

# Instructions for Use Installation & Servicing

To be left with the user

## FIRELITE 4 BBU

FIRE FRONT G.C. No. 37-047-13

## CONTOUR 4 BBU

FIRE FRONT G.C. No. 37-047-14

## MIAMI 4 BBU

TEAK FIRE FRONT G.C. No. 37-047-15

MAHOGANY FIRE FRONT G.C. No. 37-047-20

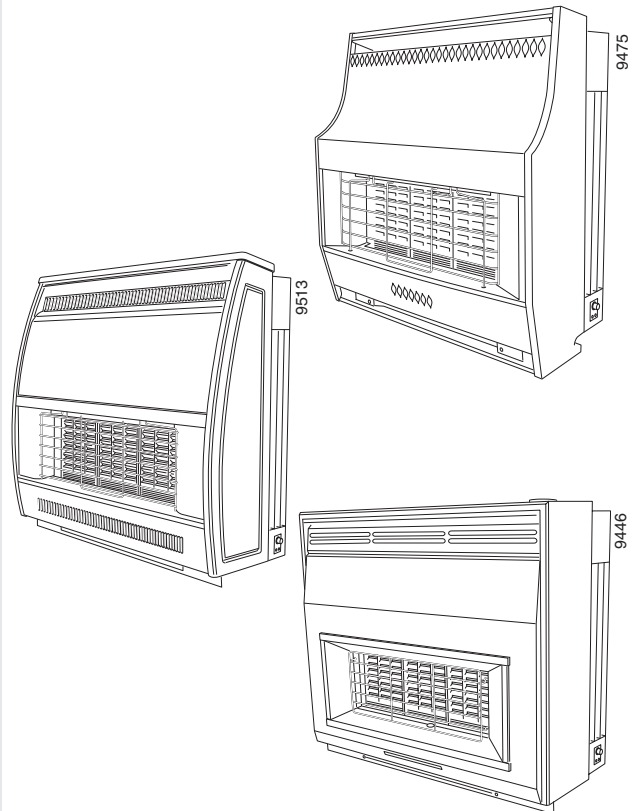
FOR USE WITH BBU 45/4 & BBU 54/4



The mark of quality for domestic heating

This is a Cat I<sub>2H</sub> Appliance

Reference in these instructions to British Standards and Statutory Regulations/Requirements apply only to the United Kingdom.  
For Ireland the rules in force must be used.



*The instructions consist of three parts, User, Installation and Servicing Instructions, which includes the Guarantee Registration Card. The instructions are an integral part of the appliance and must, to comply with the current issue of the Gas Safety (Installation and Use) Regulations, be handed to the user on completion of the installation.*

## Guarantee Registration

Thank you for installing a new Glow-worm appliance in your home.

Glow-worm appliances' are manufactured to the very highest standard so we are pleased to offer our customers' a Comprehensive First Year Guarantee.

In the centre pages are to be found your Guarantee Registration Card, which we recommend you complete and return as soon as possible.

If this card is missing you can obtain a copy or record your registration by telephoning the Heatcall Customer Service number 01773 828100.

Our Guarantee gives you peace of mind plus valuable protection against breakdown by covering the cost of:

- All replacement parts**
- All labour charges**
- All call-out charges**

REGISTER YOUR GLOW-WORM APPLIANCE  
FOR 1ST YEAR GUARANTEE PROTECTION

**CALL 0208 247 9857**

**HEATCALL**

Customer Services:

Tel: (01773) 828100

**One Contact Local Service** Fax: (01773) 828070

**Hepworth Heating Ltd.,**

Nottingham Road, Belper, Derbyshire. DE56 1JT

**General/Sales enquiries:**

Tel: (01773) 824141 Fax: (01773) 820569

## Important Information

### Certification

This fire is certificated to the current issue of BS6332 part 2, invoking the current issue of BS5258 part 5 for safety and performance. It is, therefore, important that no alteration is made to the fire, without permission, in writing, from Hepworth Heating Ltd.

Any alteration that is not approved by Hepworth Heating Ltd., could invalidate the certification, the warranty and could infringe the statutory requirements.

### CE Mark

The CE mark on this appliance shows compliance with:

1. Directive 90/396/EEC on the approximation of the laws of the Member States relating to appliances burning gaseous fuels.
2. Directive 73/23/EEC on the harmonization of the Laws of the Member States relating to electrical equipment designed for use within certain voltage limits.

### INFORMATION FOR THE INSTALLER AND SERVICE ENGINEER.

Under Section 6 of the Health and Safety at Work Act 1974, we are required to provide information on substances hazardous to health. The Adhesives and sealants used in this appliance are cured and give no known hazard in this state.

#### *RADIANTS*

After handling wash hands thoroughly.

#### *INSULATION PADS/CERAMIC FIBRE, GLASSYARN, SEALANT*

These can cause irritation to skin, eyes and the respiratory tract.

If you have a history of skin complaint you may be susceptible to irritation. High dust levels are usual only if the material is broken.

Normal handling should not cause discomfort, but follow normal good hygiene and wash your hands before eating, drinking or going to the lavatory.

If you do suffer irritation to the eyes or severe irritation to the skin seek medical attention.

### SERVICING

REMEMBER, When replacing a part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Hepworth Heating Ltd.

CONTENTS	DESCRIPTION	SECTION	PAGE No.
<b>INSTRUCTIONS FOR USE</b>	Safety		3
	Introduction		3
	Maintenance/Service/Cleaning		3
	Operating your Boiler & Fire		4
	Lighting the Boiler & Fire		5
	Replacement Parts		6
<b>INSTALLATION INSTRUCTIONS</b>	General Data	1	7/8
	Types of Installation	2	8/9
	Flue and Ventillation	3	9
	Fire Front Preperation	4	9
	Installation	5	11/12
	Controls & Pressure Checks	6	13
	Spillage Check	7	14
	Final Review	8	14
<b>SERVICING INSTRUCTIONS</b>	Serviceing and Replacement of Parts	9	15
	Fault Finding	10	17
	Spare Parts	11	19

## Instructions for Use

### **IF YOU SMELL GAS**

**DON'T SMOKE.  
EXTINGUISH ALL NAKED FLAMES.  
DON'T TURN ELECTRICAL SWITCHES  
ON OR OFF.  
TURN OFF THE GAS SUPPLY AT THE METER.  
OPEN DOORS AND WINDOWS TO GET  
RID OF THE GAS.  
IMMEDIATELY CALL THE GAS EMERGENCY  
SERVICE.**

*Advice/help should be obtained from your installation/  
servicing company or the local gas undertaking.*

### **Notes and General Information**

These instructions should be read and carefully followed for the safe and economical use of your appliance.

These gas fire fronts are to be used with specially designed Glow-worm 45/4 & 54/4 Back Boiler Units only.

The fire front and back boiler must be installed as a complete unit.

The boiler and fire can be operated together or independently.

### **Important Notice**

This appliance is for use on natural gas (G20) as distributed in the United Kingdom and Ireland and must not be used on any other gas.

A slight smell may occur for a short time after initial lighting, this is quite normal and with use it will quickly disappear.

Combustible furniture or materials must not be placed closer than 1m (39in) in front of the fire front.

Soft wall coverings(e.g. embossed vinyl, etc.) which have a raised pattern, are easily affected by heat. They may, therefore, scorch or become discoloured when close to a heating appliance. Please bear this in mind whenever you are considering redecorating

The convection air openings at the top of the fire front and air inlet grilles at the sides and base must never be restricted.

Never use the fire with damaged radiants.

### **The Gas Safety (Installation and Use) Regulations**

In your interests and that of safety it is the Law that ALL gas appliances are installed by a competent person in accordance with the current issue of the above regulations.

### **Dress Guard**

The dress guard on this fire front satisfies the current issue of Heating Appliances, Fireguards, Regulations and conforms to the current issue of BS1945.

The guard is to prevent risk of injury from burns and should be replaced immediately after removal for cleaning.

This guard does not give full protection for the young, elderly or infirm. In such cases fit an approved guard which complies with the current issue of BS6539 "Fireguards and the use with Solid Fuel Appliances" or the current issue of BS6778 "Fireguards with portable, free standing or wall mounted appliances".

### **Maintenance**

To ensure the continued efficient and safe operation of the appliance it is recommended that it is checked and serviced as necessary at regular intervals. The frequency of servicing will depend upon the particular installation and usage, but in general once a year should be enough.

If this appliance is installed in a rented property there is a duty of care imposed on the owner of the property by the current issue of the Gas Safety (Installation and Use) Regulations, Section 35.

It is the law that servicing must be carried out by a competent person.

Please be advised that the 'Benchmark' logbook (supplied with the Back Boiler Unit) should be completed by the installation engineer on completion of commissioning and servicing.

All CORGI Registered Installers carry a CORGI ID card, and have a registration number. Both should be recorded in your boiler Logbook. You can check your installer is CORGI registered by calling CORGI direct on :- 01256 372300.

### **Servicing**

In the United Kingdom servicing can be carried out either by a Heatcall Service engineer or a CORGI registered installer.

If you require your appliance to be serviced, please contact Heatcall on (01773) 828100 and quote the following details;

Model name and Serial numbers.

Fire front-positioned bottom right inside of the case.

Back Boiler-positioned on the base of the boiler next to the control box

If you wish to replace any radiants and do not know where they can be obtained please contact Hepworth Heating on (01773) 824141 or your nearest stockist.

In the United Kingdom, for general advice about gas and your gas fire contact Hepworth Heating Ltd.

### **Electrical Supply**

**WARNING.** The appliance must be earthed.

Connection of the appliance and any system controls to the mains (230V-50Hz) must be through a 3A fused double pole isolating switch, having a minimum double pole contact separation of 3mm, serving only the boiler and system controls.

The colours of three core flexible cable are, Brown - live, Blue - neutral, Green and Yellow - earth.

### **Cleaning**

Turn the fire off and allow it to cool before attempting any cleaning.

Normally the fire will only need dusting. The bright metal trims may be cleaned with a damp cloth and dried with a soft duster.

Obstinate marks can be removed from the guard and trims using soapy water. Never use abrasive cleaners.

The radiants can be cleaned with a soft brush - see diagram 7,8 & 9 which shows how to remove the dressguard and radiants.

### **Frost**

If the boiler is to be out of use for any long time during severe weather conditions we recommend that the whole of the system, including the boiler be drained off to avoid the risk of freezing up.

If fitted, switch off the immersion heater in the domestic hot water cylinder.

If you are in any doubt your installation or servicing company or the local gas undertaking should be contacted.

# Instructions for Use

## Clearance

A shelf or surround of a maximum depth of 150mm may be fitted, provided that clearances above and at the sides of the fire front are as shown in diagram 1. For a shelf made from wood or other combustible materials deeper than 150mm add 12.5mm for every 25mm of shelf depth over 150mm.

On no account must a carpet or other combustible material be laid directly under the fire, unless the minimum clearances shown in diagram 2, is achieved.

The dimension is taken from the bottom of the fire case to the top of the carpet pile or other floor covering.

## Hearth

A fire proof hearth under the fire front must have the minimum dimensions as shown in diagram 3.

