



Wonderfire

## INSTALLER'S GUIDE

# A v i g n o n & A v i g n o n A s p i r e

Model BR650 VA



(G.C. 32-032-39)

**THIS APPLIANCE IS FOR USE WITH NATURAL GAS (G20)  
WHEN CONVERTED USING CONVERSION KIT NO. 0591149 THIS  
APPLIANCE IS FOR USE WITH PROPANE GAS (G31)  
THIS APPLIANCE IS FOR USE IN THE UNITED KINGDOM (GB) AND  
THE REPUBLIC OF IRELAND (IE) ONLY.**

We trust that this Installer Guide gives sufficient details to enable the appliance to be installed and maintained satisfactorily. However, if further information is required, our **Technical Helpline** will be pleased to help.

**Please telephone 08706 061 065** (National call rates apply in the United Kingdom).

**In the Republic of Ireland call 0044 08706 061 065.**

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***INSTALLER: Please leave this guide with the owner***

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# CONTENTS

<b>1</b>	<b>SAFETY</b> .....	<b>3</b>
<b>2</b>	<b>ACCESSORY LIST</b> .....	<b>3</b>
<b>3</b>	<b>APPLIANCE DATA</b> .....	<b>4</b>
<b>4</b>	<b>APPLIANCE DIMENSIONS</b> .....	<b>5</b>
<b>5</b>	<b>GENERAL INSTALLATION REQUIREMENTS</b> .....	<b>6</b>
<b>6</b>	<b>PRE-INSTALLATION PREPARATION</b> .....	<b>12</b>
6.1	Pack Contents.....	12
6.2	Fireplace Flue Pull .....	12
6.3	The Flue Restrictor .....	12
6.4	Appliance Preparation .....	13
6.5	The Gas Supply Pipe.....	13
<b>7</b>	<b>FIREBOX INSTALLATION</b> .....	<b>14</b>
7.1	Cable Retention .....	14
7.2	Floor Sealing.....	15
<b>8</b>	<b>BURNER INSTALLATION</b> .....	<b>15</b>
8.1	Preliminary Burner Checks.....	15
8.2	Reference Pressure Check .....	16
<b>9</b>	<b>FITTING THE CERAMICS</b> .....	<b>17</b>
9.1	Avignon and Avignon Aspire models.....	17
9.2	Fitting Coals to models supplied with Coal Ceramic Fuel effect.....	17
9.3	Fitting Pebbles to models supplied with Pebble Ceramic fuel effect.....	19
<b>10</b>	<b>CONTROL CHECKS</b> .....	<b>23</b>
10.1	Recheck Control Settings.....	23
10.2	Check for Spillage.....	23
10.3	Flame Supervision & Spillage Monitoring System.....	24
<b>11</b>	<b>FINAL REVIEW</b> .....	<b>25</b>
<b>12</b>	<b>SERVICING &amp; PARTS REPLACEMENT</b> .....	<b>26</b>
12.1	To Replace Burner Plaques.....	26
12.2	To Remove the Complete Burner Unit.....	27
12.3	To Remove the Pilot Unit .....	27
12.4	To Remove the Gas Tap .....	28
12.5	To Remove the Piezo Generator .....	28
12.6	To Grease the Control Tap.....	28
12.7	To Remove the Main Burner Elbow Injector .....	29
12.8	To Remove the Appliance From the Fireplace.....	29
<b>13</b>	<b>SHORT LIST OF SPARES</b> .....	<b>30</b>

Wonderfire, Erdington, Birmingham B24 9QP  
www.firesandstoves.com.uk

*Because our policy is one of constant development and improvement, details may vary slightly from those given in this publication*

# INSTALLER'S GUIDE

## 1 SAFETY

### Installer

- Before continuing any further with the installation of this appliance please read the following guide to manual handling
- The lifting weight of this appliance is 10.0 kg. One person should be sufficient to lift the fire. If for any reason this weight is considered too heavy then obtain assistance.
- When lifting always keep your back straight. Bend your legs and not your back.
- Avoid twisting at the waist. It is better to reposition your feet.
- Avoid upper body/top heavy bending. Do not lean forward or sideways whilst handling the fire.
- Always grip with the palm of the hand. Do not use the tips of fingers for support.
- Always keep the fire as close to the body as possible. This will minimise the cantilever action.
- Use gloves to provide additional grip.
- Always use assistance if required.

## 2 ACCESSORY LIST

The following accessories are available: -

<u>Description</u>	<u>Part Number</u>
LPG Conversion kit	0591149

# INSTALLER'S GUIDE

## 3 APPLIANCE DATA

This product uses fuel effect pieces, burner compartment rear wall and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause irritation to eyes, skin and respiratory tract. Consequently, it is important 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.

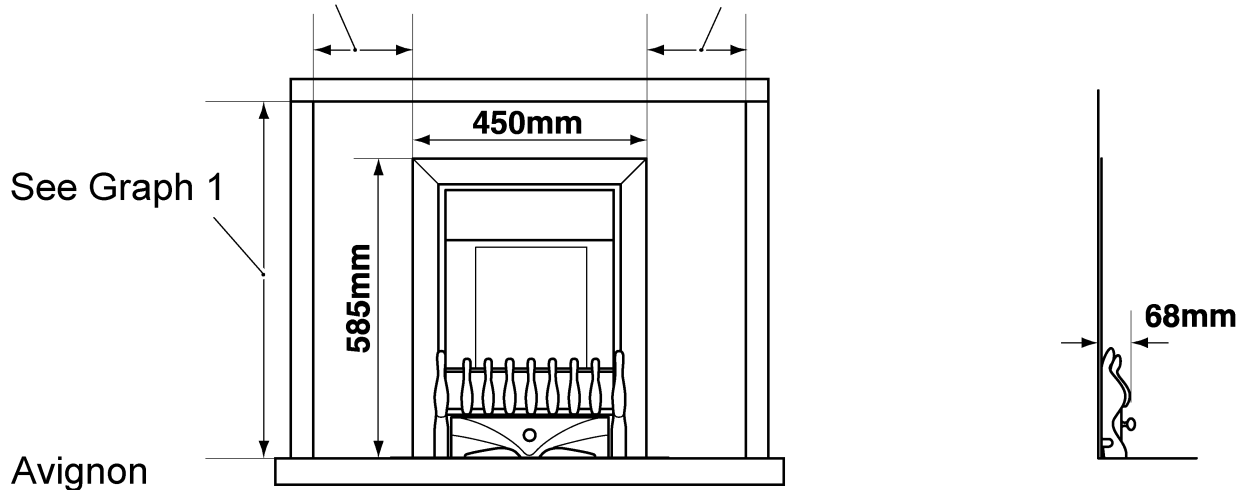
	Gas	
	Natural (G20)	Propane (G31)*
Inlet Pressure	20mbar	37mbar
Input - Max. (Gross)	6.0kW (20,500Btu/h)	6.1kW (20,800Btu/h)
Input - Min. (Gross)	2.2kW (7500Btu/h)	3.6kW (12280Btu/h)
Burner Test Pressure (Cold)	18.2±0.75mbar (7.3±0.3in w.g.)	35.6±0.75mbar (14.3±0.3in w.g.)
Burner Injector	Bray Cat. 18 Size 360	Bray Cat. 15 Size 170
Pilot & Atmosphere Sensing Device	SIT Ref. OP9030	SIT Ref. OPLPG9222
Gas Connection	8mm pipe	
Ignition	Piezo Electric. Integral with Gas Tap	
Aeration	Non-adjustable	
Fire surround height:	590mm	
Fire surround width:	450mm	
Appliance depth:	135mm	
Projection into room:	78mm	

\* When converted using Kit 0591149

# INSTALLER'S GUIDE

## 4 APPLIANCE DIMENSIONS

100mm minimum mandatory clearance to combustible surfaces projecting beyond front of appliance. For access purposes a 10mm clearance is recommended to non-combustible surfaces



100mm minimum mandatory clearance to combustible surfaces projecting beyond front of appliance. For access purposes a 10mm clearance is recommended to non-combustible surfaces

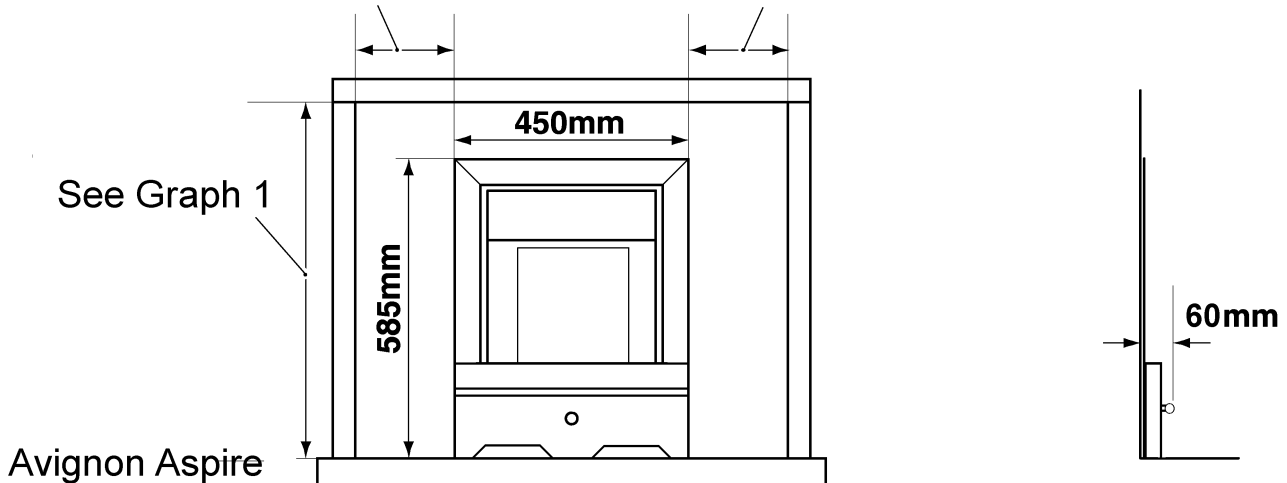


Figure 1. Appliance dimensions

## 5 GENERAL INSTALLATION REQUIREMENTS

**5.1** 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.

All relevant codes of practice.

The relevant parts of the current editions of the following British Standards:-

BS 715	BS EN 1806	BS 5440 Part 2	BS 6891
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BS 1251	BS 4543 Part 2	BS 5871 Part 1	
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BS 1289 Part 1	BS 5440 Part 1	BS 6461 Part 1	
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In England and Wales, the current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office

In Scotland, the current edition of the Building Standards (Scotland) Regulations issued by the Scottish Executive.

In Northern Ireland, the current edition of the Building regulations (Northern Ireland) issued by the Department of the Environment for Northern Ireland.

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.

**5.2** If the appliance is intended to be installed to a chimney that was previously used for solid fuel, the flue must be swept clean prior to installation. All flues should be inspected for soundness and freedom from blockages.

**5.3** Any chimney dampers or restrictors should be removed. If removal is not possible they must be fixed in the open position.

**5.4** In the United Kingdom (GB) special ventilation bricks or vents are not normally required in the room for this appliance.

In the Republic of Ireland (IE), permanent ventilation must comply with the regulations currently in force.

