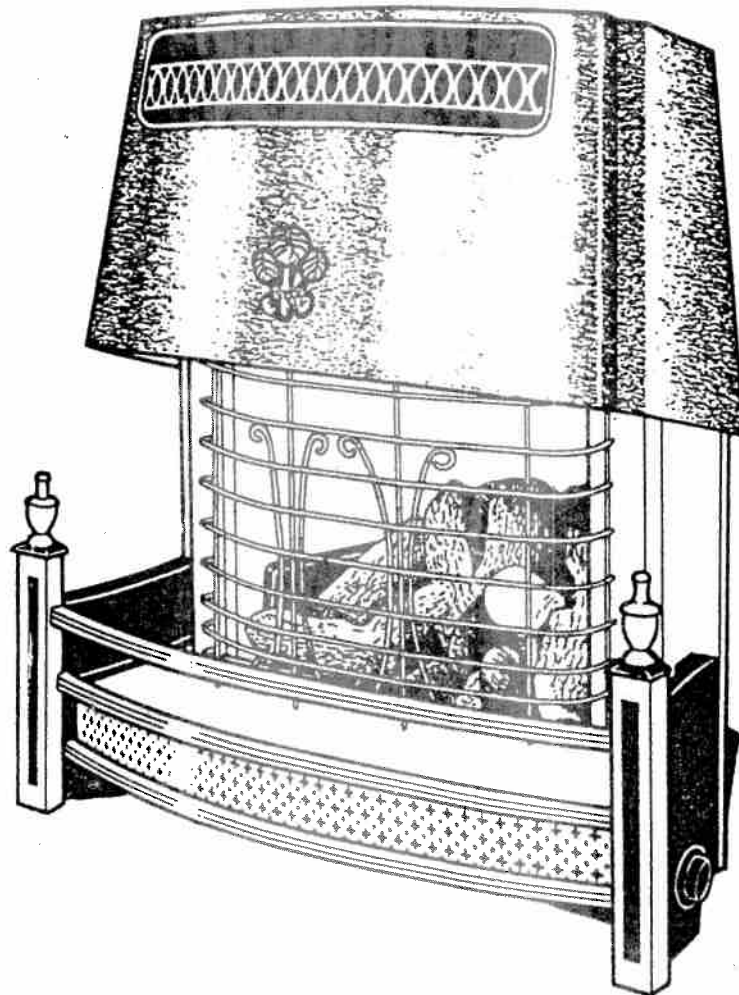


**valor**

**VALORFLAME 450  
LIVE FUEL EFFECT GAS FIRE**

**FOR NATURAL GAS ONLY**



**INSTALLATION AND SERVICING  
INSTRUCTIONS  
GAS FITTERS SHORT LIST**

**VALORFLAME 450  
LIVE FUEL EFFECT GAS FIRE**

THE MAKER'S DATA BADGE IS POSITIONED ON RIGHT-HAND SIDE OF  
HEAT EXCHANGER HEARTH BOX ASSEMBLY

- 1.0 The Valorflame model 450 bears the approval seal of the B.C. Ministry of Labour, Gas Safety Branch. The installation, and provisions for combustion and ventilation air must conform to current Can 1 - B149 Installation Code.
- 1.1 This appliance is for installation only in a vented fireplace constructed of incombustible materials to the current standards of the National Building Code of Canada, or to CSA/ULC standards accepted by the authorities having jurisdiction.
- 1.2 Prior to installation the chimney liner should be swept and inspected for soundness and possible obstructions. In areas of extremely cold climate, it is not recommended that the Valorflame be installed in fireplaces built into outside walls unless an approved flue liner is fitted so as to avoid condensation of flue gases in the chimney.
- 1.3 The minimum fireplace size into which this appliance can be installed is 22" high x 16" wide x 10" deep (for a height of at least 15" from the base of the fire) (see Fig. 1). The minimum permanent free opening of the flue shall not be less than 20 sq/ins (129 sq/cm).
- 1.4 For installation only on a NON-COMBUSTIBLE HEARTH with minimum dimensions of 12" deep x 34" wide.
- 1.5 The open areas on either side or above the top of the VALORFLAME hearth box flanges must be sealed to the fireplace face using non-combustible materials (see item 2.4 for suggested methods).
- 1.6 Any combustible mantle or shelf shall be a minimum of 9 inches clearance above the unit.
- 1.7 Any flue damper should be removed or fixed open in a permanent manner.

