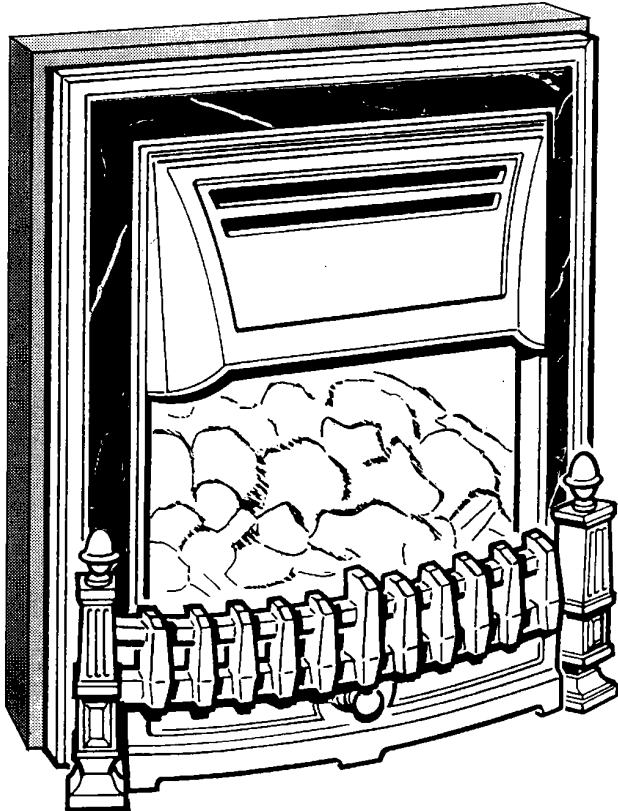


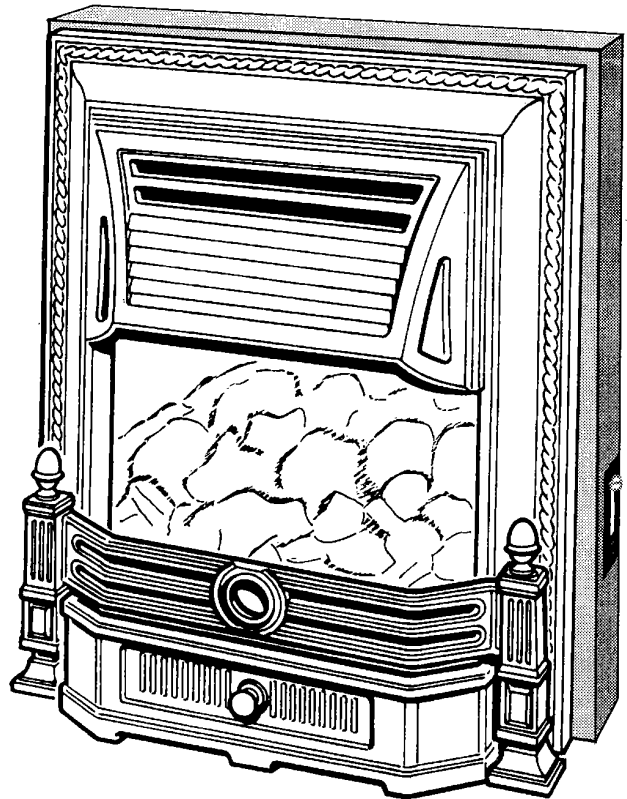
## Installation & Service Instructions

Inset Decorative Gas Fire for use with the  
Potterton Housewarmer 45 & 55 BBU's

# ILLUSION



# Stratton



IS45001A

### THE GAS SAFETY (INSTALLATION AND USE) REGULATIONS 1994.

"In your own interest, and that of safety, it is law that all gas appliances are installed by competent persons, in accordance with the above regulations. Failure to install appliances correctly could lead to prosecution."

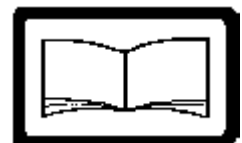
The polythene bags used for packaging are a potential hazard to babies and young children and **MUST BE DISPOSED OF IMMEDIATELY.**

**LEAVE THESE INSTRUCTIONS WITH THE USER FOR USE ON FUTURE CALLS**

For Use With Natural Gas  
(G20) Only At 20mbar

For Use in GB & IE

**IMPORTANT**  
PLEASE READ THIS BOOK  
BEFORE INSTALLING,  
OPERATING OR  
SERVICING THIS  
APPLIANCE.



## Contents - Page 2

<b>1. Technical Data.....</b>	<b>3</b>
<b>2. General.....</b>	<b>4</b>
<b>3. Installation Requirements.....</b>	<b>4</b>
3.1 Fireplace Openings.....	4
3.2 Hearths, Walls, Fire Surrounds, Shelves & Clearances.....	5
<b>4. Installation.....</b>	<b>6</b>
4.1 Unpack the Fire.....	6
4.2 Disassemble the Fire.....	6
4.3 Prepare the Fire.....	7
4.4 Install the Convector Box, Blanking Panel & Burner Tray.....	8
4.4.1 Convector Box.....	8
4.4.2 Blanking Panel.....	8
4.4.3 Burner Tray & Gas Supply.....	9
<b>5. Installing the Firebed Ceramics.....</b>	<b>9</b>
<b>6. Check Gas Pressure &amp; Operation of the Fire.....</b>	<b>10</b>
<b>7. Test for Spillage.....</b>	<b>10</b>
<b>8. Fitting the Facia.....</b>	<b>11</b>
<b>9. Complete the Installation.....</b>	<b>12</b>
<b>10. Servicing &amp; Cleaning.....</b>	<b>13</b>
<b>11. Replacement of Parts.....</b>	<b>14</b>
11.1 General Access.....	14
11.2 Pilot Burner Assembly.....	15
11.3 Burner Injector.....	16
11.4 Lint Trap.....	16
11.5 Piezo Unit.....	16
11.6 Gas Tap.....	17
<b>12. Short List of Spares.....</b>	<b>19</b>

If you have any problems or questions concerning this appliance, please contact the Potterton Myson Technical Help Line - Telephone (01926) 410044.

---

# 1. Technical Data - Page 3

Weight - Packed - Fire  
 Weight - Unpacked - Fire  
 Weight - Packed - Facia  
 Weight - Unpacked - Facia  
 Gas Connection  
 Tap  
 Burner  
 Injector - Burner  
 Injector - Pilot  
 Pressure Test Point  
 Spark Gap  
 Gas Rate on Setting 'HI'  
 Heat Input on Setting:-  
 'LO'  
 'HI'  
 Heat Output on Setting:-  
 'LO'  
 'HI'  
 Burner Pressure on 'HI' - Cold

Illusion	Stratton	Presence
23.90kg (52.7lb).	23.90kg (52.7lb).	23.90kg (52.7lb).
18.98kg (41.8lb).	18.98kg (41.8lb).	18.98kg (41.8lb).
21.25kg (46.8lb).	17.00kg (37.5lb).	8.30kg (18.3lb).
19.29kg (42.5lb).	15.10kg (33.3lb).	5.30kg (11.6lb).
	¼" Male Flare via Boiler Isolation Valve at Right Hand side of fire.	
	Combined Tap, Flame Supervision Device and Piezo.	
	Simplex - Fixed Aeration - Mica Filled Tray.	
	Marked Bray CAT 28/340	
	Sit OxyPilot	
	On Pipework at Left Hand Side of Fire.	
	3 - 4mm - Pre-set, Non Adjustable.	
	0.49 m³/h (17.29 ft³/h).	
	3.8kW ( 12,965Btu/h).	
	5.4kW ( 18,425Btu/h).	
	0.96kW ( 3,275Btu/h).	
	1.5kW ( 5,118Btu/h).	
	17.3 ± 1.0mbar (6.9 ± 0.4in w.g.).	

After this Figure, the Illusion is used as an example for both fires.

