

# Wonderfire

## Senator / Liberty

INSET LIVE FUEL-EFFECT APPLIANCES

### MODELS

NATURAL GAS

9500260

PROPANE

9500261

**GB**

**IE**

# INSTALLATION INSTRUCTIONS

(Please leave with the User)

These instructions have been written to ensure the proper installation of this fire.  
Please read them carefully before attempting to install the fire.

**Dear Installer,**

**As CORGI registered installers ourselves, we know how much a straightforward installation means to you, so we've tried hard to make these instructions simple to follow and easy to understand, whilst at the same time remaining sufficiently comprehensive to help ensure you can get the job done.**

**If you encounter any problems that these instructions don't help you to correct, then please call us on 0117 964 1234, and ask for the Technical Service Manager.**

**And if you have any suggestions how we can make your job easier in the future please let me know.**

**Technical Director**

## **CONTENTS**

<b>IMPORTANT NOTES</b>	<b>Page 1</b>
<b>RELATED DOCUMENTS</b>	<b>Page 1</b>
<b>TECHNICAL SPECIFICATIONS</b>	<b>Page 2</b>
<b>CONTENTS OF PACKAGING</b>	<b>Page 4</b>
<b>PREPARATION OF FIREPLACE</b>	<b>Page 5</b>
<b>PREPARATION OF APPLIANCE</b>	<b>Page 6</b>
<b>GAS SUPPLY CONNECTION</b>	<b>Page 8</b>
<b>ASSEMBLY OF FUEL-BED</b>	<b>Page 9</b>
<b>INSTALLING THE GLASS PANEL</b>	<b>Page 11</b>
<b>OPERATION OF THE FIRE</b>	<b>Page 12</b>
<b>SPILLAGE TEST</b>	<b>Page 14</b>
<b>INSTALLING THE FACIA</b>	<b>Page 15</b>
<b>CONSUMER BRIEFING</b>	<b>Page 16</b>
<b>SERVICING INSTRUCTIONS</b>	<b>Page 16</b>
<b>REMOVAL OF COMPONENTS</b>	<b>Page 18</b>
<b>SPARE PARTS</b>	<b>Page 19</b>
<b>INDEX</b>	<b>Page 20</b>



## **IMPORTANT NOTES**

The Gas Safety (Installation & Use) (Amendment) Regulations 1990 require that no person shall carry out any work in relation to a gas fitting unless he is competent to do so. CORGI is the body approved by the Health & Safety Executive to maintain a register of competent Gas Installers.

In addition, installation must be carried out in accordance with the Building Regulations issued by the Department of the Environment and the Building Standards Regulations issued by the Scottish Development Department, and with these instructions.

If the appliance is to be installed using a masonry chimney previously used for solid fuel the chimney must be swept prior to installation.

The minimum height of the chimney or flue must be 3m (10ft) from the hearth to the point of termination of the flue.

The chimney or flue must have any damper or restrictor removed, or permanently secured in the fully open position.

It is recommended that a fireguard complying with BS6539 or BS6778 be fitted for the protection of young children, the elderly, or the infirm.

In accordance with BS5871 Part 2, ventilation is not normally required for this appliance. However, any requirement relating to other appliances which may be in the same room must be taken into consideration.

This appliance is for use on the gas supplied.

Note that certain soft wallcoverings such as vinyl materials may stain when heated.

Must be installed in accordance with the rules in force.

### **RELATED DOCUMENTS**

BS 5440 Part 1, 1990  
BS 5440 Part 2, 1989  
BS 715, 1986  
BS 6461 Part 2, 1984

BS 5871 Part 2, 1990  
BS 1251, 1987  
BS 6461 Part 1, 1984



## TECHNICAL SPECIFICATIONS

Dimensions	Height	Width	Depth
	670mm	635mm	320mm
Opening required	Min	560mm	406mm
	Max	575mm	460mm

	Natural Gas		Propane	
	kW/hr	BThU/hr	kW/hr	BThU/h
Heat Input	Max	6.8	6.2	21,150
	Min	3.2	10,900	12,250
Supply Pressure	(G20) 20 mbar		(G31) 37mbar	
Setting Pressure (cold)				
Main burner	17.5 mbar (+/-1 mbar)		35.5 mbar (+/-1 mbar)	
Maximum				
Injectors				
Main burner	Cat 82-440		Cat 92-190	
Clearances				
To combustible side panels			100mm (4")	
To combustible shelves			200mm (8")	

NOTE- Shelves over 150mm (6") deep will require an additional 25mm (1") in clearance, for every additional 25mm (1") depth over 150mm.

### Location

This appliance is not suitable for installation in a room or internal space containing a bath or shower, or in a private garage.

This appliance is suitable for the following:-

- 1 Minimum flue height of 3m (10ft)
- 2 A masonry chimney with a minimum diameter of 175mm (7") free from any obstruction, and with any damper or restrictor plate in the chimney removed or secured. A masonry chimney having a correctly installed flexible flue liner to BS715 and with a minimum diameter of 125mm (5") is also acceptable. Check that the relevant flat surface area is available - see figures below. Note that there may be a need to locally remove the fireplace materials to ensure the outer case can easily be installed.

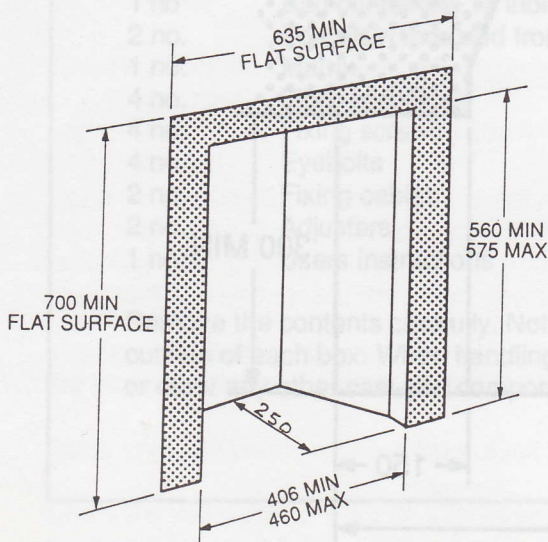


Fig 1A. With chairbrick removed

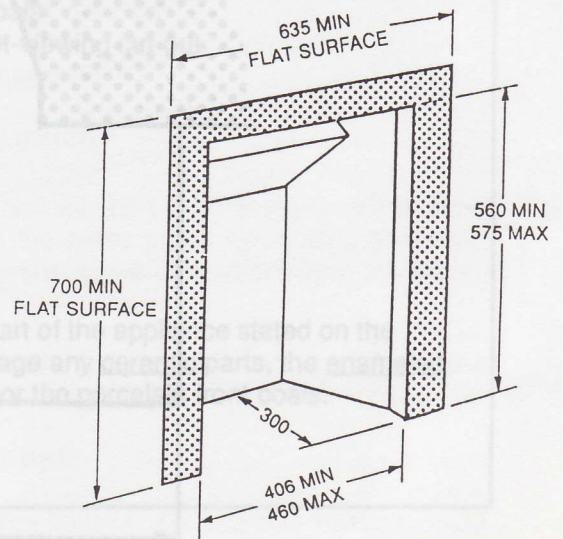


Fig 1B. With chairbrick in place



3 Firebrick (chairbrick) removal will usually be required unless the dimensional requirements in Figure 1 can be met.

4 A sheet metal flue system conforming with BS4543 or BS715, the flue diameter being a minimum of 5" (see Figure 2 below) with a minimum internal depth of 250mm. Incombustible mineral wool insulation of not less than 50mm thickness must be applied to the top surface of the system firebox, as shown in Figure 2 below.