## OPERATING YOUR BOILER AND FIRE

### Safety Device

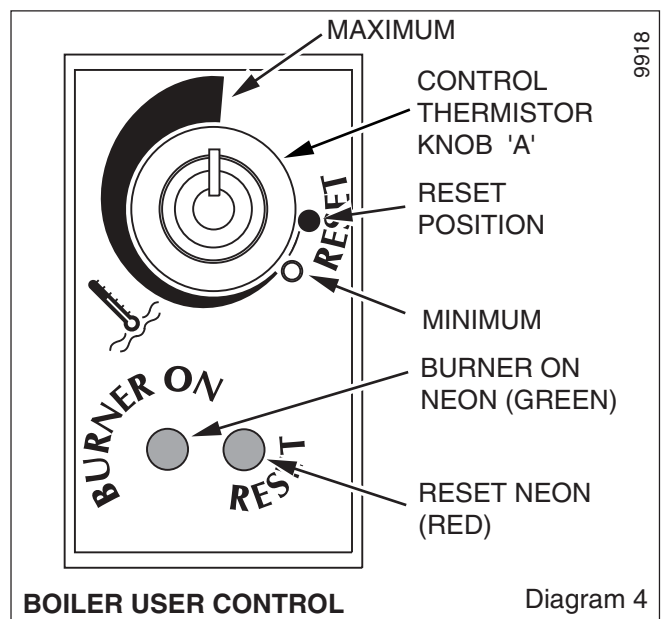
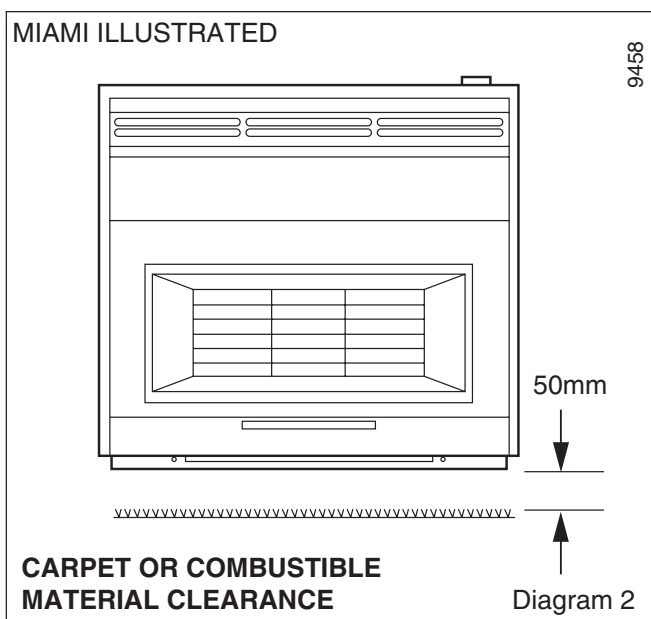
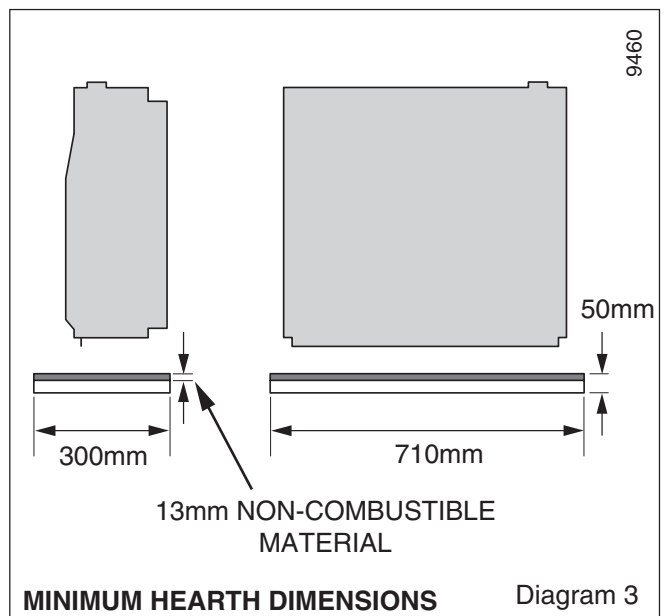
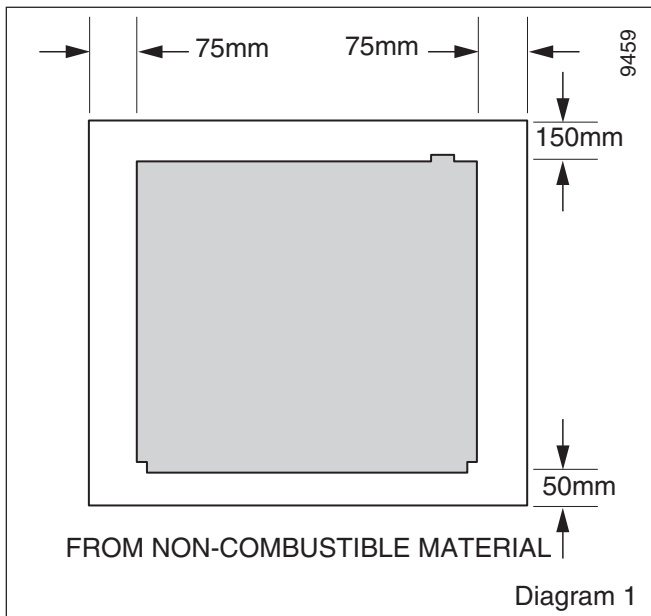
**BOILER** - This appliance is fitted with a flue blockage safety device which will shut down the appliance in the event of abnormal flue conditions. This device is NOT a substitute for an independently mounted Carbon Monoxide detector.

**FIRE FRONT** - The fire is fitted with a safety device which will shut it down if there is a lack of oxygen it also incorporates a probe which senses that the heat from the pilot flame is correct. If the probe is cool, the device will prevent any gas flow unless the control knob is held down at the ignition position.

If, for any reason, the flames go out when the fire is hot or if the fire is turned off when hot, always wait at least three minutes before attempting to relight.

If the boiler and/or fire shuts down frequently for no apparent reason the first things to be checked are the chimney and air inlets into the room.

Any problems found must be put right, by a competent person, before the appliance is used again.



# Instructions for Use

## Lighting the boiler

The boiler control is situated at the bottom of the R/H louver of the fire front.

Refer to diagram 4 to identify the boiler control.

See that all other controls are calling for heat.

The clock, room thermostat and programmer, if fitted, will probably be some distance from the unit.

To see how these items work and need to be set, read the manufacturers instructions supplied with them.

Turn the control thermistor knob "A" so that the pointer is between maximum and minimum, "O" on the boiler user control, see diagram 4.

Switch on electrical supply to the back boiler.

There will be a purge for approximately 30 seconds.

**NOTE:** If the electrical supply is switched rapidly off and on without gas present the control will purge for 100 sec. Neither of the indicators will be lit. The appliance will then operate correctly.

The boiler will automatically light.

This is indicated by a green light on the boiler user control coming on, see diagram 4.

**Note:** Should the red light on the boiler user control come on, it indicates that the pilot light is not operating correctly, or the flue blockage safety device has been activated.

When the fault has been corrected, turn the control thermistor knob "A" fully anti-clockwise so that the pointer is against the "Reset" position on the boiler user control panel, see diagram 4.

**NO ATTEMPT SHOULD BE MADE TO RELIGHT THE BOILER UNTIL ANY FAULT HAS BEEN CORRECTED. EXPERT ADVICE SHOULD BE SOUGHT.**

Adjust the control thermistor knob to the required setting between the minimum, "O" and maximum position.

Maximum is approximately 82°C.

The temperature of the hot water cylinder should be periodically raised to 60°C.

Check that all external controls are also set to your requirements.

If the burner goes out for no apparent reason it is **IMPORTANT** that the advice given under "Safety Device" is followed.

## To turn the boiler off

For short periods, turn the control thermistor knob "A" fully anti-clockwise so that the pointer is against the "Reset" position on the boiler user control, see diagram 4.

To relight the main burner turn control thermistor knob "A" clockwise to the desired setting between the minimum, "O" and maximum position.

For longer periods, turn the control thermistor knob "A" to "Reset" position. Switch off the electrical supply to the boiler.

To relight follow the full lighting instructions given above.

## Lighting the fire

Please note

When operating your fire for the first time, some vapours may be given off which may cause a slight odour and could possibly set off any smoke alarms in the immediate vicinity. These vapours are quite normal with new appliances. They are totally harmless and will disappear after a few hours.

## To light the fire

The control is shown in diagram 5.

Depress the control knob and turn anticlockwise towards the 1/IGN position, two audible clicks will be heard. A spark should be generated at the pilot while turning. The spark should ignite the pilot. The pilot flame can be seen through the opening immediately below the centre radiant, see diagram 6.

If the pilot does not light, turn the knob back to OFF and try again.

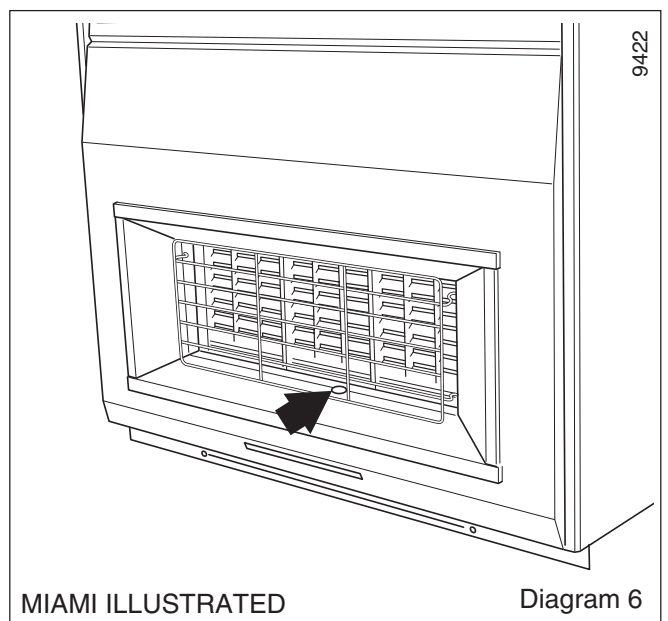
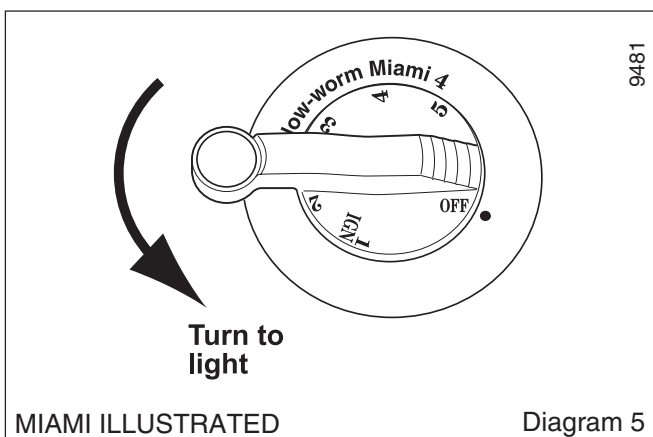
In the unlikely event of failure of the ignition mechanism the pilot can be lit with a long match or taper.

When the pilot has lit keep the knob depressed for about ten seconds to allow the flame sensing probe to warm up.

The control knob can then be set to your preferred heat level. The settings are:

Knob Position	Radiants Condition
2	Centre radiant on low. Outer radiants off.
3	Centre radiant fully on. Outer radiants off.
4	Centre radiant fully on. Outer radiants on low.
5	All radiants fully on.

To turn off partially depress the knob and turn clockwise to off. Wait at least three minutes before attempting to relight.





## Instructions for Use

### Lighting with a match or taper

Depress the control knob and turn anticlockwise towards the 1/IGN position.

While keeping the knob depressed, light the pilot by inserting a long match or taper into the pilot viewing opening (See diagram 6).

When the pilot is alight, keep the knob depressed for about ten seconds to allow the flame sensing probe to warm up before setting to your preferred heat level.

For your own convenience, have the fire serviced as soon as possible.

### To Turn Off

Push gas tap knob in and fully clockwise to "Off".

### Replacing the radiants

Turn the fire off and allow it to cool before attempting to remove the radiants.

For Miami remove the dress guard by holding the outer edge and flexing the centre outwards to release the upper and lower locating pins, see diagram 7.

For Firelite & Contour remove the dress guard by pressing down the two hooks at the top. Tilt the guard forward and lift out, see diagram 7.

Lift the centre radiant from the bottom and withdraw forwards, move the other radiants to the centre and remove in a similar way, see diagram 8.