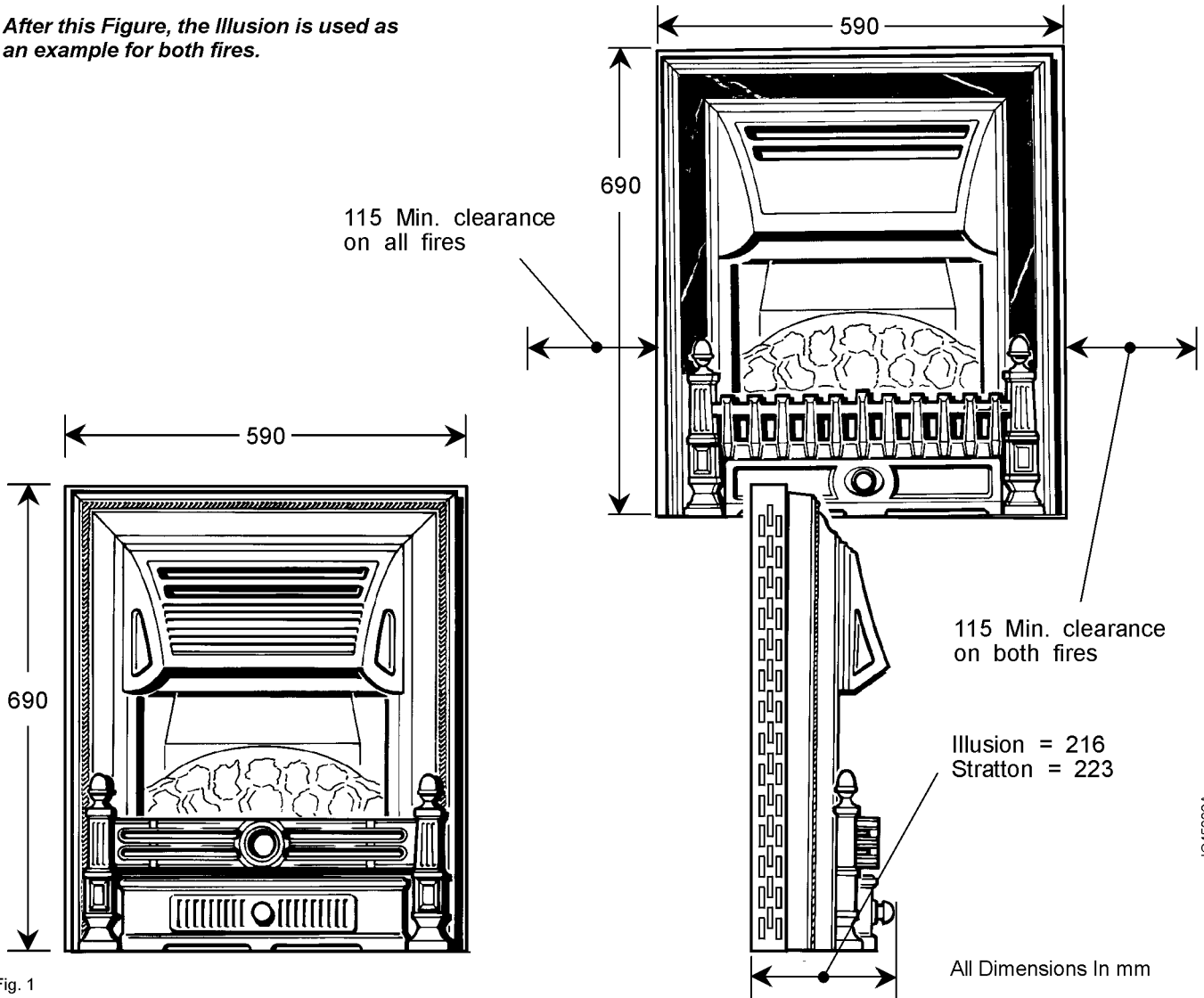


Fig. 1

## 2. General - Page 4

The 966 is an inset decorative gas fire. It is lit by a piezo spark igniter so batteries or electricity are not required. When fitted with either the Illusion, Stratton or Presence Facia, this fire is only suitable for use with the Potterton Housewarmer 45 & 55 BBu's.

The decorative effect is created by the use of ceramic coals mounted on a ceramic bed that glows red when heated by the burner. Samples of the fire have been examined by British Gas Plc, a United Kingdom Notified Body. The range is certified to comply with the essential requirements of the Gas Appliance Directive 90/396/EEC and are therefore permitted to carry the CE Mark.

The fire is fitted with two safety features:-

- A Flame Supervision Device that will shut down the fire if the gas supply is interrupted, the gas supply to the fire will remain off until the fire is re-lit. Wait 2 minutes before re-lighting the fire.
- An Atmospheric Sensing Device that will shut down the fire if the flue/chimney fails to operate correctly, e.g. blocked flue. If the fire shuts down frequently and gas supply interruption is not the cause then the flue/chimney **MUST BE** inspected and corrective action taken. Call you local Gas Region or C.O.R.G.I. Registered Installer.

**IMPORTANT:** Certain types of wallcoverings e.g. Blown Vinyl, are easily affected by heat. They may shrink and discolour when close to a heating appliance. Please bear this in mind when installing the fire. Also, because of the way hot air circulates naturally convected heat from the fire, dust or tobacco smoke particles in the air will draw towards the wallcovering around the fire and may discolour it.

## 3. Installation Requirements - Page 5

### 3.1. Fireplace Openings.

The maximum size of the front opening of the fireplace recess is 490mm wide x 580mm high. The minimum size is the same as for the boiler.

A non-combustible infill panel may be used to reduce an existing fireplace opening to the required dimensions.

**Note:** A proprietary fire surround back panel **MUST NOT** be used as an infill panel as it would be exposed to high temperature combustion products.

The minimum flat area will enable the outer metal surround to be fitted correctly and give access to the boiler controls. Note: Chimneys, Flues and Flue Systems are covered in the Installation & Service Instructions supplied with the Back Boiler Unit.

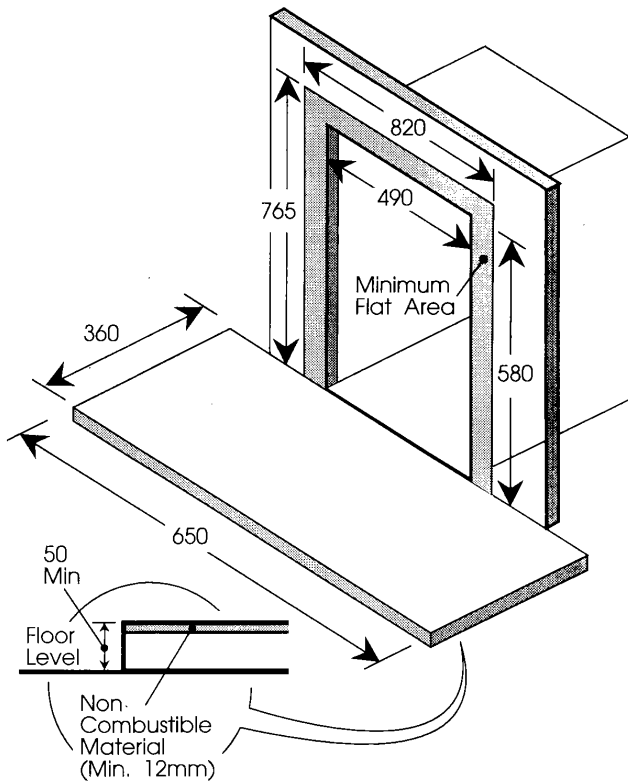


Fig.2

All Dimensions In mm

### 3.2. Hearths, Walls, Fire Surrounds, Shelves & Clearances.

#### Hearths

The fire MUST be installed onto a non-combustible hearth. The hearth must be to the dimensions shown in Fig. 2.

#### Walls

If the wall against which the fire is to be mounted has a combustible cladding or surround, the following conditions must be met:-

1. The cladding must fit snugly to the wall face, any air cavities must be sealed to prevent air leakage into the flue which would spoil the flue pull.
2. The cladding material must be cut away at the edges of the fireplace opening. Under no circumstances can it be present inside the fireplace recess or in any other position which will allow direct contact with the hot flue products.

#### Fire Surround

The surround's fireplace opening and flat area must comply with the dimensions shown in Fig. 2. It must be sealed to the wall (and infill panel if fitted) correctly and have no combustible material protruding within the fireplace opening or exposed to the combustion products.

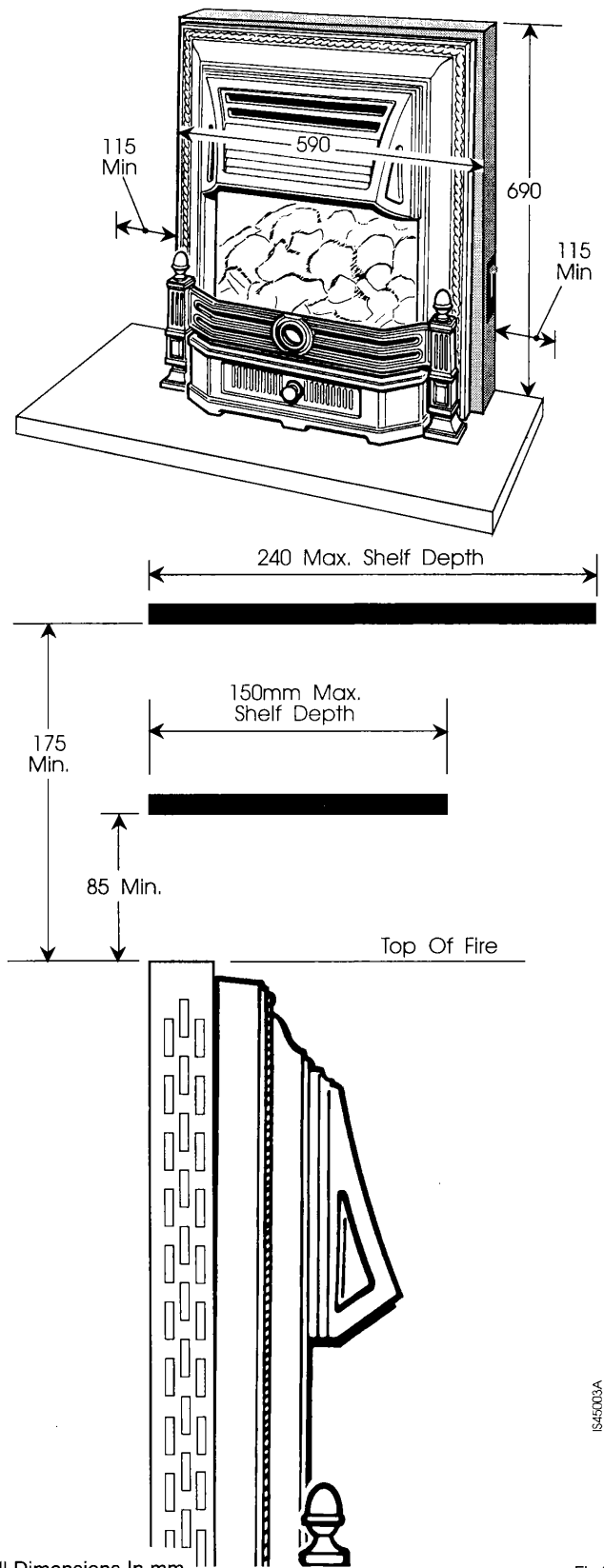
#### Shelves

A combustible or non-combustible shelf can be fitted above the fire provided it complies with the following guidelines:

1. Any shelf up to 150mm in depth must be a minimum of 85mm above the top of the fire.
2. Generally for every 10mm increase in shelf depth the shelf height above the top of the fire must increase by 10mm.
3. Any shelf 240mm in depth must be a minimum of 175mm above the top of the fire. See Figure 3 for examples.

