

# INSTALLATION INSTRUCTIONS



**COMPACT  
GAS STOVE**

**MODEL NUMBER 550**

**Before installation ensure that the local distribution conditions (identification of the type of gas and pressure) and the adjustment of the appliance are compatible**

**This is not a “Do It Yourself” product**  
**This appliance must be installed by a competent person**

**These instructions must be left with the user**

**G.C. No. 32-032-25 (Natural Gas)**

**G.C. No. 32-032-26 (LPG)**



**This appliance meets the requirements of the European Gas Directive**

Manufactured by Valor Heating

Wood Lane, Erdington, Birmingham B24 9QP, England

**The LPG appliance is for use with G31 at an inlet pressure of 37mbar.  
These appliances are for use in the United Kingdom (GB) and the Republic of Ireland (IE) only.**

## **LIST OF COMPONENTS**

### **Main Pack**

Cast iron stove containing gas burner unit.  
1 Spigot  
2 Ceramic base pieces.  
Set of 5 coals.  
1 Pair of ceramic firebox side walls  
1 Ceramic firebox back wall  
1 8mm nut & olive  
Installation and user's instructions  
2 Clamps for securing the side walls in position.

### **Closure Plate Pack**

1 Fireplace opening closure plate  
1 Decorative closure plate cover

## **APPLIANCE DATA**

This product uses fuel effect pieces, burner compartment walls and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract. Consequently, it makes sense to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.

This appliance does not contain any component manufactured from asbestos or asbestos related products.

<b>Gas</b>		<b>Natural (G20)</b>	<b>Propane (G31)*</b>
Inlet Pressure		20mbar	37mbar
Input	Max. (Gross)	5.1 kW	5.1 kW
	Min. (Gross)	2.3 kW	3.5 kW
Output	Max. (Gross)	3.67 kW	3.67 kW
	Min. (Gross)	1.66 kW	2.5 kW
Burner Test Pressure (Cold)		18.68 mbar +/- 0.75 mbar	36.36 mbar +/- 0.75mbar
Gas Connection		8mm pipe	8mm pipe
Burner Injector		Cat 82 size 320	Cat 92 size 160
Efficiency class		2	2

The stove dimensions are shown in figure 1

## **GENERAL INSTALLATION REQUIREMENTS**

The installation must be in accordance with these instructions.

For the user's protection, in the United Kingdom it is the law that all gas appliances are installed by competent persons in accordance with the current edition of the Gas Safety (Installation and Use) Regulations. Failure to install the appliance correctly could lead to prosecution. The Council for the Registration of Gas Installers (CORGI) requires its members to work to recognised standards.

In the United Kingdom the installation must also be in accordance with:

- All the relevant parts of local regulations.
- The current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office or the Building Standards (Scotland) Regulations issued by the Scottish Development Department.
- All relevant codes of practice.
- The relevant parts of the current editions of the following British Standards:-
  - BS 1251
  - BS 5440 Part 1
  - BS 5440 Part 2
  - BS 5871 Part 1
  - BS 6891
  - BS 8303

In the Republic of Ireland the installation must also conform to the relevant parts of:

- The current edition of IS 813
- All relevant national and local rules in force.

An approved fireguard for the protection of young children, the elderly and the infirm is recommended.