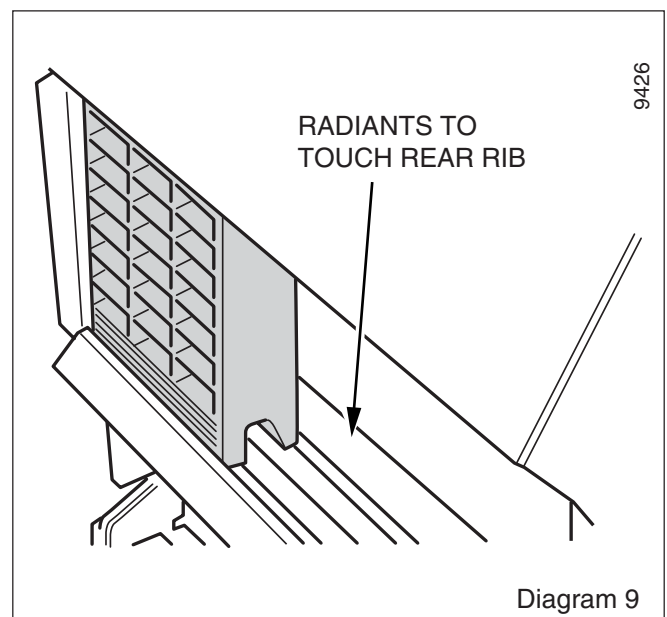
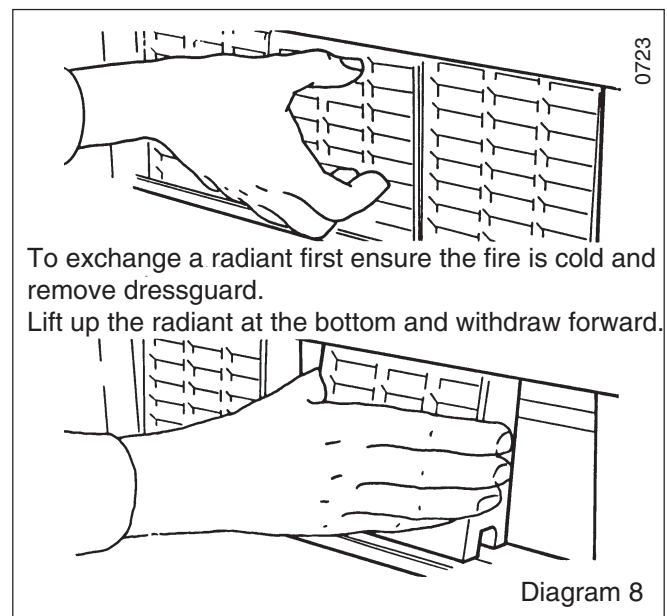
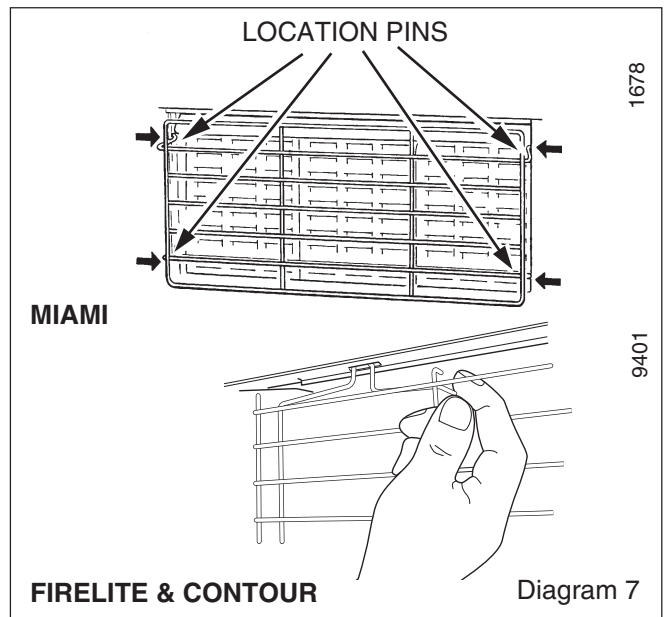
To replace, insert top of radiant first, then the bottom and lower into position, see diagram 9.

Replace the dress guard.

It is suggested that the position of the radiants be changed from time to time.

### Replacement Parts

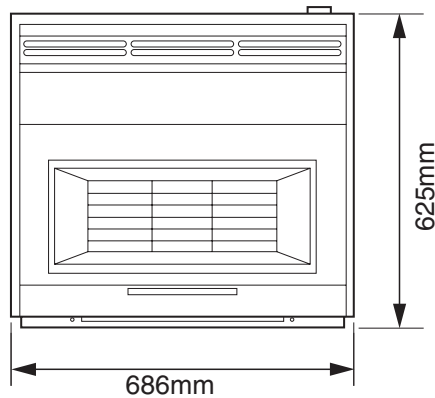
If replacement parts are required apply to your local supplier. Please quote the name of the appliance and Part No. required.



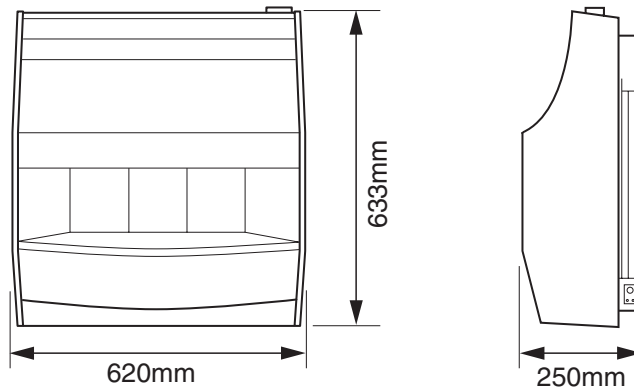
# 1 General

9449

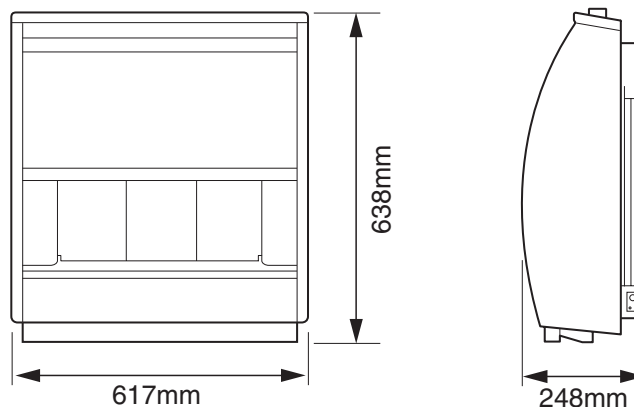
## MIAMI 4 BBU FIRE FRONT



## FIRELITE 4 BBU FIRE FRONT



## CONTOUR 4 BBU FIRE FRONT



## OVERALL DIMENSIONS

Diagram 1.1

### General Notes and Information

These gas fire fronts are to be used with specially designed Glow-worm 45/4 & 54/4 Back Boiler Units only.

The fire front and back boiler are NOT suitable for fitting to a precast flue.

The fire front is delivered packed in one cardboard carton, which contains all the parts necessary for the installation of the fire front.

If the back boiler and fire front are to be installed at the same time please read both sets of instructions before starting.

Wherever possible, all materials, appliances and components to be used shall comply with the requirements of applicable British Standards.

Where no British Standards exist, materials and equipment should be fit for their purpose and of suitable quality and workmanship.

### 1.1 Important Notice

This fire front is for use only on G20 gas.

The fire is fitted with a safety device which will shut it down if there is a lack of oxygen it also incorporates a probe which senses that the heat from the pilot flame is correct. If the probe is cool, the device will prevent any gas flow unless the control knob is held down at the ignition position.

If, for any reason, the flames go out when the fire is hot or if the fire is turned off when hot, always wait at least three minutes before attempting to relight.

If the fire shuts down frequently for no apparent reason the first things to be checked are the chimney and air inlets into the room. Any problems found must be put right, by a competent person, before the appliance is used again.

Any problems found must be put right, by a competent person, before it is used again.

This appliance does not contain any component manufactured from asbestos or asbestos related products.

# 1 General

## Sheet Metal Parts

WARNING. When installing or servicing this fire front care should be taken when handling sheet metal parts (components) to avoid any possibility of personal injury.

## 1.2 Data

<b>Gas Pressure -</b>	20mbar	
<b>Gas connection -</b>	8mm pipe from BBU gas service cock	
<b>Total weight -</b>	Miami 4	19.4kg
	Firelite 4	16.8kg
	Contour 4	18.9kg

## Injectors

<b>Upper (Centre Radiant)</b>	Bray Cat. 28/120
<b>Lower (Outer Radiant)</b>	Bray Cat. 28/250B

<b>Burner Test Pressure (Cold)</b>	17.2mbar (6.91in wg)
--	----------------------

<b>Nett Heat input</b>	
<b>Max.</b>	5.05kW (17,230Btu/h)
<b>Min</b>	1.14kW (3,800Btu/h)

<b>Pilot &amp; Atmosphere Sensing Device</b>	OP9093
--	--------

<b>Ignition</b>	Piezo-electric integral with gas tap
-----------------	--------------------------------------

<b>Aeration</b>	Non-adjustable
-----------------	----------------

<b>Data label</b>	LH Side lower corner on the inner face of back panel
-------------------	--

## 1.3 Statutory Requirements

The installation must be in accordance with these instructions.

For the user's protection, in the United Kingdom it is the law that all gas appliances are installed by competent persons in accordance with the current edition of the Gas Safety (Installation and Use) Regulations. Failure to install the appliance correctly could lead to prosecution. The Council for the Registration of Gas Installers (CORGI) requires its members to work to recognised standards.

In the United Kingdom the installation must also be in accordance with:

All the relevant parts of local regulations.

All relevant codes of practice.

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

BS 715, BS EN 1806 , BS 5440 Part 2

BS 6891, BS 1251, BS 4543 Part 2

BS 5871 Part 1, BS 1289 Part 1, BS 5440 Part 1, BS 6461 Part 1

In England and Wales, the current edition of the Building Regulations issued by the Department of the Environment and the Welsh Office

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

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

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

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

## 1.4 Fire Front Location

This fire front can only be fitted to a specially designed Glow-worm 45/4 & 54/4 Back Boiler Units, which itself has been installed in accordance with the Glow-worm Installation and Servicing Instructions.

The back boiler must have been correctly positioned in the builder's opening as the fire front is located by connection to the back boiler.

The back boiler draught diverter and combustion chamber extension acts as a support for the fire front.

The fire front flue spigot projects into the back boiler draught diverter assembly.

The gas supply is taken from the back boiler service cock.

## 1.5 Clearances

Restrictions should not be placed around the assembled fire front, see diagram 1 Instructions for Use. A shelf up to 150mm deep may be fitted above, with a minimum space of 100mm between the top of the fire front and the underside of the shelf, see diagram 1 Instructions for Use.

There should be a clearance of at least 1 metre from any part of the radiant heating surface to any combustible side wall or fixture.

# 2 Types of Installation

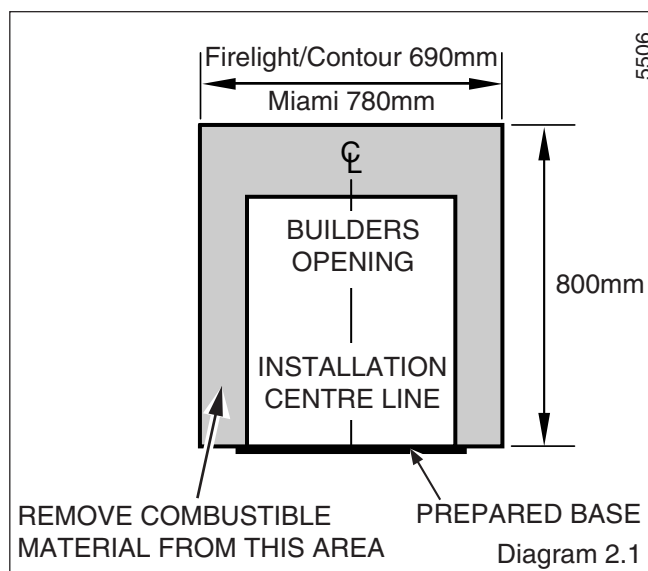
## 2.1 With Hearth

A fireproof hearth under the fire front must have the minimum dimensions as shown in diagram 3 Instructions for Use.

## 2.2 With Surround

The fire front casing should cover the opening.

Any combustible material on the fire front wall face area of the surround must be removed, see diagram 2.1. This area, to the depth removed, should then be rendered with a sand/cement mixture.