#### Clearances

In all installations there must be a minimum clearance of 115mm on both the left and right hand sides of the fire. This will allow for air supply and access for operation of controls and servicing.



645003A

Fig.3

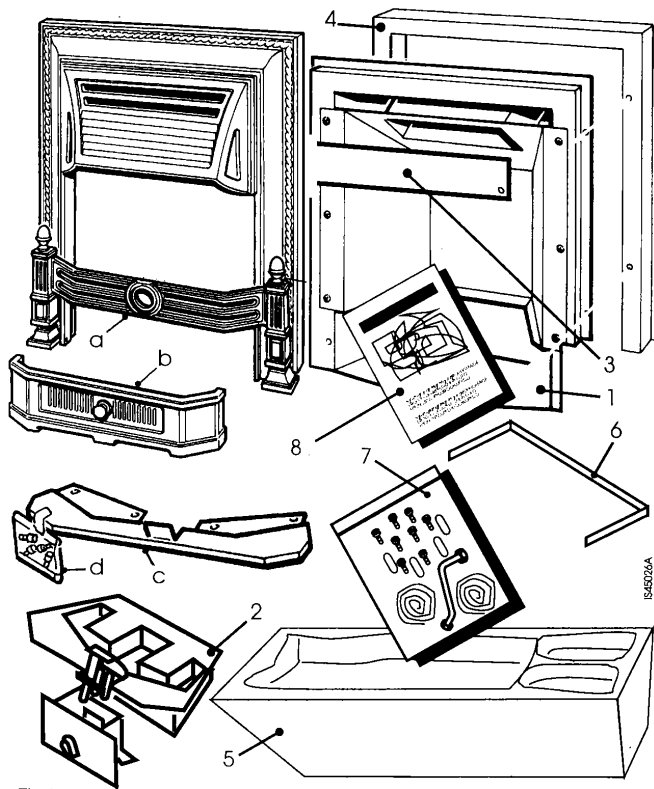


Fig.4

### 4.1. Unpack the Fire

The fire is supplied in 2 packs.

Pack 2 of 2 contains:-

- 1 The Convector Box.
- 2 Burner Tray.
- 3 Spillage Plate.
- 4 Outer Metal Surround.
- 5 Ceramics Pack.
- 6 Control Board Mounting Bracket.
- 7 Bag of Fittings.
- 8 Poly Bag containing these Instructions and other literature.

Pack 1 of 2 contains:-

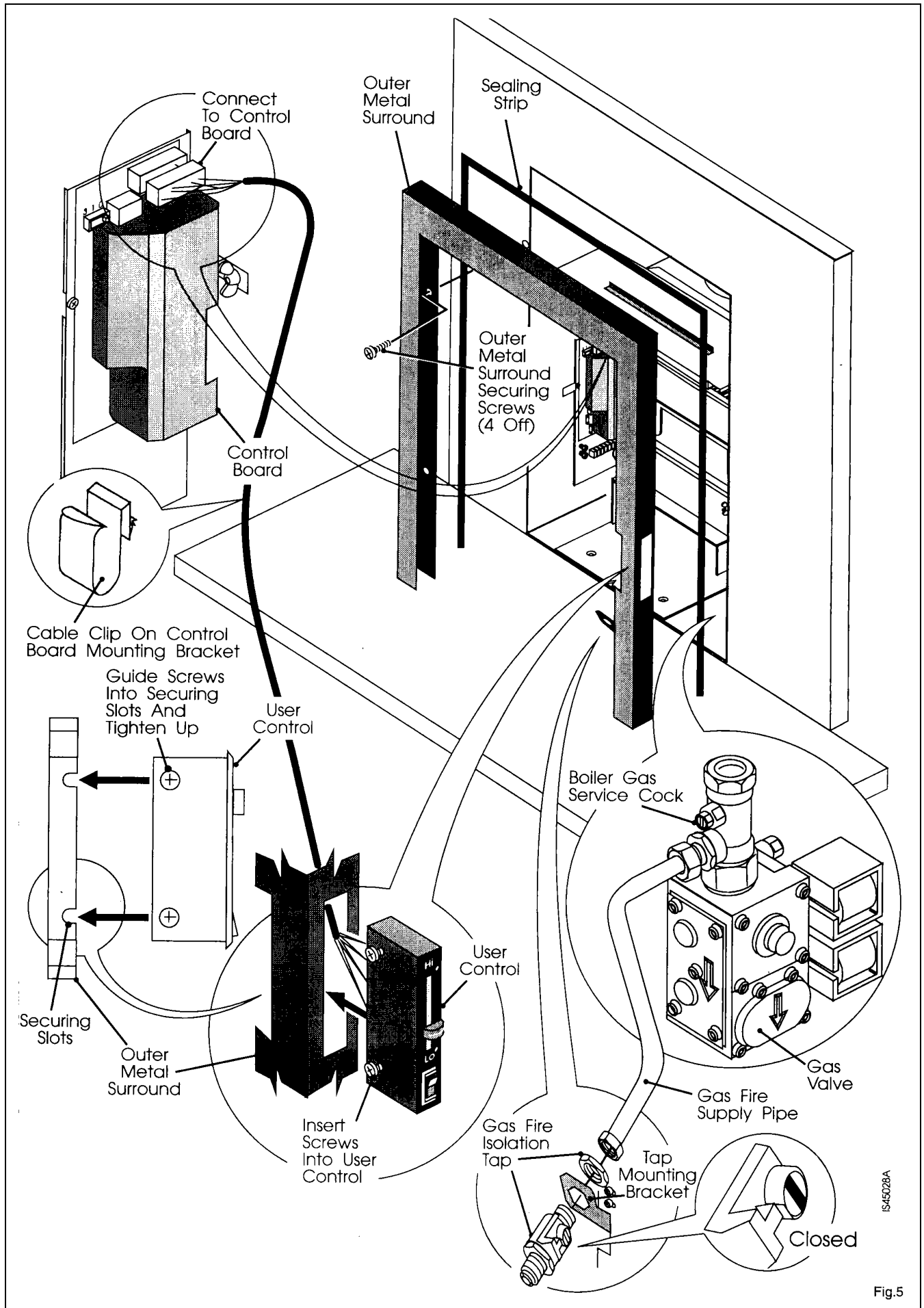
- a The Facia Assembly.
- b The Plinth Assembly.
- c Blanking Panel.
- d Poly Bag containing 4 location screws.

If any parts are damaged or missing please contact the phone number shown on the check lists supplied with the packs.