# INSTALLER'S GUIDE

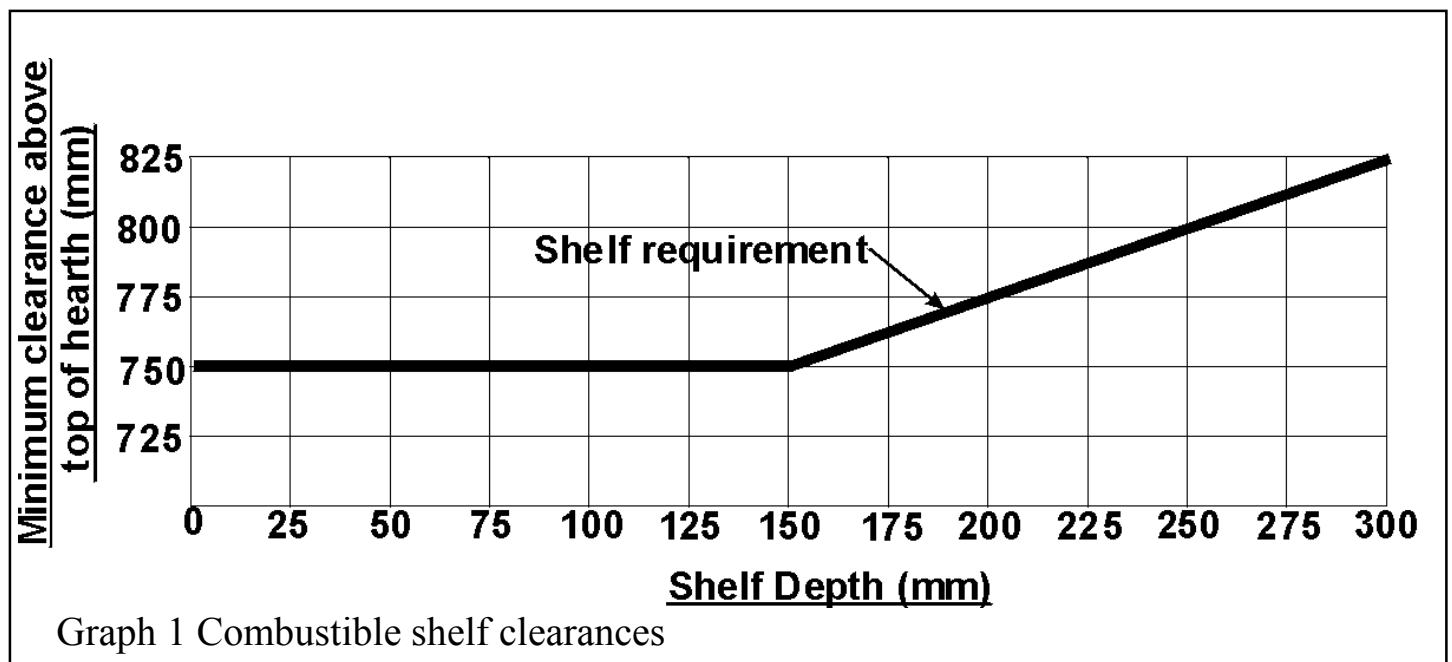
**5.5** Note that soft wall coverings (e.g. embossed vinyl, etc.) are easily affected by heat. They may scorch or become discoloured when close to a heating appliance. Please bear this in mind when installing.

**5.6** The minimum allowable distance from the outside of the appliance case to a corner wall having combustible material or any other combustible surface which projects beyond the front of the appliance is 100 mm at either side.

A 10mm side access clearance from a non-combustible surface is recommended (See figure 1)

**5.7** The minimum height required from the top surface of the hearth to the underside of any shelf made from wood or other combustible materials is shown below.

- *For a shelf up to 150mm deep*  
Minimum height = 750mm.
- *For a shelf deeper than 150mm*  
Minimum height = 750mm + 12.5mm for every 25mm depth over 150mm.



(See graph 1).

**5.8** The appliance must not be installed in any room, which contains a bath, or shower or where steam is regularly present.

# INSTALLER'S GUIDE

5.9 In the United Kingdom, as supplied, this appliance can be installed in the following situations: -

5.9.1 To a fireplace complying with BS1251 complete with surround and hearth as shown in figure 2. Removal of the fireback and sufficient material behind the fireback may be required to give the necessary debris catchment space. Alternatively, a spacer or surround may be used to provide the required depth. The free distance from the appliance flue outlet to a fireback knee or other projection in the fireplace must be at least 50mm (See figure 3).

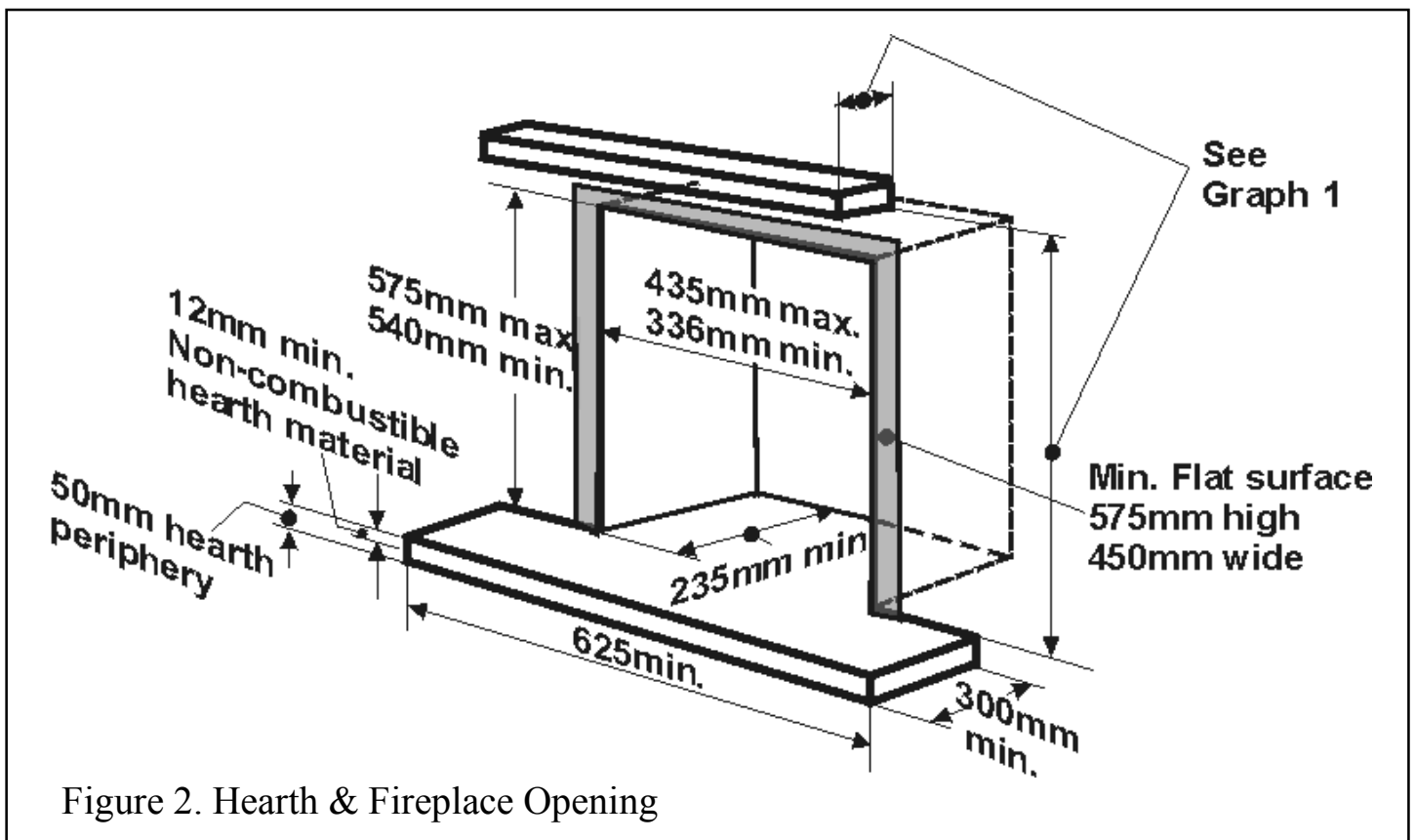


Figure 2. Hearth & Fireplace Opening

5.9.2 To a fireplace that has a precast concrete or clay flue block system conforming to BS1289 or BS EN 1806. The appliance is suitable for installations conforming to older versions of BS1289 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  $13,000\text{mm}^2$ . Older editions of BS1289 required a cross-sectional area of  $13,000\text{mm}^2$ . The current revision of the standard requires  $16,500\text{mm}^2$ . This appliance is suitable in both cases. The total depth of the opening measured from the finished front of the fireplace (Including plaster, surround etc.) must be **not less than 138mm**. See figure 4.

The current versions of BS1289 and BS EN 1806 recommend that

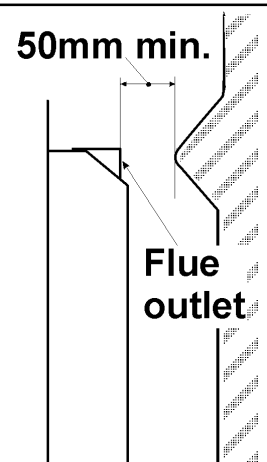


Figure 3. Flue outlet clearance



# INSTALLER'S GUIDE

there should be an air space or insulation between the flue blocks and the plaster because heat transfer may cause cracking on directly plastered flues. However, generally this appliance is suitable for installations under all circumstances unless there is a history of cracking problems. Remember that faults such as cracking may be caused by poorly built and restrictive flues, e.g. mortar extrusions, too many bends, flue heights below three metres, restrictive terminations, etc.

**5.9.3** A metal flue box conforming to BS715 with a minimum internal depth of 165mm. Incombustible mineral wool insulation of not less than 50mm thickness must be applied to the top surface of the

firebox and it must stand on a non-combustible hearth. See figure 5.

**5.9.4** If the fireplace opening is greater than the acceptable dimensions given in this guide, do not use the back of a fire surround or marble to reduce the opening. This may cause cracking of the surround back or marble.

**5.10** The following flues are suitable:

*It should be noted that, as with many appliances, sharp bends or horizontal runs in metal flues at the top of the system can be a cause of problems in these types of installation.*

- 225mm x 225mm conventional brick flue.