**Clearances** from combustible and non-combustible materials must be at least those shown in figure 1

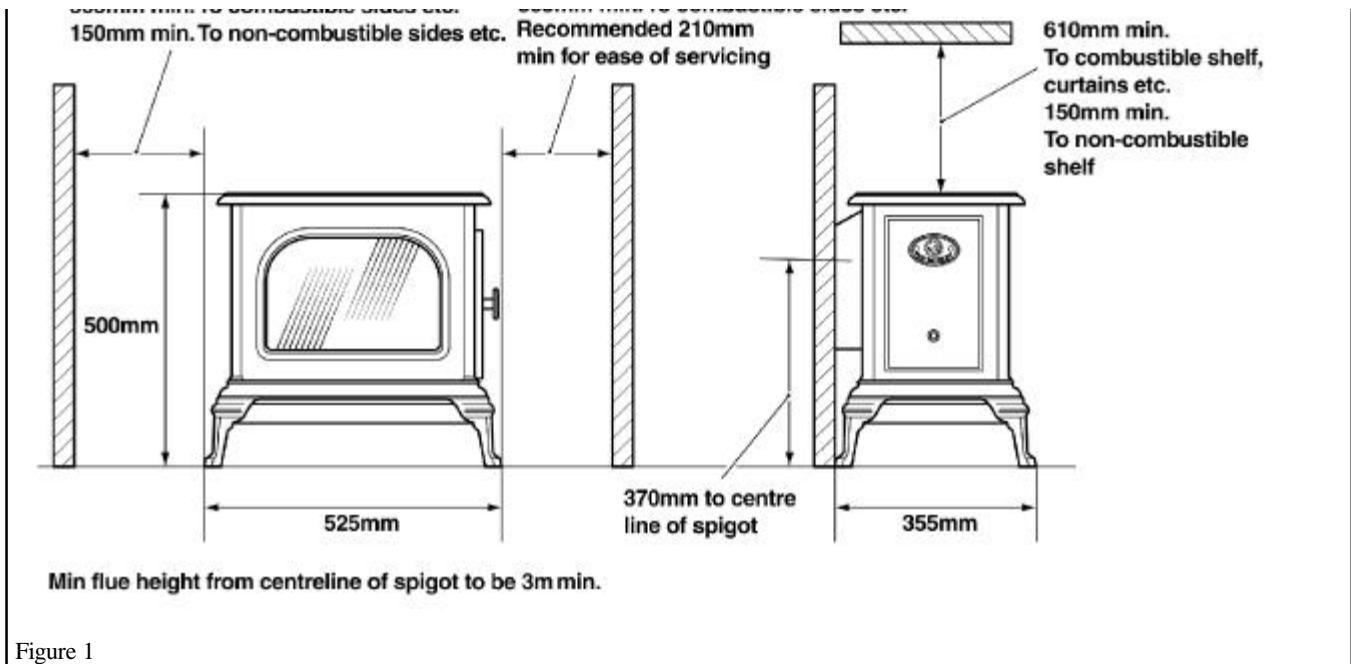


Figure 1

- The minimum flue diameter is 102mm
- A cast iron elbow for use with direct flue connection from Valor (Valor Part No. 0591189) is available. This gives connection to a 102mm flue. (see below for 127mm)
- A 102mm to 127mm flue adapter from Valor (Valor part No. 0591199) is available.
- The minimum flue height is 3m
- No restrictor plate or flue damper is permitted. Where a variable damper is fitted it must be removed or be permanently fixed in the open position.
- The flue must be swept before the appliance is installed.

**Ventilation:** In the United Kingdom (GB) no special ventilation bricks or vents are required in the room for this appliance . In the Republic of Ireland (I.E.), permanent ventilation must comply with the regulations currently in force.

**Location:** This appliance must not be installed in a private garage or any room, which contains a bath, or shower or where steam is regularly present.

**Propane gas appliances** must not be installed in a cellar, basement or other room that is built entirely below ground level (See Gas Safety (Installation & Use) Regulations).

**This appliance is fitted with a down draught diverter and flue blockage safety device. The flue blockage safety device must not be rendered inoperable under any circumstances.**

Suitable flues are :-

- 225mm x 225mm conventional brick flue. If a liner is used it must be 102mm (4in.) minimum diameter. The liner must be sealed to the surrounding area above the fireplace opening and to the top of the chimney with an approved terminal being used.
- A precast concrete or clay flue block system conforming to B.S. 1289. This appliance is suitable for installations conforming to older versions of B.S. 1289 as well as the current edition. The flue blocks must have a minimum width not less than 63mm and a cross-sectional area not less than 13,000mm<sup>2</sup>. Older editions of B.S. 1289 required a cross-sectional area of 13,000mm<sup>2</sup>. The current revision of the standard requires 16,500mm<sup>2</sup>. This appliance is suitable in both cases.
- A flue pipe 102mm (4in.) minimum diameter of - see B.S. 6461 Part 1 for suitable materials. Metal flue pipes and flue boxes must comply with B.S 715.