**DO NOT** discard the packaging until all items are accounted for or the fire is installed.

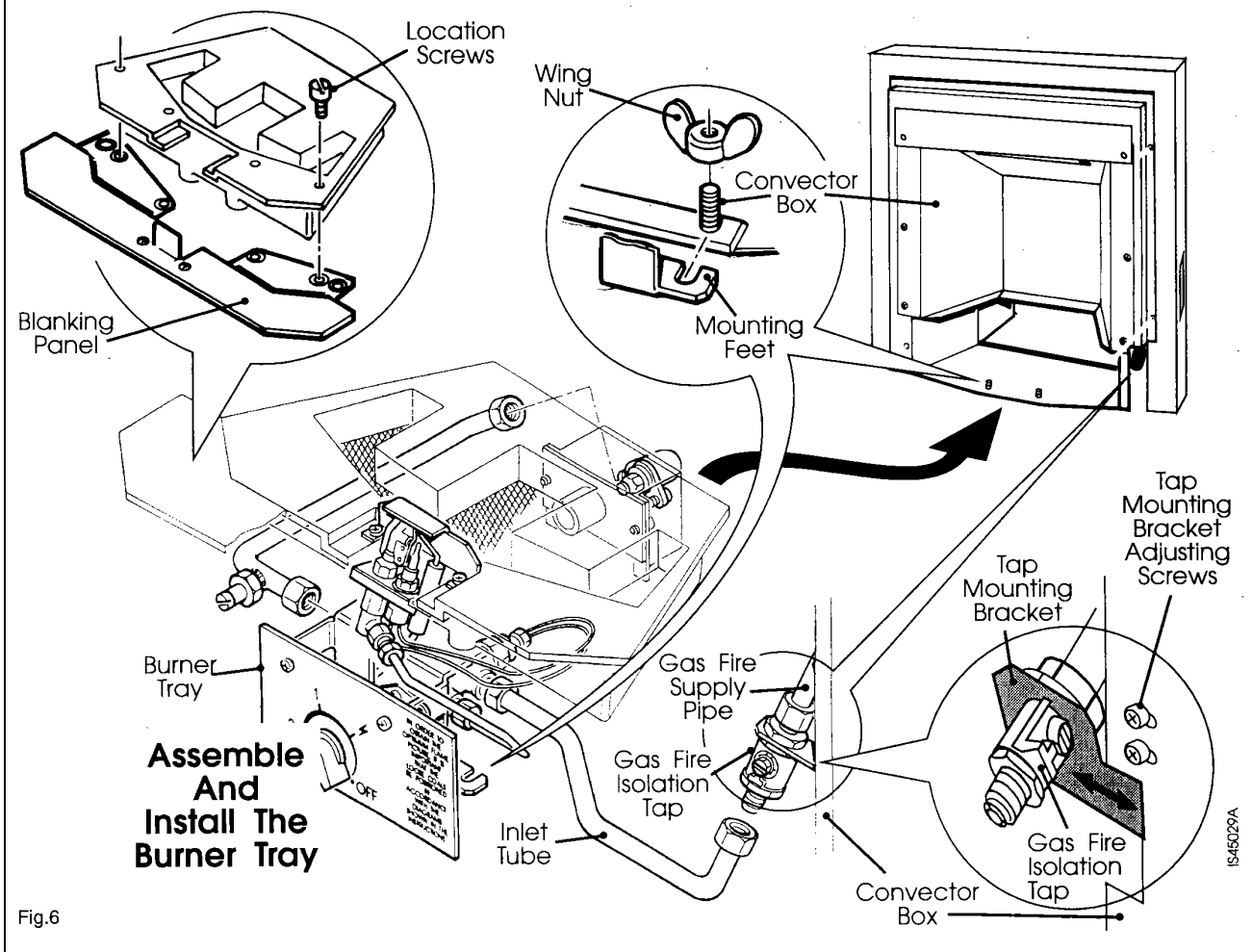
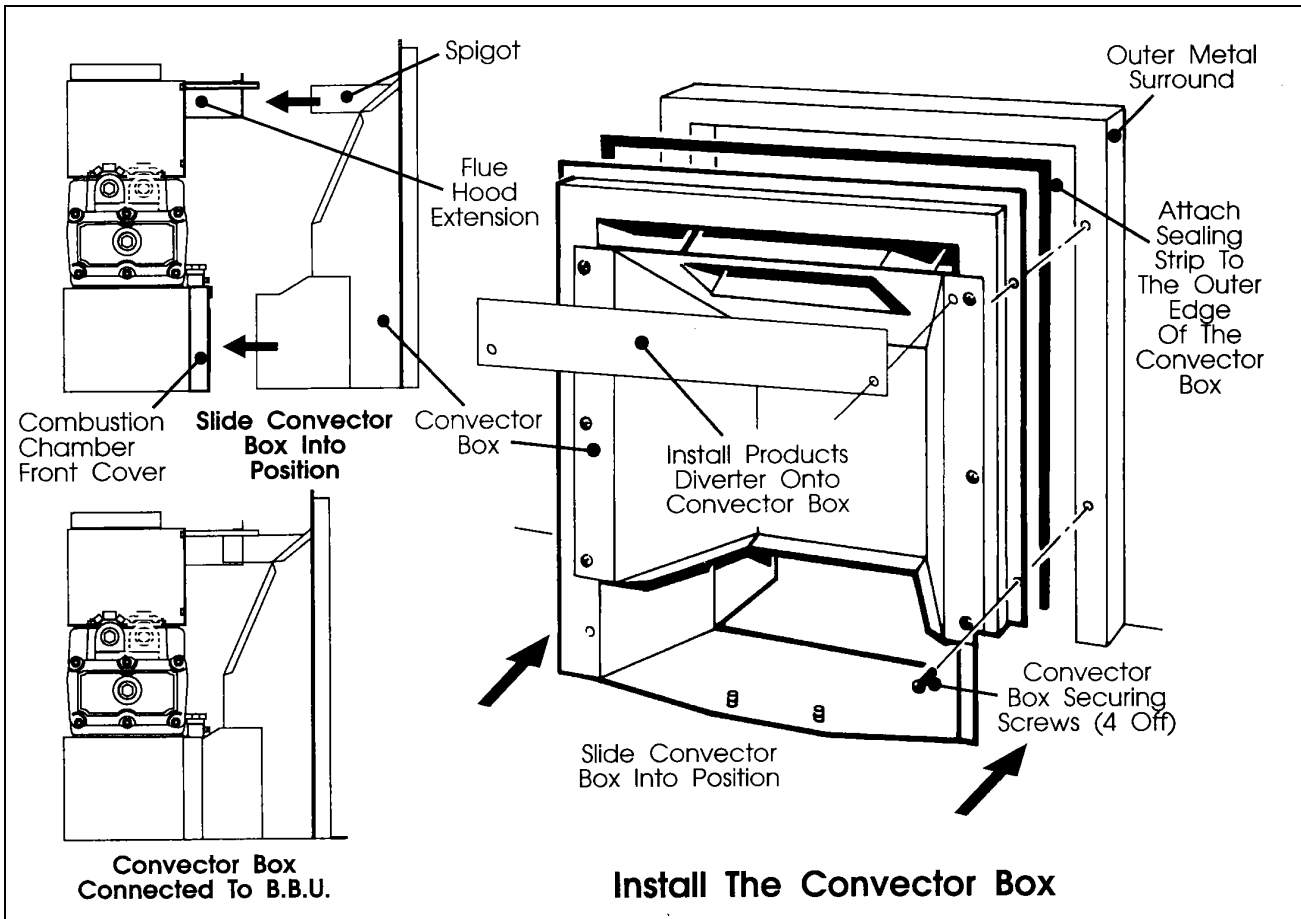
### 4.2. Install the Surround and Controls

- a) Stand the outer metal surround on the hearth and position up against the wall.
- b) Ensure it is central about the fireplace opening and mark the 4 positions of the mounting holes on the wall.
- c) Remove the surround, then using a 6 mm masonry drill, drill and plug the 4 marked mounting holes on the wall.
- d) Attach the foam strip along the sides and top of the surround at the rear.
- e) Using the 4 woodscrews supplied, secure the surround to the wall. Ensure the foam strip has been compressed.
- f) Remove from the bag of fittings and secure the tap mounting bracket to the outer metal surround using the 2 M4 x 8mm screws supplied.
- g) Insert the gas fire isolation tap through the hexagonal opening in the tap mounting bracket located at the bottom right of the surround and secure to the bracket using the locknut. Connect the gas fire supply pipe to the isolation tap. Ensure the isolation tap is in the closed position.
- h) Unplug the user control from the electronic control box on the boiler. Insert the 2 screws supplied into the user control, feed the cable through the opening and locate the user control against the two slots in the surround. Tighten the screws sufficiently to hold the control in place.
- j) Connect the user control plug onto its socket on the electronic control box and secure the harness using the cable clips. Insert the boiler overheat thermostat wire into the cable clips.



IS45028A

Fig.5





### 4.4. Install the Convector Box

- a) Attach the self adhesive foam strip along the sides and top of the outer edge of the convector box at the rear.
- b) Hook the spillage plate over the top edge of the firebox as shown in figure 6 and secure using the 2 No.6 x 9.5mm screws from the bag of fittings.
- c) Position the convector box up against the outer metal surround. The bottom air box and upper spigot will locate inside the combustion chamber front cover and flue hood extension on the boiler.
- d) Using 4 of the M5 x 10mm screws from the bag of fittings, securely fasten the convector box to the outer metal surround. Ensure that the foam strip has been compressed.

### 4.5. Assemble and Install the Burner Tray

- a) Mount the Blanking Panel on to the Burner Tray using the 4 location screws.
- b) Insert the Burner Tray into the convector box so it locates onto the studs at the front.
- c) Using the wing nuts, secure the Burner Tray to the convector box.
- d) Connect the inlet tube to the gas fire isolation tap. If necessary, the screws securing the isolation tap mounting bracket can be loosened to allow slight movement when aligning the tube to the tap. Fully tighten the screws once the pipe has been connected to the isolation tap.
- e) Set the isolation tap to the On position, turn ON the gas supply and test the installation and all joints for gas soundness then purge the installation in accordance with BS 6891.

## 5. Installing the Firebed Components - Page 9

Install the Vermiculite, Ceramic 'Coal Bed' and Ceramic Coals as shown in the instruction sheet titled "Installing the Firebed Components" (Part No. 966/9350/3) supplied with the ceramic packs.

After installing those components return to these instructions and carry on with the installation from Section 6.

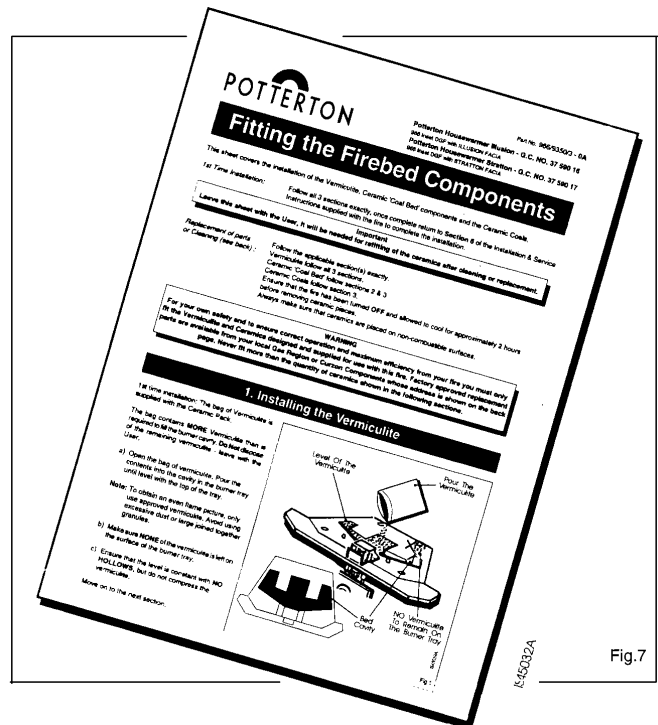


Fig.7

## 6. Check Gas Pressure & Operation Of Fire - Page 10

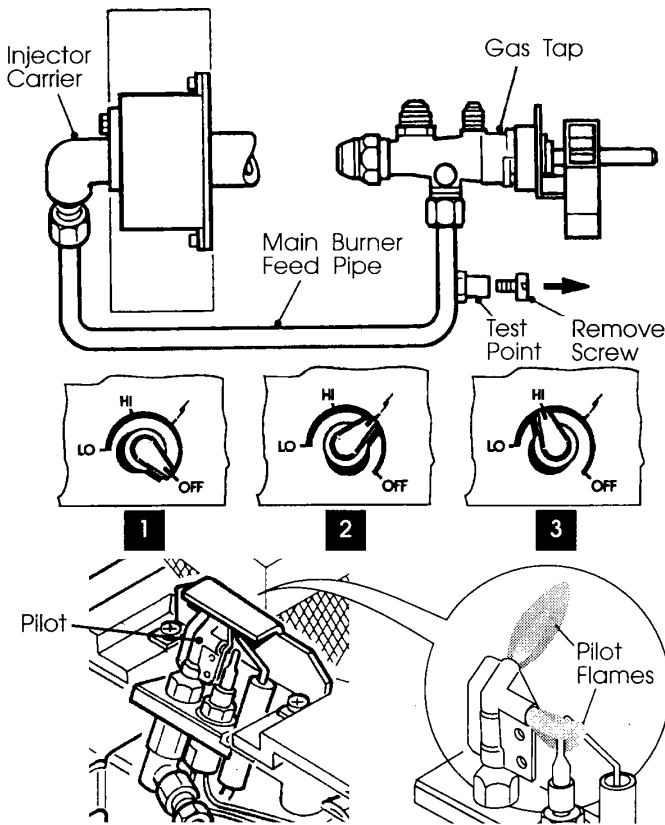


Fig.8

The test point screw is located on the left hand side of the controls assembly near the gas tap.