**2. INSTALLING THE VALORFLAME**

- 2.1 Unpack the unit.  
The fire is packed assembled except for the ceramic logs, coke, log support bars and side cheeks, all of which are in additional packs within the main carton together with the dress guard and left-hand inlet pipe which are located in the carton fitments. Carefully remove these items and place aside.

Great care must be taken in removing the fire from the carton so as to avoid damage. The carton should be stood on its end with the unit upright and the appliance then pulled gently forward from the carton grasping the sides of the casing immediately beneath the hood.

WARNING: NEVER PICK UP THE GAS FIRE BY THE GLASS PANEL, HOOD OR LOWER CASING.

- 2.2 Stand the fire on its base and
- (1) Remove gas tap knob.
  - (2) Unscrew the two screws holding the lower casing assembly (see Fig. 3) and lift away.
  - (3) Remove the two screws concealed under the top hood. (As shown in Fig. 3). This will enable the hood and the two side trims to be removed.
- 2.3 Remove the tape holding the base plate in position. Offer up the hearth box assembly (see Fig. 4) and push the box to the fireplace face. The flange of the hearth box should be flush to the surround with the base plate in very close contact with the hearth. IF THE BOX ROCKS AGAINST THE WALL FACE DUE TO AN UNEVEN FLOOR OR FIREPLACE OUT OF TRUE, REMOVE THE BOX AND ADJUST THE REAR FOOT (Fig. 4) UNTIL THE BOX IS SQUARE TO THE WALL FACE. In addition a front adjustment screw is provided at each side the hearth box assembly to correct for any sideways tilt (Fig. 2). Adjust as necessary and secure with lock nut. These screws also press the base plate to the hearth.
- 2.4 Fitting the Valorflame to the fireplace opening.  
Most openings will not be the correct dimensions to fit the Valorflame hearth box flanges without installing some type of NON-COMBUSTIBLE surround. The purpose of the "surround" is to assure proper venting, and to eliminate unnecessary room air losses up the flue. All joints should be made as air-tight as possible, using heat resistant tape, caulking material or fire cement. Fig. 1 shows the inside dimensions of the surround required to match up with the Valorflame hearth box flanges. The outside dimensions of the surround will be determined by the actual size of the fireplace opening. The outer perimeter of the surround may be fitted to either the outside surface of the fireplace face (must overlap at least 3 inches) or to the inside edge of the fireplace opening. In general, the latter method makes it easier to achieve a seal.

Materials suitable for the "surround" include:

- Cement or clay brick set in place with mortar
- A medium to heavy gauge metal
- A cement or asbestos board fixed in place using sheet metal angles as a fastening bracket. The face can be finished with paint or ceramic tiles (CAUTION - when

cutting and handling asbestos wear a mask and dispose of all dust).

- Marble or slate properly fixed in place and sealed.

## 2.5 Assemble the Log Basket.

- (1) The back bricks and base board are already assembled in position.
- (2) The retaining tape should be removed from the decorative flame burner tips.
- (3) Remove the right-hand and left-hand side cheeks from the pack (located below the support bars) and place in position (Fig. 5). Note correct handing.
- (4) Remove the log support bars from their packing and place into position in the cut-out slots in the fire bed (Fig. 5). CARE SHOULD BE TAKEN NOT TO DROP OR FORCE THESE BARS INTO PLACE.
- (5) Place all logs in position as shown in Fig. 7 following the numbered sequence stamped on the logs.
- (6) Remove log No. 6 and evenly fill in the spaces between the remaining logs with a SINGLE LAYER of the ceramic coke supplied. Replace log No. 6.
- (7) For visual appearance of completed log bed (see Fig. 6).