- Any air supply entering the fireplace from below floor level must be completely sealed off.
- **This fire is only suitable for hearth mounting.** The hearth must be non-combustible and at least 530mm wide x 360mm deep. The non-combustible hearth material must be at least 12mm thick. Its top surface should be preferably 50mm above floor level in order to discourage the placing of carpets or rugs over it.
- The fireplace opening must be within the following dimensions:-

**Conventional fireplace, Pre cast flue and Metal Flue box:**

<b>Width:</b>	Max. 460mm Min. 305mm
<b>Height:</b>	Max. 595mm Min. 476mm
<b>Min. Depth:</b>	92mm

**For Pre-cast flue see note b) above**

- There must be a flat area 10mm minimum width outside each side and above the top of the closure plate to enable the sealing tape to be properly secure. Note that the closure plate can be cut if necessary.
- This fire can be fitted to a purpose made proprietary class "O" - 100 C or 150 C surround which has a standard opening of 16.5 Inches (419mm) x 22 Inches (559mm). This ensures that the fireplace material is not immediately behind the gas stove.
- The flue spigot and any spigot extension must be capable of passing through the closure plate by a least 25mm with a minimum clearance of 50mm between its open end and the nearest obstruction. The catchment space below the flue spigot must extend at least 250mm downwards measured from the bottom of the flue spigot.
- If the fire is to be fitted against walls with combustible cladding, the cladding must be removed from the area behind the decorative closure plate.
- Please note that soft wall coverings (e.g. embossed vinyls etc.) are easily affected by heat. They may, therefore, scorch or become discoloured when close to a heating appliance. Please bear this in mind when installing.

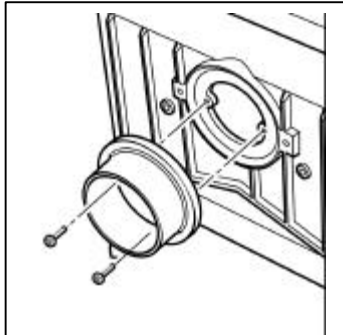


Figure 2

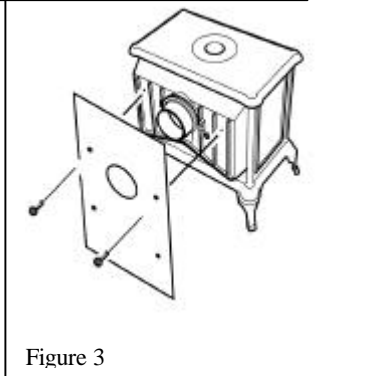


Figure 3

### **POSITIONING THE STOVE with flue spigot and closure plate installation.**

1. If a hearth is to be used ensure that it is in position before commencing the installation. Fix the closure plate to the builders opening ensuring that it is central.
2. Connect the flue spigot to the rear opening in the down draught diverter using the two nuts and bolts that are located in the fixing holes. (See figure 2)
3. Connect the decorative closure plate to the rear of the stove using the screws positioned at the outside of the draught diverter rear. (See figure 3)
4. Place the stove in position on the hearth ensuring that the minimum dimensions specified in figure 1 are adhered to. Position the stove so that the spigot passes through the hole in the closure plate and the decorative plate is flat against the rear surface of the fireplace. Each of the stove feet has height adjustment screws to accommodate uneven surfaces. Ensure that the stove is level.
5. Due to its weight there is normally no requirement for additional fixing with this appliance. However, where the stove may be subjected to some vibration (e.g. transit in a narrow boat), the legs should be secured with wooden blocks or by some means that prevents lateral movement.

### **POSITIONING THE STOVE with direct flue connection to the flue elbow kit**

Alternatively the stove can be used with a direct flue connection using a cast elbow available from Valor (Part Number 0591189). This gives connection to a 102mm flue. A 127mm (5 Inch) flue adapter is available from Valor (Part Number 0591199). This connects directly into the top of the cast elbow. When using the direct flue connection the distance from the rear of the down draught diverter to the rear of the cast elbow is 140mm.