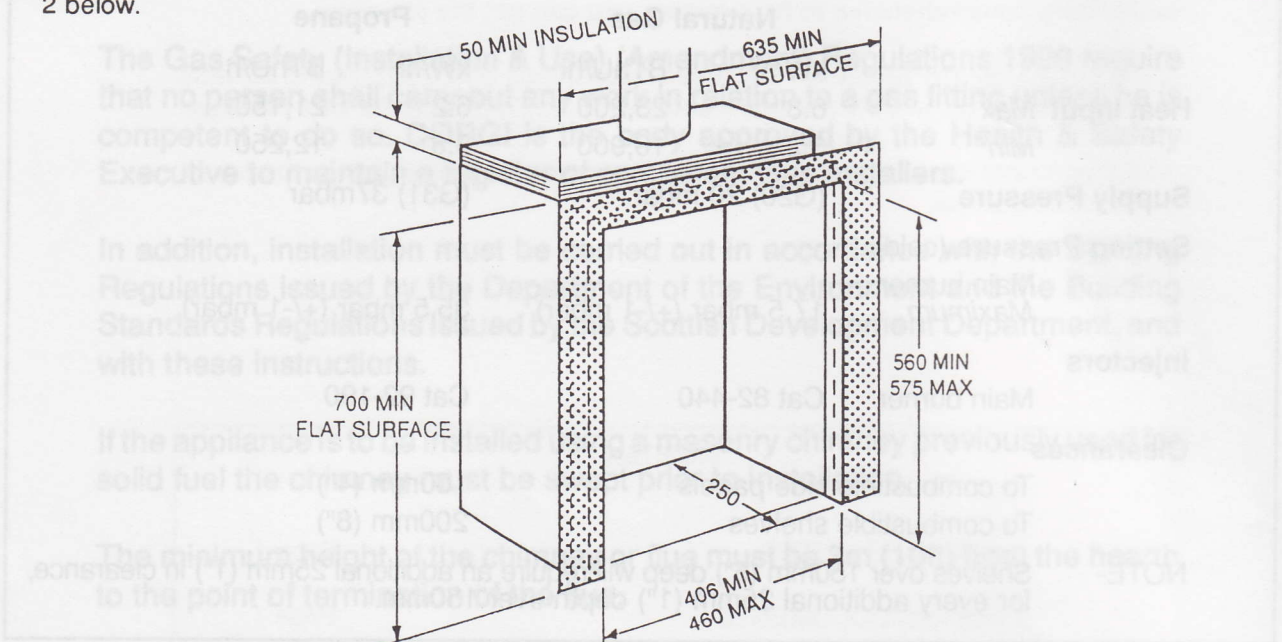


Figure 2 - Selkirk recessed factory-made flue system (Part No 04905) & 5" flue arrangement

#### Hearth requirements

The appliance must be mounted on a non-combustible hearth in accordance with Figure 3 below, being a minimum thickness of 12.5mm (1/2"). The upper surface of the hearth must be 50mm (2") above floor level, or alternatively, be provided with an upstanding edge of 50mm in height.

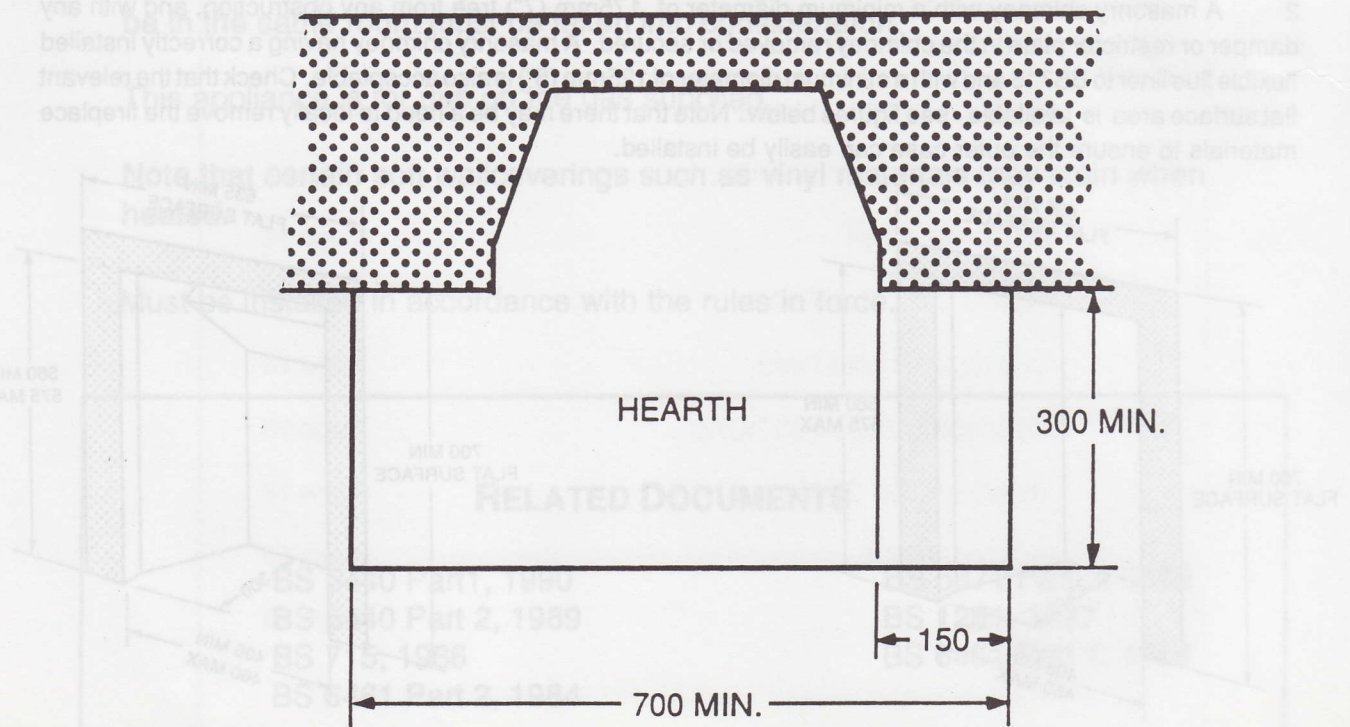


Figure 3 - Hearth dimensions



On no account must the appliance stand on combustible materials or carpets, or be fitted to a combustible wall.

Any underfloor air supply in the fire opening must be sealed with a non-combustible material to prevent draughts.

### Fire surround

This appliance may be installed with a surround with a minimum approved temperature rating of 150°C if fitted in accordance with these instructions.

The fire surround must be sealed to the wall and a suitable fireplace opening should be constructed which will provide a sealed joint from the opening to the flueway with all joints being smooth and fully sealed. See previous Figures for dimensions.

The surface area of the fireplace which is in contact with the sealing flange of the appliance must be clean, smooth and flat, in order to provide a proper seal between the fireplace and the appliance. If necessary, the faces should be made good to ensure the sealing process.

The fireplace floor (internal hearth) should be reasonably flat, and made of non-combustible materials.

## CONTENTS OF THE PACKAGES

### Box 1 of 2

- 1 no. Cast-iron firefront (or outer-case), fully assembled, with gas control access door.

### Box 2 of 2

- 1 no. Inset Live Fuel-Effect heat engine comprising fully assembled firebox, heat exchanger, glass panel, flame sensing device, ignition system, and ceramic burner system.
- 1 no. Bag containing 14 individual shaped dress coals
- 2 no. Porcelain moulded front coal-pieces with pilot-viewing cut-out
- 1 no. Matrix
- 4 no. Fibre wall plugs
- 4 no. Fixing screws
- 4 no. Eyebolts
- 2 no. Fixing cables
- 2 no. Adjusters
- 1 no. Users Instructions

Remove the contents carefully. Note the weight of each part of the appliance stated on the outside of each box. When handling take care not to damage any ceramic parts, the enameled or other any other cast-iron components, the glass panel, or the porcelain front coals.



## PREPARATION OF THE FIREPLACE

Ensure that the fireplace conforms to the previously stated dimensional requirements, or carry out any necessary remedial work.

Decide upon the preferred method of retention of the appliance (screw or cable) and if necessary consult with the consumer before commencing work.

### Screw retention

Four screws and fibre wall plugs are supplied for this retention method, to be located directly through the appliance sealing flange and into the vertical plane of the fireplace. (See Figure 4 below)

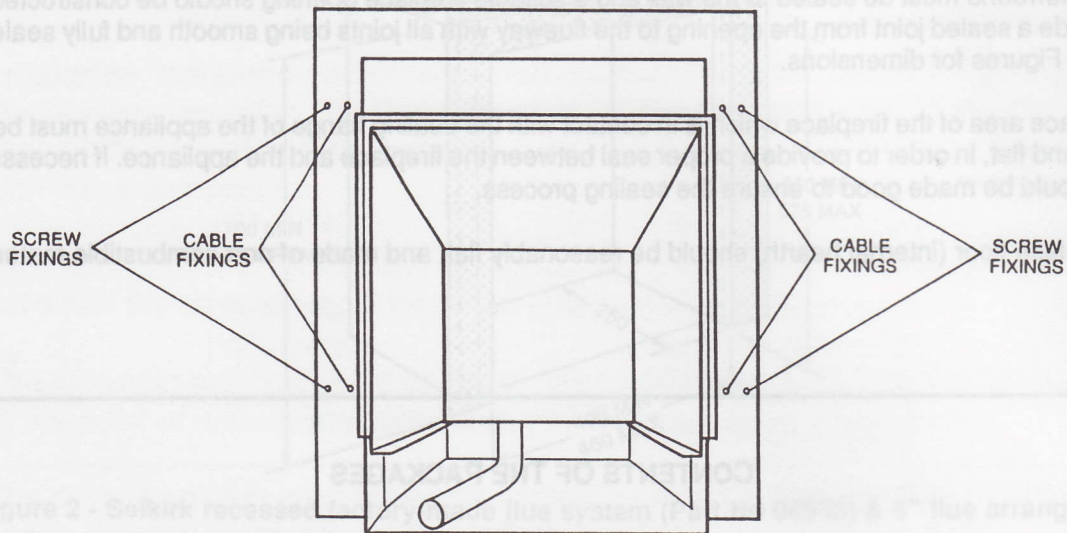


Figure 4 - Screw or Cable retention

Ensure all the fireplace components are sufficiently sound to take the wall plugs. Drill and plug as required, carefully fitting only the wall plugs at this stage. If this method cannot be undertaken without damage to the fireplace materials, then the use of retaining cables (below) should be chosen.