NOTE: A little extra coke is supplied to allow for breakage. However, no more should be used than is sufficient to provide a SINGLE LAYER. Broken fragments of 'coke' should never be used as these may fall through the supporting bars. After assembly clean out any light dust that may have fallen through the bars to the tray under the burner. Leave the spare 'coke' with the user.

The fire is supplied for a right-hand gas connection.

Test for soundness.

## 3. CHECKING THE OPERATION OF THE FIRE

### 3.1 Ignition

Fit the gas tap knob. The ignition is Piezo-electric operated from the single control knob. Press in and turn the knob slowly anti-clockwise to the Low position. At the same time press in the red flame failure device button located under the right-hand side of the front apron. After about three seconds turn the control knob to the Full position and keep the flame failure device button depressed for at least 30 seconds after the main flame is established. If the fire does not light after ensuring that the air has been purged, check that the electrode gap is as shown in Fig. 8.

NOTE: In the FULL position the main burner will be alight, but the visual flame out.

Sealing surface surrounding opening to cover at least 3" top and sides

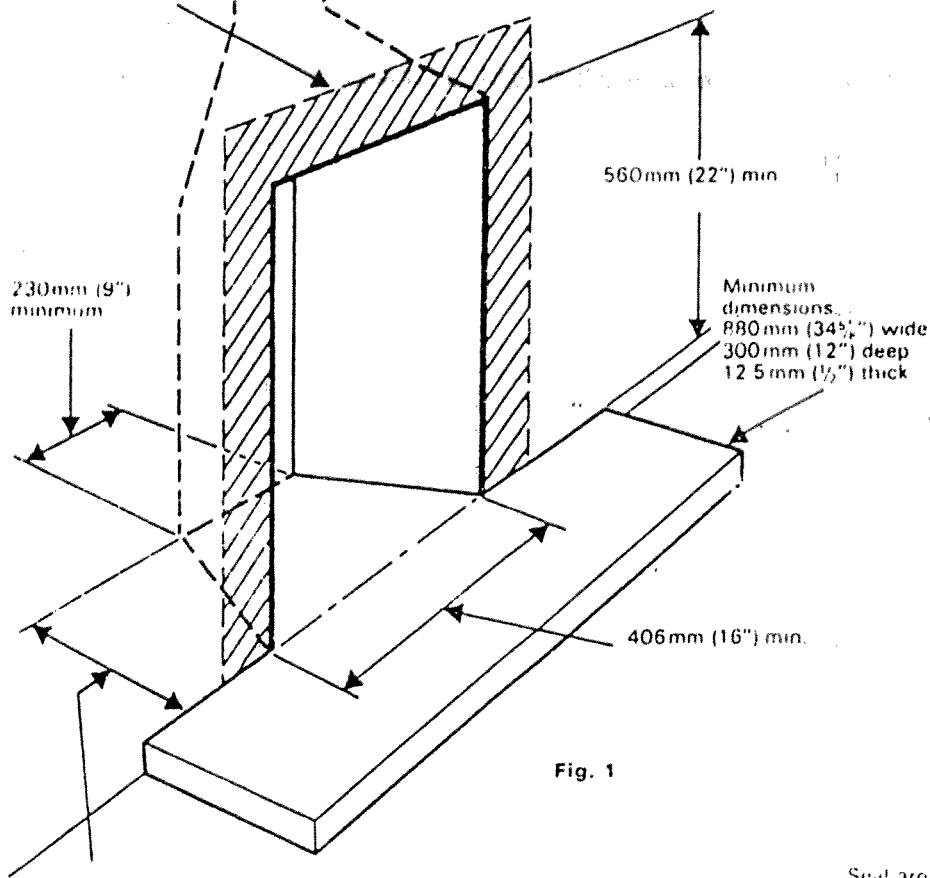


Fig. 1

