

Wonderfire

I N S T A L L E R G U I D E

For

MODEL BR622

(G.C. 32-032-09)

Marseille

Fireslide

High Efficiency Fuel Effect Gas Fire

Please keep in a safe place for future reference

Please leave this Installer Guide with the user

As supplied, this appliance is for use with natural gas (G20)
When converted using conversion kit no.591159 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.

C U S T O M E R C A R E

This Installer Guide gives sufficient details to enable the appliance to be installed and maintained. If further information is required, our Wonderfire service department will be pleased to help.

Please phone us on 0121 386 6203.

In the Republic of Ireland call 353 183 75114.

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1. 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.

The appliance data label is on a tie below the burner and is visible when the bottom front cover is removed.

Gas	Natural (G20)	Propane (G31)*
Inlet Pressure	20mbar	37mbar
Input - Max. (Gross)	6.85kW (23,400 Btu/h)	6.7kW (22,860 Btu/h)
Input - Min. (Gross)	2.7kW (9,410 Btu/h)	4.3kW (14,670 Btu/h)
Output - Max.	4.2kW (14,300 Btu/h)	4.1kW (13,990 Btu/h)
Output - Min	1.3kW (4,440 Btu/h)	2.0kW (6,820 Btu/h)
Burner Test Pressure (Cold)	17.3± 0.75mbar (7.0± 0.3in w.g.)	35.1± 0.75mbar (14.1± 0.3in w.g.)
Gas Connection	8mm pipe	8mm pipe
Burner Injector	Bray Cat. 31 Size 440	Bray Cat. 18 Size 190
Pilot & Atmosphere Sensing Device	SIT Ref. OP9030	SIT Ref. OPLPG9222
Ignition	Electronic (Battery 9V PP3)	Electronic (Battery 9V PP3)
Aeration	Non-adjustable	Non-adjustable

*When converted using kit 591159

2. GENERAL INSTALLATION REQUIREMENTS

2.1 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:

- a) All the relevant parts of local regulations.
- b) The current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office or the Building Standards (Scotland) (Consolidation) Regulations issued by the Scottish Development Department.
- c) All relevant codes of practice.
- d) The relevant parts of the current editions of the following British Standards:-
 - BS 715
 - BS 1251
 - BS 1289 Part 1
 - BS 1289 Part 2
 - BS 4543 Part 2
 - BS 5440 Part 1
 - BS 5440 Part 2
 - BS 5871 Part 2
 - BS 6461 Part 1
 - BS 6891
 - BS 8303

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

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

2.2 As supplied the appliance can be installed in the following situations:-

2.2.1 To a fireplace complete with surround and hearth as shown in figure 1 and complying with BS1251 after removal of the fireback and sufficient material behind the fireback for a debris catchment space. The required fireplace, hearth, debris catchment area and clearance dimensions are shown in figure 1.

2.2.2 To a fireplace incorporating a metal flue box complying with the constructional requirements of the current edition of BS715. The dimensions of the flue box must conform to those shown in figure 2.

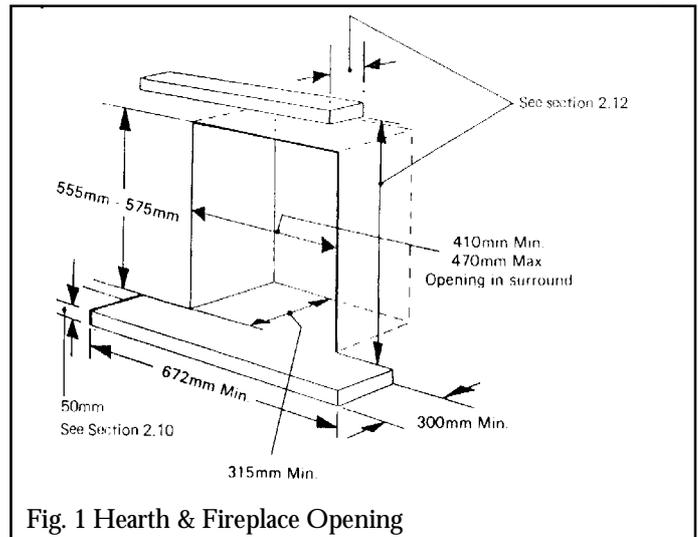


Fig. 1 Hearth & Fireplace Opening

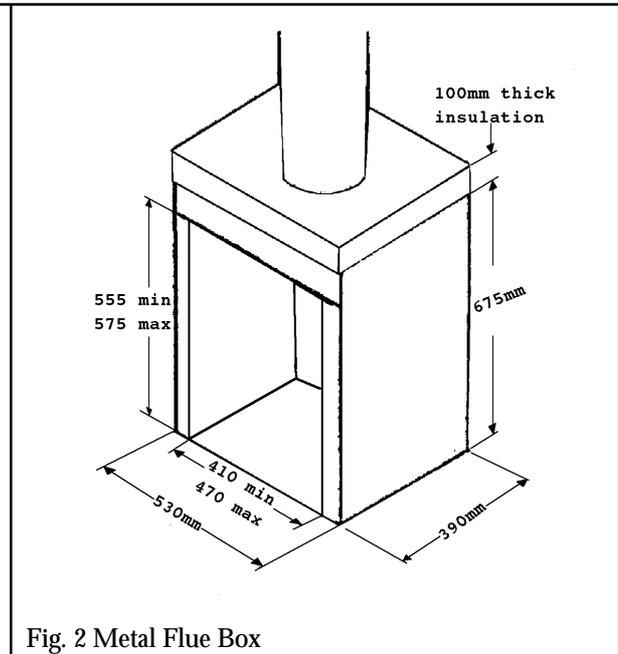
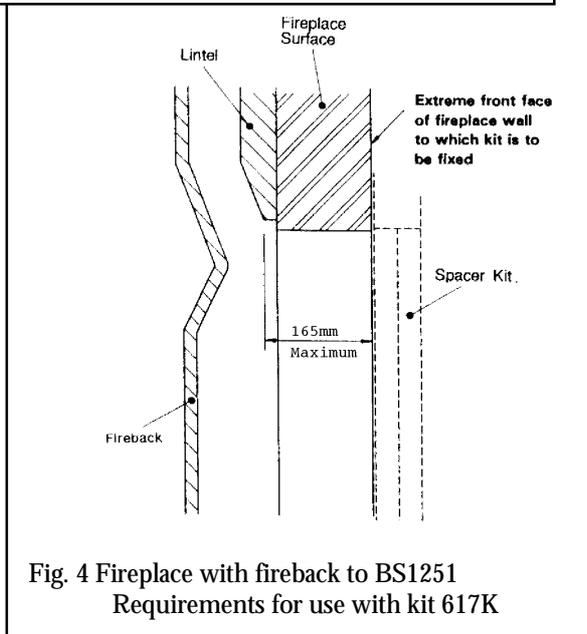
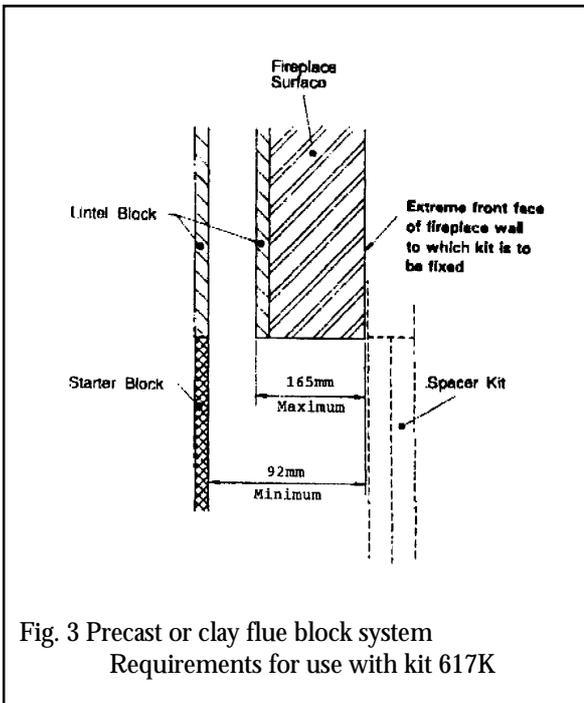


Fig. 2 Metal Flue Box



2.3 With the addition of optional accessory spacing kit 617K together with a sufficiently deep surround and hearth, this appliance can be fitted in the following situations. Full installation requirements and instructions are provided with the kit.

2.3.1 To a fireplace that has a precast concrete or clay flue block system conforming to BS1289. 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 13,000mm². Older editions of BS1289 required a cross-sectional area of 13,000mm². The current revision of the standard requires 16,500mm². This appliance is suitable in both cases.

The distance from the back face of the flue starter blocks to the extreme front face of the fireplace including all surfacings must be no less than the distance shown in figure 3. The distance from the front face of the flueway opening in the lintel block (or equivalent) to the extreme front face of the fireplace including all surfacings must be no more than the distance shown in figure 3. If this maximum is exceeded poor clearance of combustion products could result.

The flue starter blocks should not be modified.

The current version of BS1289 recommends that 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.

2.3.2 Into a fireplace that has a fireback of nominal size 400mm or 450mm and conforming to BS1251. The distance from the front face of the flueway opening in the lintel (or equivalent) to the extreme front face of the fireplace including all surfacings must be no more than the distance shown in figure 4. If this maximum is exceeded poor clearance of combustion products could result.

2.4 Suitable flues and minimum flue sizes are as follows:-

- a) 225mm x 225mm conventional brick flue.
- b) 175mm diameter lined brick or stone flue.
- c) 200mm diameter factory made insulated flue manufactured to BS4543.
- d) 175mm diameter flue pipe. See BS6461 Part 1 for suitable materials.
- e) 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.
- f) A properly constructed precast concrete or clay flue system conforming to BS1289 Part 1 or 2. This system is only suitable when the conditions stated in section 2.3 are met.