### Cable retention

Cables and eyebolts are supplied as an alternative method of retention. Ensure that the internal fireplace components are sufficiently sound to take the eyebolts and wall plugs. These should be fitted in accordance with Figure 5 below, using the wall plugs and a No. 10 drill. Use only the fibre wall plugs supplied (or similar), on no account should plastic wall plugs be used.

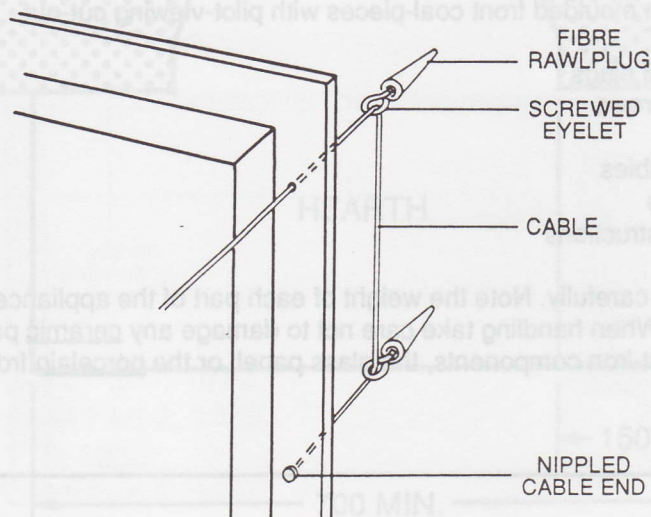


Figure 5 - Cable retention method & eyebolt detail



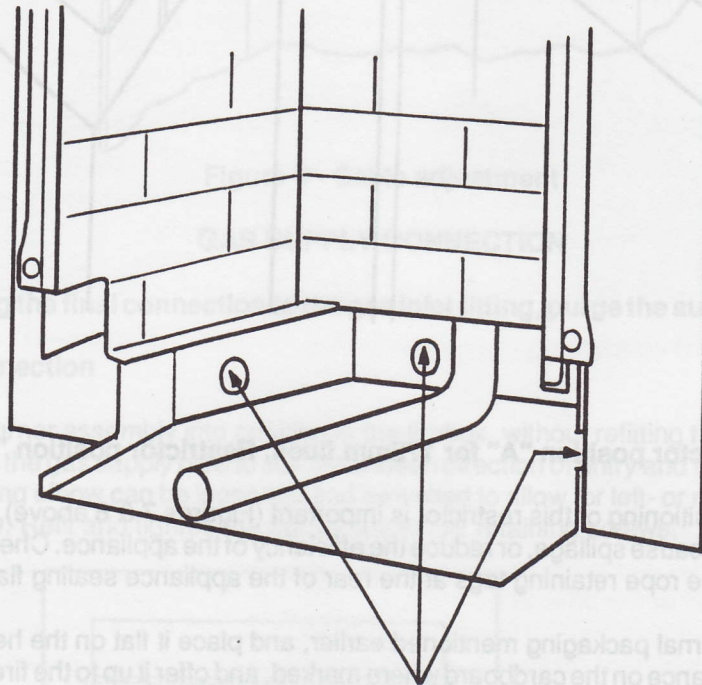
## Gas supply pipe

The gas supply can be either by concealed entrance, or if preferred by an exposed method across the hearth. The appliance inlet fitting is suitable for 8mm pipe.

If a concealed method of supply is chosen, then the gas pipe must be installed at this stage, leaving an adequate length of pipe for later connection to the fire. On no account should more than 1.5m of 8mm pipe be used, otherwise an unacceptable pressure-drop may occur.

An isolating elbow or similar device should be fitted close to the fireplace. Only rigid or semi-rigid pipe should be used.

The concealed pipe connection can be brought in through one of the grommets to the left, right or rear of the appliance sheet metal housing. Leave the grommet in position to protect the gas pipe/outer shroud interface, making a hole in the grommet suitable for the gas pipe to pass through.



GAS PIPE  
ENTRY POINTS  
(3 off)

**Figure 6 - Concealed fixing - gas entry options**

Ensure all combustible materials are removed from the fireplace area.

### PREPARATION OF THE APPLIANCE

Open the packaging, remove the internal packaging and place to one side for later use. Remove the sleeve from the packaging, giving access to the appliance. Remove the glass panel by rotating the upper retaining clips (Figure 16 Page 11) to clear the panel. Lift the panel upwards and out from the firebox assembly. Carefully place the panel where it will remain secure.

The burner assembly is retained by two screws set into the verticals of the firebox assembly. Carefully remove the burner assembly by sliding forward from the firebox.

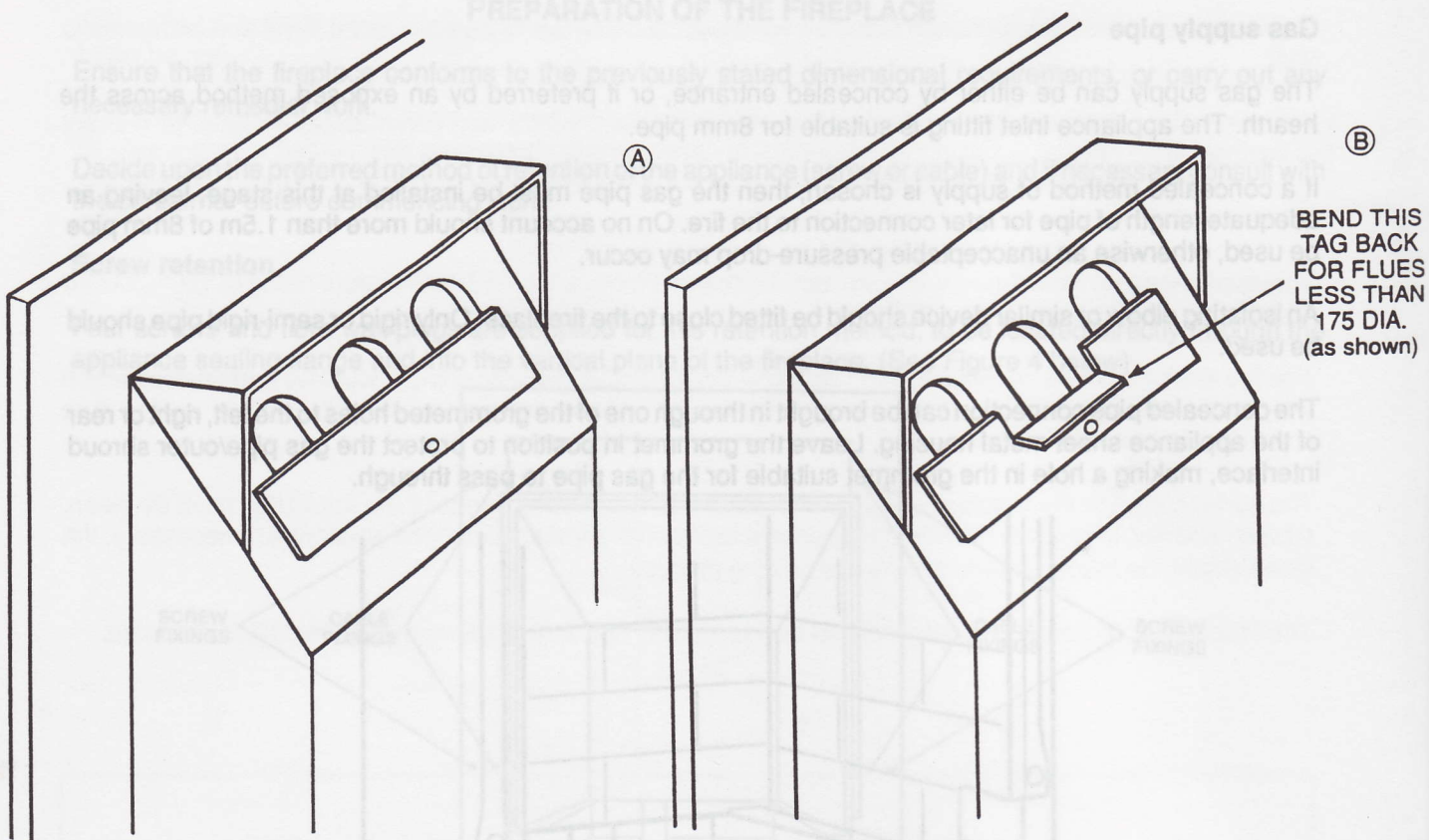
Place in a safe position, being careful not to damage any ceramic parts.