10" (254mm) minimum for a height of at least 15" (380mm) from base of fire

Fixing holes for clamping plates 540mm centres at a convenient height

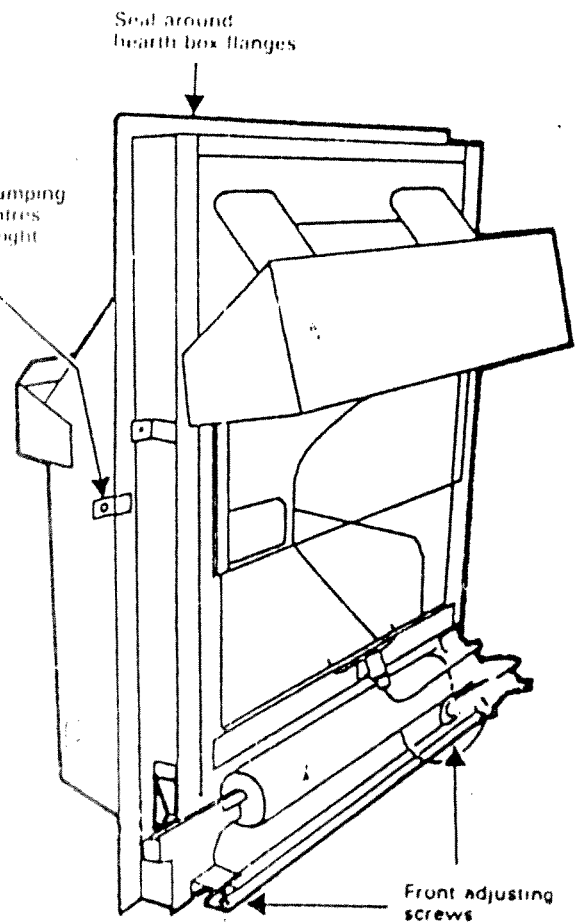


Fig. 2

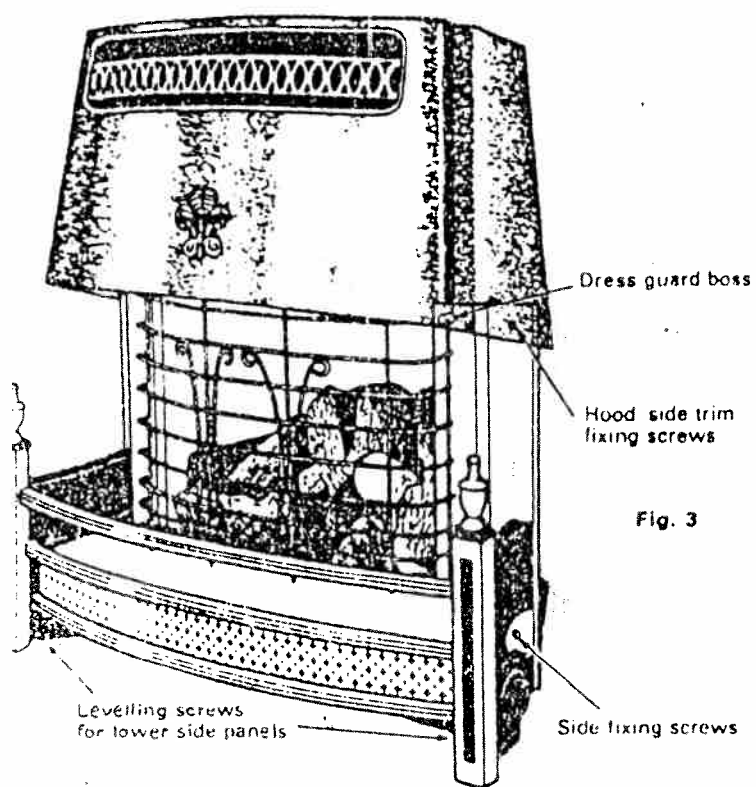


Fig. 3

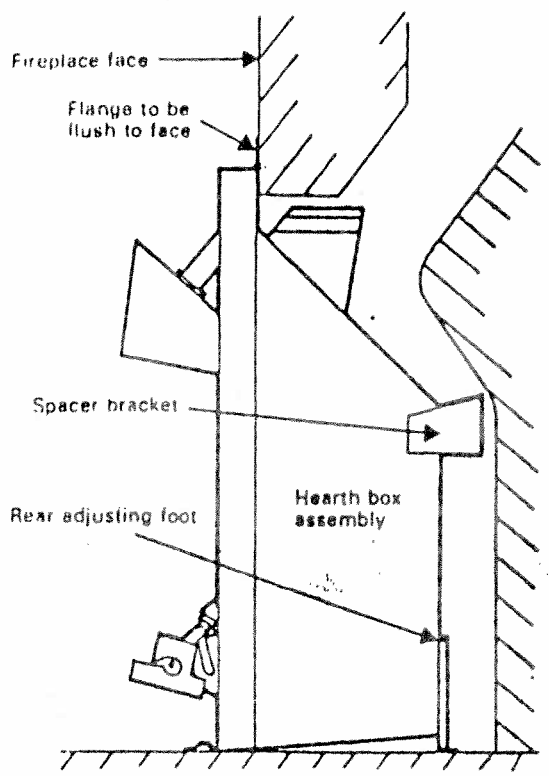


Fig. 4

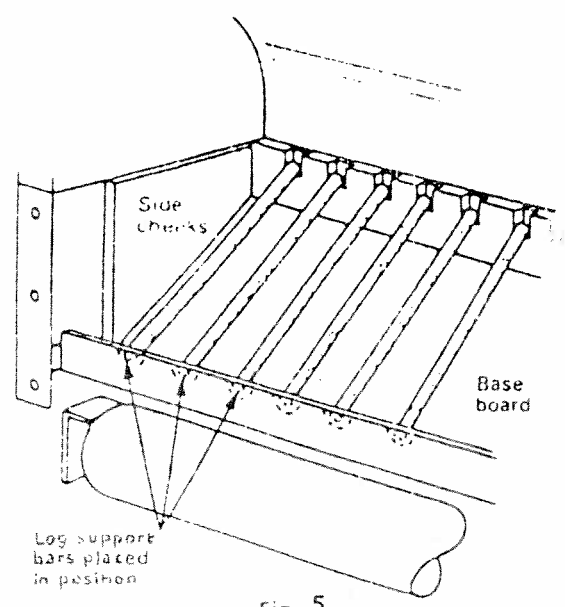


Fig. 5

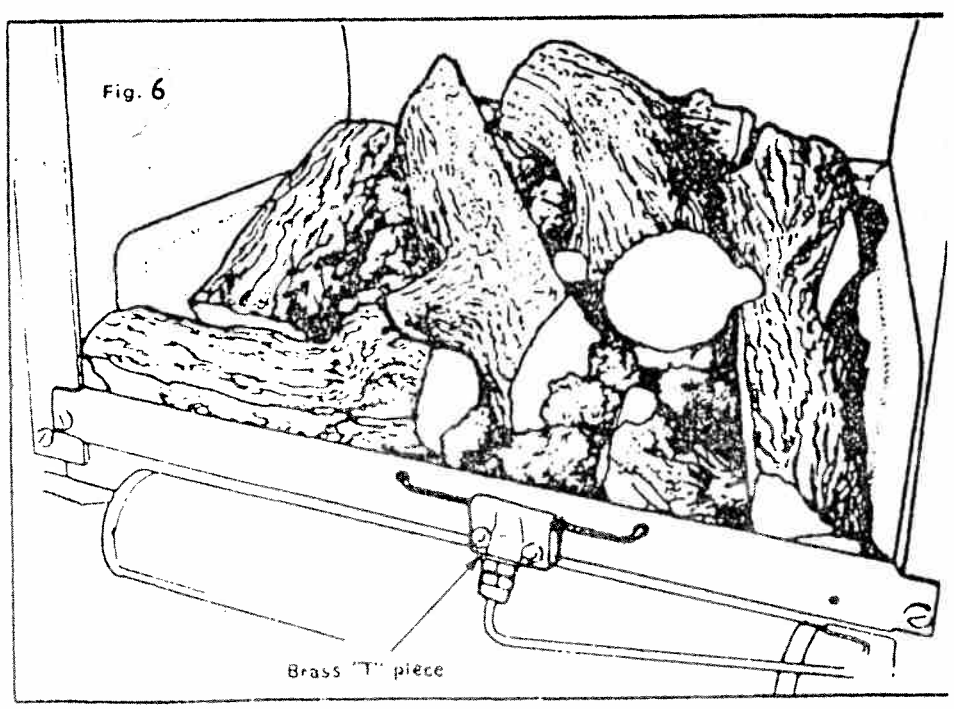


Fig. 6

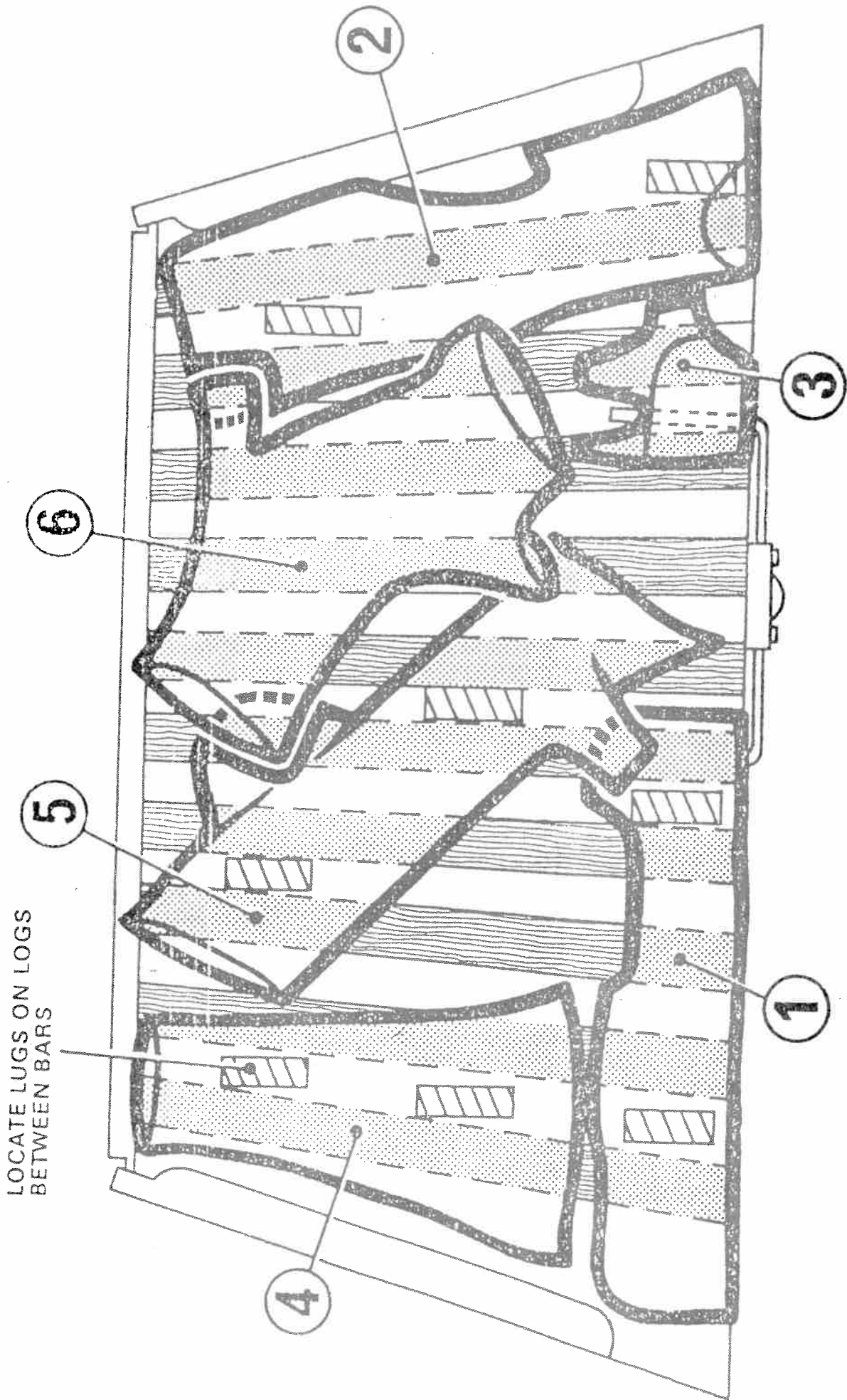
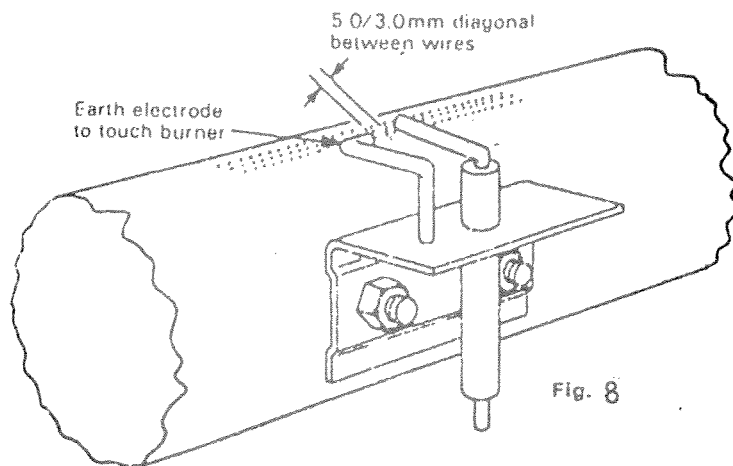