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.

2.5 The minimum effective height of the flue must be 3m.

2.6 The flue must not be used for any other appliance or application.

2.7 Any chimney damper or restrictor should be removed. If removal is not possible, they must be secured in the open position.

2.8 If the appliance is intended to be installed to a chimney which 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.

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

2.10 The appliance must be mounted behind a non-combustible hearth (N.B. conglomerate marble hearths are considered as non-combustible). The appliance can be fitted to a purpose made proprietary class "O"-150°C surround. 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 surface of the hearth must be sufficiently flat to enable the bottom of the front surround and the bottom front cover to be aligned horizontally. Any excessive unevenness (uneven tiles, Cotswold stone, etc.) should be rectified.

The appliance must not stand on combustible materials or carpets.

If the appliance is to be fitted against a wall with combustible cladding, the cladding must be removed from the area covered by the outer surround (see figure 5). We suggest that the actual surround is used as a template to mark the area for combustible cladding removal.

The distance from the outside edge of the appliance front surround to a corner wall or other projection extending further forward than the front of the appliance on either side must not be less than that shown in figure 5.

2.11 The front face of the fireplace should be reasonably flat over the area covered by the convection box top and side flange seals to ensure good sealing. These faces should be made good if necessary.

The fireplace floor should be reasonably flat to ensure that a good seal with the convection box can be made.

2.12 The minimum height from the top surface of the hearth to the underside of any shelf made from wood or other combustible materials is as follows:-

- For a shelf up to 150mm deep
Minimum height = 818mm.
- For a shelf deeper than 150mm
818mm + 12.5mm for every 25mm depth over 150mm.

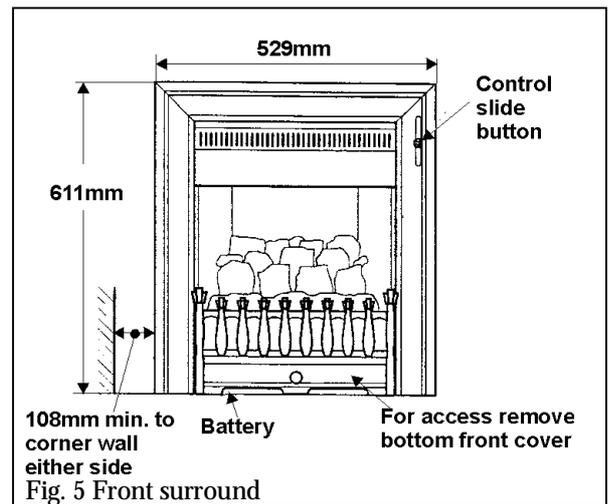
2.13 Note that soft wall coverings (e.g. embossed vinyl, etc.) are easily affected by heat. They may scorch or become discoloured when close to a heating appliance. Please bear this in mind when installing.

2.14 This appliance must not be installed in any room which contains a bath or shower or where steam is regularly present.

2.15 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.

2.16 In the United Kingdom (GB) no special ventilation bricks or vents are required in the room for this appliance. In the Republic of Ireland (IE) permanent ventilation must comply with the regulations currently in force.

2.17 Propane gas appliances must not be installed in a room which is built entirely below ground level (see BS 5871 Part 2).



3. UNPACKING & PRELIMINARY CHECKS

The items required for this appliance are packed in two sections.

Section 1 - Fire Unit contains:

- 1 Burner & Convection box Unit
- 1 Nut & olive for 8mm inlet pipe
- 1 Flue restrictor plate
- 3 Screws (For flue restrictor)
- 1 Ceramic back wall
- 1 Pair of ceramic side walls
- 1 Front coal
- 1 Main coal bed
- 1 Pack of loose coals containing 4 large, 7 medium & 2 “finger” coals
- 2 Small “U” seals for convection box side flanges
- 1 Strip of floor sealing tape
- 4 Fibre plugs
- 4 Woodscrews
- 2 Fire retaining cables
- 2 Cable clamps
- 2 Eyebolts
- 1 Knurled shouldered screw for control linkage fixing
- 1 PP3 Battery
- 1 Smoke match tube
- 1 Owner’s guide

Section 2 - “Marseille” Fire Front contains:

- 1 Fire front surround with sliding control
- 1 Fire front casting
- 1 Bottom front cover casting
- 1 Top shield
- 1 Outlet Baffle
- 3 Tapping screws for shield & baffle
- 2 Front surround securing brackets
- 4 Machine screws for front surround & securing brackets

Carefully remove all the contents. Take special care in handling the ceramic walls and the coals. Take care not to bend or distort the slide control linkage when handling the fire front surround.

Check that all the listed parts are present and in good condition.

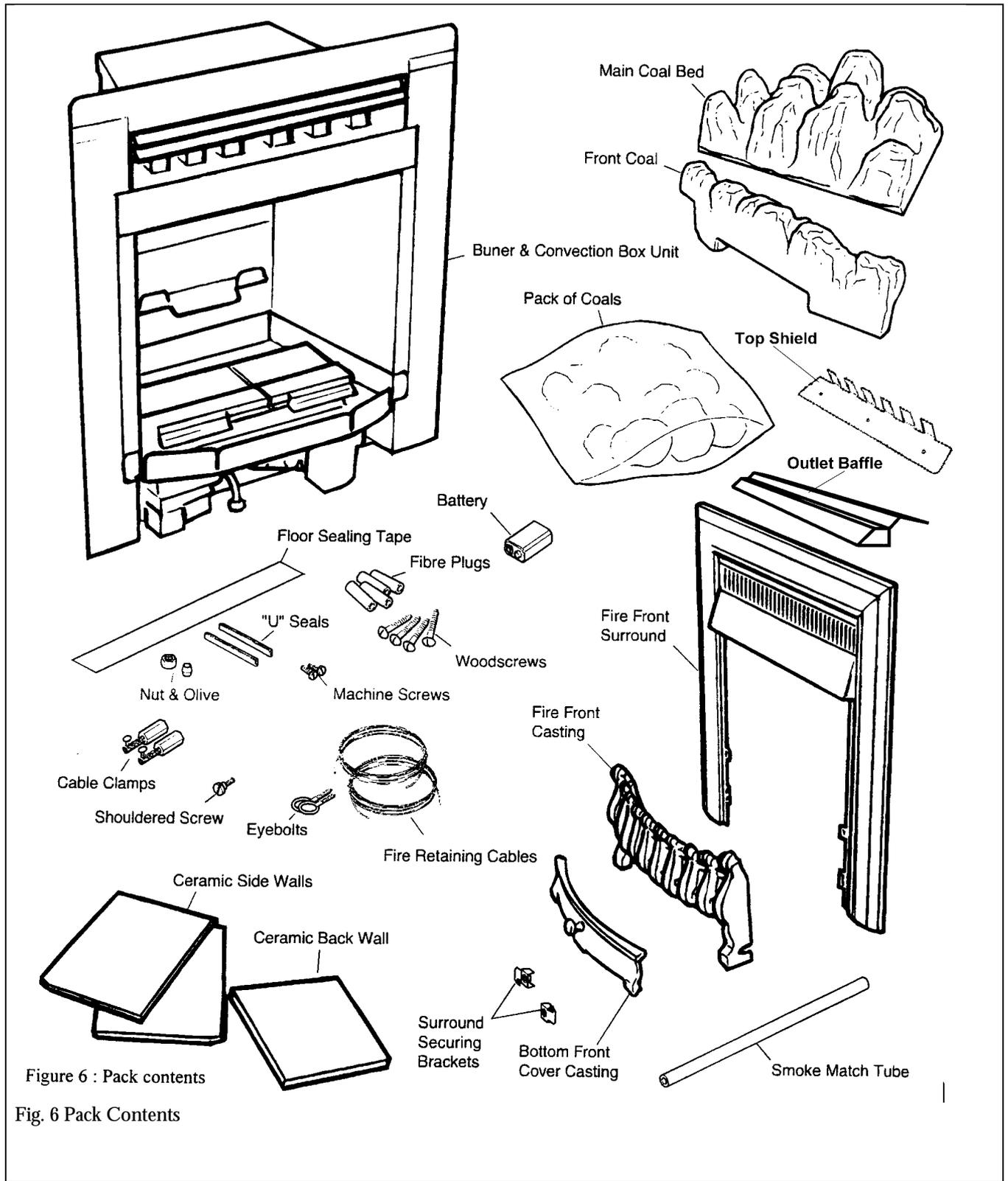


Figure 6 : Pack contents

Fig. 6 Pack Contents

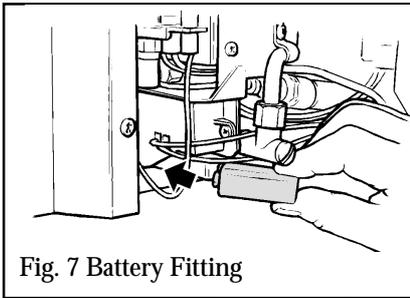


Fig. 7 Battery Fitting

3.1 Check Ignition Spark

Before attempting to install, it is worth checking that the electronic ignition system performs satisfactorily.

3.1.1 Fit the battery to the ignition block located below the burner tray at the left side (see figure 7). The positive (+) terminal is to the right as you insert.

3.1.2 Rotate the control pivot bracket clockwise as far as it will go (see figure 8). This should close the ignition circuit.

Sparks should be seen tracking from the electrode pin to the thermocouple tip (see figure 9).

figure 9).

If there are no sparks make the following checks.

- a) Check condition of battery and that it is correctly fitted.
- b) Check spark gap between electrode wire and thermocouple tip (see figure 9).
- c) If a & b are satisfactory, check the ignition circuit and components - see the servicing section in this manual.