Check the flue restrictor plate on the upper-rear sheet metal appliance housing, and adjust to the appropriate position (Figures 7 & 8 overleaf), A or B.

'A' for 175mm diameter (and larger) flues

'B' for 125mm-174mm diameter flues





**Figures 7 & 8 - Restrictor position "A" for 175mm flues, Restrictor position "B" for 125mm flues**

Note that the correct positioning of this restrictor is important (Figures 7 & 8 above). Failure to position the restrictor correctly could cause spillage, or reduce the efficiency of the appliance. Check that the sealing rope is correctly fitted onto the rope retaining tags at the rear of the appliance sealing flange.

Take the cardboard internal packaging mentioned earlier, and place it flat on the hearth to protect against damage. Place the appliance on the cardboard where marked, and offer it up to the fireplace opening - sliding the appliance and cardboard together. Carefully lifting the appliance slightly, remove the cardboard. Ensure that the sealing rope will effectively seal against the vertical plane of the fireplace.

If a concealed gas pipe fixing is to be used, offer the gas pipe through the appropriate grommet.

**Screw retaining method**

Carefully manoeuvre the appliance into the fireplace opening, remove all of the cardboard pad, and fix through the appliance sealing flange to the vertical plane of the fireplace, using the screws supplied. Take care to ensure the appliance is secured evenly in order to provide an effective seal. Do not overtighten, as this may cause damage to certain fireplace materials, such as marble or conglomerates.

**Cable retention method**

Assemble the cable through the eyelets and fit adjusters in accordance with Figure 9 overleaf. With the adjusters screwed-in fully, 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 rope sufficiently to provide an effective seal. Do not overtighten.

If the sealing rope does not fully compress, then the adjusters and nipples may require to be slackened, and the cable pulled up tighter before retightening 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.



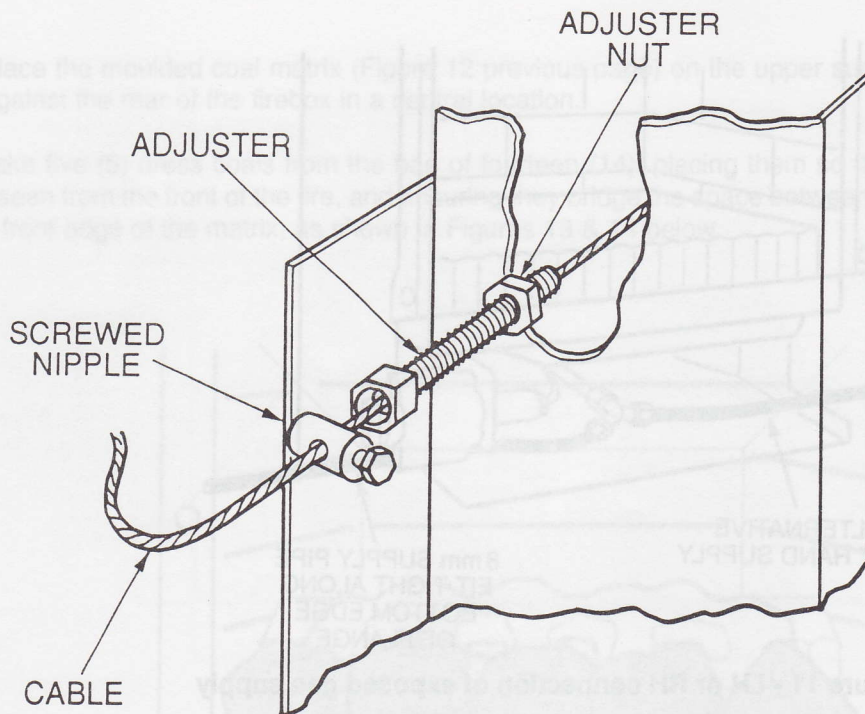


Figure 9 - Cable adjustment

### GAS SUPPLY CONNECTION

**Note:** Before making the final connection to the gas inlet fitting, purge the supply of all air and debris.

#### Concealed gas connection

Replace the burner assembly into position in the firebox, without refitting the retaining screws at this stage. Cut and shape the gas supply pipe to suit the chosen direction of entry and the gas inlet fitting position. Note that the inlet fitting elbow can be loosened and swivelled to allow for left- or right-hand gas connection. See Figure 10, below. Refit and tighten the burner assembly retaining screws.

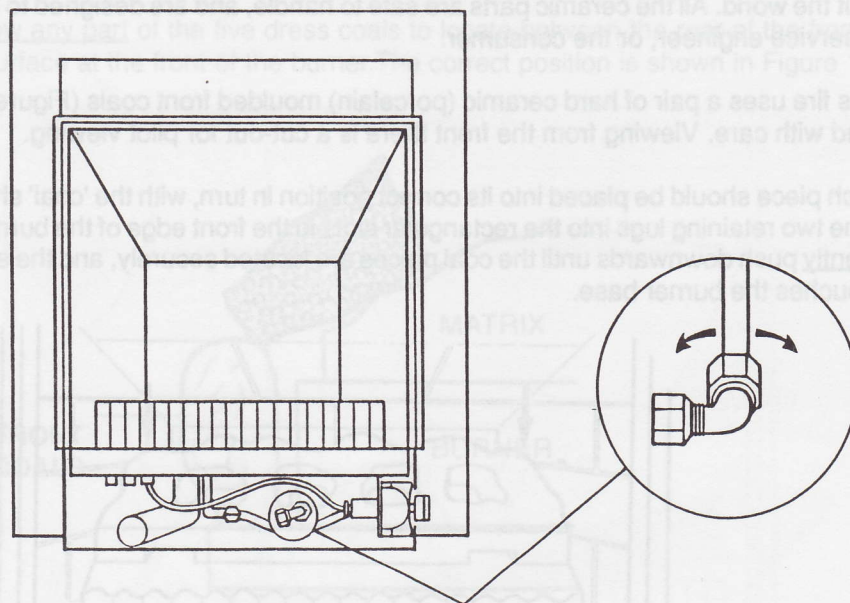
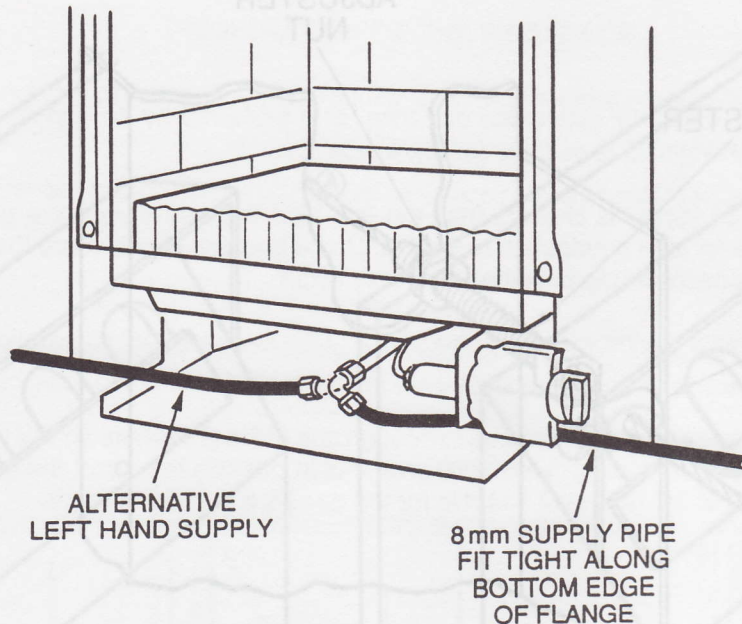


Figure 10 - Left or Right-hand connection

#### Exposed gas connection

Replace the burner assembly into position in the firebox, without refitting the retaining screws at this stage. Using 8mm diameter rigid or semi-rigid pipe, run the pipe from the gas inlet fitting to a supply restrictor elbow or similar adjacent to the fireplace. Figure 11 (overleaf) shows alternative supply routes for left or right-hand connection.





