in a charge being made following any service callout.**

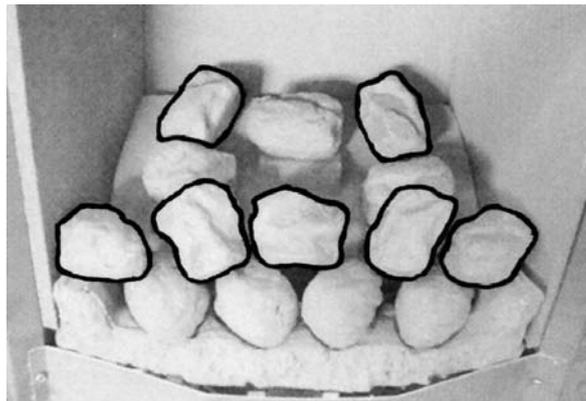
1. Position the two large coal matrixes on the burner as shown, and then position the four separately packed coals in the corresponding indentations on the front edge of the coal bed. *These 4 coals are slightly larger and have no indentations on the top of them.*



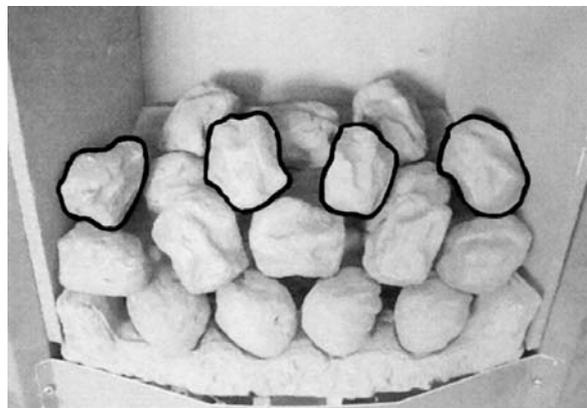
2. Position a coal on each of the platforms on the centre coal.



3. Place a coal on either side, resting on the coal bed and the loose coal beside it. Next to this, bridge the gap between the front and the middle row either side of the center. The central coal is then positioned resting on the front coals and node on the centre coal.

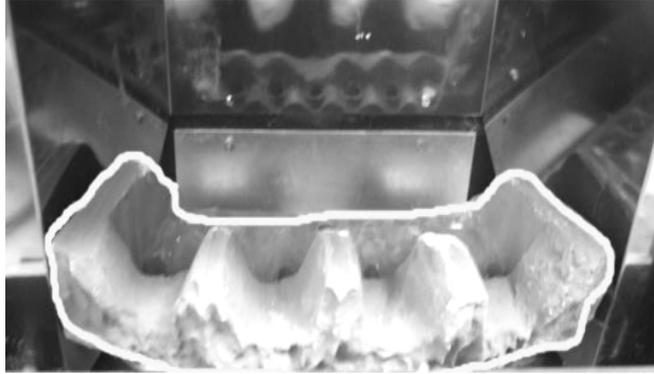


4. Place the final layers of coals carefully as shown.

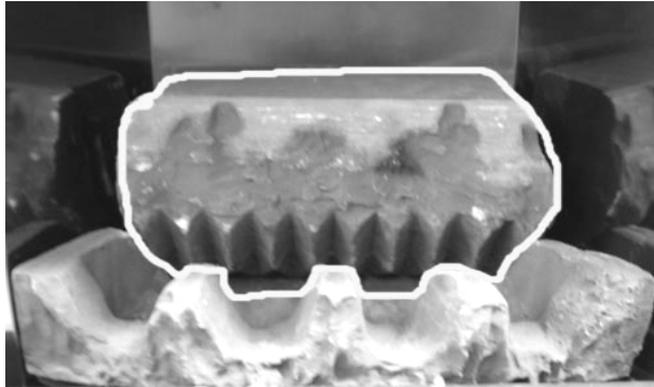


## Arranging the Layout of the Coals - Propane

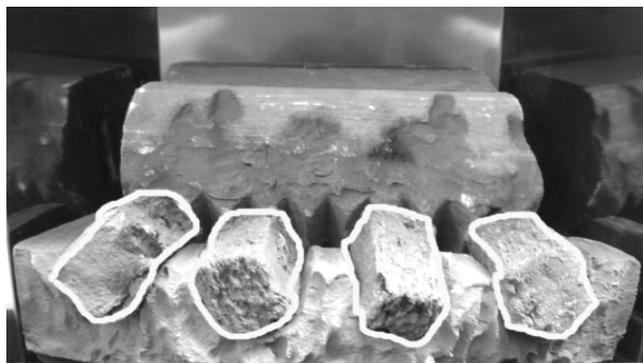
- 1) Position the first large coal matrix on the burner as shown. This coal matrix sits directly on the burner.



- 2) Position the second large coal matrix at the back of the burner resting on the first coal matrix as shown



- 3) Position 4 ceramic coals in between the up stands of the first ceramic base. These coals should not be forced into the gaps just lightly positioned as shown.