- a) Remove the pressure test point screw and connect a pressure gauge.
- b) Push in and turn the control knob anti-clockwise to the ' ⚡ ' (ignition/pilot) setting and the pilot should light. Keep the knob pushed in for 10 seconds then release, the pilot should remain alight. It may be necessary to repeat this operation several times before all the air is purged from the line. Push in and turn the knob clockwise back to ' OFF ' between each attempt.
- c) Turn the control knob to setting ' HI '.
- d) Check the burner pressure, it should be:-

17.3mbar ± 1.0mbar (6.9in w.g. ± 0.4in w.g.).

This pressure will only be obtained if the incoming gas pressure is 20mbar (8in w.g.). Check the size of the pilot flames, when lit the pilot flame envelope should just cover the electrode tip and thermocouple. If the flame is not as described, replace as shown in Section 11.2.

- e) Push in and turn the control knob through to 'OFF'.
- f) Disconnect the pressure gauge, re-fit the pressure test point screw and test for gas soundness

## 7. Test For Spillage - Page 10

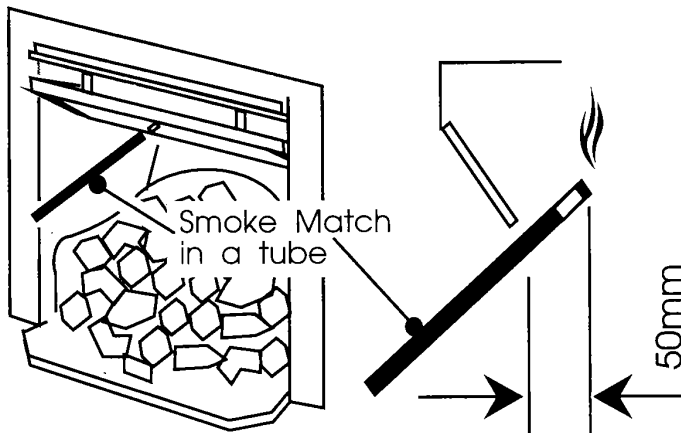


Fig.9

### 1. Fire Only

- a) Close all doors and windows, re-light the fire (pilot now only visible in a reflected form, see Fig.12). Then turn to the ' HI ' setting.
- b) After 5 minutes light a smoke match and position centrally as shown in Fig.9. The smoke should be drawn into the flueway.
- c) If in doubt, a re-check can be made for up to a total of 15 minutes after lighting the fire.
- d) If the fire shows a pronounced tendency to spill, remove the fire and check that the spigot is securely connected. Re-fit the fire and re-perform the test.
- e) If the test still shows spillage, DISCONNECT THE FIRE AND SEEK EXPERT ADVICE.
- f) If there is an extraction fan in any room, this must be turned on and any doors between it and the fire left open, re-perform the test.

### 2. Fire & Boiler

Switch on the boiler and repeat the full test shown above.

If the tests are successful, turn the fire off and complete the installation.

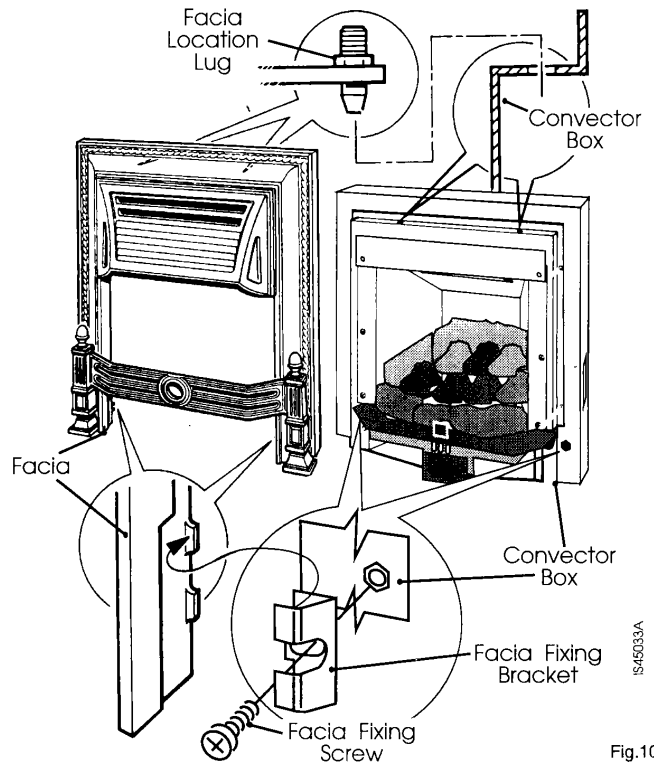
## o. Fitting The Facia - Page 11

- Loosen the 2 facia fixing bracket screws (1 each side) located at the bottom of the convector box and slide the brackets towards the centre of the appliance. Temporarily re-tighten the screws.
- Lift the facia and position it centrally on the convector box ensuring that the 2 lugs at the top of the facia locate in the 2 holes at the top of the convector box.
- Loosen the 2 facia fixing bracket screws, slide the fixing brackets back towards the facia and hook the 'Claws' onto the ridges on the inside of the facia. Tighten the screws sufficiently to bring the facia parallel to the fireplace wall.

**Note:** Removal is the opposite of installation.

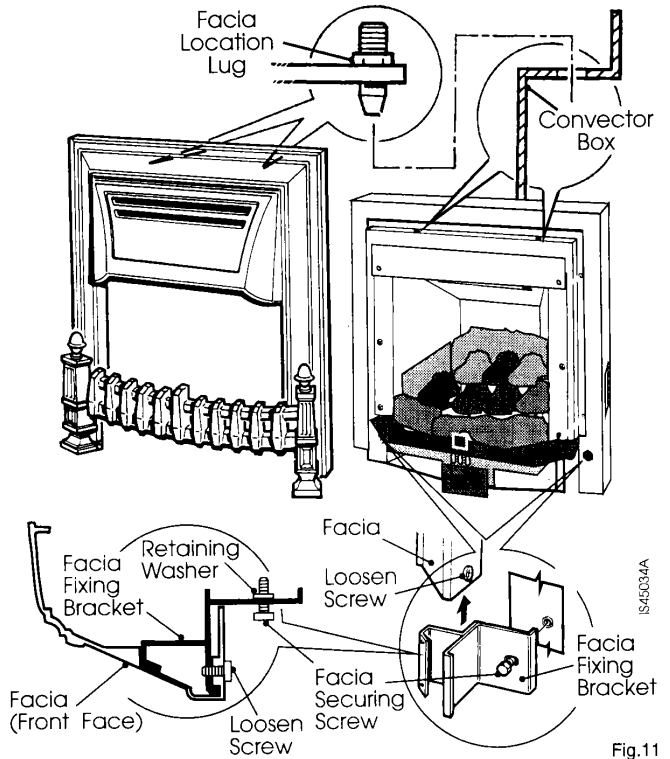
### INSTALLER

At this stage mark the appropriate facia type box on the data badge with an indelible pen/marker.