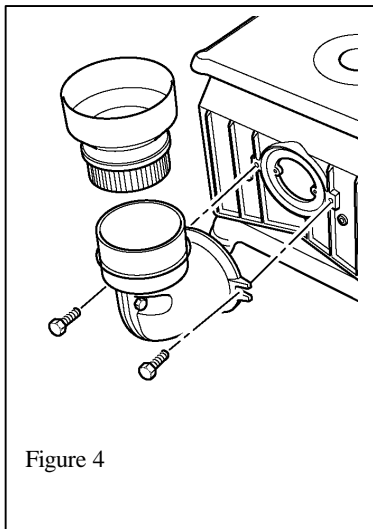


Figure 4

1. Connect the cast iron elbow using the two screws located to the side of the flue outlet (see Figure 4)
3. Place the stove in position on the hearth ensuring that the minimum dimensions specified in figure 1 are adhered to. Connect the flue pipe to the outlet and seal in place. The optional flue adapter is shown in figure 4.
4. Due to its weight there is normally no requirement for additional fixing with this appliance. However, where the stove may be subjected to some vibration (e.g. transit in a narrow boat), the legs should be secured with wooden blocks or by some means that prevents lateral movement.

**Under no circumstances should any flue system be connected to the top of the stove**

### **CONNECTING THE GAS SUPPLY**

- A nut and olive are provided for an 8mm pipe inlet connection to the elbow at the bottom front of the appliance. The elbow can be rotated to allow a connection from any direction. The elbow includes a valve for isolating the gas supply. If a concealed rear connection is required then a hole just big enough to allow the pipe to pass through can be cut into the bottom of the closure plate.

- *Note: Prior to connecting the gas supply it is advisable to blow out the gas supply so that any dirt which may be present in the pipe is cleared and cannot enter the gas valve or pilot burner and so cause a blockage*
- With the supply connected check the installation pipework for gas soundness. In the United Kingdom check in accordance with the current edition of B.S. 6891. In the Republic of Ireland check in accordance with the rules in force.

## **FITTING THE CERAMIC FIREBOX WALLS & FUEL BED**

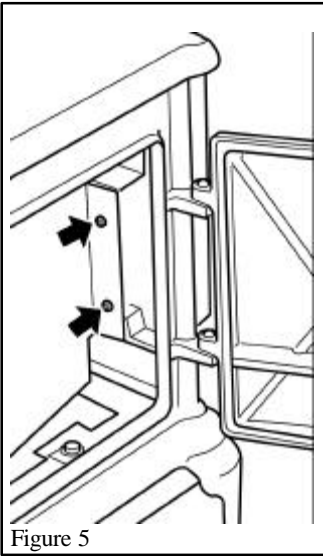


Figure 5

1. Open the side door by turning the handle clockwise.
2. Remove the two screws from the ceramic support bracket. The side of the support bracket can now be removed. (See figure 5)
3. Remove the ceramic packs from the firebox. Carefully unpack the ceramic pieces.
4. Fit one of the ceramic side walls into the slot of the ceramic support bracket at the far side of the firebox. Leave sufficient space to insert the edge of the rear wall behind the side wall. Fix the side wall into position using the retaining clamp. (See figure 6).
5. Fit the edge of the rear ceramic wall behind the side wall. The rear ceramic wall will rest on the base of the casting (see figure 7)
6. Fit the rear base piece into position behind the burner and position it so that its rear is flat against the rear ceramic wall. (See figure 8).
7. Fit the front base piece locating the ledge / slot that is underneath the base piece over the metal burner strip. (See figure 9).
8. Place the 5 coal pieces on the base pieces (See figure 10)  
The three large coals should be at the front, the two small coals at the back.
9. Fit the remaining ceramic side wall into the slot of the ceramic support bracket previously removed. Fix the side wall into position using the retaining clamp.
10. Fit the ceramic support bracket in place using the two screws previously removed.
11. Close the door and secure shut by turning the handle clockwise.