- 4) Place the final layers of coals bridging the gap between the first and second large coal matrixes. These should not be forced into position just placed carefully as shown.



## Test for Spillage

A Spillage Test **MUST** be made before the installed fire is left with the customer.

Carry out the test by first closing all doors and windows in the room containing the fire.

Insure that the fire is burning at full rate for a minimum of 10-15 minutes.

Using a lighted smoke match, run it along under the rear edge of the stove. The draught diverter box is situated at the rear of the stove, the entry being in the rear panel for the stove. Observe the smoke being drawn into the dilution box. After 10 minutes repeat the test.

If there is an extractor fan in a nearby room the spillage test must be repeated with the fan running and all connecting doors between the fire and fan left open.

If there are still problems, the chimney / flue may require attention. Disconnect the stove and seek expert advice.

## Spillage Monitoring System

This appliance is fitted with an atmospheric sensing spillage monitoring system, in the form of an oxygen depletion-sensing pilot. This is designed to shut down the fire within a safe period if there is an excessive build up of products of combustion within the room space. This would usually only occur if the flue path suffered severe blockage and / or ventilation was severely impeded

## **THE FOLLOWING ARE IMPORTANT WARNINGS RELATIVE TO THE SPILLAGE MONITORING SYSTEM**

1. The installer must not attempt any adjustments to the spillage monitoring system.
2. There must be no attempt to disable the spillage monitoring system.
3. It is not possible to replace individual parts of the pilot assembly on the appliance – only a complete pilot assembly (including thermocouple) may be fitted in the event of a replacement being necessary. When the spillage monitoring system is replaced, only complete and original manufactures' parts may be fitted.
4. Should the appliance turn itself off, wait for a minimum of 3 minutes before attempting to re-light. In the event of your stove tripping out, consult your installation engineer to have the flue / chimney checked.

## **Operating the Stove**

**It is important to read these instructions thoroughly before lighting the stove.**

The gas stove operates with a traditional permanent pilot light.

The knob for ignition and power control are located on the lower right hand side of the stove.

The pilot light is located at the left corner of the coal matrix.

If the Flame Supervision Device Actuating Flame (the pilot light) is extinguished by intention or not, no attempt should be made to re-light **until 3 minutes have elapsed.**

### **IGNITING THE PILOT AND USING THE HIGH/LOW FUNCTION**

1. Depress the control knob fully.
2. Whilst depressed, turn knob sharply 90 degrees anti-clockwise to "pilot" setting. Repeat until pilot light is visibly lit. You should feel some resistance and hear a click. Repeat until the pilot lights.
3. **Keep knob depressed at this point for 15-20 seconds.**
4. Upon releasing, turn the knob Anti-clockwise to select the high flame setting. Turning the control further anti-clockwise you will be able to select the low flame setting.
5. From the low setting you can select high by depressing the control slightly and turning clockwise

## **EXTINGUISHING THE STOVE FULLY**

1. From any heat setting or the permanent pilot, depress control knob and turn clockwise to "OFF" position.

Should the glass door become broken or damaged in any way, turn your stove off and do not attempt to re-light it. Contact your dealer for a replacement to be fitted before relighting the appliance.

**PLEASE EXPLAIN TO THE CUSTOMER THESE LIGHTING AND EXTINGUISHING PROCEDURES AND THAT IT IS NORMAL FOR THE STOVE TO GIVE OFF ODOURS WHILST THE PAINT, SEALANT AND CAST IRON MATURES.**

## **Troubleshooting**

### **The gas pilot will not ignite or stay lit**

- Ensure the gas is turned on at the appliance and the meter / cylinder.
- Hold the pilot gas button for at least 20 seconds once the pilot is alight to ensure the operation of the safety thermocouple valve.
- Ensure that the pilot injector is not obstructed or blocked and it is free from any dust or dirt.
- Ensure that the thermocouple has not been damaged in transit. This is a very delicate device.
- Ensure that the aeration ring shutter on the pilot head is fully open so that the pilot flame is initially intense: this can be subsequently turned down.
- Ensure the pilot flame is the correct size for the type of gas. The flame should be focused on the thermocouple probe, so that it is evenly encircled.
- Any whistling sound you hear is normally caused by dirt obstructing the pilot. This is normally cured by carrying out the cleaning process outlined in the next section entitled Servicing Instructions.
- After altering the pilot, check for any leakage of gas

### **The main burner does not seem to burn correctly**

- Ensure there is adequate gas pressure to the appliance. The pressure can be obtained by unscrewing the pressure test nipple and applying a suitable pressure gauge (I.E. A MANOMETER). Be sure that the gas pressure agrees with the identification label on your stove.
- Ensure adequate volume of gas is being used. Once the fire is burning on maximum, turn off all other gas appliances in the house and calculate the fuel being burned from the gas meter.
- See that the burner is burning evenly across the whole of the mesh surface without any coals in place.