**Figure 11 - LH or RH connection of exposed gas supply**

Note that the pipe must exit the appliance through the slot in the outer case column, or beneath the fender, and should be routed accordingly. Refit and tighten the burner assembly retaining screws. Note: ensure the control knob is centrally located within the data badge plate.

### Gas soundness check

Turn on the gas supply and conduct a gas soundness test.

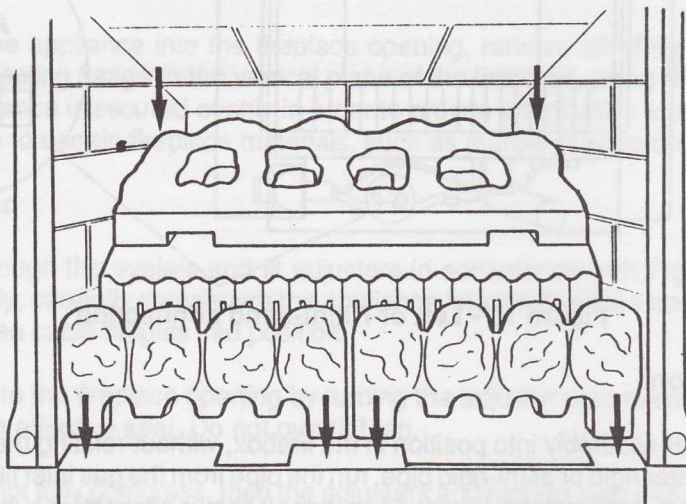
## ASSEMBLY OF THE FUEL-BED

HANDLE ALL CERAMIC FUEL-BED PARTS TENDERLY

Senator uses a fuel-bed assembly which has been proven in more than 100,000 applications throughout the world. All the ceramic parts are safe to handle, and are designed to be easily replaced by the installer, service engineer, or the consumer.

This fire uses a pair of hard ceramic (porcelain) moulded front coals (Figure 12 below) which should be handled with care. Viewing from the front there is a cut-out for pilot viewing.

Each piece should be placed into its correct position in turn, with the 'coal' shapes facing the installer, locating the two retaining lugs into the rectangular slots in the front edge of the burner as shown in Figure 12 below. Gently push downwards until the coal pieces are located securely, and the slotted area on their lower surface touches the burner base.

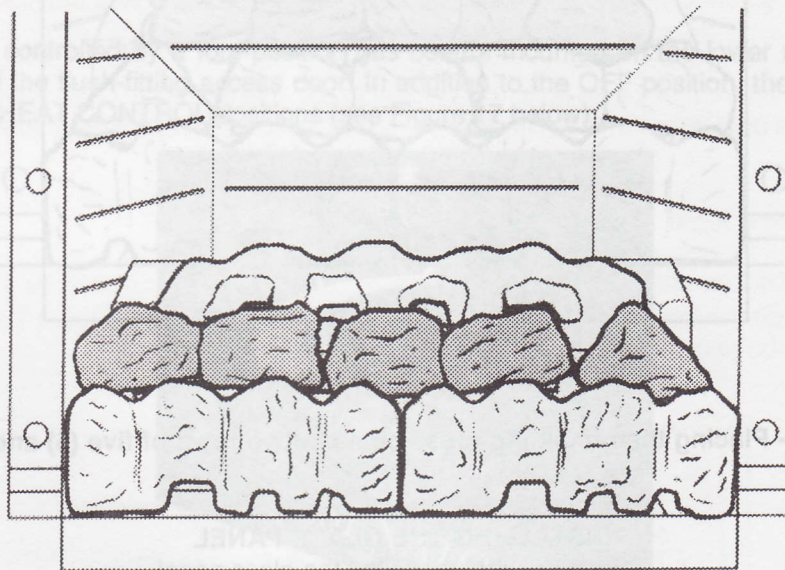


**Figure 12 - Placing the front coal and moulded matrix.**  
The matrix must be located fully against the rear of the firebox



Place the moulded coal matrix (Figure 12 previous page) on the upper surface of the burner and locate it fully against the rear of the firebox in a central location.

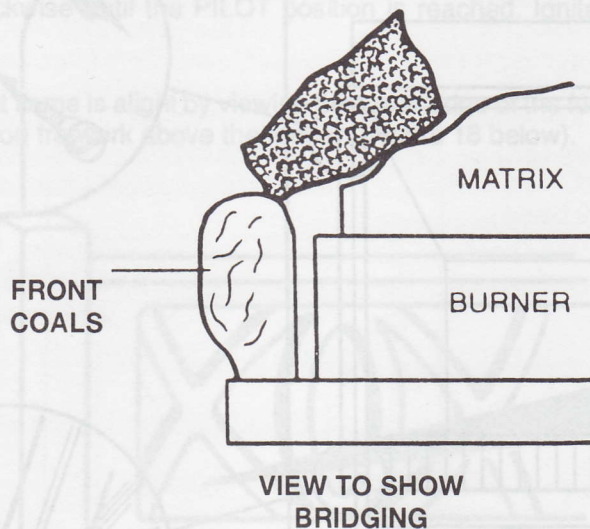
Take five (5) dress coals from the bag of fourteen (14), placing them so that the most realistic surfaces may be seen from the front of the fire, and ensuring they bridge the space between the moulded front coal pieces and the front edge of the matrix, as shown in Figures 13 & 14 below.



**Figure 13 - Placing the first five dress coals**

A random, realistic, effect may be made as it is not necessary that the shapes are all positioned in the same manner, although the coals should be generally equally spaced for the best flame effect.

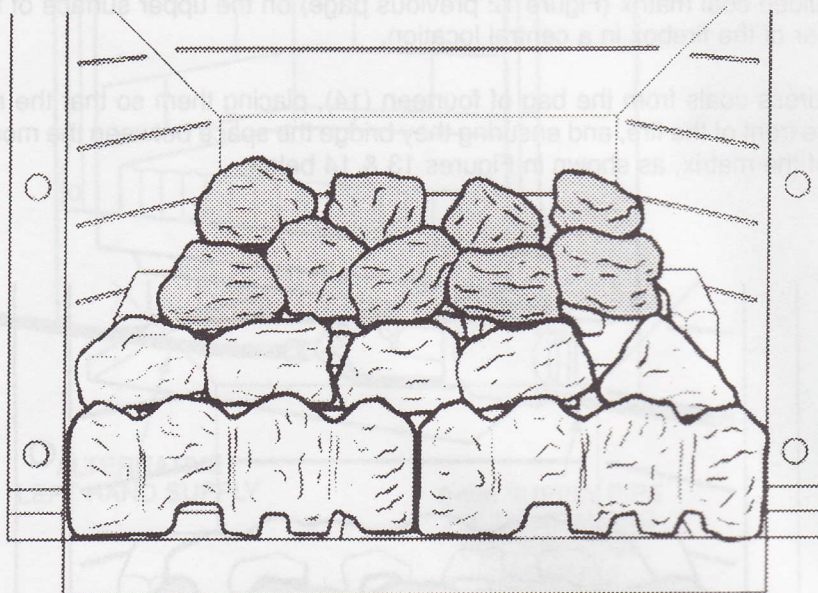
Take care not to allow any part of the five dress coals to locate between the rear of the front coal pieces and the vertical serrated surface at the front of the burner. The correct position is shown in Figure 14 below.



**Figure 14 - Bridging the front coals and matrix with 6 dress coals**

Place a further row of five (5) coals on the matrix in a random fashion above the first six coals previously placed, as shown in Figure 15 overleaf. Then place the remaining four (4) coals in a row on the surface of the matrix above the second row of coals, leaving a space between these two rows to allow the best flame effect. Ensure a generally even spacing between all the coals for the best effect.