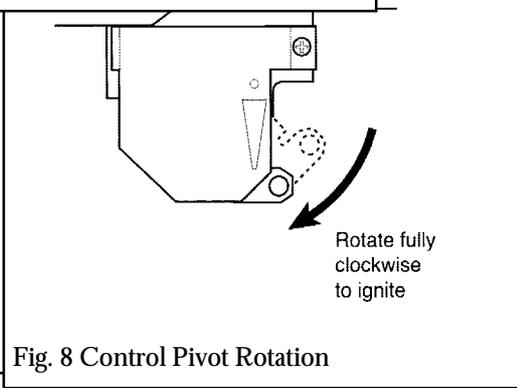


Fig. 8 Control Pivot Rotation

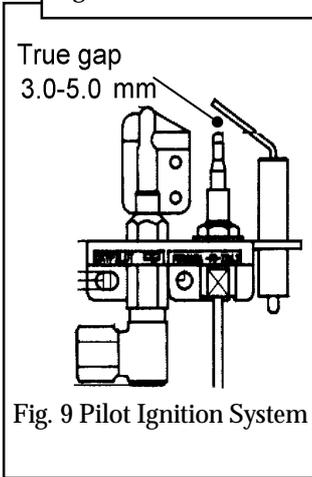


Fig. 9 Pilot Ignition System

4. THE FIREPLACE

4.1 INSTALLATIONS NOT REQUIRING OPTIONAL SPACING KIT 617K

4.1.1 Fireplace size

The fireplace must comply with the requirements described in section 2.2. This will probably entail removing the fireback and infill material behind the fireback. The debris catchment area shown in figure 10 must be kept clear of obstructions.

4.1.2 Fireplace general condition

The fireplace floor should be reasonably flat to ensure that the convection box can be installed without it rocking and so that a good seal can be made at the bottom front of the box. The front face of the fireplace should be reasonably flat over the area covered by the convection box top and side flange seals to ensure good sealing. These faces should be made good if necessary. If the appliance is to be fitted against a wall with combustible cladding, the cladding must be removed from the area covered by the fire front surround (see figure 5). We suggest that the actual fire front is used as a template to mark the area for combustible cladding removal.

4.1.3 Soundness for appliance attachment

Two primary methods of retaining the appliance are provided:-

- 1) By fixing to the fireplace front surround.
- 2) Using concealed tension cables fixed to the rear of the fireplace opening together with secondary fixing to the fireplace floor.

The methods are detailed in section 7 of this manual. Before selecting the retention method, consult with the customer. Method 2 is provided for instances where drilling holes in the front surface of the fireplace surround is unacceptable to the customer or otherwise impractical. *N.B. It is unwise to attempt to drill into marble without the proper tools and equipment.*

If method 1 is chosen, make sure that the front surround area is sound enough to take the rawlplugs and woodscrews. If necessary, make sound with a suitable cement.

If method 2 is chosen, make sure that the areas at the back and towards the centre of the fireplace floor are sound enough to take the eyebolts and screws. If these areas have deteriorated due to prolonged use, they should be made sound with a suitable cement.

4.1.4 Installations using a metal flue box

The whole of the top surface of the metal flue box must be covered with a 100mm layer of mineral wool or equivalent insulation (see figure 2).

4.2 INSTALLATIONS REQUIRING SPACING KIT 617K

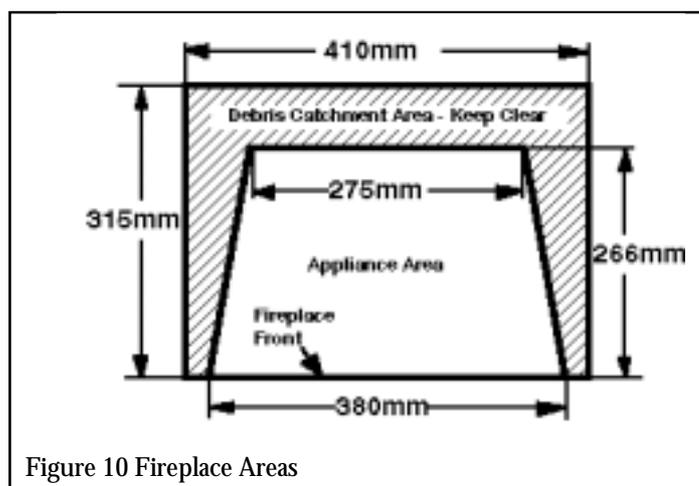
The accessory kit 617K must be used for all installations described in section 2.3 of this manual. Full instructions for its installation are included with the kit.

4.3 FIREPLACE FLUE PULL

After preparing the fireplace, carry out the flue flow test as detailed in BS5440: Part 1.

Note - A 13 gramme smoke pellet will generate the required volume of smoke, anything smaller may give a false pass result.

Observe the smoke. If there is a definite flow into the opening continue with the installation. If there is not a definite flow, preheat the chimney for ten minutes and recheck. If there is still no definite flow, the chimney may need attention. **Do not fit the appliance. Seek expert advice.**



5. GAS SUPPLY PIPE

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.

The supply pipe must be rigid material. Flexible pipe must not be used.

5.1 CONCEALED SUPPLY PIPE CONNECTION

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 opening at the back of the convection box and run to the elbow at the front. If the installation includes the optional spacing kit 617K, the kit and surround should be installed before extending the supply line.

The pipe run from the supply line up to the rear opening in the convection box must be kept away from the area which will be taken by the convection box when it is installed (See figure 10).

Note that the centre of the appliance inlet elbow is 25mm above the fireplace floor. The inlet elbow should be removed from the appliance and fitted to the supply pipe at this stage.

6. PREPARING APPLIANCE FOR INSTALLATION

6.1 Detach the burner unit from the convection box by removing two screws (see figure 11). Lift the burner unit clear.

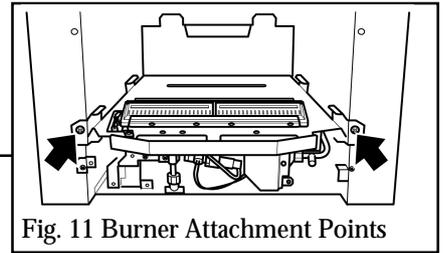


Fig. 11 Burner Attachment Points

6.2 Fit the two “U” section seals to the bottom edges of the convection box side flanges. The seals should cover the front edges and the side edges up to where they meet the convection box base (see figure 12).

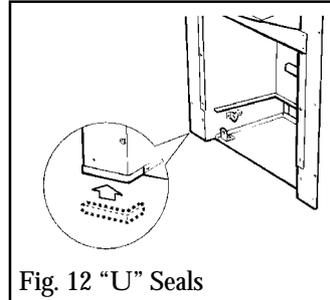
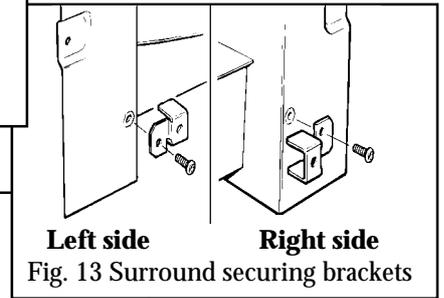


Fig. 12 “U” Seals

6.3 Fit the two surround securing brackets to the convection box side flanges with the screws supplied. Note the different orientation of the brackets at left and right sides - See figure 13.



Left side Right side
Fig. 13 Surround securing brackets

6.4 For Concealed Connection Only
Cut a slit in the seal at the back of the convection box. The seal must envelop the pipe. **Do not slit the seal unless the supply pipe is to pass through it.**

6.5 The appliance is supplied with two fireback spacers extending backwards to ensure sufficient clearance from the back of the fireplace when installed without the spacer kit 617K. If the appliance is being installed with the spacer kit, reverse the fireback spacers. This will give the minimum rear clearance required when used with the spacer kit (see figure 14). **If the kit is not used do not reverse the fireback spacers. Never totally remove the spacers.**

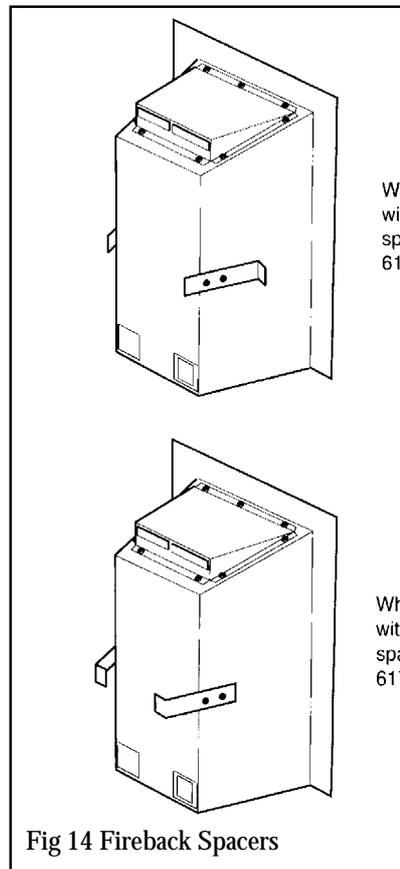


Fig. 14 Fireback Spacers

When used
with
spacer kit
617K

When used
without
spacer kit
617K

6.6 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 flue liner is used. For 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. The restrictor is packed loose with the appliance and is fixed with three screws (See figure 15).

Attach the top shield and outlet baffle to the convection air outlet using the three tapping screws supplied in the fire front pack. See figure 15A.