## **Servicing Instructions**

Servicing should be carried out annually by a qualified installation engineer when the stove is cold and the gas supply is turned off at the isolation tap. The following points should be checked.

- Remove the coals and clean any dust and debris from the top of the burner unit. Ideally a vacuum cleaner should be used, but a soft brush will do.
- Check the condition of the coals. Any damaged ones will affect the efficient operation of the stove and should be replaced with new ones available from your stove supplier.
- All gas supply joints should be checked to make sure they are completely sealed and that the gas supply and pressure is to specification.
- The pilot jets are correctly set and clear of obstruction.
- The chimney should also be checked to make sure there are no restrictions or blockages.
- Finally re-lay the coals and re-light the stove as described previously.

## **Curing the Paint**

Most high temperature paints operate in the same way. They use a resin which dries at room temperature and a silicon resin which cures at high temperatures. When the stove is burned the dry resin burns away and the silicon cures. This transition occurs about 475 degrees F.

After the stove burns about three times, the entire surface which gets hot will have cured. The house needs to be fully ventilated during these initial burnings and although the smoke is mostly Carbon Dioxide there are other components of the smoke which make it smell bad and may irritate some people. These problems will go away after the first few burns depending of the duration and surface temperature of each burn. The hotter the stoves gets the more it will cure.

## **AND FINALLY.....**

We would remind you that it is a legal requirement that the stove is installed by a qualified and accredited installation engineer. Improper installation, adjustment, alteration, service or maintenance can cause personal injury and / or damage to property. If you are in the slightest doubt about any aspect of your stove's performance or you require additional information then please contact your stove supplier, a qualified installation engineer or call our technical help-line on 01743 461444.

Please do not store, keep or use petrol or any other flammable liquids, vapours or substances anywhere near the stove or any other heating appliance.

We hope these instructions are clear and helpful and you are able to enjoy the full benefits of your stove. Please keep this booklet handy for future reference.

The materials used in building your gas stove are guaranteed for one year provided the assembly and operation complies with these instructions. Accidental damage and all consumables including the glass door and seal and ceramic coal set are not covered.

We are sure you will appreciate and accept that our guarantee cannot be extended to cover the assembly, installation and the use of your stove as these are all operations outside our control or influence.

Please retain your purchase receipt. We will need to see this in the event of a claim under warranty.

# The Commissioning Sheet

**THIS SECTION MUST BE COMPLETED AND SIGNED BY THE INSTALLATION ENGINEER**

PLEASE LEAVE WITH THE CUSTOMER AND THE APPLIANCE.

Type gas supply (please tick)

Natural (mains) Gas \_\_\_\_\_ LPG supply in bulk \_\_\_\_\_ LPG supply in cylinder \_\_\_\_\_

Size of Governor setting: (i.e.) Natural Gas 20MBAR. LPG 37MBAR

Length and size of gas supply: \_\_\_\_\_

Meter pressure. Fire on only: \_\_\_\_\_

Other appliances . All on: \_\_\_\_\_

Burner pressure. Fire on only \_\_\_\_\_

Other appliances . All on: \_\_\_\_\_

Gas rate - Natural Gas - Time for 1 cubic foot in seconds: \_\_\_\_\_

Overall length of flue: \_\_\_\_\_

Is there any spillage: \_\_\_\_\_ Is the draught excessive: \_\_\_\_\_

Is there any permanent ventilation in the room: \_\_\_\_\_

Has the room double glazing: \_\_\_\_\_

Is the aeration of the pilot correct: \_\_\_\_\_

Does the flame encircle the FFD: \_\_\_\_\_

Installation Engineers Name: \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Post Code \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ Mobile: \_\_\_\_\_

Corgi Registration No: \_\_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

# *Guarantee*

Dear Customer,

Your decorative gas fire, when installed in accordance with the installation instructions and operated in accordance with these instructions should provide many years of safe and efficient operation.

We thank you for purchasing our product and trust it will provide excellent service.

This appliance carries a guarantee of 1 Year.

We agree to repair free of charge or, at our option, replace the appliance or part thereof, which may prove to be defective within the guarantee period.

The guarantee is void if:

- The appliance is not installed and operated in accordance with our instructions, or
- Repairs of modification have been carried out by the purchaser or any third party not authorised by us or:
- The appliance has been misused or accidentally damaged, or:
- Damage is due to 'fair wear and tear.' or:
- The appliance or defective component(s) are not returned to us, prepaid postage.
- The appliance has not been serviced annually by a corgi registered gas engineer.

The rights given in this guarantee are limited to the UK mainland and are in addition to any to which you may have a statutory entitlement.

Please retain your purchase receipt. We will need to see this in the event of a claim under warranty.

Broseley Fires Ltd  
Knights Way  
Battlefield Enterprise Park  
Shrewsbury  
Shropshire  
SY1 3AB  
Tel: 01743 461444  
Fax: 01743 461446  
<http://www.broseleyfires.com>