## 2 Types of Installation

### 2.3 Without Surround or Hearth

The minimum clearances for shelves or projections on the fire front wall face are as shown in diagram 1, (Instructions for Use).

The front opening in the fire front wall face should not be greater than 580mm wide.

Any combustible material on the fire front wall face area must be removed, see diagram 2.1. This area, to the depth removed, should be rendered with sand/cement mixture.

On no account must a carpet or other combustible material be laid directly under the fire, unless the minimum clearances shown in diagram 2 Instructions for Use, is achieved.

The dimension is taken from the bottom of the fire front to the top of the carpet pile or other floor covering.

## 3 Flue and Ventilation

### 3.1 Refer to the current issue of BS5440 Part 1.

The back boiler draught diverter assembly accepts the fire front flue spigot.

Note. Provision must be made during the installation of the back boiler for the total ventilation requirement for the combined appliance. See relevant section in the Back Boiler Installation Instructions.

## 4 Fire Front Preparation

### 4.1 Unpacking

This appliance is supplied completely assembled except for :  
3 radiants which are in a cardboard pack inside the firebox.

Literature pack.

Fittings pack.

Gas feed pipe and fittings.

Remove all the items carefully to prevent damage. Some items may be contained in the packaging fittings - Examine the packaging carefully before discarding. Check that all the items are present and undamaged.

*MIAMI only:* Remove the wood transit strips, secured with panel pins, from bottom of the wooden case sides.

### 4.2 Appliance Preparation

Remove the two transit screws from near the top of the back panel wing, see diagram 4.1.

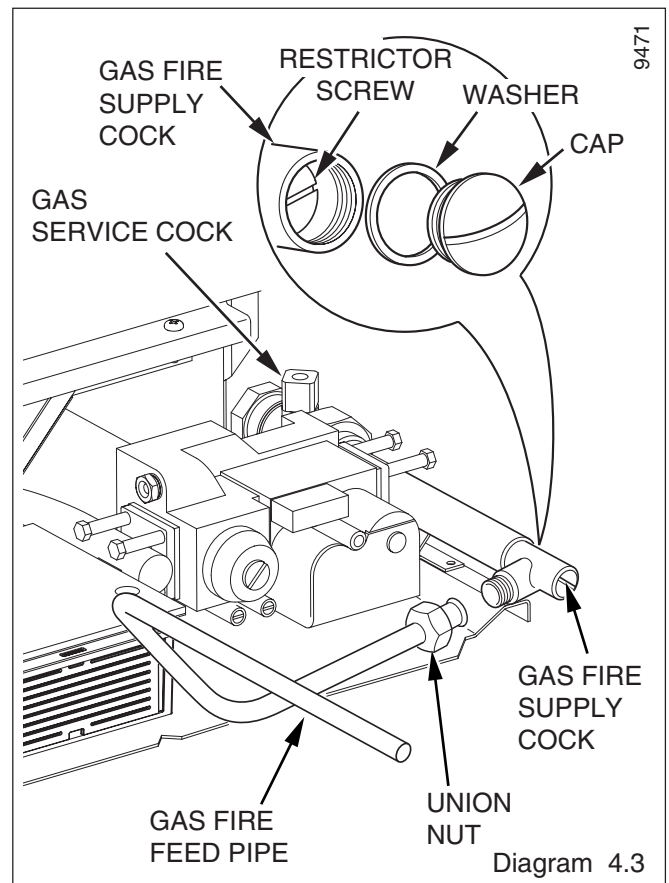
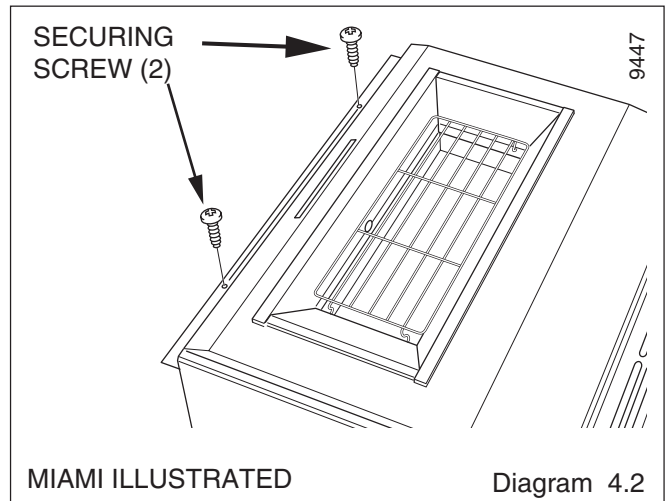
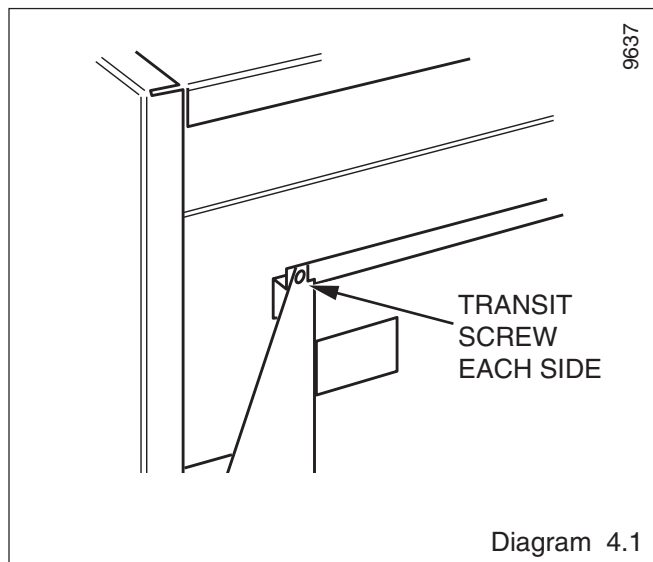
Take care not to damage the rear surround side louvres when placing the fire front on its back, remove the two case retaining screws located at the front of the case near the bottom corners, see diagram 4.2.

Remove the control knob by pulling clear of the gas tap spindle.

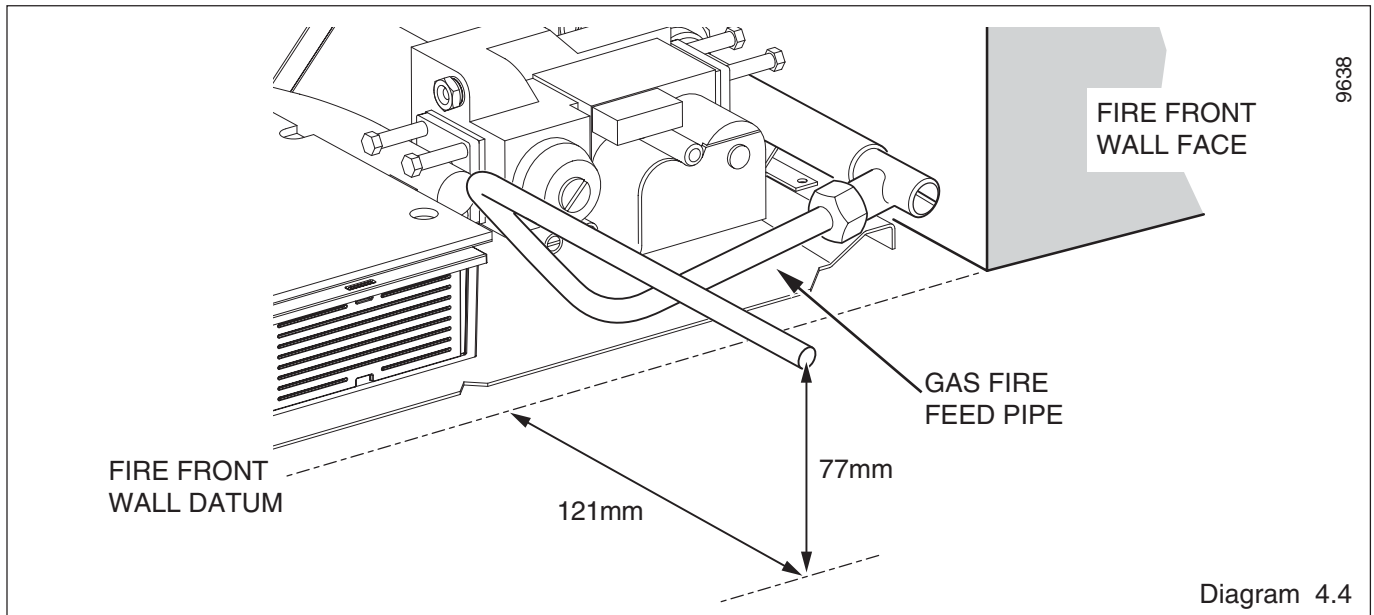
Ease the bottom of the casing upwards and away to disengage the upper lugs, withdraw from the chassis.

Place casing aside, on its back, until required.

Remove the radiant pack and place carefully on one side until required.



## 4 Fire Front Preparation



### 4.3 Gas Supply to Fire Front

Check that the gas service cock is in the Off position, diagram 4.3.

NOTE: The gas fire feed pipe will need cutting at the plain end at a point depending upon the position of the BBU relative to the fire front wall face.

From the fittings pack, fit the union nut to the flanged end of the gas fire feed pipe.

Connect the gas fire feed pipe assembly to the gas fire supply cock, see diagram 4.3.

The gas fire feed pipe must project from the fire front wall face, 121 mm, see diagram 4.4. Measure and cut to suit.

From the fittings pack, fit the gas fire isolating valve to the cut end of the gas fire feed pipe, ensuring it is positioned correctly, using an olive and nut, see diagram 4.5.

When fitted check that the gas fire feed pipe, where it projects from the fire front wall face, is level and the centre of the feed pipe is 77 mm above the back boiler base plate.

Tighten connections.

Make sure that the gas fire isolating valve is in the Off position by removing cap and turning restrictor screw clockwise, see diagram 4.5.

Turn the gas service cock to the On position.

Turn the gas fire supply cock to the On position by removing cap and turning restrictor screw anti-clockwise, see diagram 4.3.

Pressure check the installation pipework for gas soundness. In the United Kingdom check in accordance with the current edition of BS6891. In the Republic of Ireland check in accordance with the rules in force.

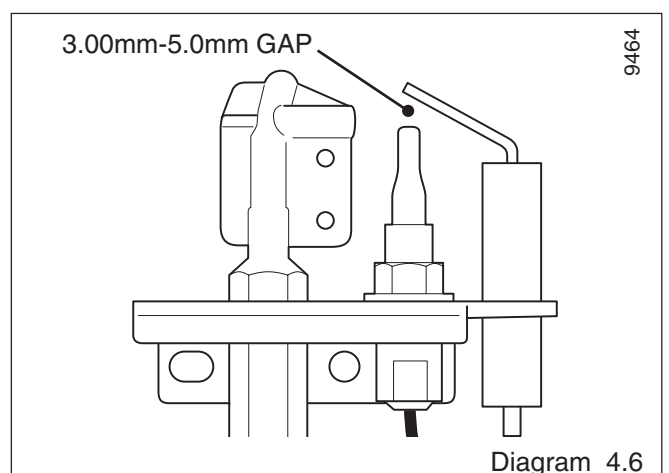
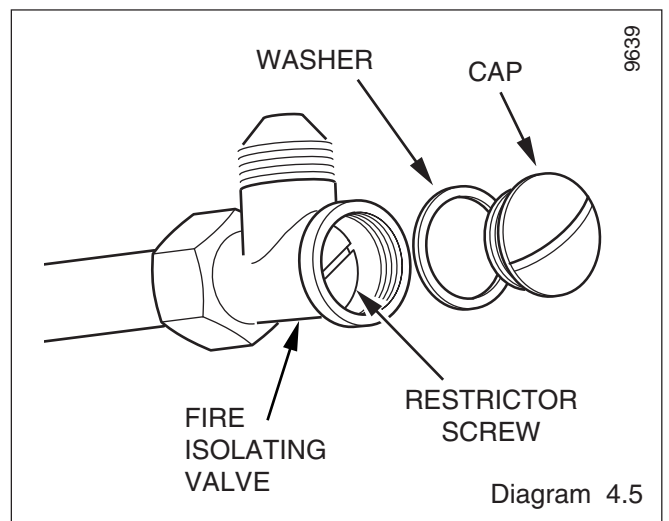
### 4.4 Check ignition spark

Before attempting to install, it is worth checking that the piezo electric spark ignition system operates satisfactorily.