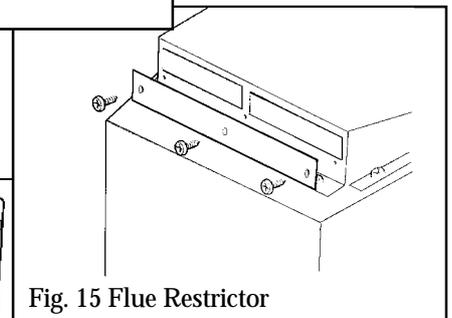


Fig. 15 Flue Restrictor

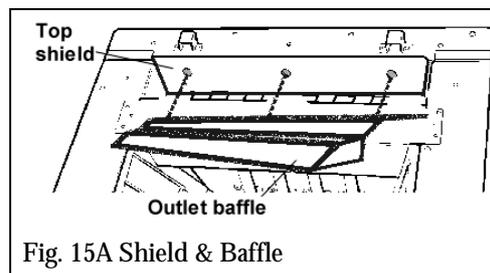


Fig. 15A Shield & Baffle

7. CONVECTION BOX INSTALLATION

7.1 INSTALLATIONS WITHOUT SPACER KIT 617K

7.1.1 Method 1 - Front fixing to fireplace surround

Make sure that the fixing area is satisfactory - see section 4 of this manual.

7.1.1.1 Place the convection box centrally in the fireplace in the position in which it is to be permanently installed.

If a concealed connection is being used, insert the convection box into the fireplace feeding the supply pipe through the slit in the rear seal.

7.1.1.2 Mark the fireplace front surround through the four fixing holes in the side flanges of the convection box (see figure 16).

7.1.1.3 Remove the convection box. Drill four holes in the fireplace front surround at the marked positions using a no.12 masonry drill.

7.1.1.4 Insert a rawlplug into each hole.

7.1.1.5 Place the convection box back in position in the fireplace.

7.1.1.6 Fit a woodscrew through each hole in the convection box flanges and tighten to seal the box to the fireplace surround.

7.1.2 Method 2 - Cable retention and floor fixing

7.1.2.1 Drill two holes in the rear wall or floor of the fireplace for the eyebolt plugs. The holes should be drilled within the range of positions shown in figure 17 using a no.12 masonry drill. The holes should be equidistant each side of the centre line of the fireplace to ensure that the appliance finishes centrally in the opening when tension is applied to the cables.

7.1.2.2 Insert a fibre plug into each hole. Use the rawlplugs supplied with this appliance - **Never use plastic plugs instead of the fibre plugs supplied.** Screw the eyebolts into the plugs. Make sure that the bolts are secure.

7.1.2.3 Place the convection box unit close to the fireplace but allow sufficient access into the fireplace opening so that the cables can be threaded through the eyebolts and returned through the back of the convection box.

If a concealed connection is being used, insert the convection box into the feeding the supply pipe through the slit in the rear seal.

7.1.2.4 The convection box has two holes at each side of the convected air opening.

Insert one end of each cable (one cable each side) from the back through the lower of the two holes and return the end through the upper of the holes (see figure 18). Give the cables a pull so that they grip against the convection box flanges.

7.1.2.5 Thread the cables through the eyebolts in the rear wall. Return the cables through the holes near the bottom of the convection box back panel and through the "V" shaped brackets near the bottom front sides of the convection box (see figure 19).

7.1.2.6 Place the convection box fully back into the fireplace opening so that it is sealed against the fireplace front surround.

7.1.2.7 Fit a cable retainer over the bottom end of each cable.

7.1.2.8 Pull each cable taut. Push the cable retainers hard up against the "V" brackets.

Tighten the screws in the retainers so that they clamp the cables in position. Apply tension to the cables by turning the hexagonal adjusters (see figure 20).

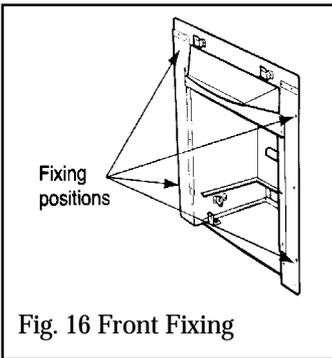


Fig. 16 Front Fixing

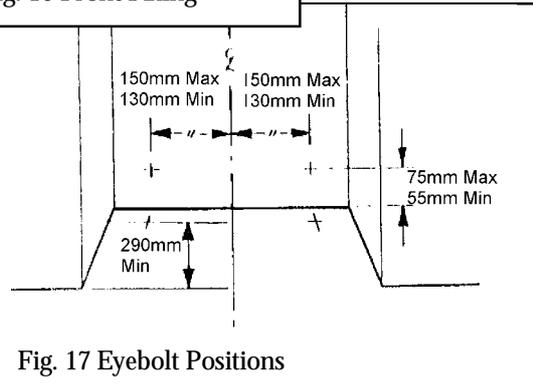


Fig. 17 Eyebolt Positions

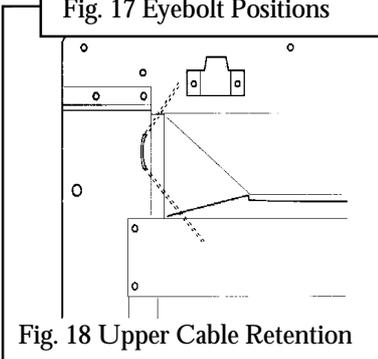


Fig. 18 Upper Cable Retention

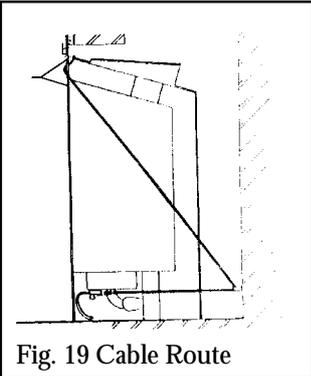


Fig. 19 Cable Route

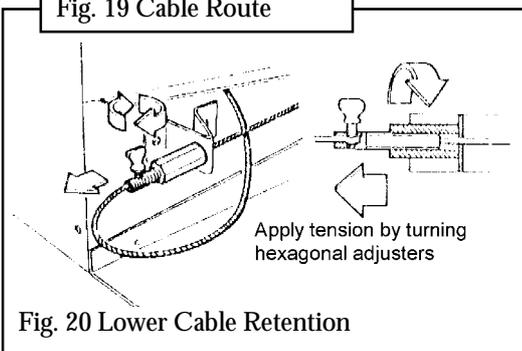


Fig. 20 Lower Cable Retention

7.1.2.9 Drill a hole into the fireplace floor through each of the two holes in the base of the convection box, using a no.12 masonry drill (see figure 21).

7.1.2.10 Insert a fibre plug into each hole. Use the rawlplugs supplied with this appliance - **Never use plastic plugs instead of the fibre plugs supplied.** Fit a woodscrew in each plug and tighten.

7.1.2.11 Inspect the fit of the convection box to the fireplace surround. If it is aligned squarely and the sealing is satisfactory, fully tighten the cable retainers.

7.1.2.12 If the convection box is not correctly aligned, release the tension on the cables by slackening the screws and turning the hexagonal adjusters fully anticlockwise. The convection box should then automatically realign itself. Pull each cable taut again and push the cable retainers back against the "V" brackets. Again, tighten the screws in the retainers and apply tension to the cables by turning the hexagonal adjusters clockwise as far as possible.

7.1.2.13 Push the free length of the cables inside the convection box so that they are available to allow easy removal and refitting of the appliance during subsequent service calls.

7.2 INSTALLATIONS WITH SPACER KIT 617K

7.2.1 There are 9 indented positions on the front flanges of the convection box. Drill a 5.5mm hole through each indent (see figure 22).

7.2.2 Place the convection box unit into the installed spacer kit opening. Align the 9 drilled holes with the holes in the spacer unit sides and top.

If a concealed connection is being used, make sure that the supply pipe enters the convection box through the slit in the rear seal.

7.2.3 Attach the convection box to the spacer unit with the 9 machine screws supplied with the kit.

7.3 ALL INSTALLATIONS

Important - Seal The Floor Front

Using the floor sealing tape supplied, seal the bottom of the convection box to the fireplace and hearth floor (see figure 23).

Make sure that the whole length of the front edge of the convection box is fully sealed.

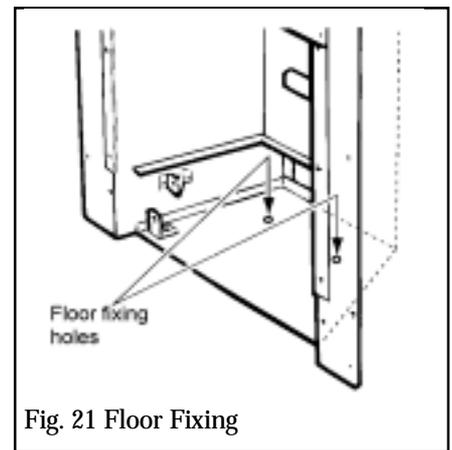


Fig. 21 Floor Fixing

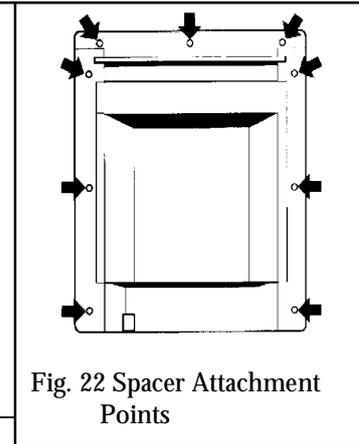


Fig. 22 Spacer Attachment Points

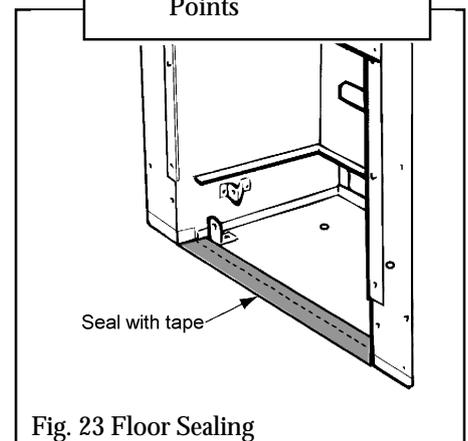


Fig. 23 Floor Sealing

8. BURNER INSTALLATION

8.1 Refit the burner unit to the convection box with two screws.

8.2 Connect the supply line to the appliance.

8.3 Pressure check the installation pipework for gas soundness in accordance with the current edition of BS6891.

8.4 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.***

8.4.1 If closed, open the isolating valve at the inlet elbow.

8.4.2 Rotate the control pivot bracket clockwise as far as it will go and hold in this position (see section 3.1.2 & figure 8). This should close the ignition circuit and (now that the gas is connected) simultaneously open the gas tap allowing the gas to flow to the pilot. Wait a few seconds while the air is purged. The electronically generated sparks should light the pilot. 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.