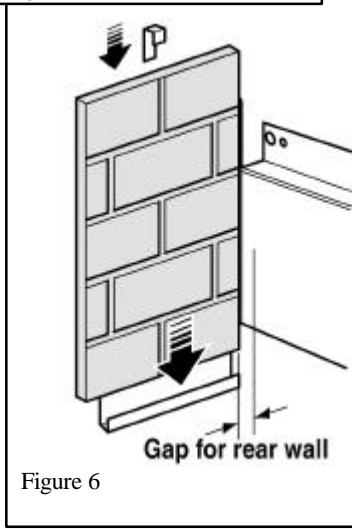


Figure 6

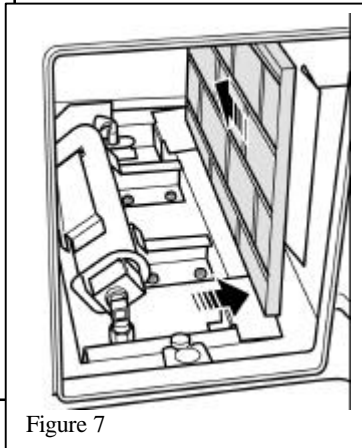


Figure 7

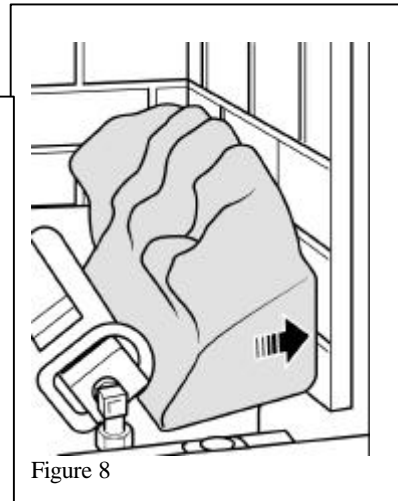


Figure 8

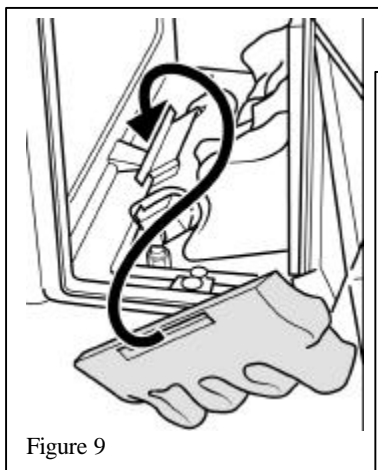


Figure 9

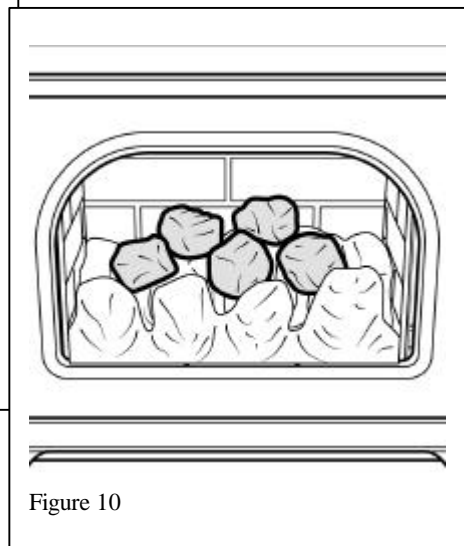


Figure 10

## CHECK FULL OPERATING SEQUENCE

If the fire is turned off or the flames go out, wait at least 3 minutes before attempting to relight. A safety device in the control stops the fire being turned back on until it is safe. If the blocked flue safety device has operated then it will not be possible to relight the appliance until the device has cooled sufficiently.