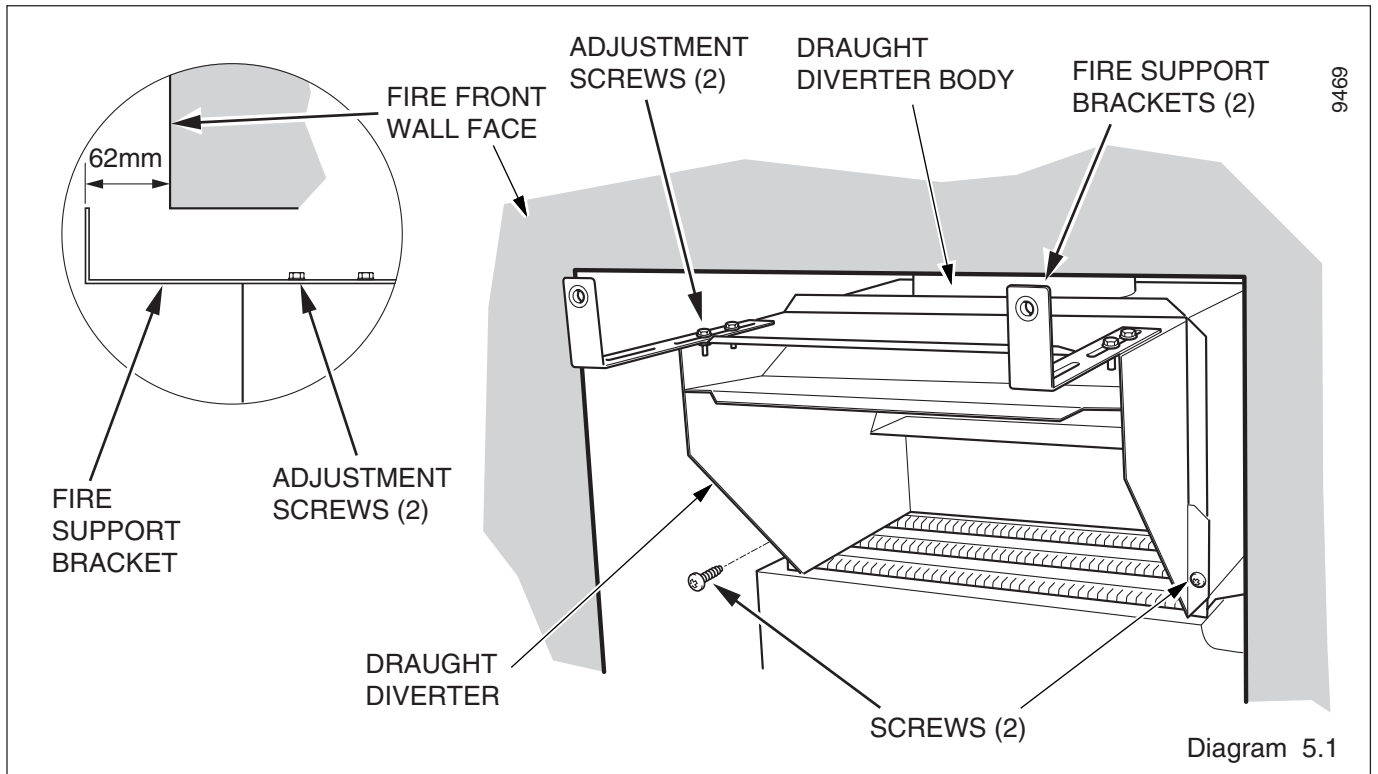
To initiate the spark, temporarily refit the control knob to the tap spindle. Depress the control knob and while keeping it depressed, turn to the 1/IGN position. A spark should track from the electrode pin to the thermocouple tip. If there is no spark or incorrect tracking, check that the spark gap is between the electrode wire and thermocouple tip, see diagram 4.6.

If the spark gap is correct, check the ignition wiring.

Remove the control knob after checking.



## 5 Installation



### 5.1 Fire Front Fixing

Slide the draught diverter, supplied with the boiler, into the draught diverter body on the BBU and secure with two 5mm dog point screws, see diagram 5.1.

Fit the two upper fire support brackets on to the draught diverter with two dog point screws each and adjust so that the end of each bracket extends about 62mm from wall face, see diagram 5.1.

Check that the measurement between the centres of the fire securing holes on the brackets is 238mm and adjust accordingly, ensuring that the brackets are as near to 90° as possible from the wall face, tighten the dog point screws.

Note. The Boiler User Control is supplied coiled and taped onto the controls, remove tape and uncoil, carefully place to the right hand side of boiler.

Take the combustion chamber extension, supplied with the back boiler, and fit the lower fire support brackets with two dog point screws on each but do not tighten.

Fit the combustion chamber extension on the two BBU combustion chamber front screws and secure, see diagram 5.2.

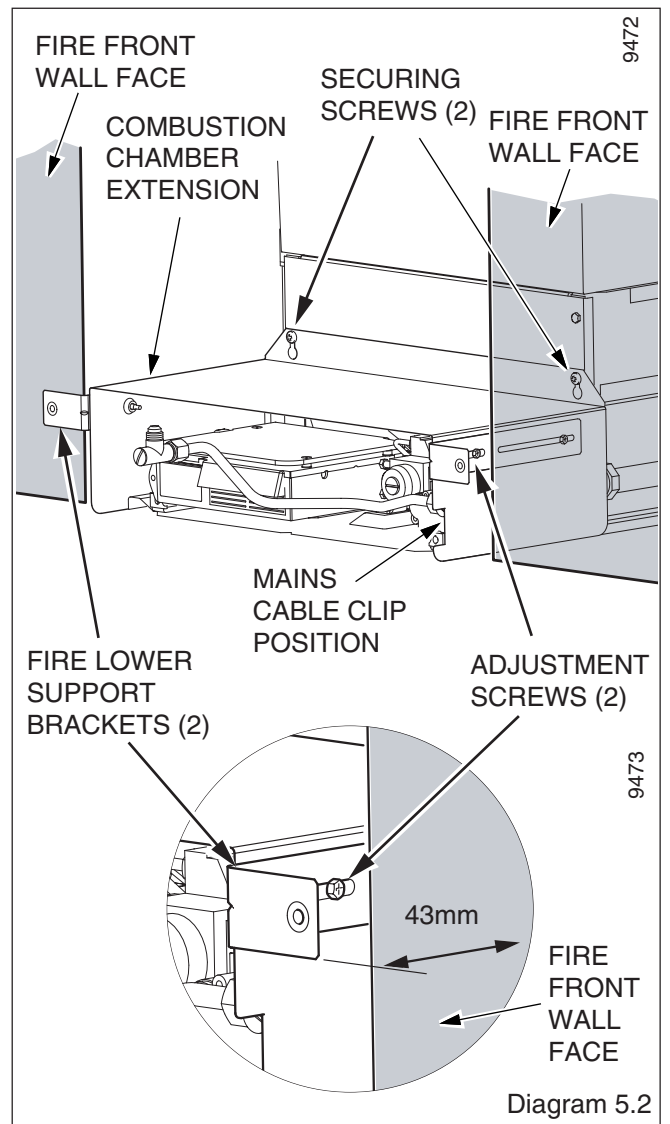
Note: If the mains electrical supply cable is routed from the right, secure it with a cable clip, from fittings pack, to the combustion chamber extension, see diagram 5.2.

Adjust the two lower support brackets so that the end of each bracket extends about 43 mm from the fire front wall face, see diagram 5.2.

Lift the fire chassis and position the spigot centrally into the back boiler unit draught diverter assembly, gently slide the chassis into place.

Note: It may be necessary to temporarily remove the floor protection plate, see diagram 5.4 to ease installation and fitting of gas fire feed pipe to fire.

Secure fire chassis to the fire support brackets using the M5x20mm dog point screws, see diagram 5.3.



## 5 Installation

### 5.2 Gas Supply Connection

Connect and tighten the union nut at the fire front isolating valve, see diagram 5.4.

Refit floor protection plate if removed.

Turn gas on at the fire isolating valve by removing cap and turning restrictor screw anti-clockwise.

Pressure check the installation pipework for gas soundness. In the United Kingdom check in accordance with the current edition of BS6891. In the Republic of Ireland check in accordance with the rules in force.

### 5.3 Boiler User Control

Place the boiler user control in position from the inside to the aperture on the bottom of the R/H louvre of the fire chassis, making sure that it is the correct way up, see diagram 5.5.

Secure from the outside to the louvre with the screws, from fittings pack, see diagram 5.5.

### 5.4 Radiants Installation

Remove radiants from packaging and fit as described in "Replacing Radiants" in the Instructions for Use section of these instructions.

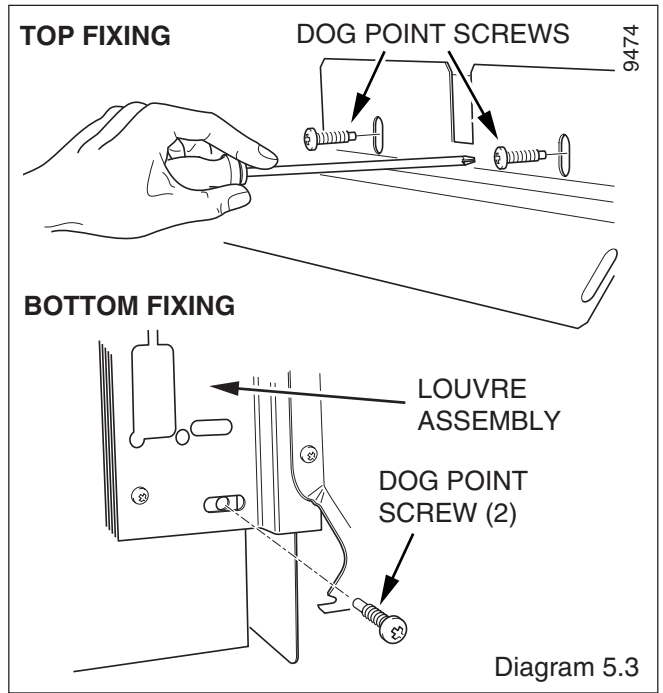


Diagram 5.3

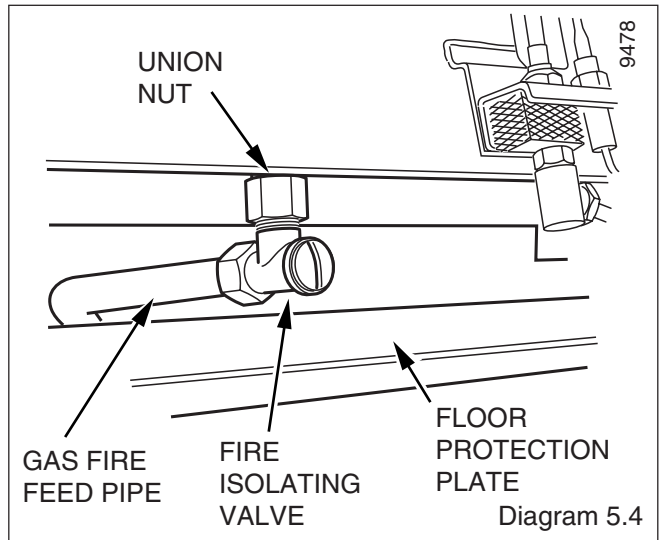


Diagram 5.4

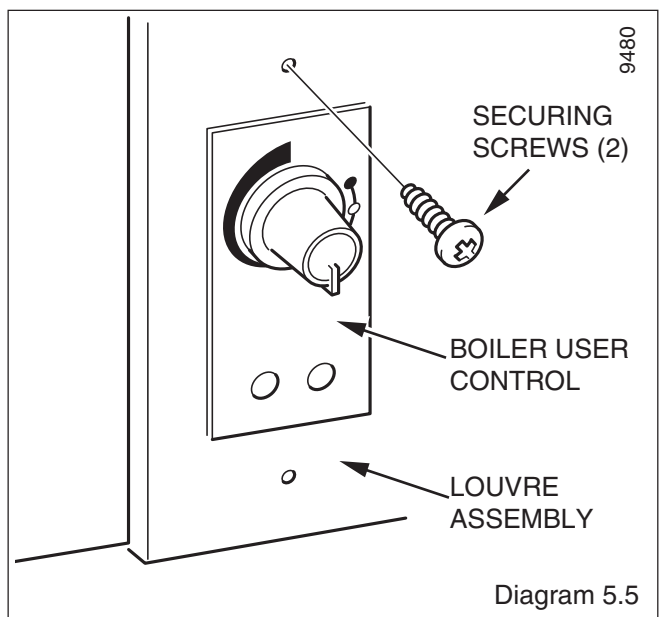


Diagram 5.5

## 6 Control & Pressure Checks

### 6.1 Check Control Settings

If closed, open the fire isolating valve.