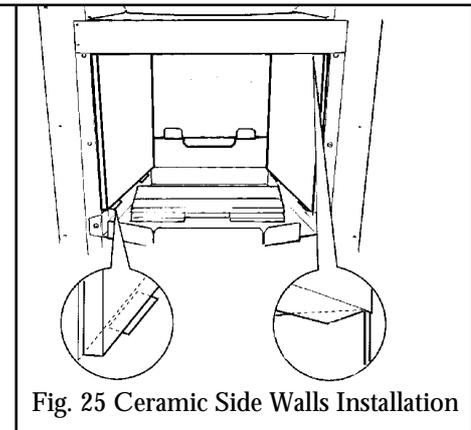
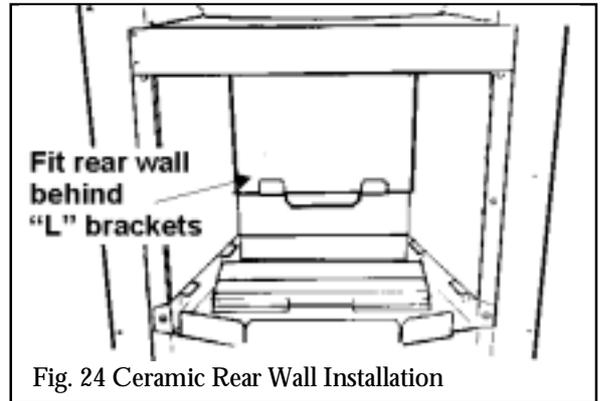
8.4.3 When the burner is operating properly, gradually turn the control pivot bracket anti-clockwise. The burner flames should gradually increase until the pivot bracket is nearly at its furthest anti-clockwise rotation. Rotating further until the pivot bracket comes to a stop should then turn the burner and pilot off. ***When the above checks have been completed close the isolating valve on the inlet elbow.***

8.4.4 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 guide.

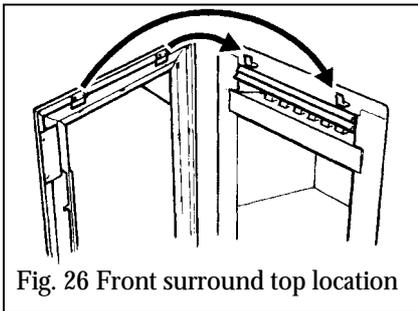
9. CERAMIC WALLS INSTALLATION

9.1 Fit the ceramic rear wall inside the “L” brackets on the back face of the burner compartment. Push the ceramic wall flat against the back face of the burner compartment (See figure 24).

9.2 Fit the ceramic sidewalls against the side faces of the burner compartment. The bottom edges of the walls should rest on the ledges at the sides of the fire box and the top of the walls should locate in the space between the black cross member and the side walls of the burner compartment (See figure 25).

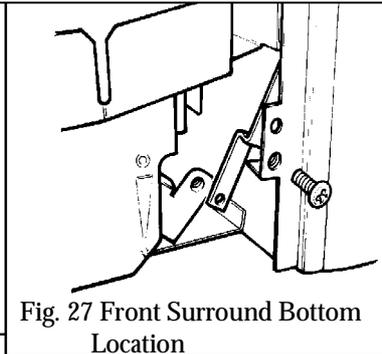


10. FRONT SURROUND & CONTROL LINKAGE INSTALLATION



10.1 Remove the tape securing the control linking bar to the front surround. Slide the control button upwards as far as it will go. Make sure that the bottom of the linking bar is higher than the bottom of the front surround.

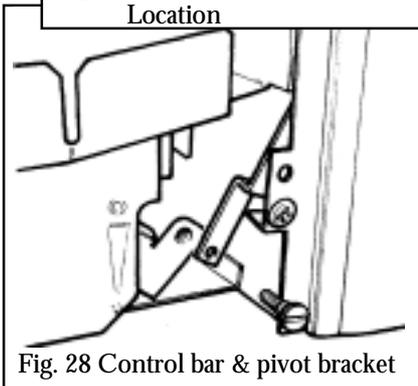
10.2 Carefully lift the front surround. **Do not lift it by the control button.** Place the front surround against the fireplace front surface so that the two retaining plates at the back of the surround are directly above the two upper retaining brackets at the top of the convection box. Lower the surround unit making sure that the retaining plates locate fully over the brackets on the convection box (See figure 26). Swing the bottom control linking bar towards the centre of the fire to clear the right side of the surround. Slide the surround unit sideways, if necessary, to align the bottom fixing holes with those in the convection box.



10.3 Fix the bottom of the surround unit to the convection box with two screws (See figure 27).

10.4 All Surrounds

Align the hole near the bottom of the control linking bar with that in the control pivot bracket. Join them with the knurled shouldered screw (See figure 28). Make sure that the isolating valve is closed. Slide the control button fully from top to bottom and back to make sure that the slide and pivot mechanisms move smoothly. Note that some resistance should be felt when the slide button reaches the "burner fully on" position.



11. CERAMIC COALS INSTALLATION

11.1 Place the ceramic base coal in the burner compartment. The bottom rear face of the coal should rest on the angled ledge at the back of the burner compartment. The bottom front recessed edge of the coal base should locate against the step in the burner plaques (See figure 29).

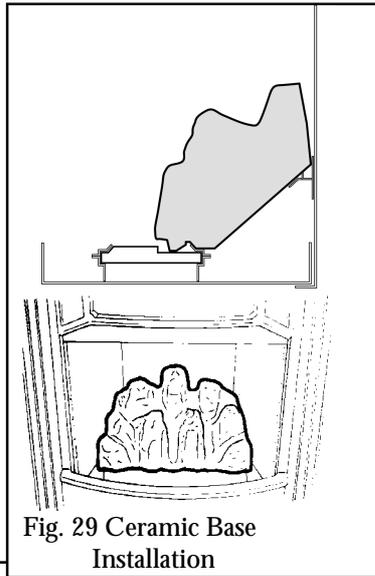


Fig. 29 Ceramic Base Installation

(Installer - Note that the small round holes in the burner plaques which will be covered by the base coal are not gas burner ports. They are simply a consequence of the plaque manufacturing process).

11.2 Place the ceramic front coal in position in front of the base coal. Make sure that the side legs of the front coal are fully seated into the burner tray. There will be a gap between the rear of the front coal and the front of the base coal (See figure 30).

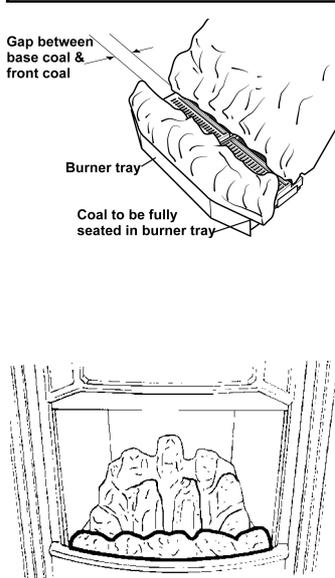


Fig. 30 Front Coal Location

11.3 Install the 13 loose coals as follows. There are 2 "finger" coals, 7 medium size coals and 4 large coals. Place all the loose coals so that they are firmly seated in the valleys in the coal base and front coal.

11.3.1 Place the 4 large coals in the valleys of the front coal (See figure 31).

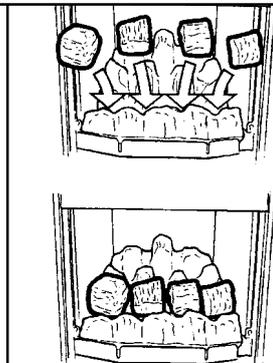


Fig. 31 Front Row of Coals

11.3.2 Place 3 of the medium size coals behind and approximately midway between the large coals as shown in figure 32. Place a "finger" coal at each end of the first two rows of coals. See figure 32.