IS46033A

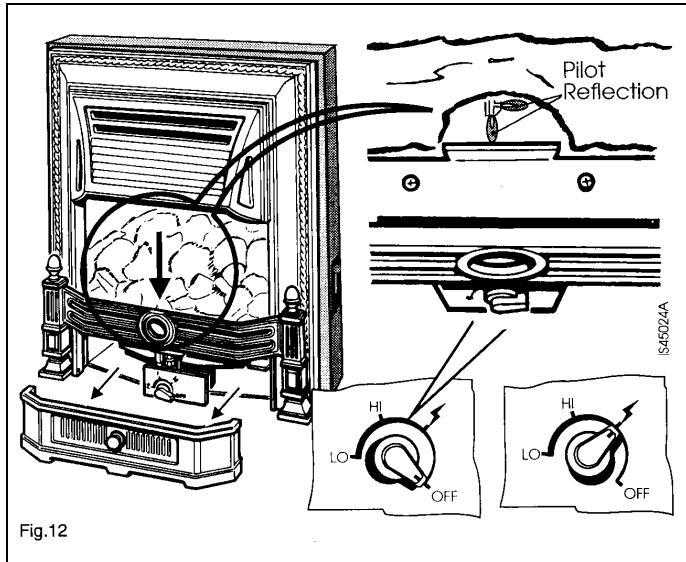
Fig.10



IS46034A

Fig.11

## 9. Complete the installation - Page 12



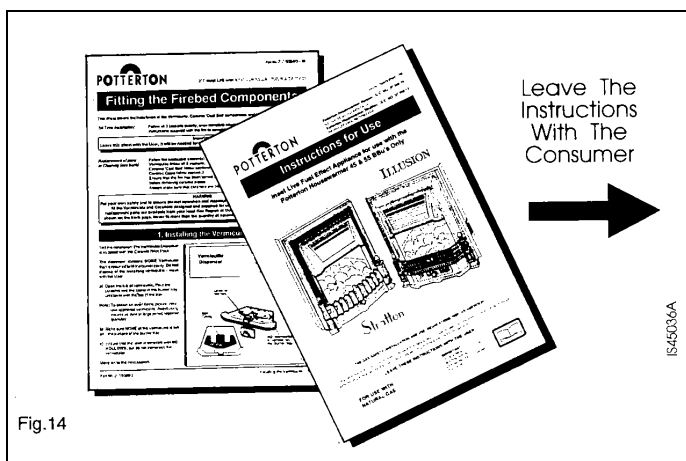
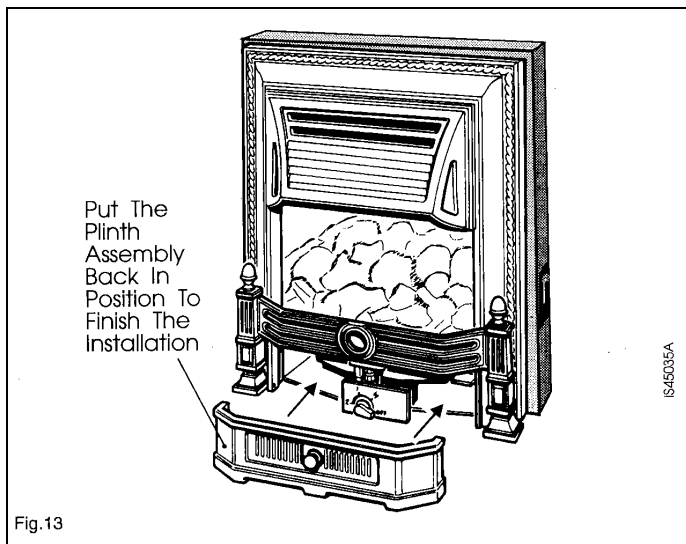
Locate the Plinth into position at the front of the appliance.

In the interests of hygiene please wash your hands on completion of the installation.

**Leave the bag of vermiculite with the consumer to allow them to top up the burner tray.**

Hand the Instructions For Use to the consumer and explain the following points:-

- How to light the boiler, how to light the pilot on the fire and alter the settings. Also how to light the pilot using a taper. See Page 5 of the Instructions For Use.
- The procedure for replacing the ceramic coals, and that the fire must not be used if any of the ceramic coals or other ceramics are missing or broken.
- That any smell emitted from the fire and boiler is due to the 'newness' and will disappear as the fire is used.
- That inspection and servicing should be carried out at regular intervals as recommended by your local British Gas Region or C.O.R.G.I. Registered Installer. See Instructions For Use, Page 8.
- If service or spare parts are required, always quote the Appliance Name, Serial Number and G.C. Number shown on the Data Badge. Show the user the position of the badge and advise them to write the Serial Number in the space provided on Page 9 of the Instructions For Use.
- That after a time, the convector box inner, the ceramic coals and other ceramic pieces will start to discolour, this is quite normal and will enhance the appearance of the fire.
- That certain types of wall coverings, e.g. Blown Vinyl, are easily affected by heat. They may shrink and discolour when close to a heating appliance. They should bear this in mind when decorating the room. Also, because of the way hot air circulates naturally convected heat from the fire dust particles or tobacco smoke in the air will be drawn towards the wallcovering around the fire and may discolour it.



## 10 Servicing & Cleaning - Page 13

Refer to the separate boiler instructions supplied with the boiler for cleaning the boiler.

To ensure continued efficient operation of the appliance, it is recommended that it is checked and cleaned as necessary at regular intervals. The frequency of servicing will depend upon the particular installation conditions and usage but in general once per year should be adequate. It is the law that any service work must be carried out by a competent person such as British Gas or other C.O.R.G.I. registered personnel.

The following aspects of the fire and installation should be examined and rectified as necessary.

1. Run the fire and check the operation of its controls and observe the flame picture.
2. Remove dust and debris from the burner, lint trap, A.S.D and fire interior.
3. Examine the burner injector and ensure it is clear and undamaged.
4. Carry out a spillage test, see Section 7, Page 10.

The fire data badge is located at the bottom left hand side of the convector box. The badge will be visible after removal of the plinth. On completion of the service run the boiler and fire and ensure that they operate correctly.

### **WARNING:**

Before commencing work, turn the fire off and set the boiler switch to off. Isolate the electricity supply to the boiler and allow the fire and boiler to cool.

### **IMPORTANT:**

Always test for gas soundness after completing any servicing of gas carrying components and carry out functional checks of controls.

---

### **10.1 Remove the Fire**

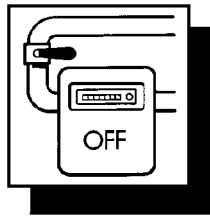
- a) Perform General Access - See 11.1, Page 14.
- b) Remove the screws securing the convector box to the outer metal surround and remove the convector box.

### **10.2 Inspect & Clean Components**

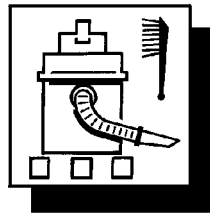
- a) Carefully brush off any dust or deposits from all the ceramic pieces. Examine all the ceramics and replace any that are broken.
- b) Remove and inspect the Burner Injector - See 11.3, Page 16. Clean by blowing through or washing. Do NOT clear the injector with a pin or wire.
- c) Check the condition of the Atmospheric Sensing Device, remove any deposits from the thermocouple tip using a fine wire brush.
- d) Check the condition of the self adhesive foam strips, replace if necessary.
- e) Wipe any deposits from the stainless steel firebox inner using a damp cloth.

### **10.3 Re-fit the Fire**

- a) Re-fit the convector box and secure to the outer metal surround using the screws previously removed.
  - b) Re-fit the burner tray and secure to the convector box using the wing nuts previously removed.
  - c) Re-connect the gas supply, open the gas fire isolation tap and test for gas soundness.
  - d) Re-fit the vermiculite and ceramics as shown in the instruction sheet titled "Fitting the Firebed Components" (Part No. 966/9350/3) that was supplied with the ceramic packs.
  - e) Light the fire, test all joints around the fire for gas soundness, check the control tap operation and test for spillage (Section 7, Page 10).
  - f) Clean the outer case of the fire as described in the Instructions for Use.
-

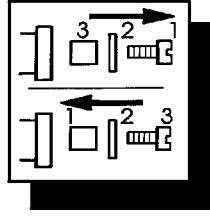


TURN OFF THE GAS SUPPLY AND ALLOW THE FIRE TO COOL BEFORE STARTING ANY WORK.

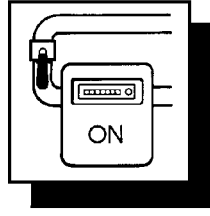


When servicing the fire, always remove dust and debris from the Burner, Lint Trap, Main Injector, A.S.D. and fire interior.

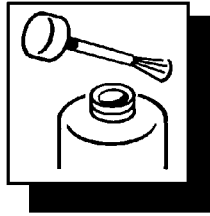
DO NOT USE A VACUUM CLEANER NEAR THE VERMICULITE.



When replacing parts, re-assemble in reverse order unless otherwise stated.



Turn on the gas supply after servicing or replacement of parts to check the appliance is working correctly.



ALWAYS CHECK FOR GAS SOUNDNESS AFTER SERVICING OR REPLACEMENT OF ANY GAS CARRYING COMPONENTS.



In the interest of hygiene, please wash your hands after servicing this appliance.

Fig. 15

IS45020B

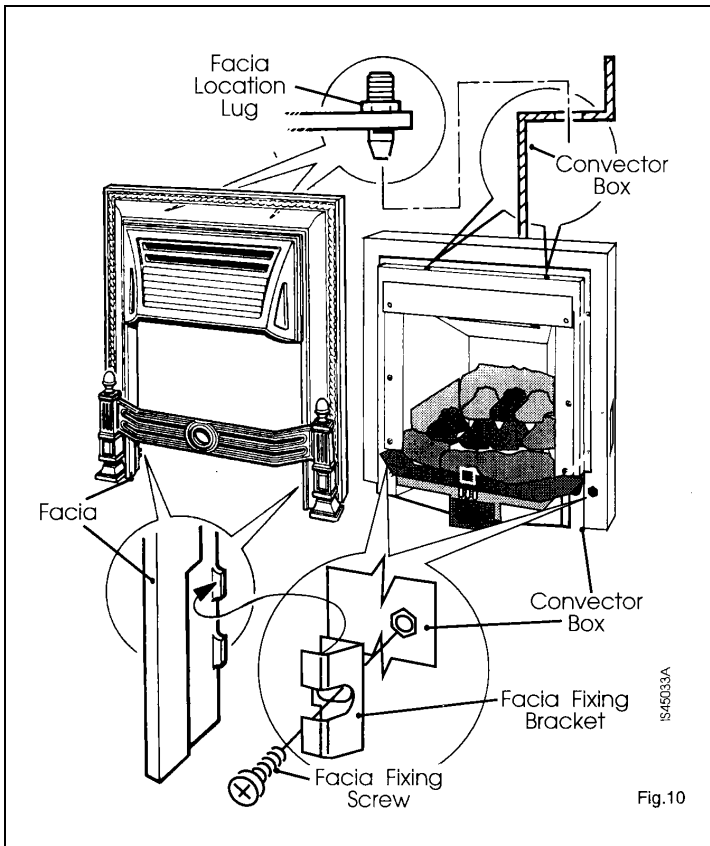
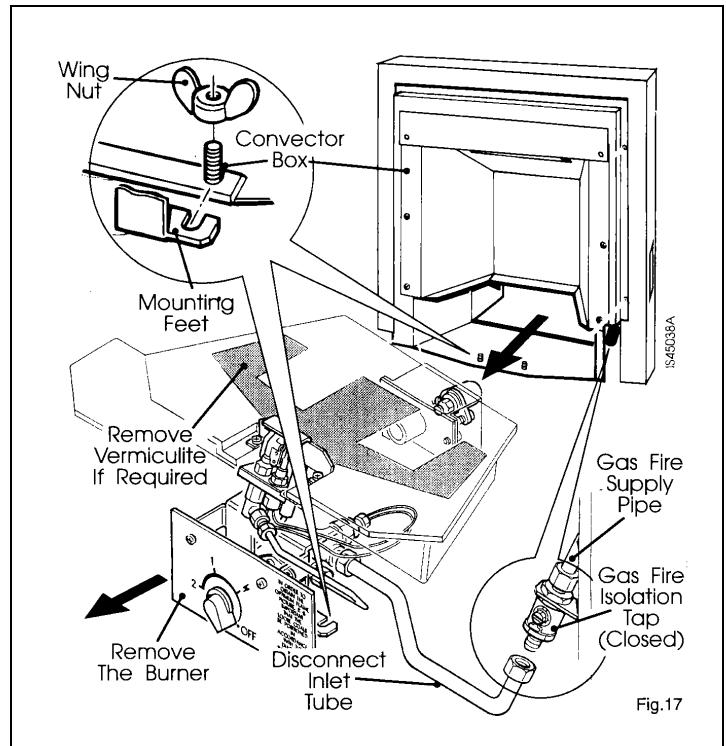