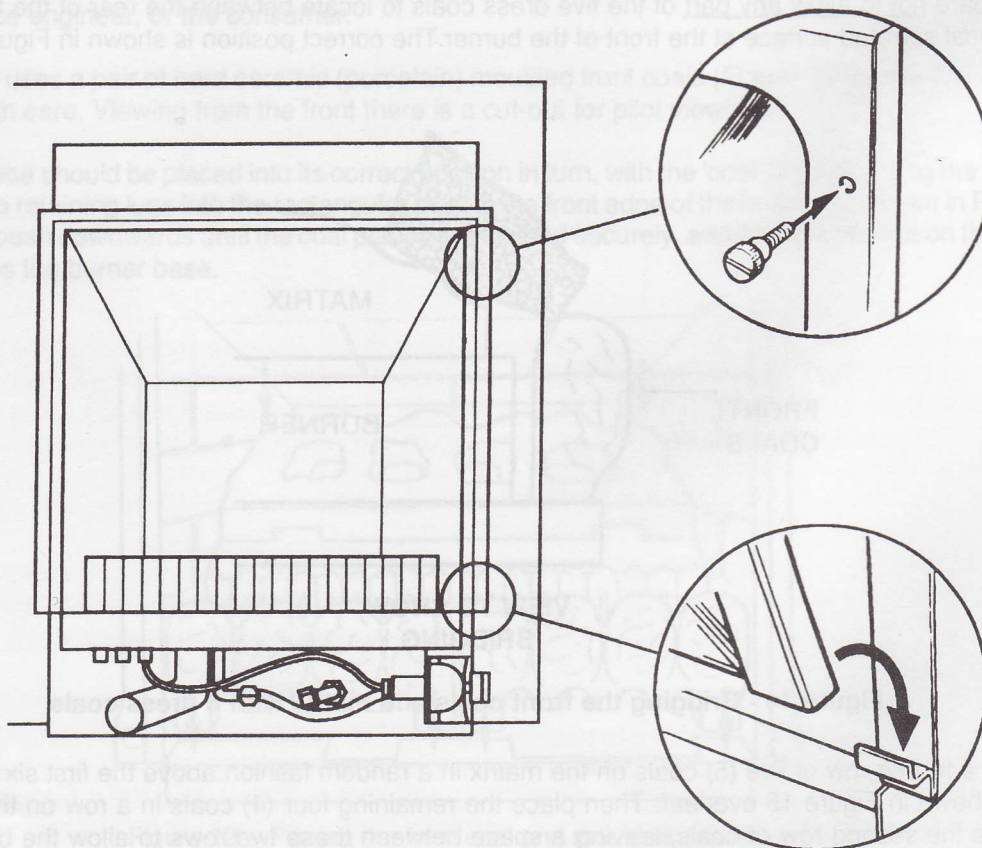


**Figure 15 - Placing the remaining dress coals in two rows of five (5) and four (4)**

**INSTALLING THE GLASS PANEL**

Take care when handling the glass panel

Take the glass frame assembly and offer up centrally to the fabricated steel firebox. Insert the lower corners of the frame assembly into the U channel locations on the firebox. Line up the upper location points and with the thumb screws provided tighten the upper section of the glass assembly onto the firebox. To ensure a tight seal is achieved, the use of a flat headed screwdriver will be required in order to bed down a new seal.



**Figure 16 - The glass retaining clips**



## OPERATION OF THE FIRE

Before installing the cast-iron firefront (outer case) please observe the Important Notes on Page 1 of the Users Instructions, before attempting to operate this appliance.

Read these instructions thoroughly before operating the fire for the first time. Ensure the gas supply is purged of air before attempting to light the fire for the first time.

### The Gas Control

This fire is controlled by a four-position gas control mounted on the lower right-hand side of the appliance, behind the flush-fitting access door. In addition to the OFF position, there is a PILOT LIGHT position, and two HEAT CONTROL positions (see Figure 17 below).

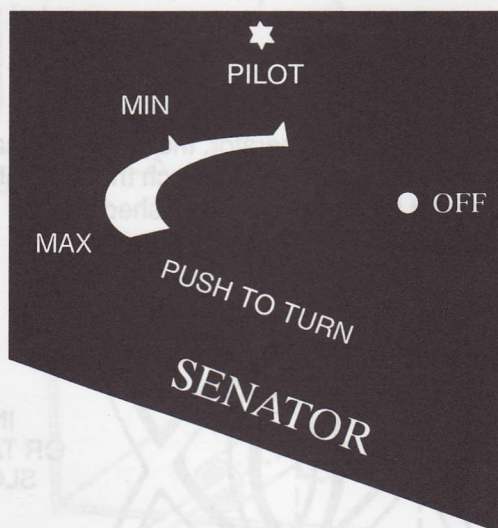


Figure 17 - Ignition and heat control positions

Ignition of the fire is by piezo which ignites the pilot flame. The main burner is lit from this pilot.

### Lighting the Pilot

Ensure that the gas supply is on. Turn the gas control knob to the OFF position. Depress the control knob and turn anticlockwise until the PILOT position is reached. Ignite the pilot flame. Keep the knob depressed.

Observe the pilot flame is alight by viewing the lower edge of the fuel-bed on the left-hand side of the fire, through the cast iron fretwork above the fender. (Figure 18 below).

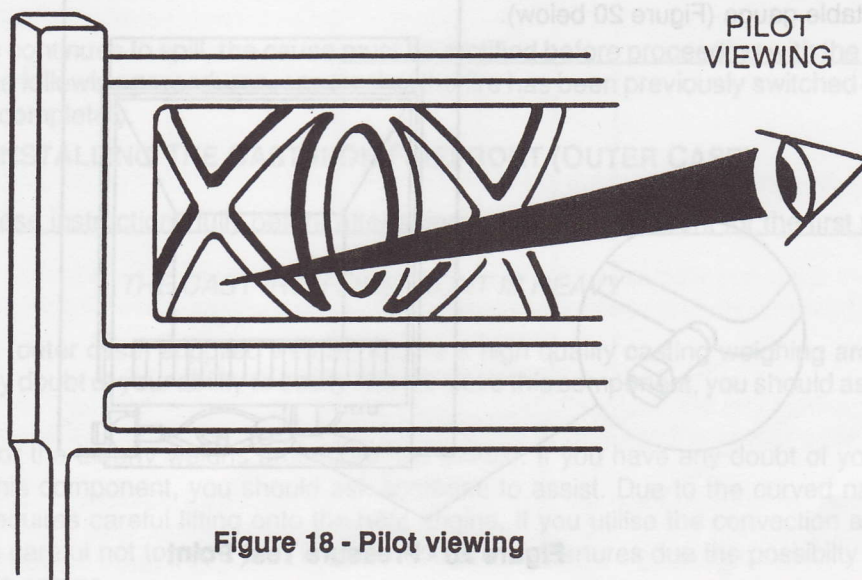


Figure 18 - Pilot viewing



### Lighting the main burner

The main burner can be lit by depressing and turning the control knob anticlockwise to the MAXIMUM position (Figure 17)

### To turn the fire OFF

Depress the control knob and turn clockwise until the OFF position has been reached. Observe that the pilot is now extinguished (Figure 17). Check that the appliance operates satisfactorily in all control positions.

Note that the fuel-bed may take up to 15 minutes to provide a realistic glow, and that the flames will be predominately of a blue colour until the fire has completely heated up to its usual operating temperature. This is normal.

### Lighting the fire with a taper

In the event of failure of the piezo spark generator, the pilot flame can be lit by a taper, spill, or long match inserted through the fretwork above the fender to reach the pilot light (Figure 19 below). Follow the lighting instructions above until the pilot flame can be established.

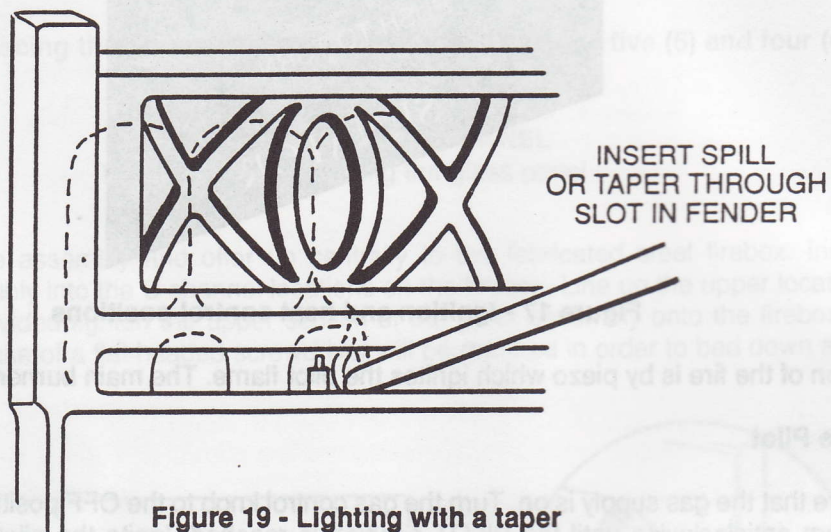


Figure 19 - Lighting with a taper

### Check the burner pressure

Light the fire in accordance with the lighting procedures outlined above. The appliance is pre-set to give the correct heat input at 20 mbar NG.; 37 mbar LPG. inlet pressure. The burner pressure should be checked at the pressure test point, using a suitable gauge (Figure 20 below).