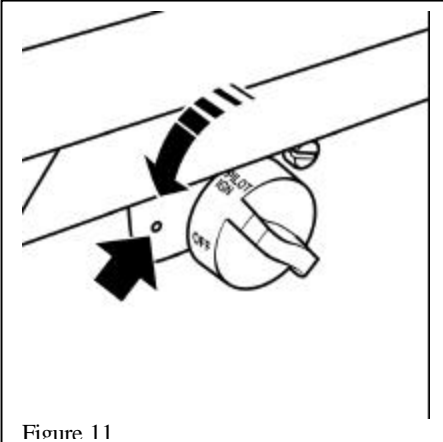


Figure 11

Depress the control knob and turn anticlockwise towards the PILOT/IGN position (See Figure 11). A spark should be generated at the pilot while turning. The spark should ignite the pilot. The pilot flame can be seen below the upper coal at the front left side.

Keep the button at the PILOT/IGN position for a further ten seconds. This will prevent the flame sensing device from shutting off the gas while its probe warms up.

When the pilot is alight and stable, partially depress the knob and turn to "LOW". The pilot should then light the main burner at its low setting. There may be a delay of up to four seconds between the pilot lighting and ignition of the gas at the main burner. This is normal and is due to the time required to fill the main burner compartment with sufficient gas for ignition.

When the burner is alight at its low setting, partially depress the knob and gradually turn it anti-clockwise until the burner is at your desired level. The burner flames will gradually increase until the knob reaches the "HIGH" position.

### **To turn off**

To turn the main burner off but leave the pilot alight, partially depress the knob and turn to PILOT/IGN.

To turn the fire fully off, partially depress the knob and turn to OFF.

While cooling, the coals may make some crackling noises. This is quite normal.

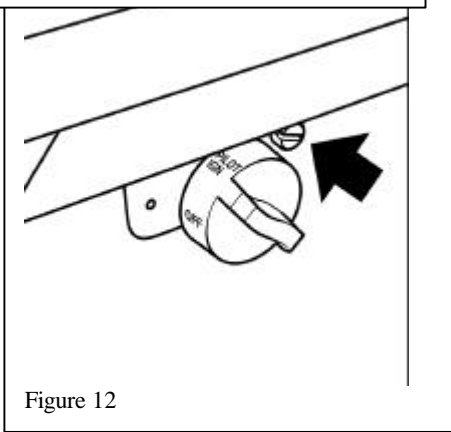


Figure 12

## CHECK REFERENCE PRESSURE

The burner aeration is non-adjustable. The appliance is preset to give the correct heat input on Natural Gas at 20 mbar (8in w.g.) inlet pressure and no further adjustment is necessary. The burner pressure should be checked at the pressure test point located to the right hand side of the control knob (See figure 12). The pressure check should be carried out using a calibrated pressure gauge after removing the test point screw. The fire should be alight and at its maximum heat setting. The pressure setting should be within the limits shown on page 2 of this manual (Appliance data). After checking the pressure, turn off the fire, remove the pressure gauge and replace the pressure test sealing screw. Relight the fire and test all gas joints for soundness using a suitable leak detection fluid.

## CHECK FOR SPILLAGE

A spillage check must be made before leaving the installed appliance with the customer. Make this with all the ceramic coals in position.

1. Close all doors and windows in the room containing the appliance.
2. Light the appliance and turn the flame-height control to the maximum position.
3. Leave the appliance on for 5 minutes.