11.3.3 Place the four remaining coals in a row at the back of the firebox compartment. See figure 33.

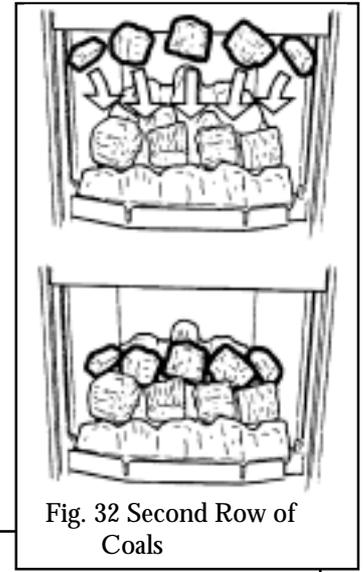


Fig. 32 Second Row of Coals

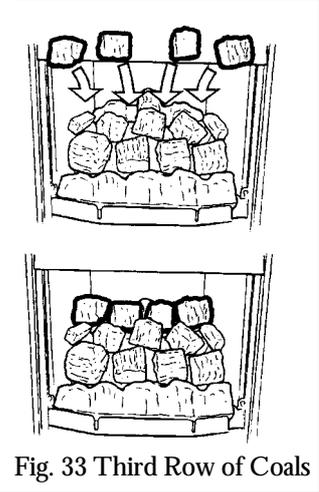


Fig. 33 Third Row of Coals

12. FULL OPERATING CHECKS

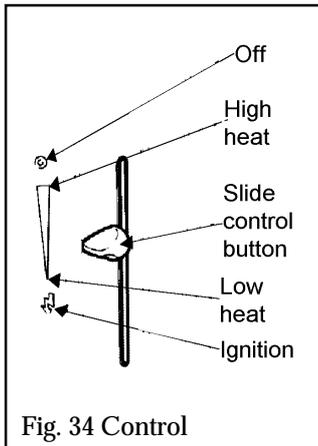


Fig. 34 Control

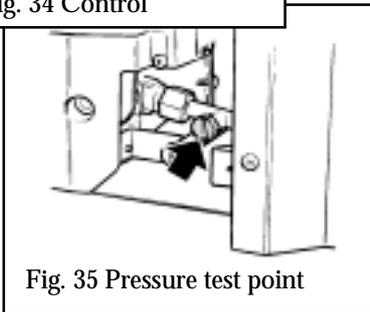


Fig. 35 Pressure test point

12.1 CHECK THE CONTROL SETTINGS

The control position markings on the front surround are shown in figure 34.

Please note

1. When first turned on from cold, the flames will appear predominantly blue.
2. When operating the fire for the first time, some vapours may be given off which could set off smoke alarms in the vicinity. These vapours are quite normal with new appliances. They are totally harmless and will disappear after a few hours use.

12.1.1 Make sure the slider button is at the off position (at topmost position marked "O" on the front surround).

12.1.2 Open the isolating valve on the inlet elbow.

12.1.3 Slide the button to the bottom (ignition) position marked . Retain in this position to ignite the pilot. The burner should ignite at its lowest setting within 4 seconds of the pilot igniting. Keep at this position for a further 10 seconds to allow the pilot flame to stabilise.

12.1.4 Release the button. The button should automatically spring up to the low heat position. If the flames go out at this stage or when checking the rest of the setting positions, try the full lighting sequence again. If the flames fail after two attempts, investigate the pilot unit.

12.1.5 Gradually slide the button up to increase the burner setting. The burner should be at its maximum setting at the high heat position shown in figure 34. You should feel a check to the button movement at this position.

12.1.6 Slide the control button up past the high heat position to the off ("O") position at the top of the slide slot. Both pilot and main burner should go out.

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

12.2 CHECK REFERENCE PRESSURE

The appliance is pre-set to give the correct heat input at the inlet pressure shown in section 1 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 (See figure 35). 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.

12.3 SPILLAGE CHECK

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

12.3.1 Close all doors and windows in the room containing the appliance.

12.3.2 Light the appliance and set the slide control to the maximum burning position.

12.3.3 Leave the appliance on for five minutes.

12.3.4 Place the smoke match tube into the convection box at the right hand side and immediately below the black top cross member. Angle it at approximately 45° to the horizontal.

Insert the tube so that the neck of its flared end touches the inside surface of the edge of the cross member (figure 36).

Keeping the neck of flared end in contact with the edge of the cross member, slide the tube to the left until you feel it enter the notch in the edge of the cross member. Make sure that the tube is pointed upwards at 45° to the horizontal.

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 the 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 6.6), remove the restrictor, reseal the appliance and retest. If smoke is still not drawn into the appliance **disconnect the appliance and seek expert advice**.

12.3.5 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. 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**.

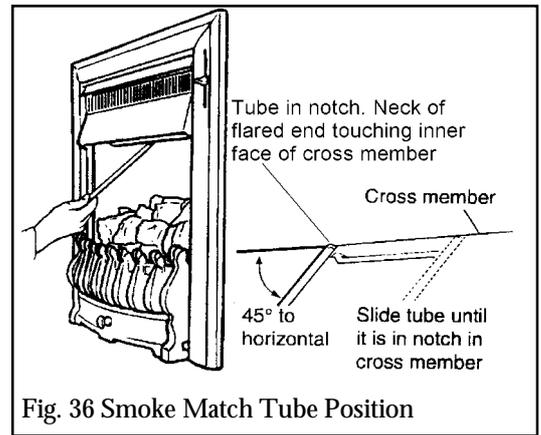


Fig. 36 Smoke Match Tube Position

13. COMPLETION OF FRONT INSTALLATION & FINAL REVIEW

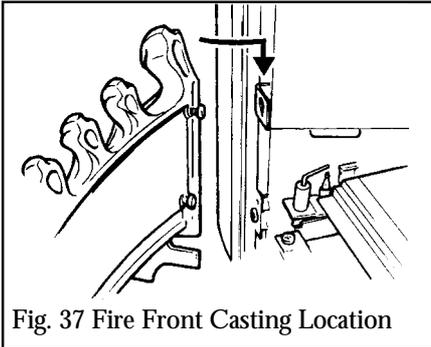


Fig. 37 Fire Front Casting Location

13.1 FIT FIRE FRONT CASTINGS

Fit the fire front casting to the front surround. Locate the two screw heads at the rear top corners of the casting through the keyhole slots at the inner sides of the surround. If the screw heads do not project enough or project too far, the screws can be adjusted. Lower the casting so that it rests on the hearth (see figure 37). Place the bottom front cover casting in position below the fire front casting.

13.2 FINAL REVIEW

13.2.1 Recheck the operation of the fire at all control positions.

13.2.2 Visually inspect the appliance. Clean off any marks incurred during installation.

13.2.3 If a gap is visible between the inner sides of the front surround and the ceramic sidewalls, gently slide the walls forward.

13.2.4 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 your fire".

13.2.5 *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.*

13.2.6 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 slide 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.

This is explained in the Owner's manual under the section 'Operating the Fire'.

13.2.7 Advise the customer how to operate the appliance. Point out that lighting instruction details are contained on a plate tied to the bottom of the appliance (leave the plate visible in front of the bottom front cover as a reminder).

13.2.8 Recommend that the appliance should be serviced and the chimney inspected by a competent person at least annually.

13.2.9 Hand this guide and the owner's guide to the customer.

14. SERVICING & PARTS REPLACEMENT

- **Always turn off the gas supply before commencing any servicing (The inlet elbow for this appliance incorporates an isolating valve).**
- **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 soot or debris is not blocking the gaps between the coals 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 walls and coals are replaced correctly as described in the installation instructions.
- **Always test for gas soundness and spillage after servicing the appliance**

14.1 TO REMOVE THE IGNITION MICROSWITCH (Figures 38 & 39)

The ignition microswitch is stamped V4NT9C4YC

14.1.1 Remove the bottom front cover.

14.1.2 Detach the microswitch cover by removing one screw and pulling clear of the location lug (see figure 38).

14.1.3 Disconnect the leads from the ignition microswitch (The lower of the two microswitches - See figure 39).

14.1.4 Detach the microswitch and insulation pad by removing two screws.

14.1.5 Replace in the reverse order. Check that the microswitch operates correctly by fully closing it and observing that there are sparks at the pilot electrode.

14.2 TO REMOVE THE GAS SHUT-OFF MICROSWITCH (Figures 38, 39 & 40)

The gas shut-off microswitch is stamped V4NT9C2YCGPX or V4NT9C2YCAUX.

14.2.1 Remove the bottom front cover.

14.2.2 Detach the microswitch cover by removing one screw and pulling clear of the location lug (see figure 38).

14.2.3 Loosen the thermocouple nut to free the microswitch leads and pull the leads clear of the thermocouple interrupter block (see figure 40).

14.2.4 Detach the bridging bracket, microswitch assembly and insulation pad by removing two screws (see figure 39).

14.2.5 Replace in the reverse order. When refitting the leads to the interrupter block, make sure that they are secured firmly to give a good electrical contact.