Fig.10

11.1. General Access

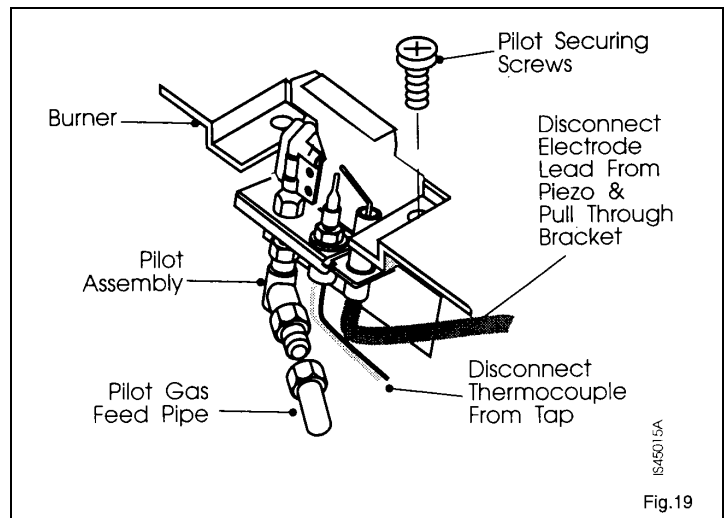
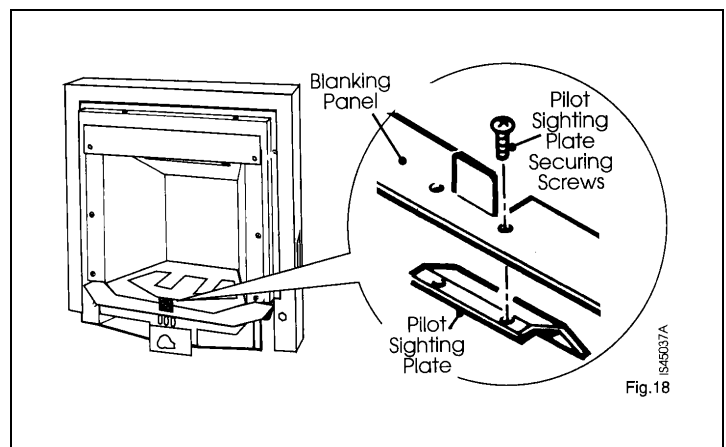
- a) Carefully pull the plinth away from the fire.
- b) Remove the facia (2) by slackening off or removing the facia fixing brackets at the base of the facia. Lift the facia off the convector box.
- d) Carefully remove all the ceramics and place to one side.

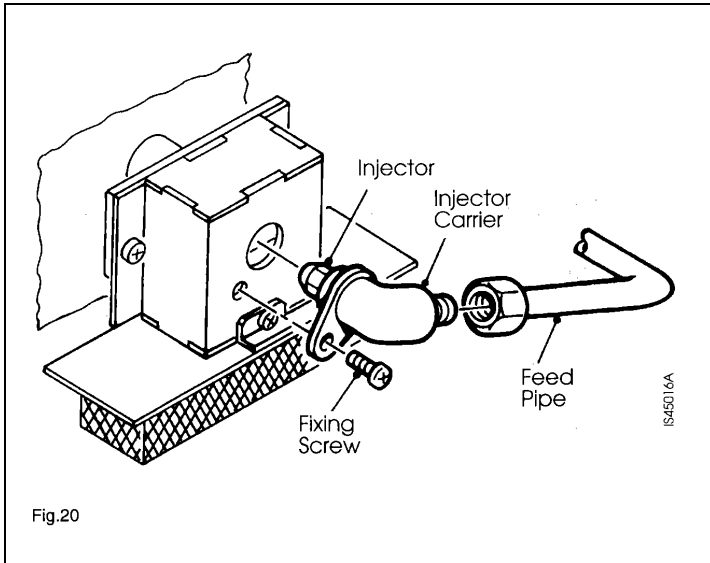
- c) Close the gas fire isolation tap and undo the union.
- d) Loosen the 2 wing nuts securing the burner tray to the convector box, then carefully remove the burner tray.
- e) To avoid accidental spillage, carefully empty the vermiculite (Ash Effect) out of the burner tray into a suitable container and put somewhere safe. On re-assembly, check the level of the vermiculite, if it is below the level of the burner tray top surface, it will need topping up - See instruction sheet 966/9350/3.



**11.2. A.S.D Assembly**

- a) Perform General Access - 11.1.
- b) Remove 2 screws securing the pilot sighting plate and remove the plate.
- c) Disconnect the union nut securing the pilot pipe to the pilot injector with 2 spanners.
- d) Disconnect the thermocouple from the back of the gas tap.
- e) Pull the electrode lead off the piezo unit.
- f) Remove 2 screws securing the A.S.D assembly and heat shield assembly to the burner box.
- g) Fit the new A.S.D assembly and check that the spark gap between the electrode tip and the thermocouple tip is 3.0 to 4.0 mm. If necessary, adjustment can be made by gripping the base of the tip with one pair of pliers whilst gently bending the end of the tip with another pair. Take care not to crack the ceramic insulator.
- h) Re-assemble in reverse order, check for gas soundness and correct operation of the fire.



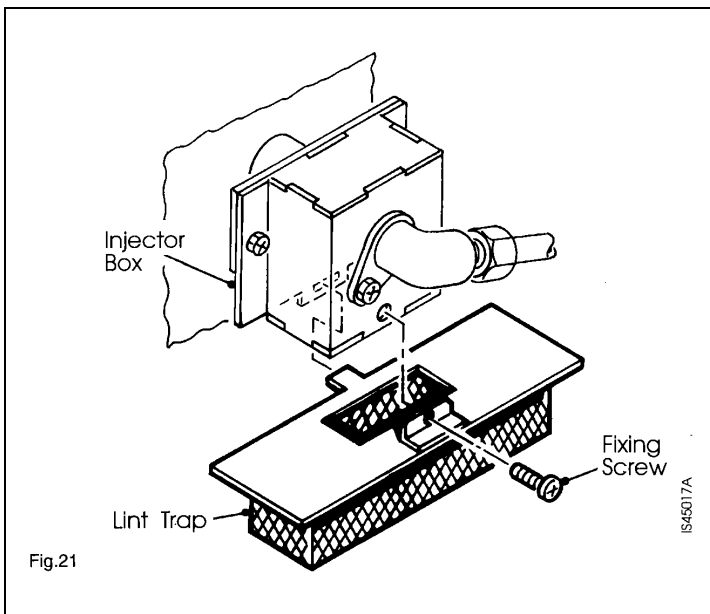


### 11.3. Burner Injector

- a) Perform General Access - 11.1.
- b) Disconnect the union nut securing the pipe to the injector carrier.
- c) Remove the screw securing the injector carrier to the injector box then carefully withdraw the injector carrier.
- d) Unscrew injector from the injector carrier.

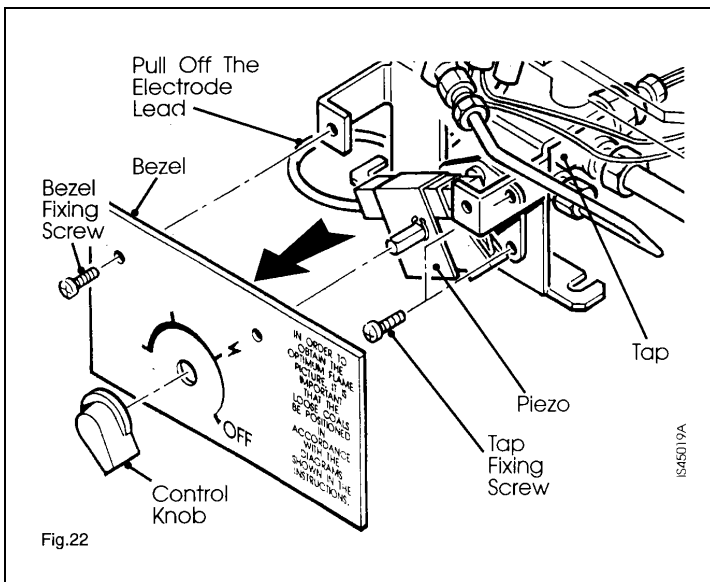
**Notes on re-assembly** - Use a suitable sealing compound on the injector threads.