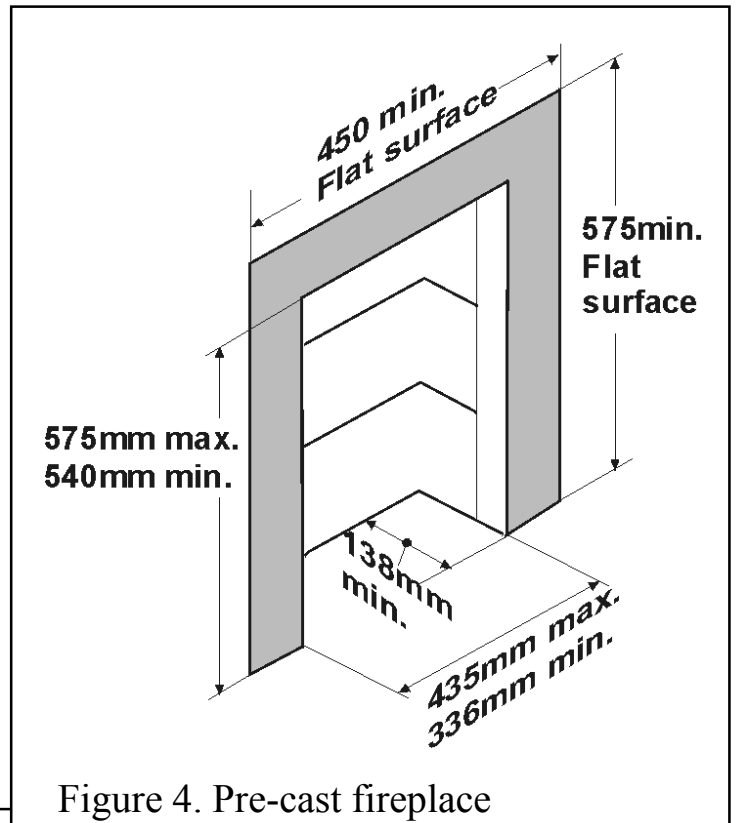


Figure 4. Pre-cast fireplace

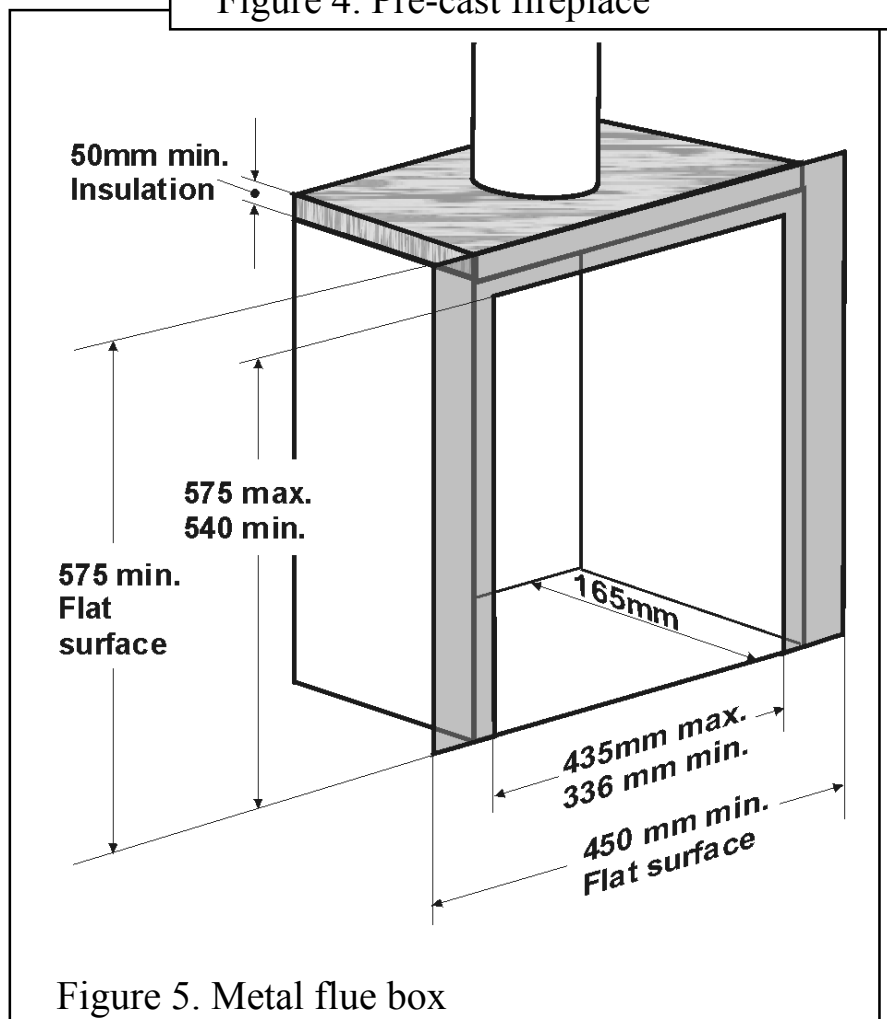


Figure 5. Metal flue box

# INSTALLER'S GUIDE

- 175mm diameter lined brick or stone flue.
- 200mm diameter factory made insulated flue manufactured to BS4543.
- 175mm diameter flue pipe. See BS6461 Part 1 for suitable materials.
- Single wall, twin wall or flexible flue liner with a minimum diameter of 125mm. The materials to be used are stainless steel or aluminium as specified in BS715. The liner must be sealed to the surrounding area above the fireplace opening and to the top of the chimney. An approved terminal must be fitted.

- A properly constructed precast concrete or clay flue system conforming to BS1289 or BS EN 1806. This system is only suitable if the conditions stated in section 5.9.2 are met.

**5.10.1** The flue must conform to BS 5440: Part 1 in design and installation.

The flue, measured from the bottom of the fireplace opening to the bottom of the terminal, shall be not less than 3m in actual vertical height. When calculated in accordance with BS 5440: Part 1 Annex A, the minimum **equivalent** height of the flue shall be 2.0m of 125mm dia. flue pipe.

**5.10.2** The flue must be clear of any obstruction and its base must be clear of debris.

**5.10.3** The flue must be completely sealed so that combustion products do not come into contact with combustible materials outside the chimney.

**5.10.4** The flue must serve only one fireplace.

**5.11** If the fireplace opening is an underfloor draught type, it must be sealed to stop any draughts.

**5.12** An extractor fan may only be used in the same room as this appliance, or in any area from which ventilation for the appliance is taken, if it does not affect the safe performance of the appliance. Note the spillage test requirements detailed further on in this manual. If the fan is likely to affect the appliance, the appliance must not be installed unless the fan is permanently disconnected.

**5.13** A fireguard complying with BS6539 or BS6778 should be fitted for the protection of young children, the elderly, or the infirm.

**5.14** The appliance is fitted with an A.S.D (Atmosphere sensing device). If the appliance closes down after a period of operation for no apparent reason, the consumer should be informed to stop using the appliance until the installation and appliance have been thoroughly checked. The A.S.D will shut the appliance down if an unacceptable amount of harmful products of combustion accumulate. Under no circumstances should the A.S.D be altered or bypassed in any way. Only a genuine manufacturers replacement part should be fitted. The individual A.S.D components are not replaceable.

# INSTALLER'S GUIDE

**5.15** The appliance can be fitted to a purpose made proprietary class “O”-150°C surround. The fire surround must be sealed to the wall.

**5.16** The appliance must be mounted behind a non-combustible hearth in accordance with figure 2. (N.B. conglomerate marble hearths are considered as non-combustible). The hearth material must be at least 12mm thick. The periphery of the hearth (or fender) should be at least 50mm above floor level to discourage the placing of carpets or rugs over it. The appliance must not stand on combustible materials or carpets.

**5.17** Propane gas appliances must not be installed in a room, which is built entirely below ground level (See BS 5871 Pt2).

**5.18** Proprietary terminals must comply with BS 715 or BS 1289. Any terminal or termination must be positioned in accordance with BS 5440 Part 1 to ensure that the products of combustion can be safely dispersed into the outside atmosphere. Where the appliance is connected to an unlined brick chimney it is generally unnecessary for the chimney pot to be replaced or for a terminal to be fitted unless the flue has a diameter smaller than 170mm.

# INSTALLER'S GUIDE

## 6 PRE-INSTALLATION PREPARATION

### 6.1 Pack Contents

The carton contains the following: -

- 1 Fire unit
- 1 Literature Pack
- 1 Burner tray trim
- 3 Self-Adhesive Foam seals
- 2 Tension Cables
- 2 Cable Adjusters
- 1 Flue restrictor with 2 securing screws
- 2 Eyescrews
- 2 Fibre Plugs
- 1 Strip of Floor Sealing Tape
- 1 Nut and Olive for 8mm Inlet Pipe

For models supplied with a coal fuel effect:

- 1 Front coal Matrix
- 1 Rear coal Matrix
- 1 Loose coals Pack

For models supplied with a Pebble fuel effect:

- 1 Front pebble base
- 1 Rear pebble base
- 1 Loose pebble pack

Remove all the items carefully to prevent damage. Take special care when handling the ceramic components. Some items may be contained in the packaging fitments - Examine the packaging carefully before discarding. Check that all the items are present and undamaged.

### 6.2 Fireplace Flue Pull

Close all doors and windows in the room in which the appliance is to be installed. After confirming with a match that smoke is drawn into the flue, light a 13 gram smoke pellet and check that there is a definite flow through the flue. Verify outside that the smoke exits from one terminal only and that the termination is suitable. Observe, where possible, upstairs rooms and loft spaces for signs of escaping smoke indicating a defective flue. If there is not a definite flow warm the flue for a few minutes and repeat the smoke pellet test. If there is still no definite flow the flue may need remedial work – **Do not fit the appliance until there is a definite flow through the flue.**

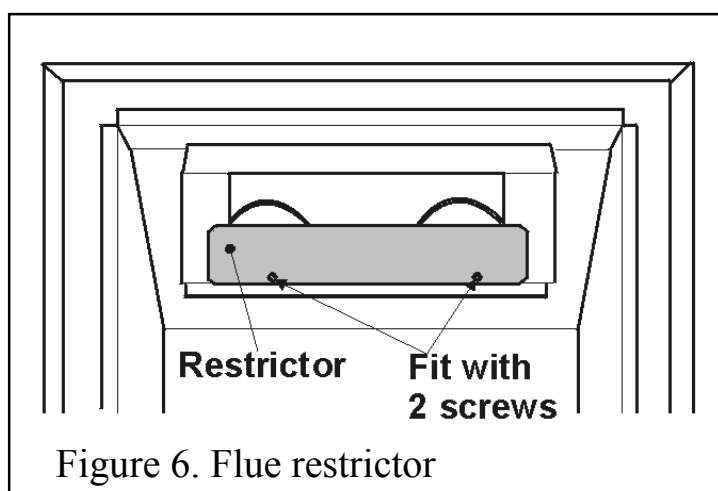


Figure 6. Flue restrictor

### 6.3 The Flue Restrictor

This appliance is supplied with a flue restrictor for use where the flue draught is excessive. **The restrictor must not be fitted where a precast flue or a 125mm flue**

# INSTALLER'S GUIDE

**liner is used.** For flue liners greater than 125mm and all other installations the restrictor should be fitted. There may however, be certain exceptional circumstances where fitting the restrictor causes the fire to fail the spillage test. In such cases the restrictor will have to be removed. After removal conduct the spillage check again.

Fit the restrictor to the appliance flue outlet as shown in figure 6 using the two screws provided.

## 6.4 Appliance Preparation

- Remove any transit tape and packing and inspect for any evidence of mishandling which might affect the performance. Each unit is flame tested before it leaves the factory and as a result there may be slight discoloration around the burner ports. There may also be slight thermal cracking across the burner surface that is perfectly normal and is not detrimental to performance.

- The burner assembly is retained by one screw set in the front leg - See Figure 7. Remove the screw and carefully remove the burner assembly by lifting and sliding forward from the firebox. The burner is produced from a soft ceramic material and should be handled carefully.