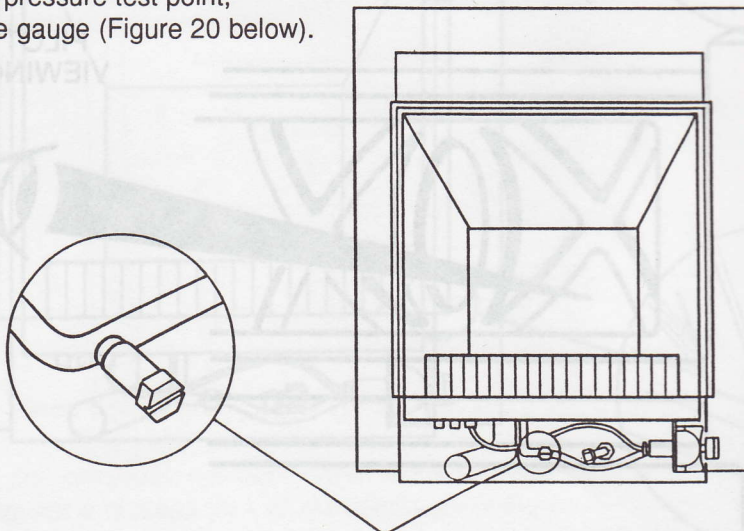


Figure 20 - Pressure Test Point

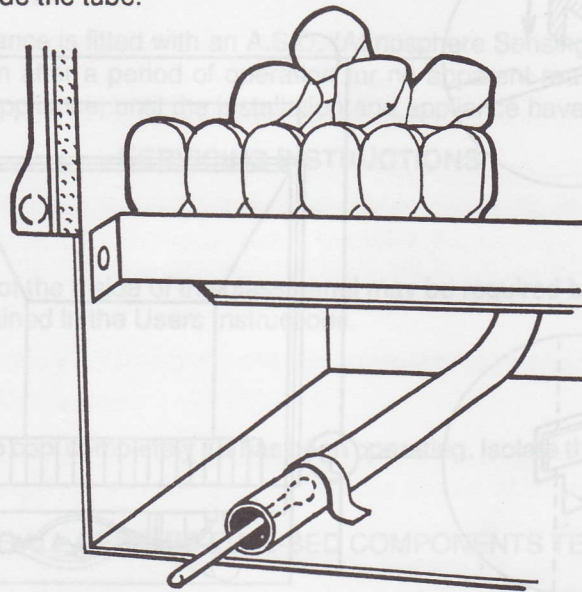


With the appliance operating in the MAXIMUM position the burner pressure should be in accordance with Technical Specifications, Page 2. After checking the pressure, turn off the appliance and replace the test point sealing screw. Relight the appliance, turn to MAXIMUM, and test around the sealing screw for gas soundness.

### SPILLAGE TEST

This spillage test must be conducted to confirm the safe clearance of combustion products.

Light the fire if it is not already operating, and allow to warm up for five minutes at the MAXIMUM position. Place a smoke match into the spillage sensing tube (Figure 21 below) so as the whole head of the match is at least 12mm inside the tube.



MATCH HEAD  
12mm INTO TUBE

**Figure 21 - Conduct a Spillage Test**

Observe the smoke, if it is drawn into the tube then the appliance is clearing the combustion products satisfactorily.

If smoke expels from the tube then allow the appliance to warm up for a further ten (10) minutes and repeat the test. If spillage occurs remove the appliance from the fireplace opening, and adjust the flue outlet restrictor mounted on the rear of the firebox (See Figures 7 and 8 Page 7) to the fully open position for 5" flues, allow to warm up and repeat the test. If spillage continues to occur, do not proceed. Seek expert advice.

Additionally, if an extractor fan is fitted in the same - or a communicating - room space, a check should be carried out with doors and windows closed and the fan turned on.

If the appliance continues to spill, the cause must be rectified before proceeding with the installation. Before undertaking the following procedures, ensure that the fire has been previously switched off, and has been allowed to cool completely.

### INSTALLING THE CAST-IRON FIREFRONT (OUTER CASE)

Please read these instructions fully before attempting to install the firefront for the first time.

#### THE CAST IRON FIREFRONT IS HEAVY

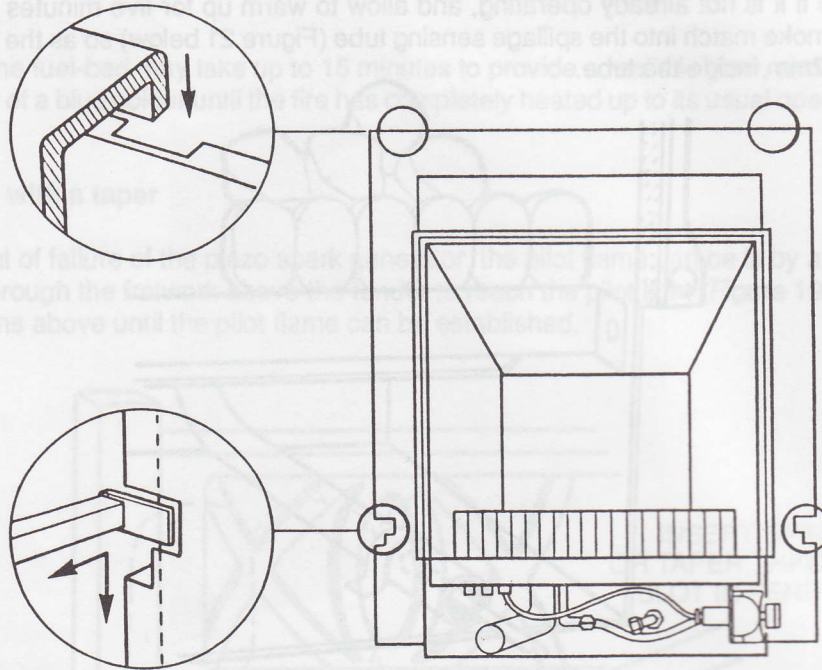
The cast-iron firefront (outer case) supplied with Senator is a high quality casting weighing around 28kgs (60lbs). If you have any doubt of your ability to easily lift or remove this component, you should ask someone to assist.

Like the Senator the Liberty weighs around 28 kgs (60lbs). If you have any doubt of your ability to easily lift or remove this component, you should ask someone to assist. Due to the curved nature of the case design Liberty requires careful lifting onto the heat engine, if you utilise the convection air or fender apertures for lifting be careful not to pass your fingers through the apertures due the possibility of pinching when offering up to the engine.



Assistance will also help avoid damage to the firefront component itself, the painted or enameled finish, the fire surround and fireplace components, and will avoid possible injury to yourself. You may wish to utilise the cardboard packaging again, to avoid damage to the hearth or firefront component.

Note the the firefront has two lugs cast into the rear of the mantle shelf, and two steel lugs attached to the rear of each vertical column which locate into the slots in the sheet metal. Carefully lift the firefront into a position square to the sealing flange of the appliance, some 1" (25mm) above and away from the four location slots formed in the sheet metal of the chassis sealing frame (Figure 22 below).

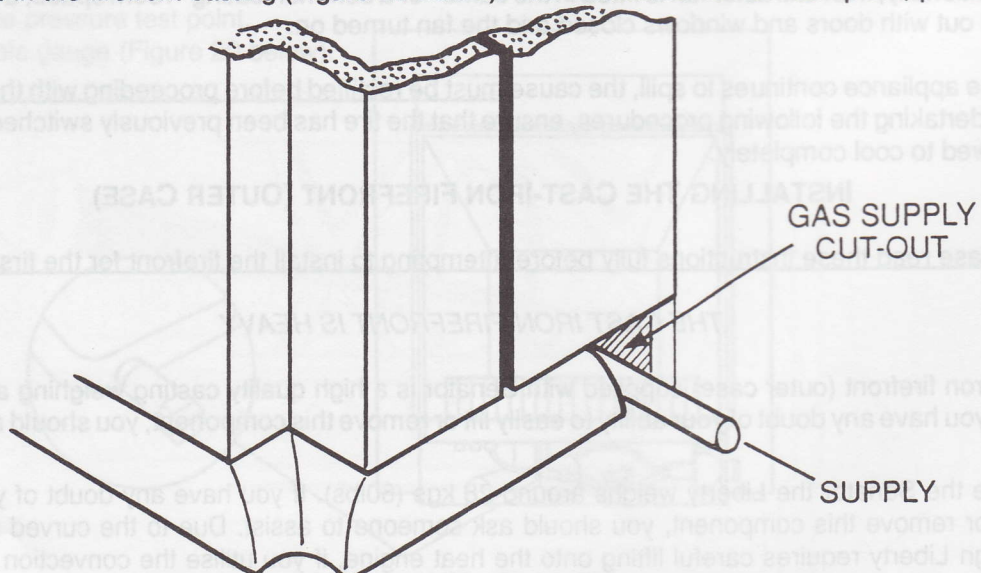


**Figure 22 - Install the firefront into the slots provided**

Holding the firefront a little above the top surface of the chassis sealing flange, locate the fixing lugs into the slots provided in the sealing flange, push carefully towards the fireplace, and GENTLY lower the component onto the hearth ensuring that no damage occurs to the finish of the facia, or to the hearth material itself.