- e) Check for gas soundness and correct operation of the fire.



### 11.4. Lint Trap

- a) Perform General Access - 11.1
- b) Remove the screw securing the lint trap to the injector box and carefully remove the lint trap.



### 11.5. Piezo Unit

- a) Remove the Plinth.
- b) Pull the control knob off the gas tap.
- c) Remove the 2 screws securing the bezel around the gas tap. Remove the bezel.
- d) Pull the electrode lead off the piezo unit.
- e) Pull the circlip off the gas tap spindle and slide off the piezo unit.
- f) Slide the new piezo unit onto the spindle.

**Notes on re-assembly** - The circlip locates in the groove on the spindle just in front of the piezo unit. Ensure the electrode lead is positively located.

- h) Check for correct operation of the fire

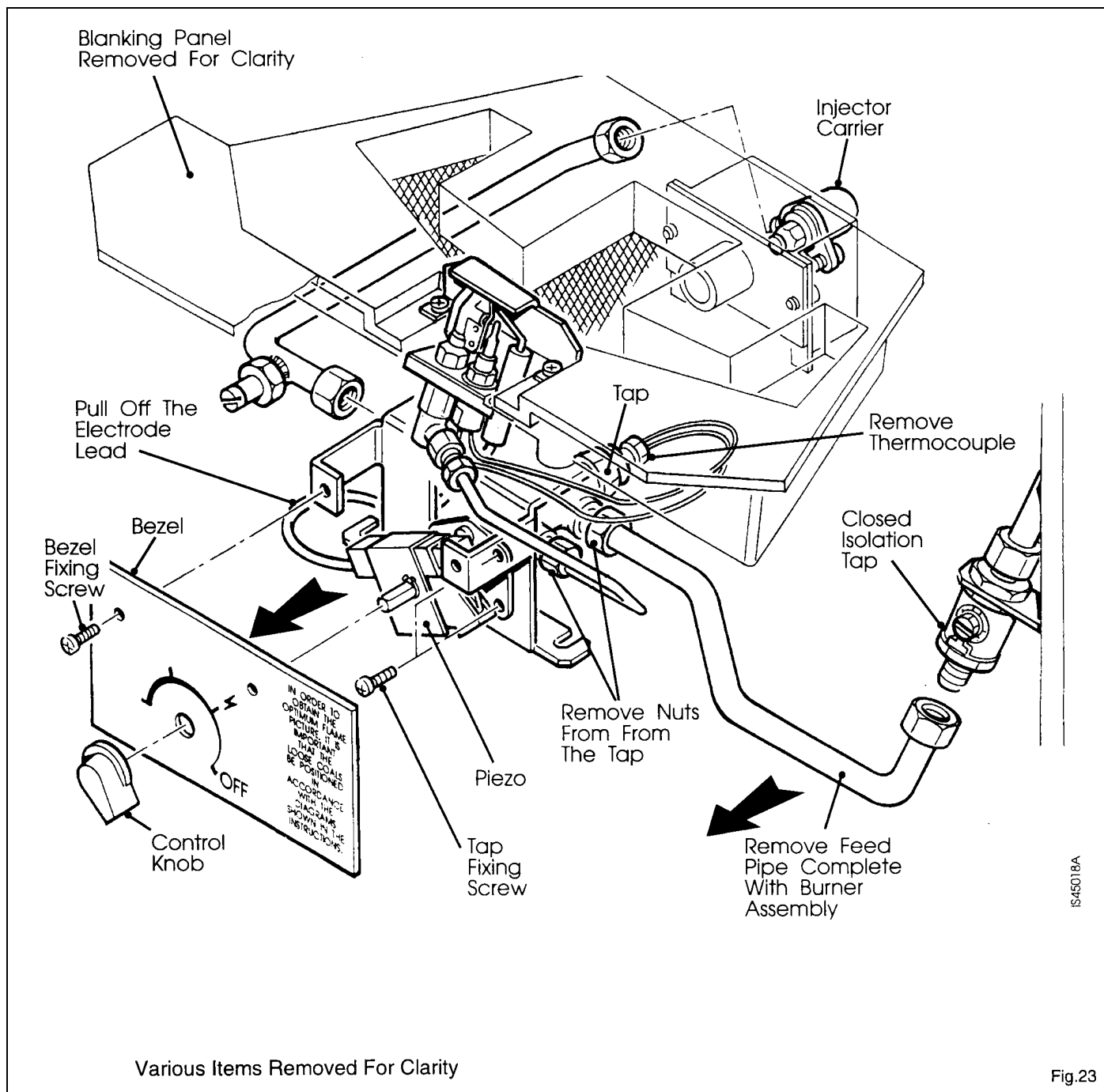


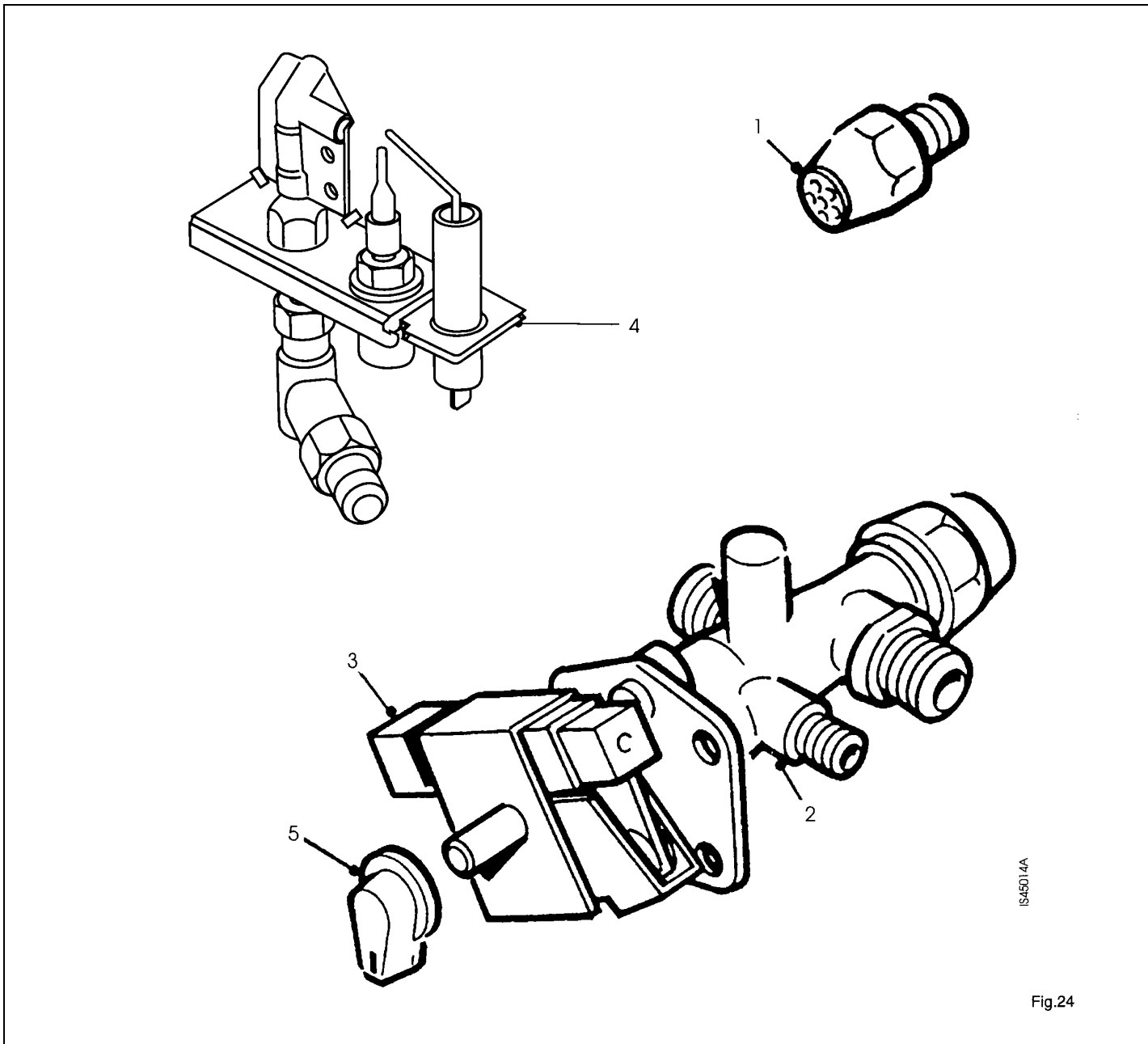
### 11.6. Gas Tap

- a) Perform General Access - 11.1.
- b) Pull the control knob off the gas tap.
- c) Remove the 2 screws securing the bezel around the tap. Remove the bezel.
- d) Pull the electrode lead off the piezo unit.
- e) Unscrew the thermocouple from the rear of the gas tap.
- f) Disconnect the 3 union nuts at the gas tap.
- g) Remove the 2 gas tap screws and withdraw the gas tap.

**Notes on re-assembly** - Ensure the electrode lead is positively located. The thermocouple connection need only be finger tight and a quarter turn.

- i) Check for gas soundness and correct operation of the fire.





Drg. Ref.	G.C. No.	Description	No. Off	Makers Part No.
1	389 583	Burner Injector - Bray CAT 28/340	1	966/705
2	158 582	Tap Assembly - Includes Drg. Ref. 3	1	364/1044
3	385 855	Piezo Unit	1	942/9387
4	127 293	Pilot Burner Assembly (Atmospheric Sensing Device)	1	960/1433
5	127 022	Control Knob Assembly	1	503/1051

For Part Numbers of the ceramic bricks that make up the 'Coal Bed' and the ceramic coals refer to the instruction sheet titled "Fitting the Firebed Components" - Part Number 966/9350/3