- A foam seal is supplied which will need to be attached to the rear face of the firebox frame on all three sides. Ensure that all joints are butted together to prevent air gaps.

## 6.5 The Gas Supply Pipe

8mm rigid tubing must be used to connect the gas supply to the appliance. An olive and nut are provided for connection to the "T" connector on the appliance. The connector can be rotated to ease connection. The connector includes a valve for isolating the gas supply.

**6.5.1** If a **concealed connection** from inside the fireplace is required then, **before the appliance is fitted into the fireplace** it will be necessary to extend the supply line so that it will project through the sealed grommet at the back of the firebox and run to the "T" connector.

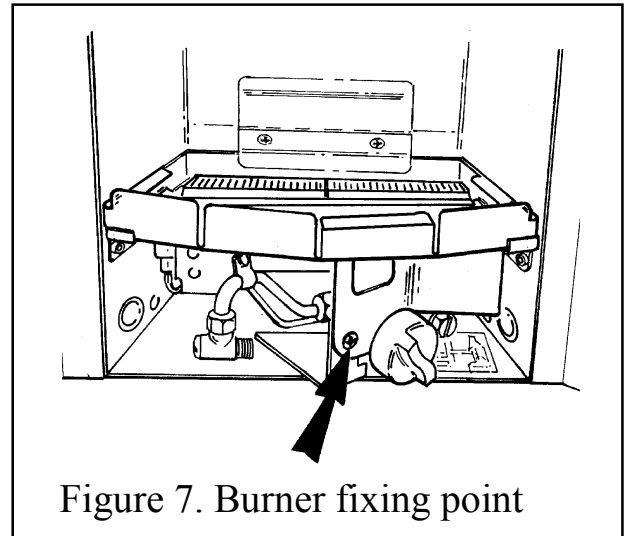
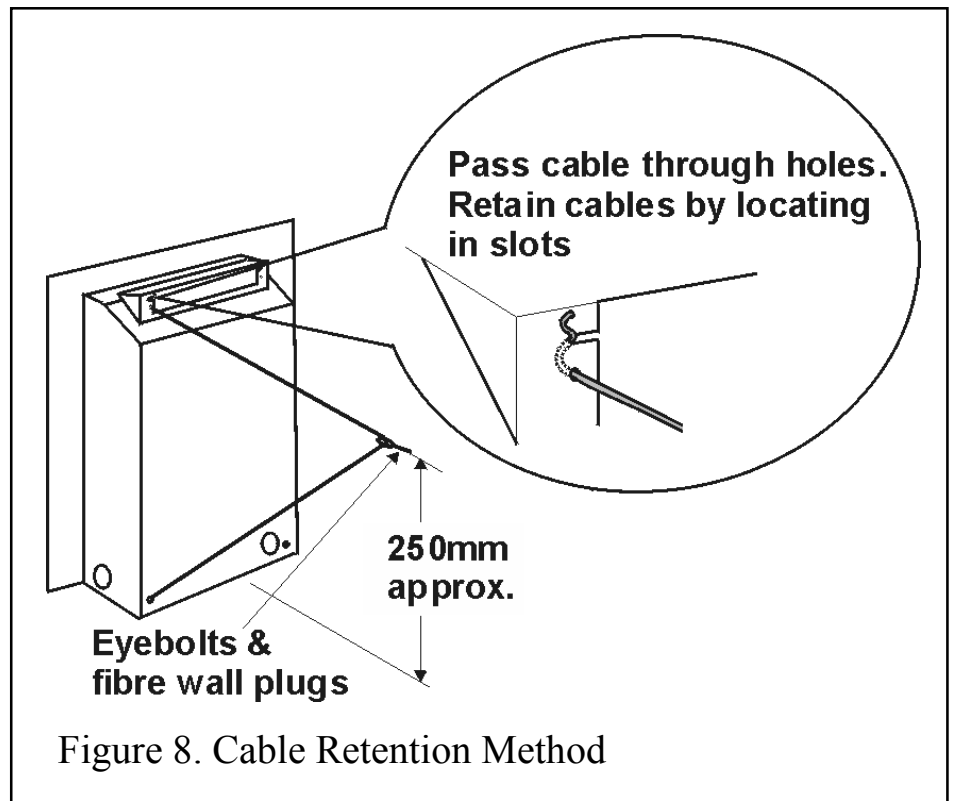


Figure 7. Burner fixing point

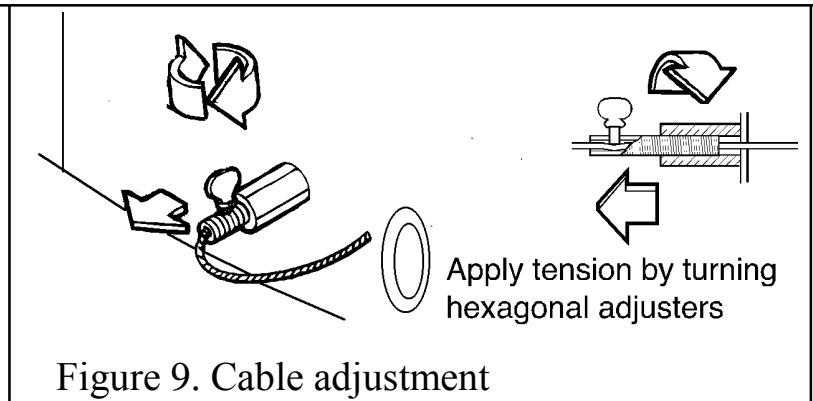
## 7 FIREBOX INSTALLATION

### 7.1 Cable Retention

- Cables and eyebolts are supplied for the retention of the appliance. Ensure that the internal fireplace components are sufficiently sound to take the eyebolts and wall plugs. These should be fitted as shown in figure 8 using the wall plugs and a No.10 drill. Use only the fibre wall plugs supplied (or similar). **Never use plastic plugs instead of the fibre plugs supplied.**
- Assemble one end of a cable through the small round hole at the side of the



appliance rear flue opening and locking it by positioning the cable end in the adjacent slot. Pass the other end of the cable through the eyebolt & then through the hole near the lower rear corner of the appliance and fit an adjuster as shown in figure 9. Repeat with the second cable at the other side.



- With the adjusters fully screwed in, carefully manoeuvre the appliance into the fireplace opening. Take up any slack on the cables, and tighten cable nipples into position.
- Tighten the appliance into the fireplace opening by turning the adjuster nuts to compress the sealing foam sufficiently to provide an effective seal. Do not overtighten. If the sealing foam does not fully compress, then the adjusters and nipples may require to be slackened and the cable pulled up tighter before re-tightening the adjuster.
- Do not cut off any excess cable, instead coil up the cable against the flange, as it may be required for servicing purposes.

# INSTALLER'S GUIDE

## 7.2 Floor Sealing

- Using the floor sealing tape supplied, seal the bottom of the convection box to the fireplace and hearth floor. Run the tape over the burner-fixing bracket.

## 8 BURNER INSTALLATION

- Refit the burner unit to the appliance reattaching it to the front leg bracket by the screw.
- Connect the supply line to the appliance.
- Pressure check the installation pipework for gas soundness. In the United Kingdom check in accordance with the current edition of BS6891. In the Republic of Ireland check in accordance with the rules in force. A long brush may be required to reach some joints.

### 8.1 Preliminary Burner Checks

Some burner operations can be checked at this stage. Checking now will mean that less disassembly will be required if any problems are found. ***A full check should still be made, however, after final installation.***

- If closed, open the isolating valve at the “T” connection.
- Depress the control knob and turn anticlockwise partially towards the “PILOT/IGN” position until some resistance is felt. Keep depressed at this position to purge air from the system then, while keeping it depressed, turn fully to the “PILOT/IGN” position. A spark should be generated at the pilot while turning. The spark should ignite the pilot. If not turn the control knob back to the off position and repeat the procedure.
- When pilot ignition has been achieved, keep the control knob depressed for approximately ten seconds to allow the thermocouple probe to warm up and then release it. If the pilot does not remain alight, ensure that the air has been purged, that the pilot orifice is clear and that the thermocouple connections are sound. Replace the pilot unit if necessary (see servicing section of this manual).
- 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 operating properly, partially depress the control knob and gradually turn it anti-clockwise. The burner flames should gradually increase until the knob reaches the “HIGH” position.
- When all the checks have been completed partially depress the control knob and turn to “OFF”.
- If the above checks are satisfactory, continue with the installation. If not, check the control and ignition circuitry and components as described in the servicing section of this manual.

## 8.2 Reference Pressure Check

The appliance is pre-set to give the correct heat input at the inlet pressure shown in the Technical Specification section of this manual. No adjustment is necessary.

- Check the burner pressure by fitting a pressure gauge at the test point. The test point is on the pipe situated below the bottom right corner of the burner unit. Check the pressure with the appliance alight and set at maximum output.
- After checking, turn off the appliance. Remove the pressure gauge and replace the test point sealing screw. Relight the appliance. Turn to the maximum output position and test around the sealing screw for gas soundness with a suitable leak detection fluid.

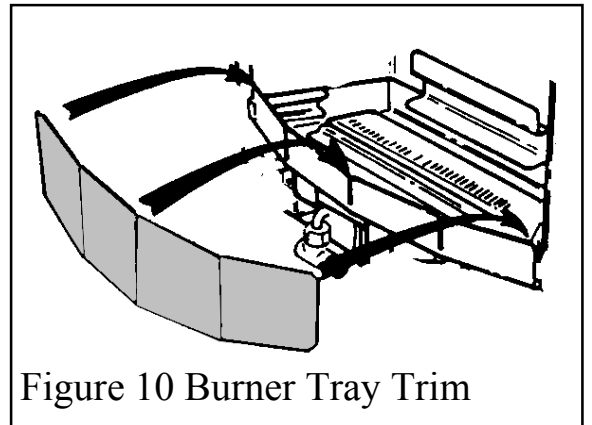


# INSTALLER'S GUIDE

## 9 FITTING THE CERAMICS

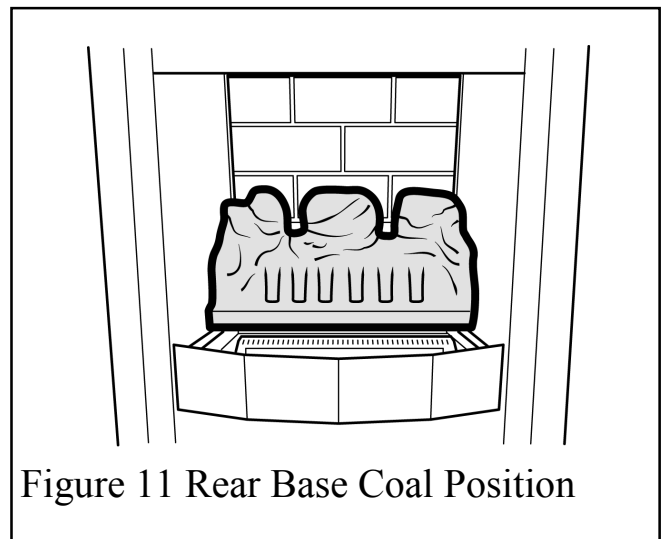
### 9.1 Avignon and Avignon Aspire models

1. Fit the burner tray trim over the front rim of the burner tray. Push the trim fully down. See figure 10.



### 9.2 Fitting Coals to models supplied with a Coal Ceramic Fuel Effect. (For models supplied with a Pebble Ceramic fuel effect see section 9.3)

1. Place the rear base coal in the firebox. It should rest on the ledges at the sides and back of the firebox and its rear face should touch the rear ceramic wall. See figure 11.