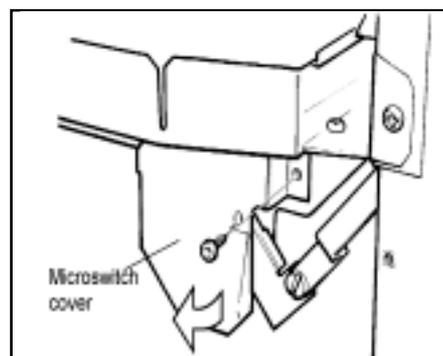


Fig. 38 Microswitch Cover Removal

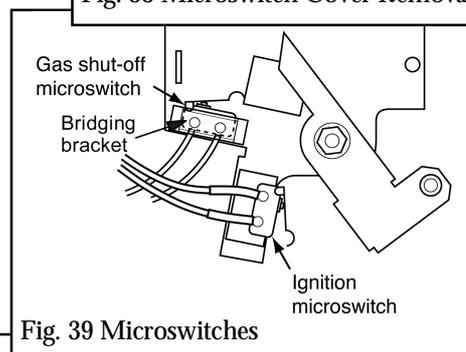


Fig. 39 Microswitches

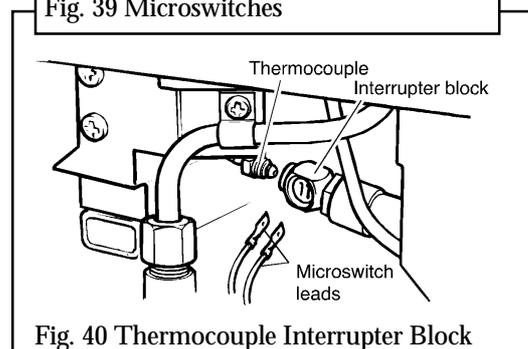


Fig. 40 Thermocouple Interrupter Block

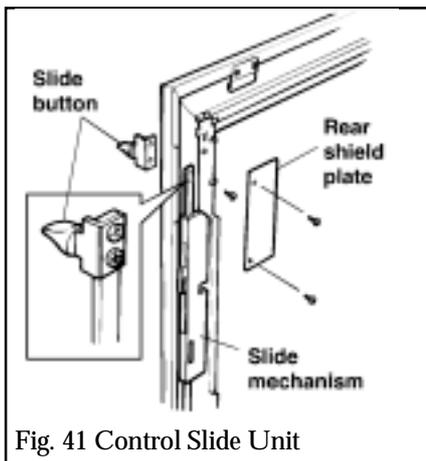


Fig. 41 Control Slide Unit

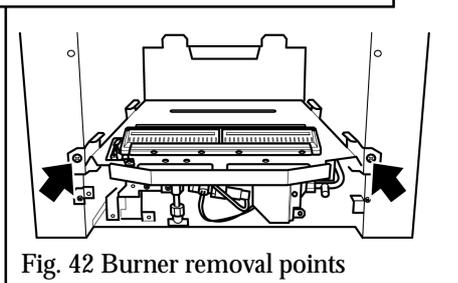


Fig. 42 Burner removal points

14.3 TO REMOVE THE FIRE FRONT

14.3.1 Remove the bottom front cover casting.

14.3.2 Lift the fire front casting up and forward to release the locating screw heads at the back of the casting from the keyholes in the surround sides (See fig. 37). Lift the casting clear.

14.3.3 Detach the control linking bar from the control pivot bracket by removing the knurled screw (See fig. 28).

14.3.4 Remove the two screws securing the bottom of the front surround to the sides of the convection box (See fig. 27).

14.3.5 *Make sure that the control linking bar has been detached (see 14.3.3).*

Carefully lift the surround unit upwards to clear the upper retaining brackets on the convection box (See fig. 26). Pull the surround clear and place carefully aside.

14.3.6 Refit in the reverse order. Make sure that the surround is properly located over the upper retaining brackets. See section 10 of this manual for detailed fitting instructions.

14.4 TO REPLACE THE CONTROL SLIDE BUTTON

14.4.1 Remove the front unit - See section 14.3.

14.4.2 Detach the rear shield plate by removing two screws from the rear right side of the front surround (See fig. 41).

14.4.3 Remove the two screws securing the slide button to the back of the slide mechanism bar. Raise the button to clear the bar and pull through the slot in the surround side (See fig. 41).

14.4.4 Refit in the reverse order.

14.5 TO REMOVE THE CONTROL SLIDE UNIT

14.5.1 Remove the surround unit and slide button - see section 14.4

14.5.2 Remove two screws securing the plastic slide mechanism box to the rear side of the front casting. Lift the slide unit clear.

14.5.3 Refit in the reverse order.

14.6 TO REMOVE THE BURNER UNIT (See figure 42)

14.6.1 Remove the front surround unit- See section 14.3.

14.6.2 Remove the loose coals, the front coal and the base coal.

14.6.3 Remove the ceramic side and rear walls.

14.6.4 Support the inlet isolating elbow to avoid straining the pipework and disconnect the appliance from the elbow.

14.6.5 Detach the burner unit from the convection box by removing 2 screws.

14.6.6 Replace in the reverse order.

14.7 TO REMOVE THE ELECTRONIC IGNITION GENERATOR

14.7.1 Remove the bottom front and fire front castings and front surround - see section 14.3.

14.7.2 Remove the battery.

14.7.3 Remove the burner unit - see section 14.6.

14.7.4 Remove the two leads to the switch and remove the spark lead, marking them if Necessary to ensure that they are replaced on to the correct terminals.

14.7.5 Remove the two fixing screws that attach the generator unit to the bracket. The igniter generator can now be exchanged.

14.7.6 Refit in the reverse order.

14.8 TO REMOVE THE THERMOCOUPLE INTERRUPTER BLOCK (See figure 43)

14.8.1 Remove the front surround unit - See section 14.3.

14.8.2 Detach the thermocouple from the interrupter block by unscrewing the thermocouple nut.

14.8.3 Detach the two microswitch leads from the interrupter block.

14.8.4 Remove the interrupter block by unscrewing from the gas shut-off tap.

14.8.5 Refit in the reverse order. If the microswitch leads cannot be easily attached to the interrupter block when it is fully tightened to the gas shut-off tap, slacken it and rotate to allow the leads to be fitted. Retighten making sure that the leads remain in place in the interrupter block. Fit and tighten the thermocouple nut making sure that the leads are secured in the interrupter block to give a good electrical contact.

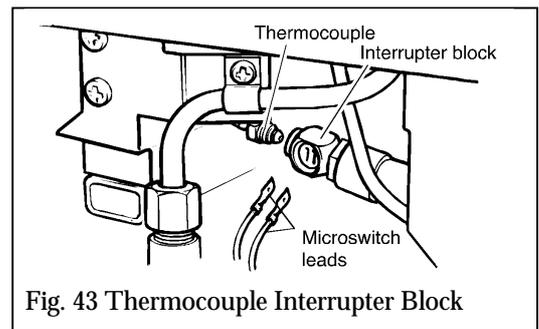


Fig. 43 Thermocouple Interrupter Block

14.9 TO REMOVE THE PILOT UNIT (See figure 44)

14.9.1 Remove the burner unit - See section 14.6.

14.9.2 Detach the pilot pipe from the gas shut-off tap.

14.9.3 Detach the thermocouple from the interrupter block by unscrewing the thermocouple nut.

14.9.4 Detach the electrode lead from the underside of the electrode tab.

14.9.5 Remove the first screw securing the dust cage to the pilot unit & burner. Carefully remove the dust cage and place aside. See figure 44.

14.9.6 Remove the second screw securing the pilot unit to the burner.

Remove the pilot unit and place it aside. See figure 44.

14.9.7 Disconnect the pilot pipe from the pilot unit elbow.

14.9.8 Refit in the reverse order.

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.

3. When the thermocouple is removed from the interrupter block, the microswitch lead terminals in the interrupter block will be loose. Make sure that they are properly secured to give a good electrical contact when retightening the thermocouple nut.

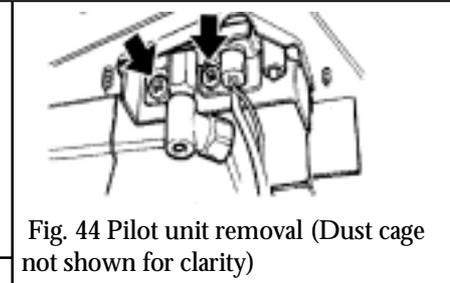


Fig. 44 Pilot unit removal (Dust cage not shown for clarity)

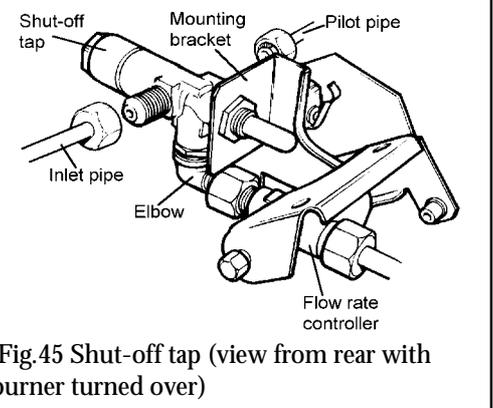


Fig. 45 Shut-off tap (view from rear with burner turned over)

14.10 TO REMOVE THE SHUT-OFF TAP (See figure 45)

14.10.1 Remove the burner unit - See section 14.6.

14.10.2 Turn the burner unit upside down. Detach the thermocouple and interrupter block from the tap - See sections 14.8.2 to 14.8.4.

14.10.3 Detach the pilot pipe from the tap.

14.10.4 Detach the inlet pipe.

14.10.5 Remove the hexagonal nut securing the tap to the mounting bracket.

14.10.6 Detach the elbow by unfastening the hexagonal nut connecting it to the flow rate controller. Lift the tap (complete with elbow) clear

14.10.7 Loosen the hexagonal locknut securing the elbow to the tap. Remove the elbow by rotating it.

14.10.8 If fitting a new tap, remove the hexagonal nut at the mounting bracket end of the old tap and fit to the replacement tap. Refit in the reverse order. When refitting, make sure that the tap spindle is in the correct relationship relative to the control pivot bracket. Rotate the pivot bracket fully clockwise. The tap spindle should "bottom out" (i.e. the tap should be fully open) after the pivot bracket has actuated the ignition microswitch but before it has pushed the microswitch leaf against the microswitch body. When refitting the thermocouple and interrupter block, make sure that the microswitch wires are properly secured to give a good electrical contact.