To check the control positions temporarily place the case loosely over the chassis. Fit the control knob over the gas tap spindle.

Depress the control knob and turn anticlockwise partially towards the 1/IGN position until some resistance is felt. Keep depressed at this position for a few seconds to purge air from the system then, while keeping it depressed, turn fully to the 1/IGN position, two audible clicks will be heard. A spark should be generated at the pilot while turning. The spark should ignite the pilot.

When pilot ignition has been achieved, keep the control knob depressed for approximately ten seconds to allow the thermocouple probe to warm up and then release it. If the pilot does not remain alight, ensure that the air has been purged, that the pilot orifice is clear and that the thermocouple connections are sound. Replace the pilot unit if necessary (see servicing section of this manual).

Check all the control settings. These are:

Knob Position	Radiants Condition
2	Centre radiant on low. Outer radiants off.
3	Centre radiant fully on. Outer radiants off.
4	Centre radiant fully on. Outer radiants on low.
5	All radiants fully on.

### 6.2 Flame Supervision Device

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

Check that the system operates properly as follows;

Light the appliance. Set at position 5 and leave for one minute.

Turn back to "OFF" to extinguish the pilot. Note the time when the pilot goes out. Listen for a snap sound at the gas tap. Note the time when the sound is heard. This sound is caused by an electromagnetic valve shutting off the gas supply through the tap. The valve is located in the body of the tap. The valve should operate within 60 seconds of the pilot going out. If the valve does not operate within this time limit do not allow the appliance to be used until the fault has been corrected.

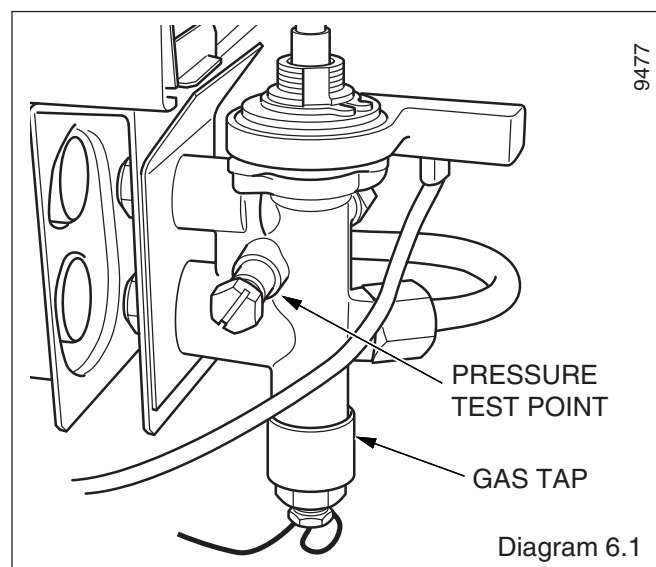


Diagram 6.1

### 6.3 Flue Blockage Safety Device

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

This monitoring system, or any of its parts, must only be exchanged using Glow-worm authorised parts.

### 6.4 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.

Detach the control knob from the spindle. Remove the case.

Check the burner pressure by fitting a pressure gauge at the test point. The test point is on the gas tap, see diagram 6.1. Check the pressure with the appliance alight and set at maximum output (Control position 5).

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.

If all the above checks are satisfactory, continue with the installation. If not, check the control and ignition circuitry and components as described in the servicing section of this manual.

### 6.5 Case Fitting

Remove the protective wood transit strips (secured with panel pins) from the bottom of the wooden case sides.

Place the case over the chassis. Make sure that the channel near the top of the rear of the outer case locates fully into the wings of the chassis back panel, see diagram 6.2.

Fit the control knob firmly on to the control spindle.

Refit the two case retaining screws at the front of the case near the bottom corners.

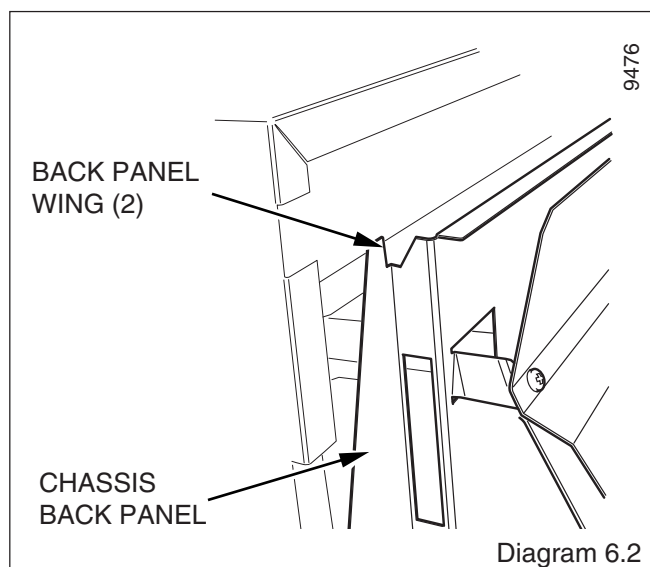


Diagram 6.2



## 7 Spillage Check

### 7.1 Spillage Check

Note:

1. Take care. The appliance gets hot during testing.
2. To carry out the test you will need a 500mm emplume tube and a torch.

#### TEST: WHERE NO FAN IS PRESENT

Close all outside doors and doors and windows in the room in which the appliance is installed.

Light the fire front only. After 5 minutes apply spillage test. Position the smoke match tip under the fire front flue duct on the draught diverter lip by inserting the emplume tube 380mm through the side louvres, see diagram 7.1. During test smoke should be drawn into the draught diverter and between the fire front flue duct and the draught diverter lip. If spillage occurs leave fire front alight for up to a further 10 minutes and repeat tests.

Next, light the boiler only and after 10 minutes apply spillage test by positioning smoke match tip as described above, and shown in diagram 7.1. If spillage occurs, leave the boiler alight for up to a further 5 minutes and repeat test.

Now light the boiler and fire front. After 10 minutes apply spillage tests by positioning smoke match tip as described above, and shown in diagram 7.1. During tests smoke should be drawn into the boiler draught diverter. If spillage occurs, leave the boiler and fire front alight for up to a further 5 minutes and repeat tests.

Note: If spillage does occur smoke will be visible exiting the top of the fire casing.

#### TEST. WHERE A FAN IS PRESENT

(A fan means an extractor fan, or a fan for other open flued appliances, or a circulating fan for a warm air unit, whether or not gas fired). With the fan switched off carry out the appropriate spillage test with all doors and windows closed, as above.

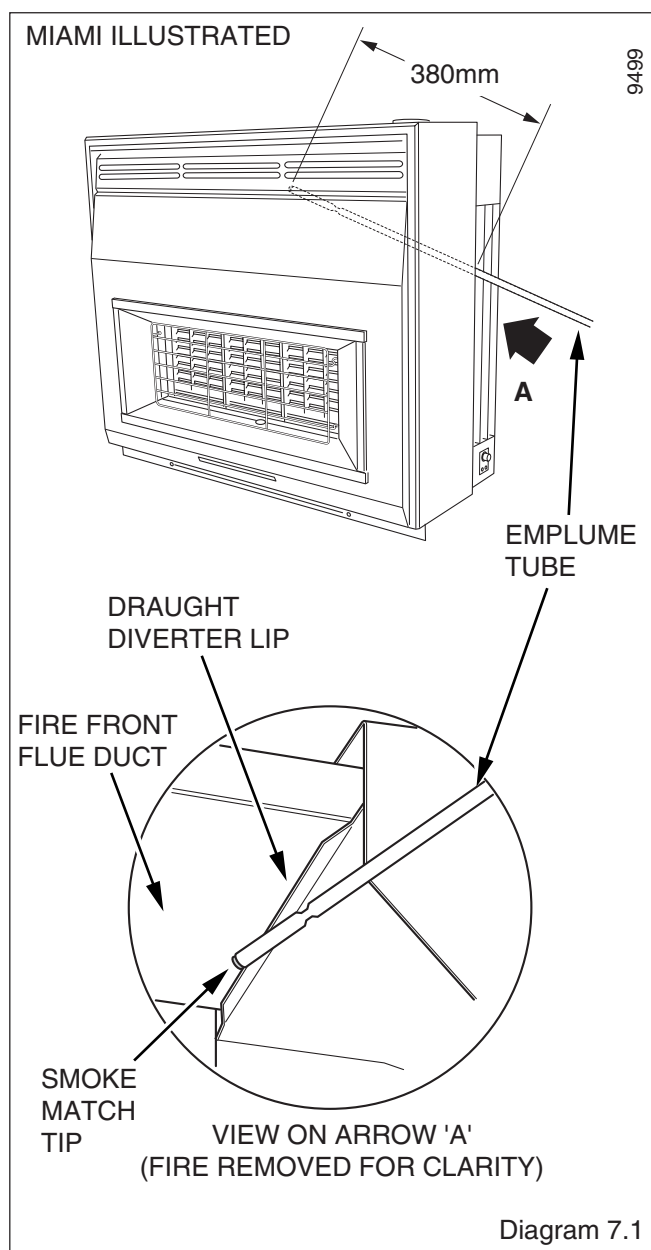
If the above tests are satisfactory continue as follows,

Open all doors connecting the room containing the appliance and the room in which the fan is fitted. Close all other doors and windows in the premises.

If the fan is in the same room as the appliance close all doors and windows in that room. Switch on fan and repeat spillage test as above.

In ALL cases, if spillage continues after the specified test periods steps MUST be taken to put right the fault(s).

Possible causes include, flue obstructions, down draught or restricted fresh air supply into the room.



## 8 Final Review

Please ensure the "Benchmark" logbook (supplied with Back Boiler Unit) is completed and left with the user.

Make sure that the dress guard is securely in position.

Check the operation of the fire at all control positions.

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

Advise the customer how to operate the fire and boiler.

Explain to the customer that the appliance has a flame failure and spillage monitoring system. Point out the explanation of this system in the "Instructions for Use". Advise that if the appliance goes out for any reason, they must wait at least three minutes before relighting. Stress that if the monitoring system repeatedly shuts off the appliance that it must be switched off and their local installation or service organisation must be contacted or the local gas undertaking contacted.

Advise that the fire may give off a slight odour while new. This is quite normal and it will disappear after a short period of use.

Advise the customer that they should read the Instructions for Use before operating the fire and always follow the advice in the section headed "Cleaning your fire".

Advise the user that the appliance can be lit with a match if necessary by inserting it through the central opening at the bottom of the radiant box.

Recommend that the appliance should be serviced and the chimney inspected by a competent person (In the UK a CORGI registered person) at least annually.

If the appliance is in premises in the United Kingdom occupied by a tenant, point out that by law a landlord must have any gas appliance, flue and pipework which is situated in a tenant's premises checked for safety at least every 12 months.

Mention that the radiants may become brown with use, that this is quite normal and has no adverse effect and that they can be replaced without removing the case, refer "Instructions for Use", replacing radiants section.

Reminder-leave these instructions and the "Benchmark" logbook with the user.



## 9 Servicing and Replacement of Parts

### Servicing Notes

MAKE SURE FIRE FRONT IS COLD.

Servicing must be carried out by a competent person.

After completing a service, always test for gas soundness and carry out functional check of controls.