# INSTALLER'S GUIDE

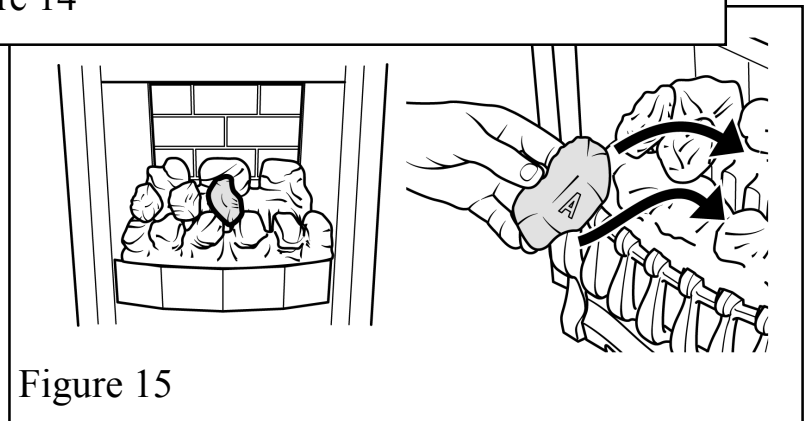
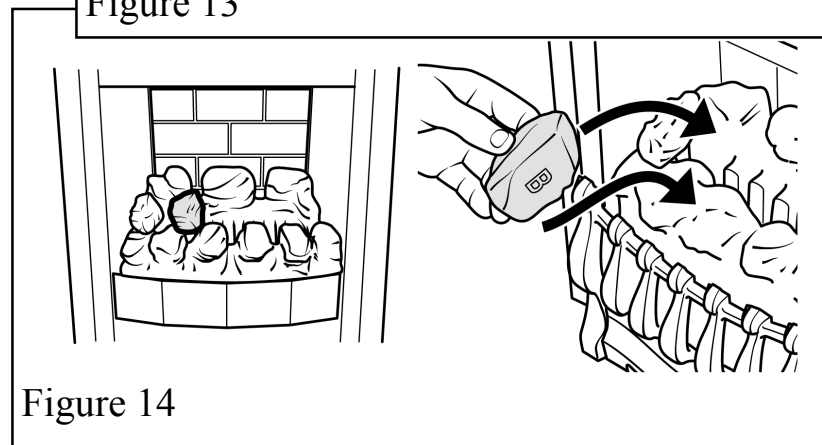
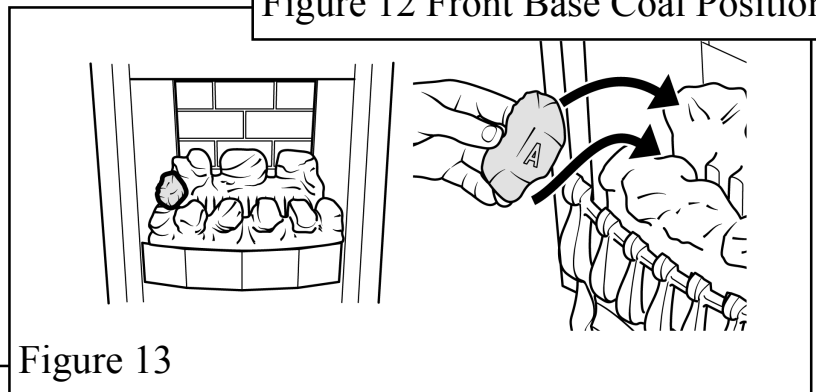
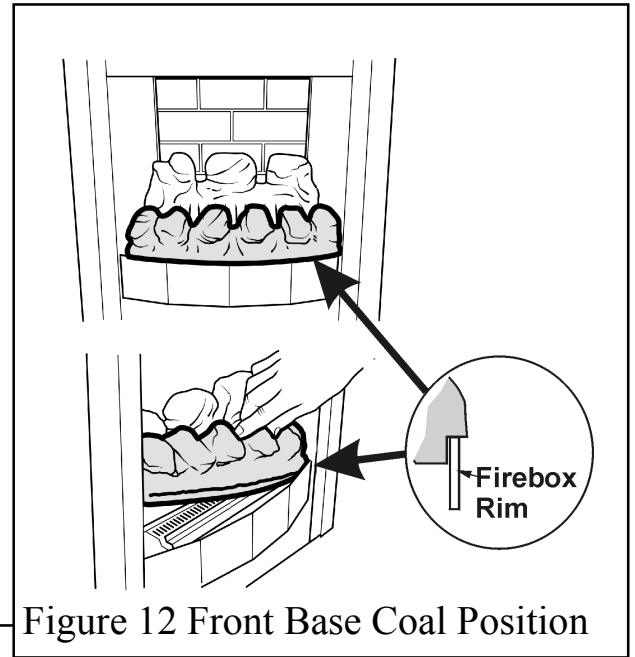
2. Place the front base coal in the firebox with its bottom front locating over the front rim of the firebox. Pull the coal forward so that it locates immediately behind the front rim of the firebox. See figure 12.

There are two types of loose coals. These are identified with the letter "A" or "B" on the underside of the coal. There are three "A" coals and two "B" coals.

3. Place a type "A" coal between the front and rear base coals with the letter "A" upright and so that the coal is against the left side of the firebox. See figure 13.

4. Place a type "B" coal between the front and rear base coals as shown in figure 14. The letter "B" should be upright.

5. Place a type "A" coal between the front and rear base coals with the letter "A" upright. The top of the coal should rest against the centre coal of the rear base coal as shown in figure 15.

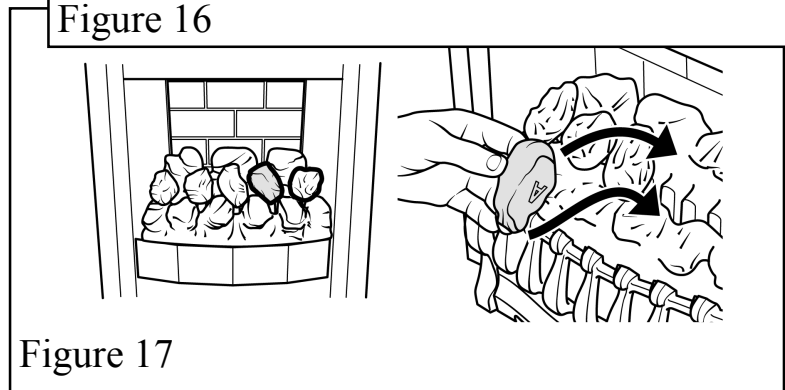


# INSTALLER'S GUIDE

6. Place the remaining type “B” coal at the right side of the firebox between the front and rear base coals. The letter “B” should be upright. The coal should touch the right side of the firebox. See figure 16.

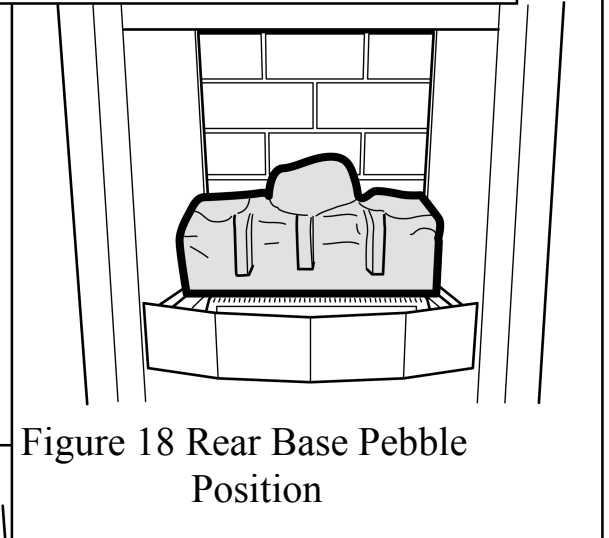


7. Place the remaining type “A” coal between the front and rear base coals. The letter “A” should be upside down with its rear face between the right and centre coals of the rear base coal. Angle the coal so that the gap between it and the type “B” coal to its right is appreciably larger than the gap between it and the type “A” coal to its left but do not have it touching the type “A” coal. This will give the best flame effect. See figure 17.

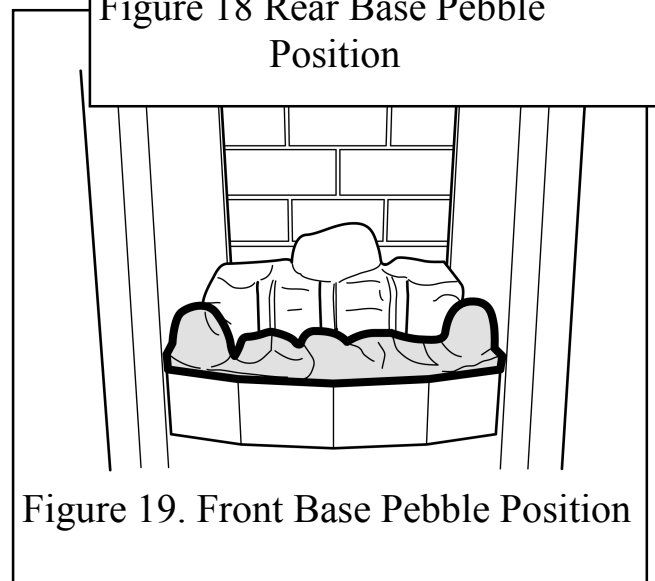


### 9.3 Fitting Pebbles to models supplied with Pebble Ceramic Fuel Effect. (For models supplied with a Coal Fuel Effect see section 9.2)

1. Place the rear base pebble in the firebox. It should rest on the ledges at the sides and back of the firebox and its rear face should touch the rear ceramic wall. See figure 18.



2. Place the front base pebble in the firebox with its bottom front locating over the front rim of the firebox. Pull the pebble forward so that it locates immediately behind the front rim of the firebox. See figure 19.