All four fixing lugs should locate into the slots, and the firefront should sit squarely on the hearth, locating against the vertical surface of the fireplace.

Note: If the gas supply is across the hearth, ensure that the supply pipe is located through the purpose-provided slot in the firefront casting. (Figure 23 below). The installation is now complete, please brief the consumer.



**Figure 23 - Ensuring an exposed gas supply enters correctly**



## CONSUMER BRIEFING

Once the appliance has been fully installed and commissioned, instruct the User on its correct operation.

The cleaning procedures recommended in the Users Instructions should be explained in detail, and coal placement explained. The consumer must be warned not to vary the coal layout, and of the dangers of adding extra coals, or of operating the appliance without the glass panel in place.

Explain how the firefront may be removed and refitted, and suggest that the elderly or infirm request assistance in the event the firefront requires removal.

Inform the consumer that any servicing is to be carried out by a CORGI installer. These Instructions should be left with the consumer.

Explain that 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.

## SERVICING INSTRUCTIONS

### Glass Panel

Occasional cleaning of the inside of the glass panel may be required between services. Instructions for this procedure are contained in the Users Instructions.

### Regular Servicing

Allow the appliance to cool completely if it has been operating. Isolate the gas supply to the appliance prior to commencing work.

### HANDLE ALL CERAMIC FUEL-BED COMPONENTS TENDERLY

Senator uses a fuel-bed assembly which has been proven in more than 100,000 applications throughout the world. All the ceramic parts are safe to handle, and are designed to be easily replaced by the installer, serviceman, or consumer.

The fourteen (14) individual dress coals (Figure 15 Page 11) should be removed, noting their approximate positions to facilitate replacement, and then placed on a piece of newspaper. Any deposits can be carefully removed from the surface of the coals using a soft brush (such as a paint brush).

The two parts of the porcelain ceramic front coals (Figure 12 Page 9) and the moulded ceramic coal matrix (Figure 12 Page 9) should now be removed from the burner surface, noting their positions and location to simplify replacement. They may be cleaned with a soft brush.

The burner surface, three flue outlet ports and firebox surfaces may be CAREFULLY cleaned by the use of a vacuum-cleaner USING ONLY A SOFT BRUSH ATTACHMENT. Remove only loose particles, and ensure that the burner surface, burner ports, and moulded shapes are not in any way damaged by the cleaning action.

### Inspection of the burner

Disconnect the gas supply from the gas inlet fitting at the front of the burner assembly. (Figure 10 Page 8).

Remove the two burner assembly retaining screws, and slide the assembly out of the firebox, taking care not to damage any ceramic component. Any deposits or debris should be carefully removed with a SOFT BRUSH.

The burner slots should be inspected to ensure they are clear of debris, and any blockages carefully removed. On no account should tools be used which may enlarge or damage the burner slots.

The burner surface should be inspected for damage. Consult the manufacturer for advice if in any doubt if damage is present. Any surface crazing of the ceramic surface of the burner, matrix, and fuel components is usual and is no cause for concern.



Check the injector and venturi for linting or obstruction. If there is a need to remove the injector, please see Removal of Components.

Check the injector remains aligned correctly to fire centrally into the venturi. Adjust the injector position as required.

Check the smooth operation of the control tap, the integrity of the gas train, and the piezo ignition lead and connections.

Remove any deposits or debris from around the pilot light, and check that the piezo generator is sparking correctly by operating the combined tap and piezo control.

Place the burner assembly to one side taking care not to damage the ceramic components.

### **Inspect the flue/chimney**

Remove the four retaining screws from the appliance sealing flange (Figure 4 Page 5) or alternatively slacken the cable adjuster and remove the cable nipples, if fitted (Figure 5 Page 5).

Carefully slide the appliance out of the fireplace opening, ensuring no damage occurs to the hearth material.

Inspect the general condition of the flue and remove any deposits or debris from the fireplace opening or flueways.

Repair any cracking in the flueway before reassembling. Inspect the condition of the rope seal and also ensure this is correctly positioned to ensure an effective seal. Ensure the rope seal is fully intact before re-fitting.

Re-install the appliance in accordance with the installations instructions contained herein. Care must be taken to ensure the correct appliance sealing and fuel-bed layout.

Commission the fire in accordance with the Installation Instructions. Conduct a gas soundness test, and a flue spillage test to verify the safe operation of the appliance as previously described (Page 14).

Leave these instruction with the User.

## **REMOVAL OF COMPONENTS**

### **Removal of the A.S.D. (Atmosphere Sensing Device)**

Remove the burner assembly in accordance with the instructions on Page 16.

Taking care not to damage the ceramic components, invert the burner assembly and disconnect the thermocouple nut at the gas control.

Disconnect the pilot supply pipe at the A.S.D. end, and carefully withdraw the Assembly.

Disconnect the electrode lead at the A.S.D. end. Remove the two screws holding the pilot burner assembly to the burner tray. The pilot assembly may now be removed. Re-assemble in reverse order.



## Removal of the gas control

Remove the burner assembly in accordance with the instructions on Page 16.

Taking care not to damage the ceramic components, invert the burner assembly and disconnect the thermocouple nut from the gas control.

Disconnect the pilot supply pipe at the gas control end. Disconnect the main burner supply pipe at the gas control end. Disconnect the inlet pipe at the gas control end.

Remove the gas control retaining locknut from the control mounting brackets and withdraw the control. Re-assemble in reverse order.

## Removal of the main burner injector

Remove the burner assembly in accordance with the instructions on Page 16.

Taking care not to damage the ceramic components, invert the burner assembly and disconnect the main burner supply pipe from the injector end, taking care to support the turning action by retaining the injector position using a suitable spanner on the square end. Unscrew the injector.

Re-assemble in reverse order, ensuring the correct alignment of the injector firing down the centre-line of the venturi.

## Assembly of the Firefront/Outer Case

In the event of damage to the Outer Case, the individual castings may be replaced as follows.

Remove the damaged Outer Case as described on Pages 14/15. Dis-assemble the case into the five cast components by removing the nuts holding the assembly. Remove the damaged component, and replace the new one in position.

Carefully replace and tighten the nuts without damaging the painted/enamelled finish by use of undue pressure.

Re-install the Outer Case following the instructions on Page 14/15.

## NOTE

Liberty is a one piece casting with only the control door access casting being replaceable as an individual item.



## SHORT SPARES LIST

Never fit non-standard parts as this might constitute a hazard. Use only the correct manufacturers spares. Use only the correct number of firebed components, and install them as described in the procedure.

### PART NUMBERS

Description	W/fire Part No.
Coal matrix	9770004
Front coals (pair)	9780027
Dress coal set	9780036
Glass panel Assembly	9550057
A.S.D. (Natural Gas)	9740029
A.S.D. (Propane)	9740030
Gas Control	9730068
Gas Control knob	9730069
8mm olive	9750002
Compression nut	9750001
Main burner injector (Natural)	9730014
Main burner injector (Propane)	9730006

### SENATOR

Outer castings (Classic)	
Mantle	1300121
LH column	1300127
RH column	1300126
Control door	1300128
Firefront (without brass)	1300125
Fanlight	1300124
Outer-case castings (Midnight)	
Mantle	1340121
LH column	1340127
RH column (complete)	1340126
Control door	1340128
Firefront (without brass)	1340125
Fanlight	1340124
Outer-case castings (Sand)	
Mantle	1320121
LH column	1320127
RH column	1320126
Control door	1320128
Firefront (without brass)	1320125
Fanlight	1320124

### LIBERTY

Liberty Front (Inc control door)	0002368
Liberty control door	1301123

**NOTE**