Unless stated otherwise all parts are replaced in the reverse order to removal.

Always turn off the gas supply at the fire isolating valve, refer diagram 5.4.

NOTE: It is recommended that the back boiler be serviced before refitting the fire front case and radiants, refer to Back Boiler Installation Instructions.

### 9.1 Servicing

Remove the control knob by pulling clear of the gas tap spindle.

Remove two case retaining screws located at the front of the case near the bottom corners.

Lift the case up and forward to clear the rear top location.

When refitting make sure that the channel near the top of the rear of the outer case locates fully into the wings of the chassis back panel, see diagram 6.2 in the installation section.

Make sure that the radiants are not dislodged when refitting the case.

Remove the radiants, Refer "Instructions for Use".

Clean all around the fire front chassis with a soft brush or vacuum cleaner.

Check the condition of the electrode, thermocouple and dust cage, clean with a soft brush, see diagram 9.1.

Make sure that the electrode spark gap is as shown in diagram 4.6.

Clean injectors as necessary, but, Do not clean injectors with a wire or sharp instrument.

Clean the burner with a soft brush, or vacuum cleaner.

NOTE: It is recommended that the back boiler be serviced, refer to Back Boiler Installation Instructions.

### Replacement of Parts Notes

REMEMBER: When replacing a part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Hepworth Heating Ltd.

### 9.2 Radiants

Refer "Instructions for Use" section, replacing radiants.

### 9.3 Pilot Unit

Remove the case as section 9.1.

Disconnect the thermocouple connection at the bottom of the gas tap and disconnect the pilot pipe from the gas tap, see diagram 9.2.

Remove the first securing the dust cage to the pilot unit & burner bracket and carefully remove the dust cage and place aside, see diagram 9.1.

Remove the screw securing the pilot unit to the burner bracket.

Disconnect the electrode lead from below the pilot electrode, see diagram 9.1.

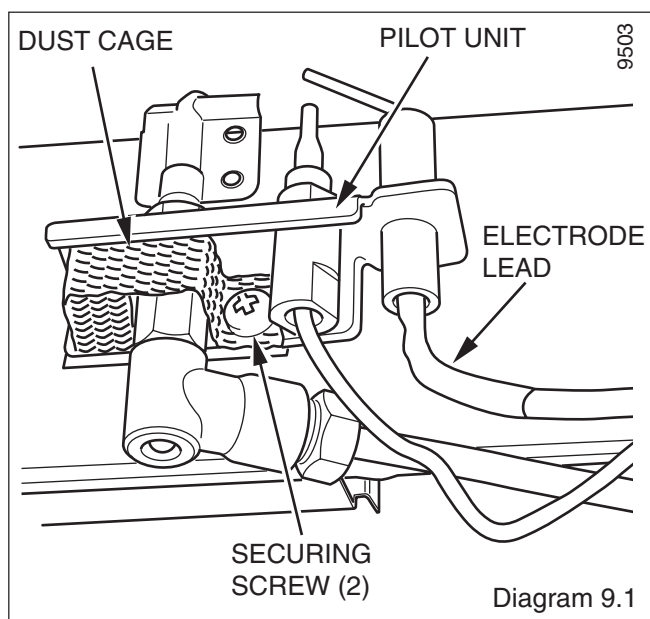
Carefully remove the pilot unit together with the pilot pipe then disconnect the pipe from the pilot unit.

Replace 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.



## 9 Servicing and Replacement of Parts

### 9.4 To Remove the Piezo Generator

Remove the case as section 9.1.

Disconnect the electrode lead from below the pilot electrode, see diagram 9.1.

Disconnect the control spindle & adaptor from the gas tap by removing the split pin, see diagram 9.2. Lift the adaptor clear of the gas tap spindle.

Remove the circlip holding the piezo generator to the tap, see diagram 9.2.

Replace in the reverse order. Make sure that the control knob with spindle is correctly turned to agree with the gas tap position before refitting the split pin.

### 9.5 To Remove The Complete Burner Module, Pipes and Pilot

Remove the case as section 9.1.

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

Disconnect the control spindle & adaptor from the gas tap by removing the split pin, see diagram 9.1. Lift the adaptor clear of the gas tap spindle.

Detach the left end of the burner module from the radiant box by removing one screw, see diagram 9.3.

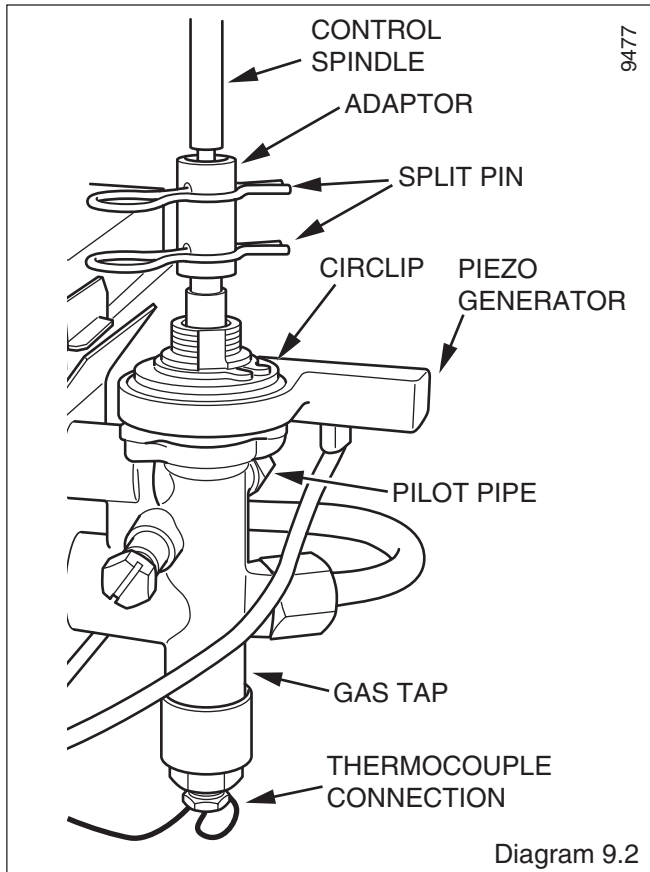
Carefully slide the burner module to the right to free it from the right side of the radiant box.

Remove the pipes, gas tap or injectors as required.

Replace in the reverse order.

Take care when replacing the injectors. The injectors have ceramic tips at each end. It is important not to allow jointing compound to get on either end of the injectors.

Make sure that the control knob with spindle is correctly turned to agree with the gas tap position before refitting the split pin.



### 9.6 To Grease the Gas Tap

Remove the burner module as section 9.5.

Remove the circlip holding the piezo generator to the tap.

Remove the two screws from the head of the tap.

Remove the spindle and spring from the tap.

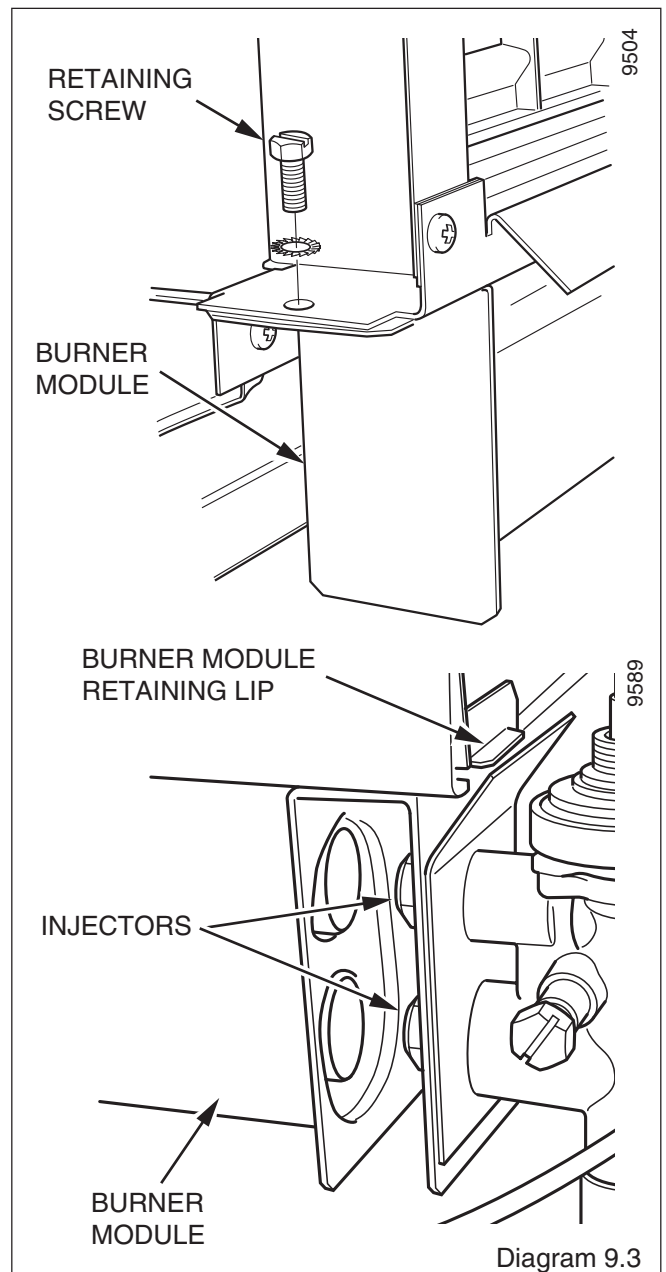
Note the position of the slot in the plug. Mark this position on the tap body.

Rotate the plug and pull it out of the tap.

Clean and grease the plug lightly with a suitable grease. Do not apply excessive grease. Particularly, make sure that the gas ports are not restricted by grease.

Push the plug back into the tap body. Line up the slot in the plug with the mark previously made on the tap body.

Reassemble in the reverse order making sure that the components are correctly engaged. Check the operation of the tap and piezo. Make sure that the control knob with spindle is correctly turned to agree with the gas tap position before refitting the split pin.



# 10 Fault Finding

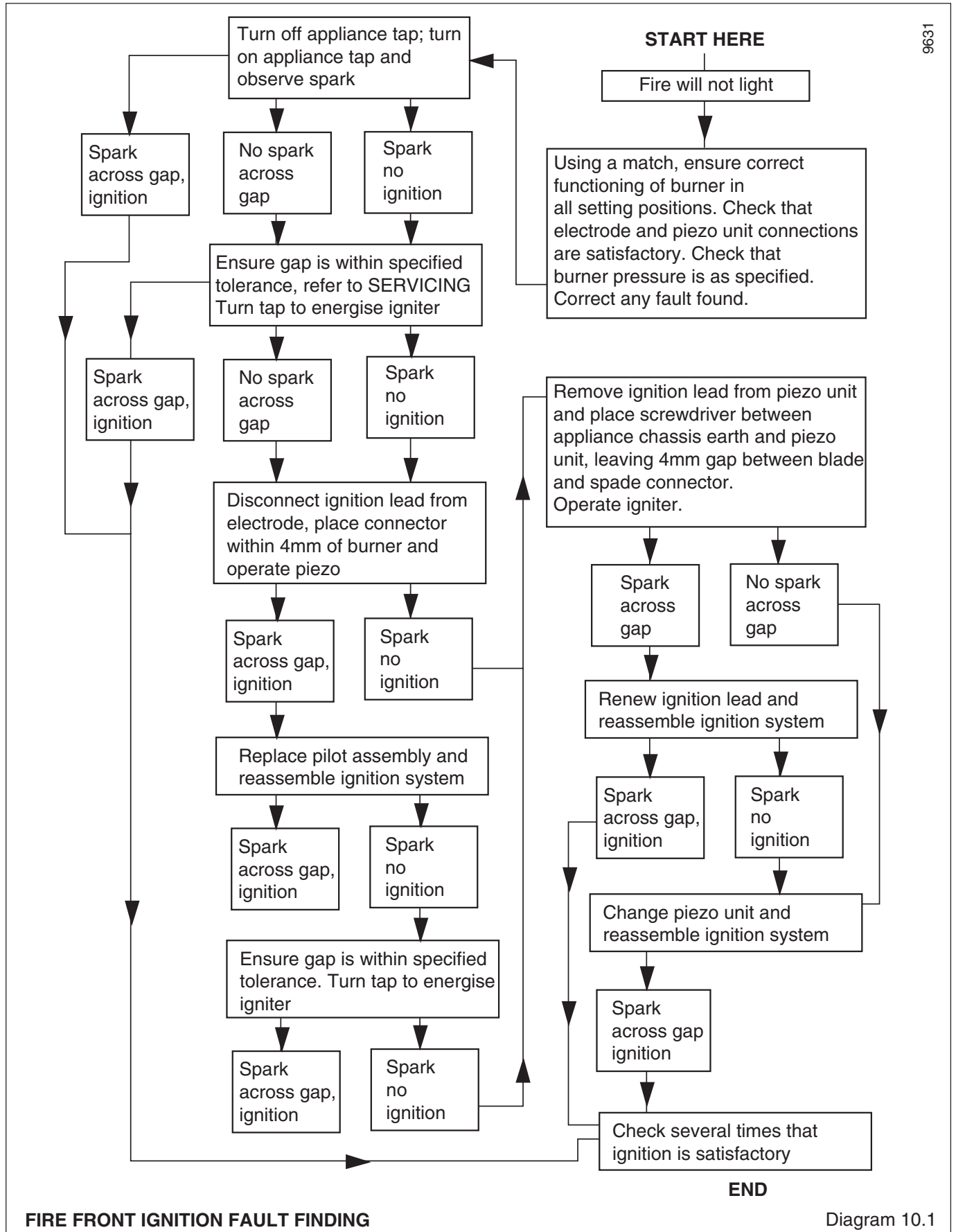
## 10.1 Fire Front Ignition

Remove casing as section 9.