# INSTALLER'S GUIDE

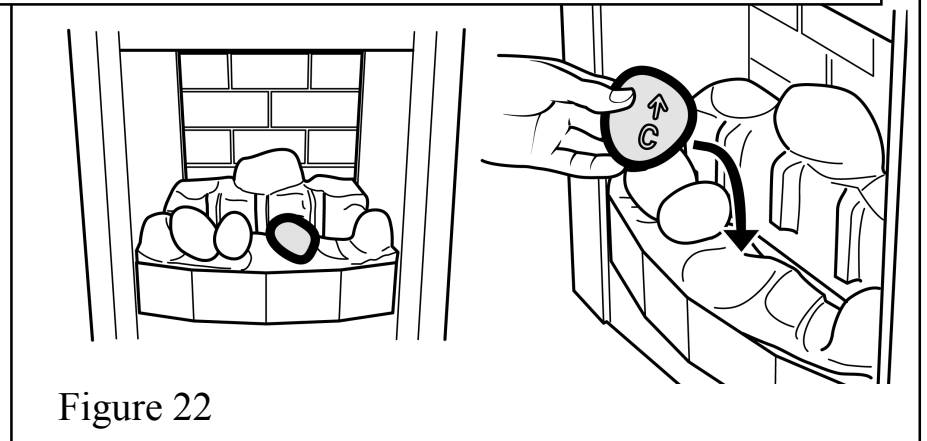
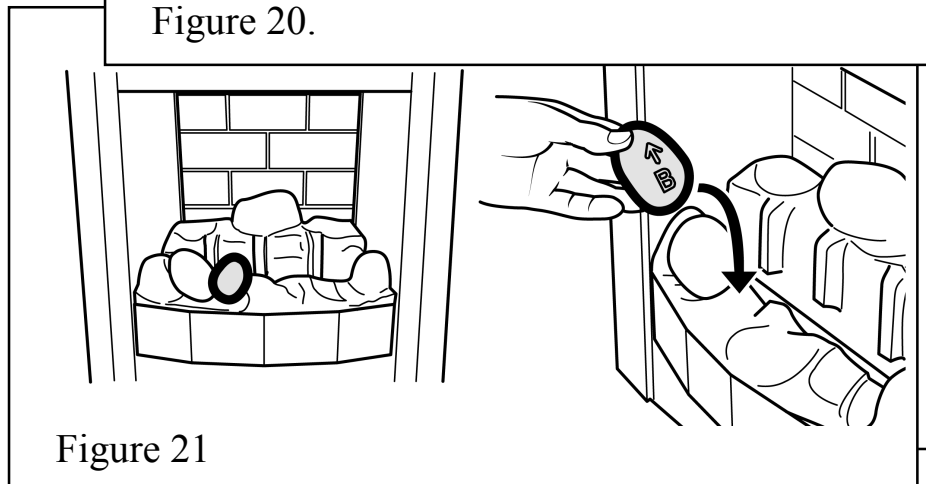
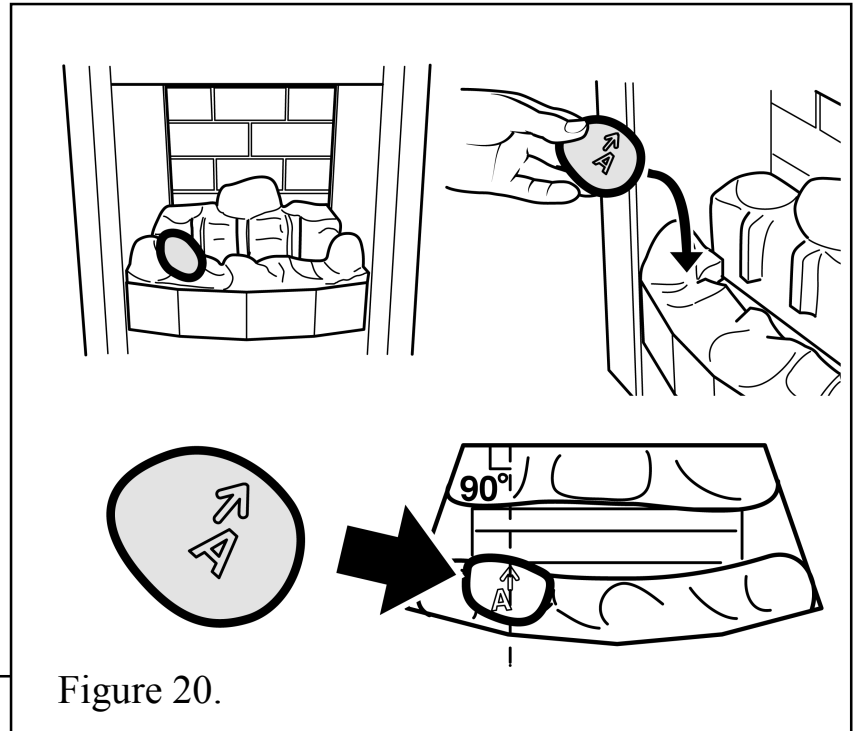
Install the 11 loose pebbles as follows. The underside of each pebble is marked with a letter 'A' to 'K' and an arrow.

The pebbles should be positioned so that the arrows always point towards the back of the fireplace opening. When located into position the stem of each arrow should be at 90° to the rear of the fireplace opening (See figure 20).

3. Hold pebble 'A' upright with the arrow pointing to the top. Place pebble "A" on top of the front base pebble. The pebble should rest against the moulded pebble to its left. (See figure 20).

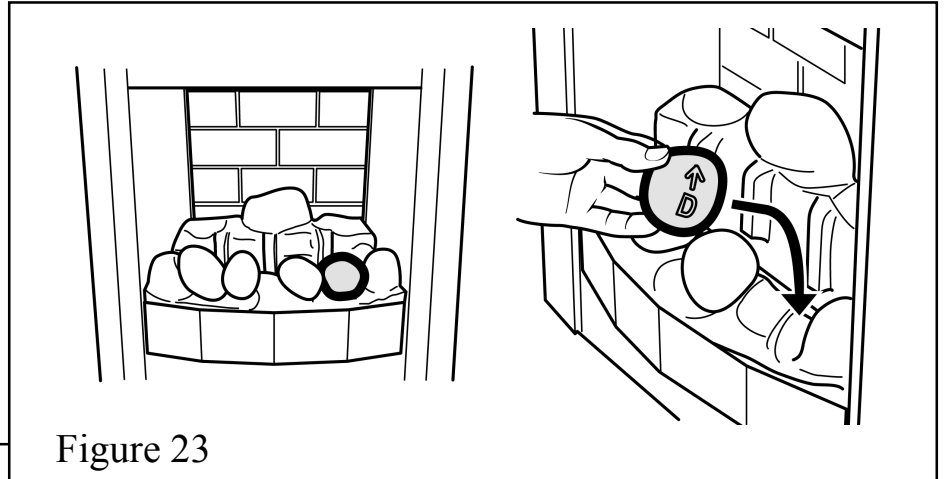
4. Hold pebble 'B' upright with the arrow pointing to the top. Place pebble "B" on top of the front base pebble. (See figure 21).

5. Hold pebble 'C' upright with the arrow pointing to the top. Place pebble "C" on top of the front base pebble. It should lie against the moulded pebble to its left. (See figure 22).

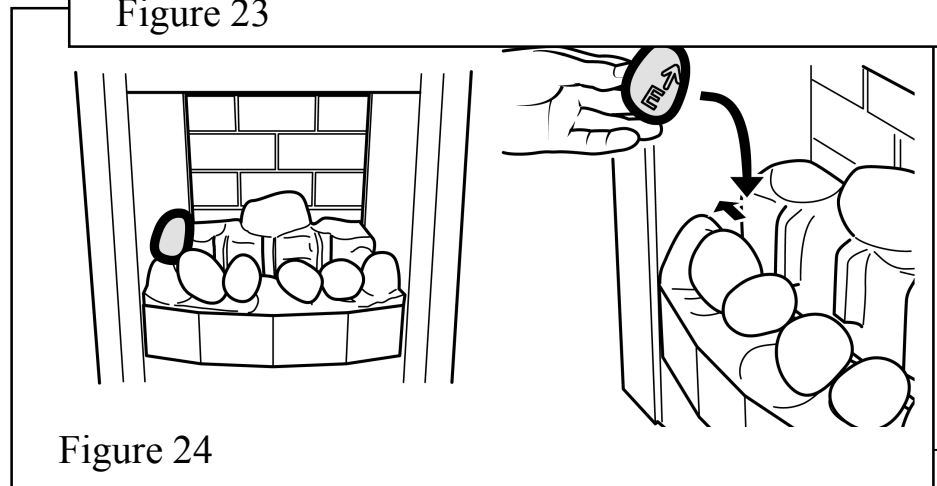


# INSTALLER'S GUIDE

6. Hold pebble 'D' upright with the arrow pointing to the top. Place pebble "D" on top of the base front pebble. It should rest against the moulded pebble to its right. (See figure 23).

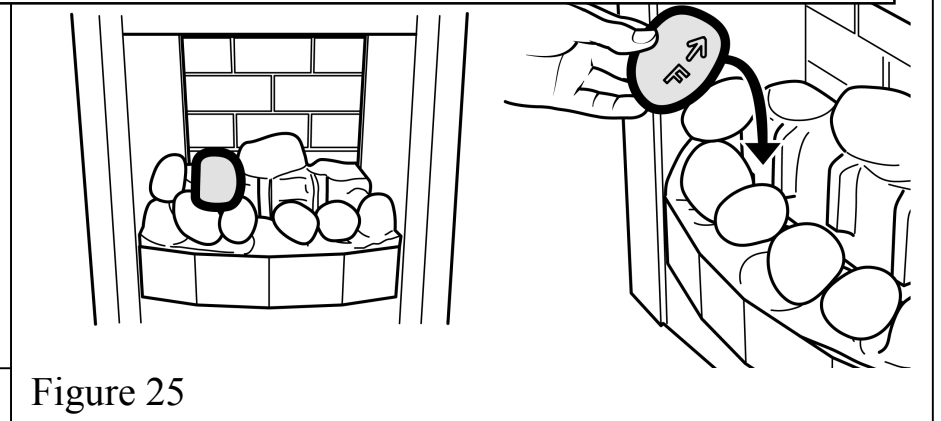


7. Hold pebble 'E' upright with the arrow pointing to the top. Place pebble 'E' between the front and rear base pebbles. It should rest against the side of the firebox. (See figure 24).

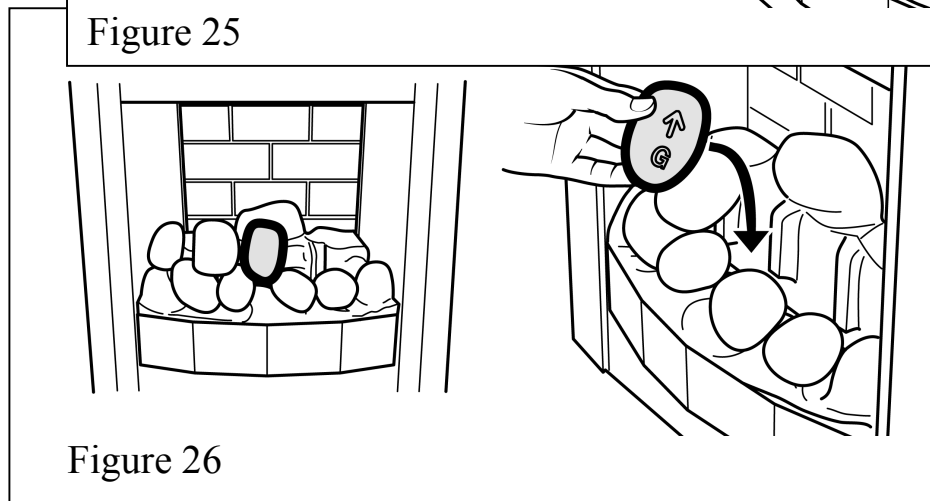


8. Hold pebble 'F'

upright with the arrow pointing to the top. Place pebble 'F' between the front and rear base pebbles. It should rest on top of pebble 'A' & 'B'. (See figure 25).