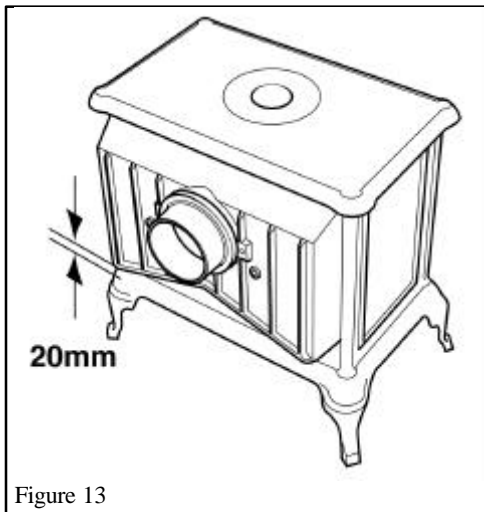


Figure 13

4. Hold a lighted smoke match, in a smoke match tube, centrally 20mm below the draught diverter outlet at the back of the stove. (See figure 13)
5. The installation is satisfactory if the smoke is drawn into the appliance and there is no spillage from the edge of the down draught diverter and the area immediately below the flue outlet.
6. If the smoke is not drawn into the appliance, leave the appliance alight at the maximum setting for a further ten minutes and then repeat the test.
7. If the smoke is still not drawn into the appliance, turn off the appliance and allow to cool. Check the flue installation and clearance of the draught diverter from the rear surface. **If no solution can be found, turn off the appliance and disconnect it. Advise the customer of the problem and stress that the appliance must not be used until the problem is solved.** If necessary seek expert advice.
8. If the above test is satisfactory, open all internal connecting doors, hatches, etc. in the room. Keep all doors and windows that open to the outside of the building closed. Switch on any extractor fan installed in the same room as the appliance or a connecting room. Open all doors and other openings between the fan and the appliance. Recheck for spillage as above. The installation is satisfactory if the smoke is drawn into the appliance. **If the test is not satisfactory, turn off the appliance and disconnect it. Advise the customer of the problem and stress that the appliance must not be used until the problem is solved.**

## **FINAL REVIEW & CUSTOMER BRIEFING**

- Visually inspect the appliance. Clean off any marks incurred during installation.
- Advise the customer how to operate the appliance. Advise the customer that they should read their Owner's guide before operating the fire and always follow the advice in the section headed "Cleaning".
- Advise the customer that the top, front, sides and back of the appliance are working surfaces and become very hot during use and, therefore care should be exercised, particularly with the young, elderly or infirm.
- **Warn** the customer that **under no circumstances is the appliance to be operated with the side door open**. This may be hazardous.
- Explain to the customer that the appliance has a flame failure & spillage monitoring system. Point out the explanation of this system shown in the user's instructions under "Operating the fire". Advise that if the fire goes out for any reason wait at least three minutes before relighting. If the spillage monitoring system has operated then it will not be possible to relight the appliance until the monitoring system has cooled sufficiently. Stress that if the monitoring system repeatedly shuts off the fire, the appliance should be switched off and a specialist should be consulted.
- Advise the customer that the window can be cleaned following the instructions in the User Guide
- **Stress that no extra coals must be added over and above those supplied with the appliance and that any replacements must only be the authorised spares. Warn that ignoring this advice could cause incomplete clearance of the products of combustion with consequent health hazards.**
- Hand these instructions and the owner's guide to the customer.
- Recommend that the appliance should be serviced and the flue checked by a competent person (*In the UK preferably a CORGI registered person*) at least annually. *If the appliance is in premises in the United Kingdom occupied by a tenant, point out that by law a landlord must have any gas appliance, flue and pipework which is situated in a tenant's premises checked for safety at least every 12 months*

## **SERVICING**

- *Always turn off the gas supply and ensure the appliance is sufficiently cool enough before commencing any servicing.*
- *This product uses fuel effect pieces, burner compartment walls and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause temporary irritation to eyes, skin and respiratory tract. Consequently, it makes sense to take care when handling these articles to ensure that the release of dust is kept to a minimum. To ensure that the release of fibres from these RCF articles is kept to a minimum, during installation and servicing we recommend that you use a HEPA filtered vacuum to remove any dust and soot accumulated in and around the fire before and after working on the fire. When replacing these articles we recommend that the replaced items are not broken up, but are sealed within a heavy duty polythene bag, clearly labelled as RCF waste. This is not classified as "hazardous waste" and may be disposed of at a tipping site licensed for the disposal of industrial waste. Protective clothing is not required when handling these articles, but we recommend you follow the normal hygiene rules of not smoking, eating or drinking in the work area and always wash your hands before eating or drinking.*
- Check that the appliance is clean and that no matter is blocking the burner or pilot which may cause imperfect flames or prevent a correct electrode spark.
- After servicing, make sure that the ceramic walls and fuel effect pieces are replaced correctly as described in the installation instructions.
- *Always test for gas soundness after servicing the appliance.*
- **This appliance is fitted with a down draught diverter and blocked flue detector switch. The blocked flue detector switch must not be rendered inoperable under any circumstances.**