Fig. 7



Test pressure at "FULL" position cold or hot

ORIFICE	ALTITUDE	INPUT Btu/Hr	Manifold pressure	
			M/Bar	Inches wg
Bray Cat 16 Size 750	0 - 2000'	25,000	6.0	2.4
	2000-4500'	22,500	4.86	1.95

Check gas rate at meter after ten minutes warm up in "FULL" position.

#### 5. FINAL CASING ASSEMBLY

- 5.1 Remove the gas tap knob.
- 5.2 The hood should be placed over the upper section of the hearth-box and lowered until the two tags at the rear of the hood have entered the two slots in the hearth-box. Ensure that the hood flanges rest in front of their fixing bracket.
- 5.3 Peel off protective film from side trims and apron. The left-hand and right-hand side trims can then be fitted and the two upper fixing screws inserted (see Fig. 3). These screws also fix the hood in position.
- 5.4 The lower casing assembly can then be fitted to the lower section of the hearth-box and retained by two fixing screws, one at each



side (see Fig. 3). If necessary adjust the two levelling screws located just behind the front legs (Fig. 3) so that they touch the hearth.

5.5 To fit the dress guard place the lower pegs into the holes in the bottom apron, and by bowing the top locate the upper pegs in the bosses fastened to the side trims (Fig. 3).

5.6 Refit the gas tap knob.

## 6. FINAL OPERATION CHECK

Re-check the ignition and operate the fire on all settings.

NOTE: The pieces of coke adjacent to the two decorative flame jets may be adjusted to give the best flame appearance.