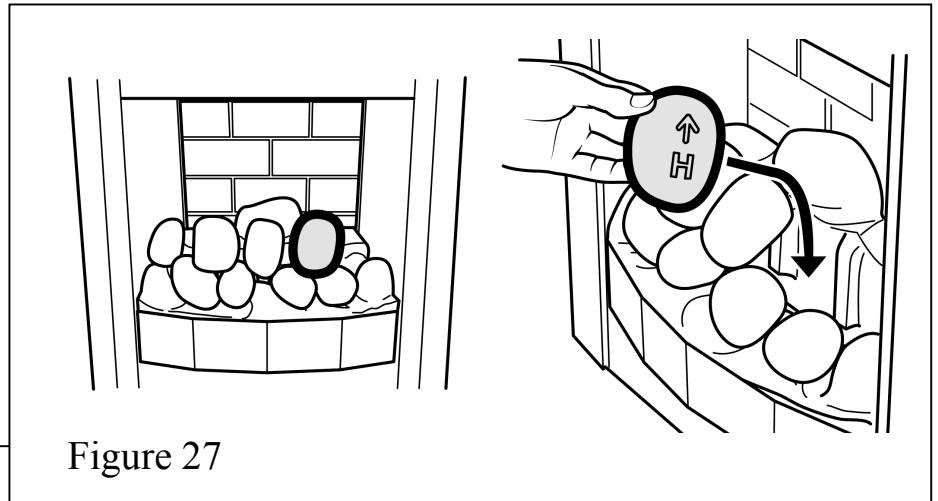


9. Hold pebble 'G' upright with the arrow pointing to the top. Place pebble 'G' between the front and rear base pebbles. It should rest on top of pebble 'B' & 'C' and rest against the moulded pebble in the rear pebble base. (See figure 26).

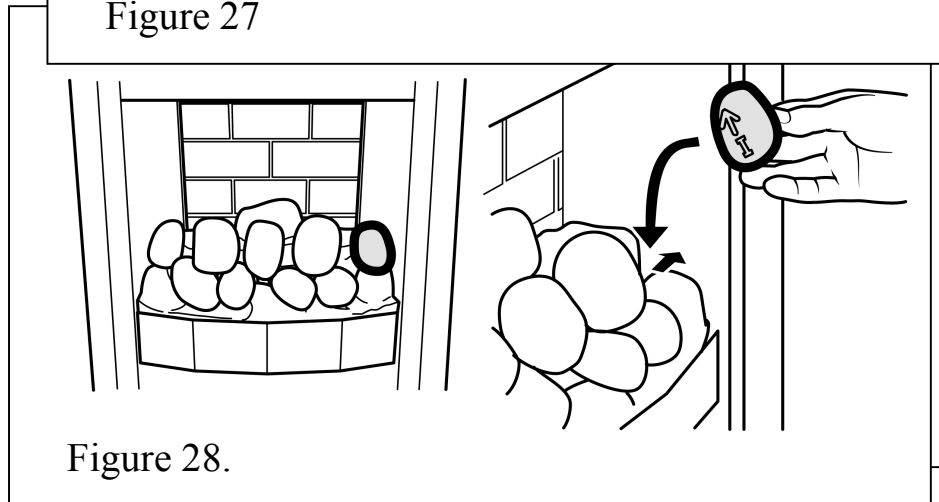


# INSTALLER'S GUIDE

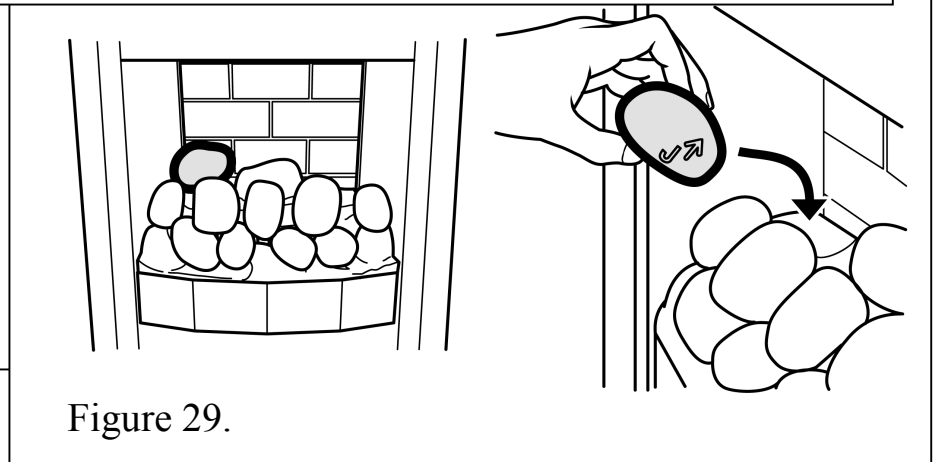
**10.** Hold pebble 'H' upright with the arrow pointing to the top. Place pebble 'H' between the front and rear base pebbles. It should rest in between pebbles 'C' & 'D' and against the moulded pebble in the rear pebble base. (See figure 27).



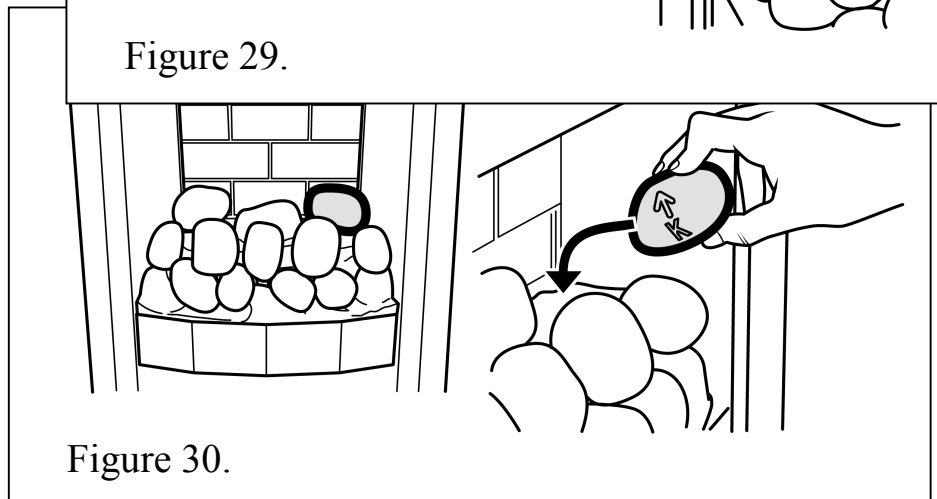
**11.** Hold pebble 'I' upright with the arrow pointing to the top. Place pebble 'I' between the front and rear base pebbles. It should rest against the side of the firebox (See figure 28).



**12.** Hold pebble 'J' upright with the arrow pointing to the top. Place pebble 'J' on top of the base pebble rear. (See figure 29)



**13.** Hold pebble 'K' upright with the arrow pointing to the top. Place pebble 'K' on top of the base pebble rear. (See figure 30)



## 10 CONTROL CHECKS

### 10.1 Recheck Control Settings

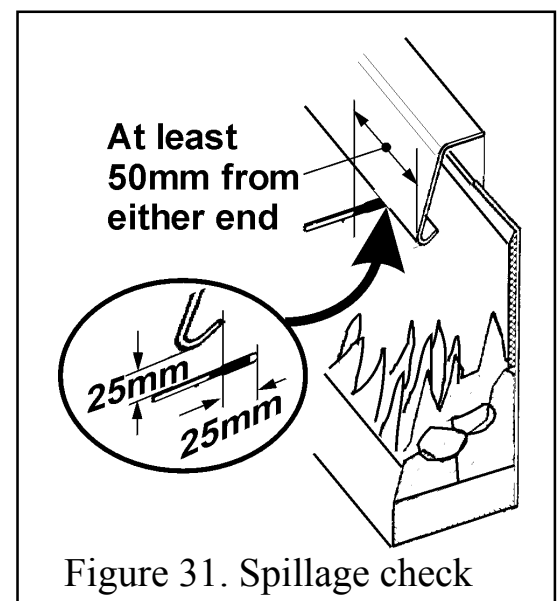
Now that all the ceramic fuel effects are in position, the control operation must be fully rechecked.

- Make sure that the isolating valve at the inlet elbow is open.
- Depress the control knob and turn anti-clockwise partially towards the “PILOT/IGN” position. A spark should be generated at the pilot while turning. The spark should ignite the pilot. Check that the pilot flame is visible.
- When pilot ignition has been achieved, keep the control knob depressed for approximately ten seconds to allow the thermocouple probe to warm up and then release it. If the pilot does not remain alight, ensure that the pilot orifice is clear.
- 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 operating properly, partially depress the knob and gradually turn it anti-clockwise. The burner flames should gradually increase until the knob reaches the “HIGH” position.
- Partially depress the control knob and turn back to the “PILOT/IGN” position. The main burner flames should be extinguished but the pilot should remain alight.
- Partially depress the control knob and turn to “OFF”. The pilot should be extinguished.

### 10.2 Check for Spillage

**A spillage check must be made before leaving the installed appliance with the customer. Make this check with the appliance fully installed with the ceramic fuel effects and front surround in position.**

- Place the main firefront in position. Place the bottom of the firefront below the main firefront.
- Close all doors and windows in the room containing the appliance.
- Light the appliance and turn the control knob to “HIGH”.
- Leave the appliance on for five minutes.
- Place the smoke match into the appliance canopy. See Figure 31.



# INSTALLER'S GUIDE

- The installation is satisfactory if the smoke is drawn into the appliance. 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. If smoke is still not drawn into the appliance, inspect the sealing to the fireplace surround. If the sealing is satisfactory but the appliance is installed with the flue restrictor (see section 6.3), remove the restrictor, reseal the appliance and retest. If smoke is still not drawn into the appliance, **disconnect the appliance and seek expert advice.**
- 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. Recheck for spillage as above. If an extractor fan is installed in the same room as the appliance or a connecting room, check that spillage does not occur with the fan operating and all doors and other openings between the fan and the appliance open. If the smoke is drawn into the appliance, continue with the installation. If the test is not satisfactory, **disconnect the appliance and advise the customer of the cause of failure.**

## 10.3 Flame Supervision & Spillage Monitoring System

The pilot unit incorporates a system that will automatically shut off the gas supply if the pilot flame goes out or if there is insufficient oxygen due to spillage or lack of ventilation.

Check that the system operates properly as follows;

- Light the appliance. Set at the "HIGH" position and leave for one minute.
- Turn back to "OFF" to extinguish the pilot. **Note the time when the pilot goes out.** Listen for a snap sound at the gas tap. **Note the time when the sound is heard.** An electromagnetic valve shutting off the gas supply through the tap causes this sound. The valve is located in the body of the tap. The valve should operate **within 60 seconds of the pilot going out.** If the valve does not operate within this time limit do not allow the appliance to be used until the fault has been corrected.

**This monitoring system must not be adjusted, bypassed or put out of operation.**

**This monitoring system, or any of its parts, must only be exchanged using Wonderfire authorised parts.**



# INSTALLER'S GUIDE

## 11 FINAL REVIEW

- Place the main firefront in position. Place the bottom of the firefront below the main firefront.
- Visually inspect the appliance. Clean off any marks incurred during installation.
- Advise the customer how to operate the fire.
- Explain to the customer that the appliance has a flame failure and spillage monitoring system. Point out the explanation of this system shown in the owner's guide. Advise that if the fire goes out for any reason, wait at least three minutes before relighting.