Refer to Fire Front Ignition Fault Finding, diagram 10.1.

## 10.2 Flue Blockage Safety Device

If the device operates it indicates there could be a problem with the chimney. First make sure air vents are free of obstructions, by carrying out spillage checks as section 7.



# 10 Fault Finding

5243

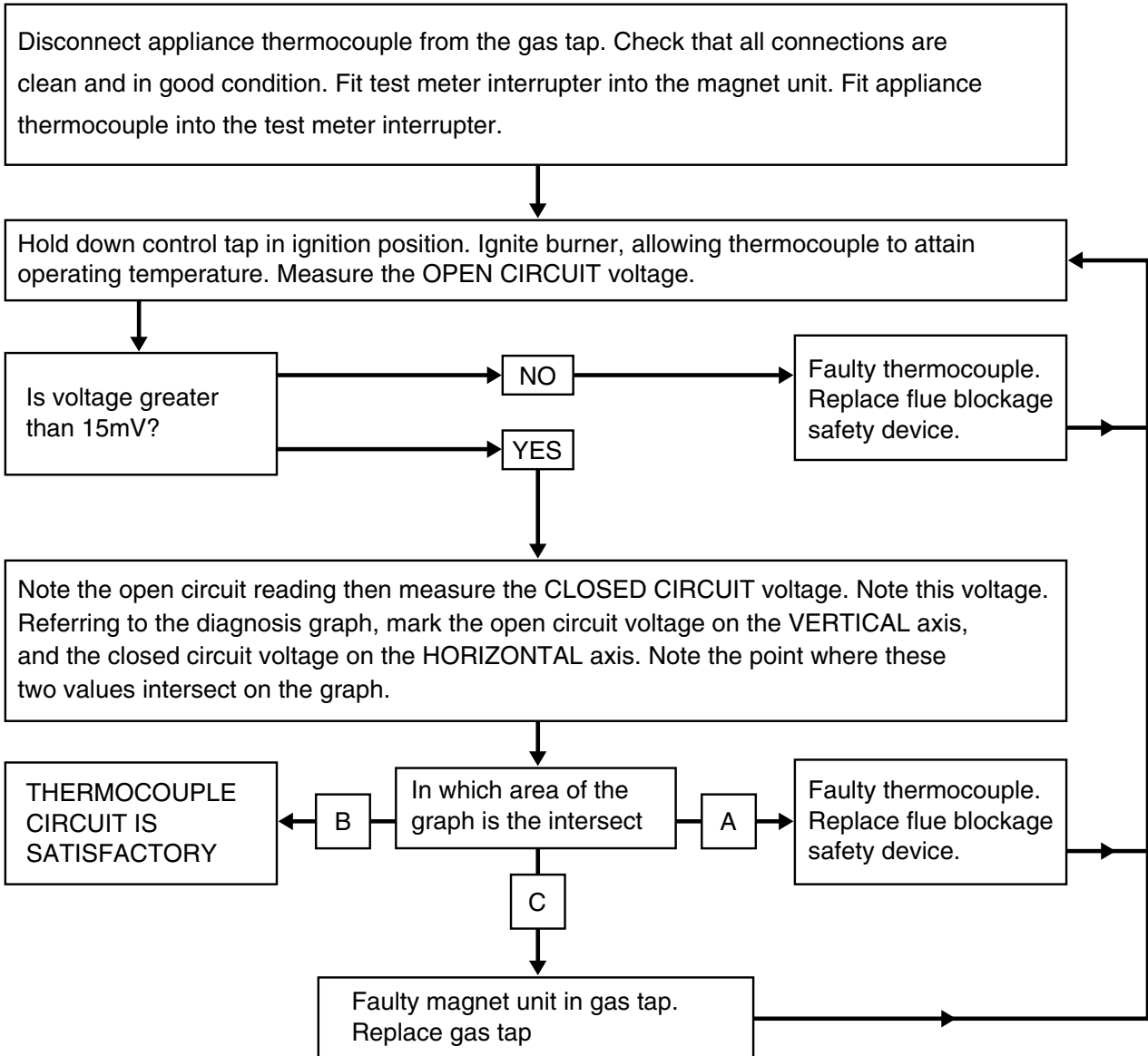


Diagram 10.2

## 10.3 Thermocouple

To test a thermocouple, a meter with a range of 0 to 30mV is required together with a thermocouple interrupter test unit.

Refer to Fault Finding diagram 10.2 and Diagnosis Graph diagram 10.3.

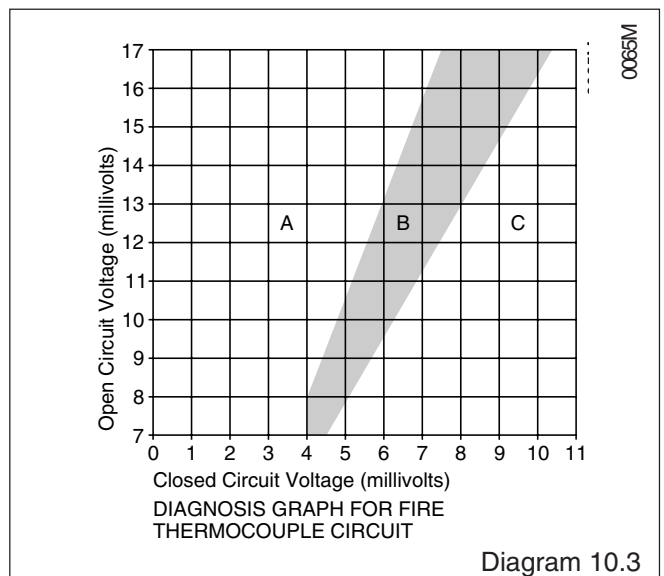


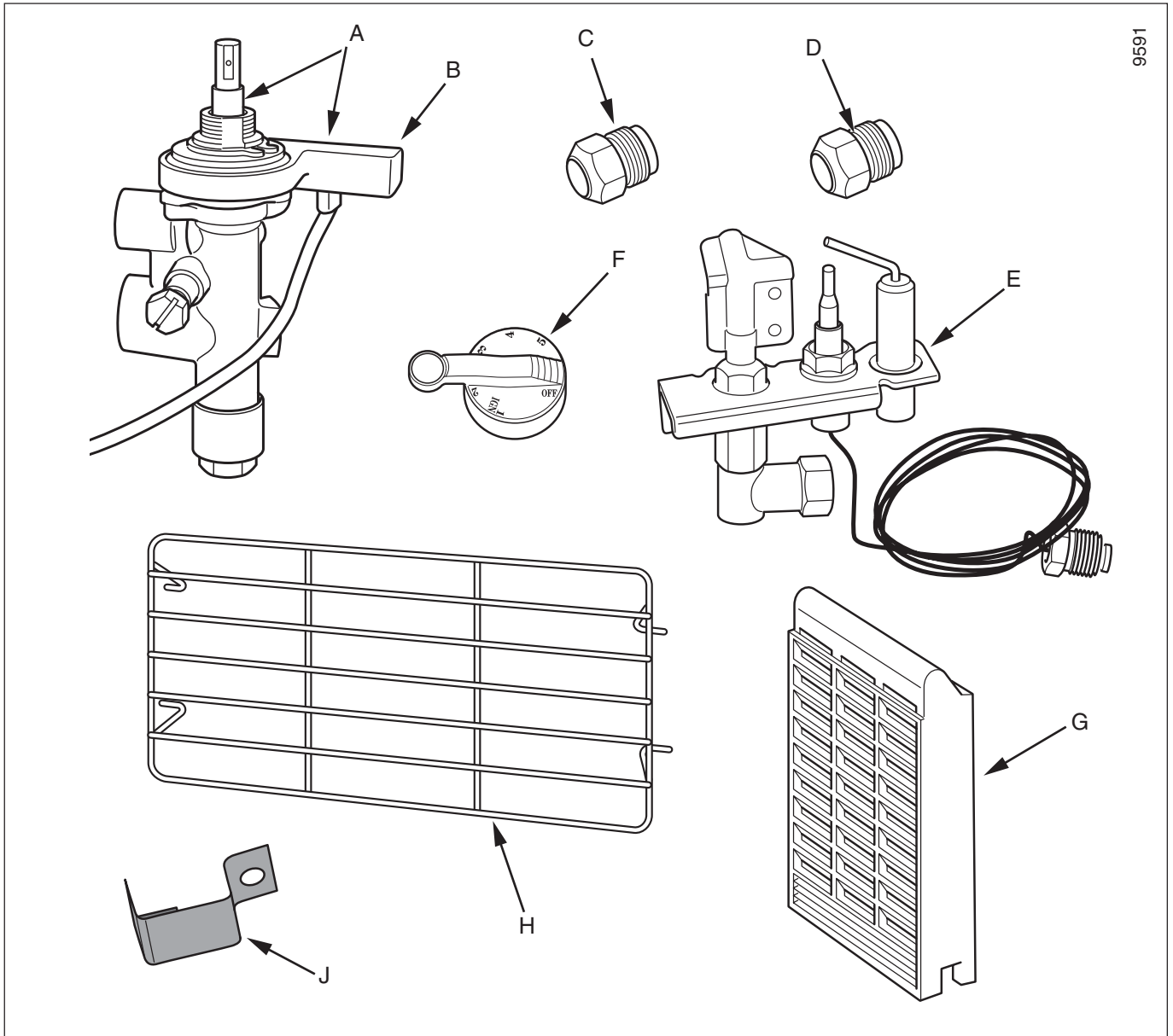
Diagram 10.3

## 11 Spare Parts

When spare parts are required apply to your local supplier.

Please quote the name of the appliance, also the serial number which can be found on the data label on the appliance.

If ordering from the local gas undertaking the appropriate appliance GC number should also be quoted together with the GC number of the part.



KEY	DESCRIPTION	No. OFF	PART No	GC PART No
A	Gas Tap & Spark Generator	1	462500	*****
B	Spark Generator	1	462501	*****
C	Upper injector Bray Cat.28 Size 120	1	462502	*****
D	Lower injector Bray Cat.28 Size 250B	1	462503	*****
E	Pilot Unit	1	462504	*****
F	Control Knob - Firelight	1	462505	*****
	- Contour, Miami	1	462506	*****
G	Radiant	3	462507	*****
H	Dress Guard - Miami (Illustrated)	1	427504	152 744
	Firelite	1	462508	*****
	Contour	1	462508	*****
J	Dust Cage	1	462509	*****

*Because of our constant endeavour for improvement details may vary slightly from those in the instructions.*