## 7. MAKE SURE THAT THE USER KNOWS THAT:

7.1 The tap must be pressed in before turning anti-clockwise.

7.2 To light the fire the tap must be turned to the fullest extent when a click will be heard from the ignition.

7.3 A match or taper may be used to light the fire if necessary.

7.4 Paper, rubbish, etc. must not be thrown on to the fire to burn.

7.5 In the event of the glass front panel being damaged the fire should be turned off and not used until the glass has been replaced.

7.6 Should it be necessary the coke can be replaced. (Refer to the User's instructions).

7.7 The fire may smell slightly for a period due to its newness.

7.8 A flame failure device button is located under the right hand side of the front apron which must be held in until the flame is established.

## SERVICING INSTRUCTIONS

BEFORE ANY SERVICING. TURN OFF GAS SUPPLY TO FIRE.

### A. TO REPLACE CERAMIC LOG(S) OR COKE:

To remove the dress guard (Fig. 3) spring the two top horizontal logs out of their chrome plated bosses and lift the guard out of its bottom location. The log(s) or coke can now be removed as required. Replace the logs and coke as shown in Fig. 7. Replace the dress guard.

### B. TO REPLACE THE LOG SUPPORT BARS:

Proceed as 'A'. Remove all the logs and coke. Remove and replace the log support bars as necessary making sure that no pieces of broken small cokes, etc. are left on the bed under the support bars. Replace logs and coke as previously described (Fig. 7).

### C. TO REMOVE THE BURNER/CONTROL ASSEMBLY:

- (i) Remove the dress guard as in 'A'
- (ii) Pull off gas control knob
- (iii) Take off lower casing assembly after first removing the fixing screws
- (iv) Remove fixing screw from R.H. vertical trim. Remove trim.
- (v) Undo flame burner pipe from brass block 'T' piece located centrally (Fig. 6)
- (vi) Disconnect the inlet from the gas tap
- (vii) Remove fixing screw from the gas tap support bracket (located on R.H. side of the fire)
- (viii) Slide complete burner/gas tap assembly to the left to disengage R.H. burner location. Withdraw complete assembly by rotating slightly toward you and lifting away

### D. TO CHANGE ORIFICE:

- (i) Proceed as 'C' (i) to (viii)
- (ii) Unscrew the old orifice and replace with new

TAKE CARE. DO NOT ALLOW JOINTING COMPOUND TO GET ON TO THE CERAMIC TIPS IN THE ENDS OF THE ORIFICE.

### E. SPARK ELECTRODES:

- (i) Proceed as 'C' (i) to (viii)

Disconnect the ignition lead from the electrode. Remove the electrode retaining nuts and washers. Remove and replace the electrode assembly positioning the electrode as shown in Fig. 8.

### F. PIEZO GENERATOR:

- (i) Proceed as 'C' (i) to (iv). The piezo generator can be changed

with the tap in position in the fire. Disconnect ignition lead from igniter. Carefully remove the two top screws in the gas tap niting plate and lift off, taking care not to lose the spring. The new piezo generator and niting plate unit can now be fitted in the reverse order, making sure that the head work is correctly located in the plug key slots.

G. GAS TAP PLUG (GREASING):

Turn the tap to 'OFF' position. Proceed as 'C' (i) to (iv). Remove the two niting screws and shakeproof washers and lift the headwork assembly off, taking care not to lose the spring. Insert a screwdriver into the slot in the plug, twist to loosen, then withdraw. Ensure that the tap orifices are not blocked when regreasing and use the minimum amount of grease possible. Re-assemble using reverse procedure, ensuring the correct location of the plug.

H. TO REPLACE GLASS FRONT PANEL:

Remove dress guard, gas control knob, lower casing assembly and right-hand vertical trim as described in 'C' above. Remove two screws holding right hand glass retaining bracket. Remove damaged or broken glass. Take new glass and fit into top left-hand retaining bracket. Replace right-hand bracket, securing firmly with the two screws, replace other parts.

IMPORTANT: ALWAYS test all gas joints for soundness after any dismantling or exchange procedure.