Stress that if the monitoring system repeatedly shuts off the fire, the appliance should be switched off and a specialist should be consulted.

- Advise that the fire may give off a slight odour while new. This is quite normal and it will disappear after a short period of use.
- Advise that any cleaning must only be carried out when the fire is off and cold.
- Advise the customer that they should read the Owner's guide before operating the fire and always follow the advice in the section headed "Cleaning your fire".
- Advise the customer that the appliance will operate to its maximum potential if the flue is primed during the first 20 – 30 minutes of use. To do this, simply turn the control to its highest setting. This will also burn off any carbon deposits that may have formed during previous use.

If using the appliance for long periods it is beneficial to change between settings. This will also help to remove any carbon deposits that may form during use.

- Recommend that the appliance should be serviced and the chimney inspected by a competent person (In the UK 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.

- Advise the customer that the castings, front surround, firebox and ceramic pieces can be cleaned as described in the user's instructions and that the ceramic coal / pebble fuel effect pieces must be replaced as described in those instructions.

***Stress that no extra coals or pebbles 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 the literature pack with this guide to the customer.

## 12 SERVICING & PARTS REPLACEMENT

Always turn off the gas supply before commencing any servicing (The appliance inlet “T” connector incorporates an isolating valve).

It is recommended that, at least once a year, the appliance is disconnected and the fireplace opening checked and cleared of any debris.

This product uses fuel effect pieces, burner compartment rear wall and gaskets containing Refractory Ceramic Fibres (RCF), which are man-made vitreous silicate fibres. Excessive exposure to these materials may cause irritation to eyes, skin and respiratory tract. Consequently, it is Important 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 soot or debris is not blocking the gaps between the ceramic fuel effect pieces causing an imperfect flame.
- Check that soot or debris is not impairing the electrode spark or pilot burner.
- Check that soot or debris is not blocking any of the slots in the main burner.
- After servicing, make sure that the ceramic rear wall and coals / pebbles are replaced correctly as described in the installation instructions.
- **Always test for gas soundness and spillage after servicing the appliance.**

### 12.1 To Replace Burner Plaques

**(Models supplied with a Coal Ceramic fuel Effect)**

- Remove the five loose coals, front base coal and rear base coal.

**(Models supplied with a Pebble Ceramic Fuel Effect)**

- Remove the eleven loose pebbles, front base pebble and rear base pebble.
- Remove the plaque clamping strips by detaching 6 screws.

# INSTALLER'S GUIDE

- Remove the plaques and the combination gasket between and under the plaques. If necessary remove the gauze and the gasket beneath it.
- If necessary fit a new gasket below the gauze. Clean and replace the gauze. Fit a new combination gasket below the plaques. Push the gasket ends inwards to form a dividing gasket between the plaques.
- Place the new left hand plaque in position. The left side of the plaque must touch the inside edge of the retaining flange at the left side of the burner well.
- Place the new right hand plaque in position. Make sure that the centre section of the combination plaque is between the two plaques. If there is any play between the plaques and the end retaining flanges, push the plaques firmly to the left squeezing the centre section of the combination gasket between the two plaques. Any gap should be between the right side of the plaque and the right side-retaining flange.
- Fit the front and rear plaque clamping strips. Make sure that the plaques are as far to the left as possible. **It is important that the left side plaque is accurately positioned so that it has the correct relationship to the pilot.** Fully tighten the clamping strips.
- Refit the ceramic fuel effects and rear wall as described in this manual.

## 12.2 To Remove the Complete Burner Unit

### (Models supplied with a Coal Ceramic fuel Effect)

- Remove the five loose coals, front base coal and rear base coal.

### (Models supplied with a Pebble Ceramic Fuel Effect)

- Remove the eleven loose pebbles, front base pebble and rear base pebble.
- Support the inlet isolating elbow to avoid straining the pipework and disconnect the appliance from the elbow.
- Detach the burner unit from the convection box by removing 1 screw (As shown in figure 7).
- Replace in the reverse order.

## 12.3 To Remove the Pilot Unit

- Remove the complete burner unit - See section 12.2.
- Disconnect the electrode lead from the tab underneath the electrode.
- Undo the thermocouple nut at the gas tap.
- Disconnect the pilot pipe from the pilot unit elbow.
- Remove the first screw securing the dust cage to the pilot unit & burner bracket. Carefully remove the dust cage and place aside. Remove the second screw securing the pilot unit to the burner. Remove the pilot unit and place it aside.
- Refit in the reverse order

# INSTALLER'S GUIDE

*Note 1 The pilot unit must be replaced as a whole assembly. Its individual components are not separately replaceable.*

*2. Once removed, ensure that the dust cage is cleaned before refitting. Make sure that it locates squarely onto the pilot unit without any gaps between the cage edges and the pilot unit.*

## **12.4 To Remove the Gas Tap**

- Remove the complete burner unit - See section 12.2.
- Disconnect the electrode lead from the tab underneath the electrode.
- Undo the thermocouple nut at the gas tap.
- Disconnect the inlet pipe at the tap end
- Disconnect the pilot pipe at the tap end.
- Disconnect the main burner pipe at the tap end
- Pull off the control knob
- Remove the gas tapfixing nut. Pull the tap clear of the control plate.
- Replace in the reverse order.

## **12.5 To Remove the Piezo Generator**

- Remove the gas tap – See section 12.4.
- Make sure that the tap is in the off position
- Remove the circlip holding the piezo unit to the tap. Remove the piezo unit.
- Replace in the reverse order.

## **12.6 To Grease the Control Tap**

- Detach the tap and remove the piezo generator – See section 12.5.
- Remove the two screws from the head of the tap. Remove the niting head and spindle complete with collar and spring.
- Note the position of the slot in the plug - mark its position on the tap body.
- Remove the plug rotating slightly while pulling.
- Clean and grease the plug lightly with suitable grease. Do not apply excessive grease. Particularly, make sure that the gas ports in the tap are not restricted by grease.
- Push the plug into the tap body and position the slot in line with the mark previously made on the tap body.
- Reassemble the niting head and spindle complete with collar and spring making sure that the components are correctly engaged.
- Check the operation of the tap.
- Refit the piezo generator.

## **12.7 To Remove the Main Burner Elbow Injector**

- Remove the complete burner unit - See section 12.2.
- Disconnect the main burner pipe from the injector at the venturi end. If necessary, loosen the pipe at the gas tap end to swing the pipe clear of the injector.
- Unscrew the injector from the rear support bracket.
- Refit in the reverse order.

## **12.8 To Remove the Appliance From the Fireplace**

### **(Models supplied with a Coal Ceramic fuel Effect)**

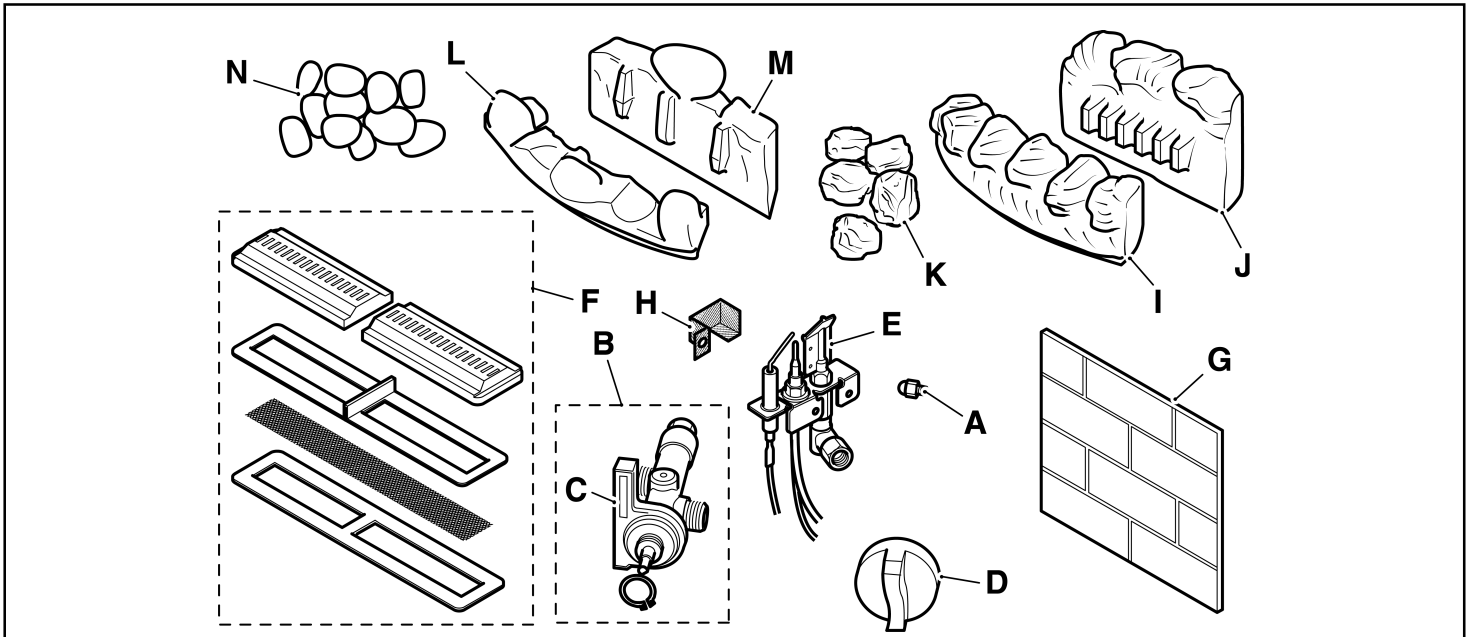
- Remove the five loose coals, front base coal and rear base coal.

### **(Models supplied with a Pebble Ceramic Fuel Effect)**

- Remove the eleven loose pebbles, front base pebble and rear base pebble.
- Slacken the hexagonal adjusters on the cable retainers. Unscrew to release the cables.
- Refit as described in the relevant installation sections. Make sure gas soundness, sealing spillage test and performance are satisfactory.

# INSTALLER'S GUIDE

## 13 SHORT LIST OF SPARES



KEY	DESCRIPTION	NO. OFF	PART NO.
A	Injector Bray cat 18 size 360 <i>For Natural Gas Appliances</i>	1	0541069
	Injector Bray cat 15 size 170 <i>For Propane Appliances</i>		0581199
B	Gas tap & spark generator	1	0569429
C	Spark generator	1	0521069
D	Control knob	1	0545979
E	Pilot unit <i>For Natural Gas Appliances</i>	1	0540979
	Pilot unit <i>For Propane Appliances</i>		0566929
F	Burner plaque & gasket set	1	0569439
G	Ceramic rear wall	1	0579139
H	Dust Cage		
	<b>'Coal' models</b>		
I	Front coal	1	0579119
J	Rear base coal	1	0579129
K	Pack of loose coals	1	0579149
	<b>'Pebble' models</b>		
L	Front pebble	1	3002771
M	Rear base Pebble	1	3002772
N	Pack of loose Pebbles	1	3002773