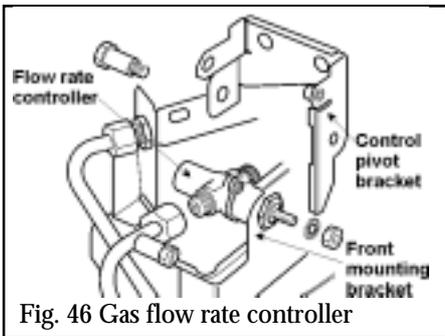


Fig. 46 Gas flow rate controller

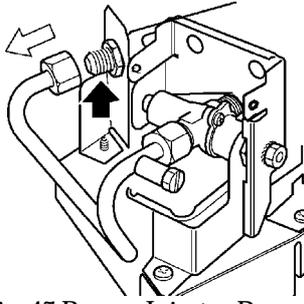


Fig. 47 Burner Injector Removal

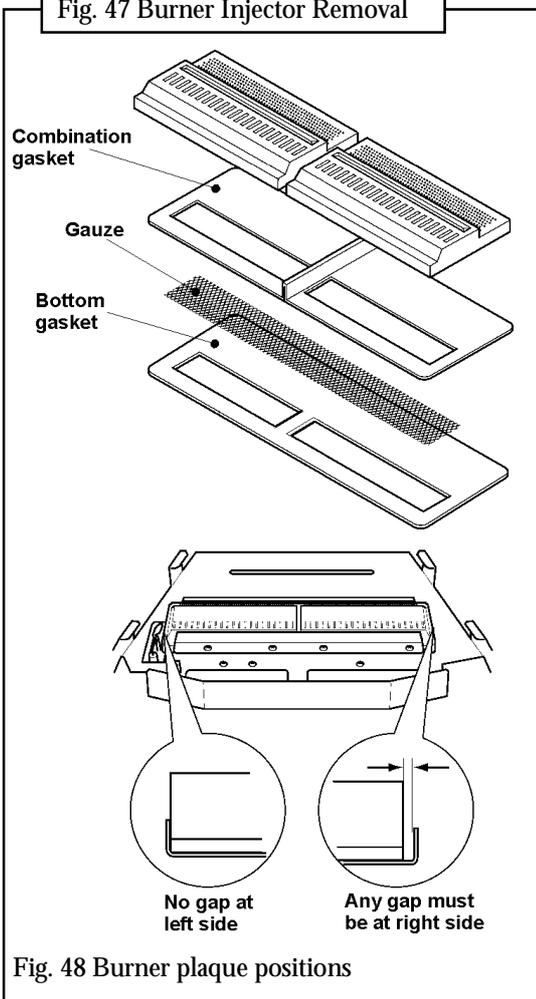


Fig. 48 Burner plaque positions

14.11 TO REMOVE THE GAS FLOW RATE CONTROLLER (See figure 46)

14.11.1 Remove the burner unit - See 14.6.

14.11.2 Detach the microswitch cover - See section 14.1.2.

14.11.3 Detach the shut-off tap as detailed in sections 14.10.2 to 14.10.6

14.11.4 Detach the burner pipe from the controller. Support the controller while detaching to prevent excessive strain.

14.11.5 Remove the nut and washer securing the control pivot bracket to the controller at the front. Support the pivot bracket while removing the nut to prevent possible damage to the microswitch.

14.11.6 Remove the hexagonal bolt securing the control pivot bracket to the controller at the rear.

14.11.7 Detach the control pivot bracket.

14.11.8 Remove the hexagonal nut securing the controller to the front mounting bracket and remove the flow rate controller.

14.11.9 Refit in the reverse order.

14.12 TO REMOVE THE MAIN BURNER INJECTOR (See figure 47)

14.12.1 Remove the burner unit - See section 14.6.

14.12.2 Disconnect the main burner pipe from the injector at the venturi end. If necessary, loosen the pipe at the flow rate controller end to swing the pipe clear of the injector.

14.12.3 Unscrew the injector from the injector carrier which is on the other side of the injector bracket.

14.12.4 Refit in the reverse order.

14.13 TO REPLACE BURNER PLAQUES (Fig. 48)

14.13.1 Remove the loose coals, the front coal and the base coal.

The plaques can be then be removed as follows without detaching the front surround or ceramic walls but **be careful not to damage the ceramic walls while working inside the firebox.**

14.13.2 Remove the plaque clamping strips by detaching 8 screws.

14.13.3 Remove the plaques and the combination gasket between and under the plaques. If necessary remove the gauze and the gasket beneath it.

14.13.4 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.

14.13.5 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.

14.13.6 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.

14.13.7 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.

14.13.8 Refit the coals as described in the installation instructions.

14.14 TO REMOVE THE APPLIANCE FROM THE FIREPLACE

14.14.1 Remove the burner unit - See section 14.6.

14.14.2 Installations without spacing unit 617K

If the fire retention is as method 1 (See section 7.1.1 of installation instructions), remove the screws.

If the fire retention is as method 2 (See section 7.1.2 of installation instructions), slacken the hexagonal adjusters on the cable retainers and unscrew the thumbscrews to release the cables.

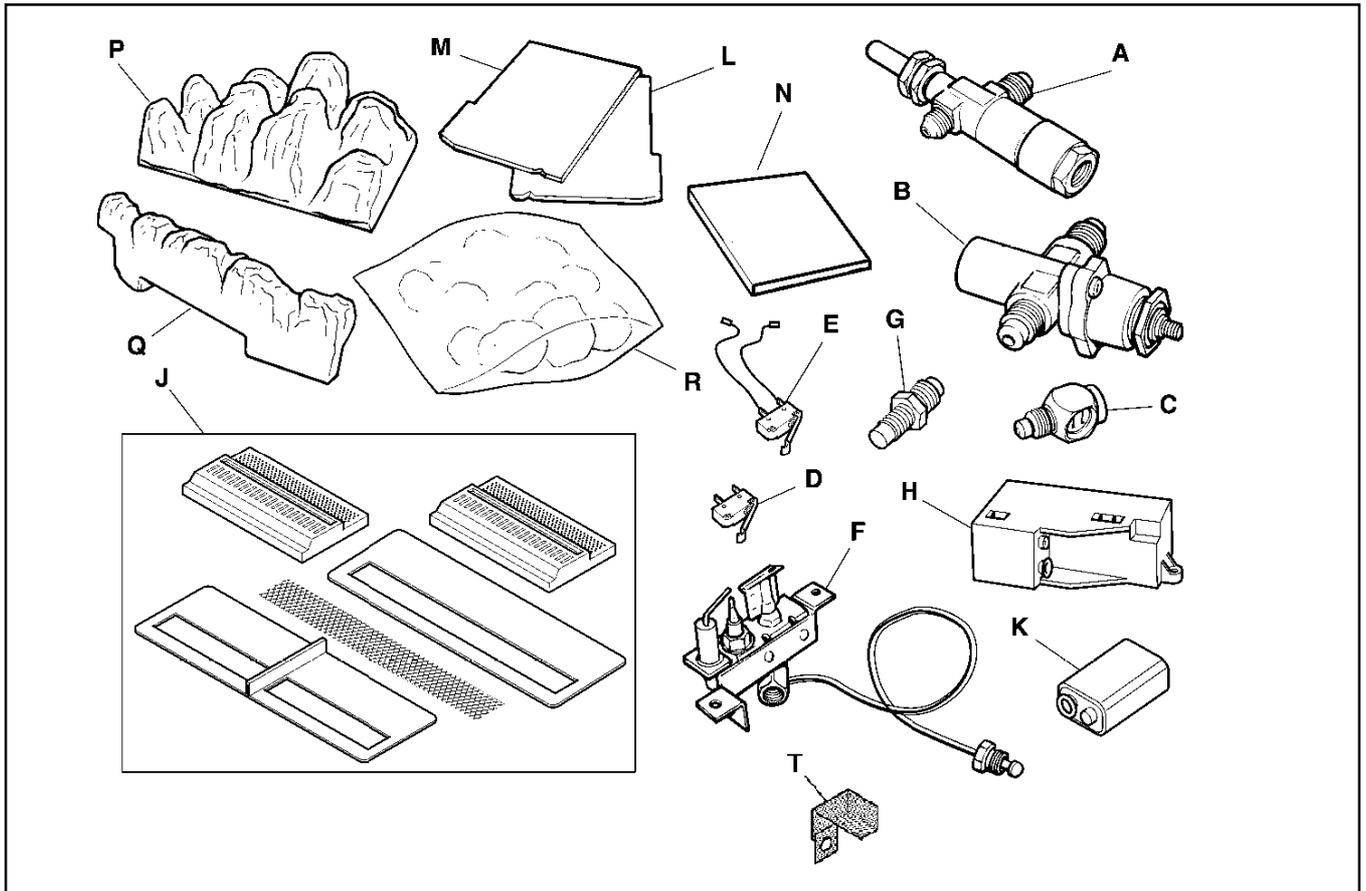
14.14.3 Installations with spacing unit 617K

Remove the nine screws securing the appliance to the front of the spacer unit.

If the appliance is attached to the fireplace floor, remove the two fixing screws.

14.14.4 Refit as described in the relevant installation sections. Make sure gas soundness, sealing, spillage test and performance are satisfactory.

15. SHORT LIST OF SPARES



KEY NO.	DESCRIPTION	NO. OFF	MAKER'S PART NO.
A	Shut-off tap	1	540899
B	Gas flow rate controller	1	540919
C	Thermocouple interrupter block	1	522389
D	Ignition microswitch	1	540959
E	Gas shut-off microswitch	1	540969
F	Pilot unit - <i>For Natural Gas Appliances</i>	1	540979
F	Pilot unit - <i>For Propane Gas Appliances</i>		544929
G	Injector Bray cat 31 size 440 - <i>For Natural Gas Appliances</i>	1	569539
G	Injector Bray cat 18 size 190 - <i>For Propane Gas Appliances</i>		569419
H	Igniter unit	1	554949
J	Burner plaque & gasket set	1	569549
K	Battery 9V Size "PP3"	1	553389
L	Ceramic left side wall	1	574709
M	Ceramic right side wall	1	574699
N	Back wall	1	567669
P	Base coal	1	569559
Q	Front coal	1	569569
R	Pack of loose coals	1	9780044
T	Dust cage	1	567619

Wonderfire

All Wonderfire appliances are CE Approved and designed to meet the appropriate British Standards.



All Wonderfire appliances are manufactured to the highest standards of quality and excellence under the BS EN ISO 9001 quality system accepted by the British Standards Institute.

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