

## **WARNING**

**This information is a copy of an original archive, therefore Aga cannot be held responsible for its continued accuracy.**

# THE COALBROOKDALE GS1i

## Installation and Servicing Instructions

### Closure Plate Model

#### Consumer Protection Act 1987

As manufacturers and suppliers of cooking and heating products, in compliance with Section 10 of the Consumer Protection Act 1987, we take every care to ensure, as far as is reasonably practicable, that these products are so designed and constructed as to meet the general safety requirement when properly used and installed. To this end, our products are thoroughly tested and examined before despatch.

**IMPORTANT NOTICE:** Any alteration that is not approved by Aga-Rayburn, could invalidate the approval of the appliance, operation of the warranty and could also affect your statutory rights.

#### Control of Substances - Health and Safety Important

This appliance may contain some of the materials that are indicated. It is the Users/Installers responsibility to ensure that the necessary personal protective clothing is worn when

handling, where applicable, the pertinent parts that contain any of the listed materials that could be interpreted as being injurious to health and safety, see below for information.

**Firebricks, Fuel beds, Artificial Fuels** - when handling use disposable gloves.

**Fire Cement** - when handling use disposable gloves.

**Glues and Sealants** - exercise caution - if these are still in liquid form use face mask and disposable gloves.

**Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre, Kerosene Oil** - may be harmful if inhaled, may be irritating to skin, eyes nose and throat. When handling avoid inhaling and contact with skin or eyes. Use disposable gloves, face-masks and eye protection. After handling wash hands and other exposed parts. When disposing of the product, reduce dust with water spray, ensure that parts are securely wrapped.

GAS DATA		
	NAT GAS	PROPANE
<b>MAX</b>	<b>kW</b>	<b>kW</b>
HEAT INPUT (GROSS)	7.0	6.
HEAT OUTPUT (GROSS)	3.95	3.41
<b>MIN</b>	<b>kW</b>	<b>kW</b>
HEAT INPUT (GROSS)	3.35	3.35
HEAT OUTPUT (GROSS)	1.87	1.87

Gas Connection 8mm OD Tubing  
Ignition - Piezo Spark Generator  
Appliance Weight 63.5 kg

## INTRODUCTION

The Coalbrookdale GS1i is factory set to operate on natural gas or propane (See data label) and is available with a standard or traditional door option.

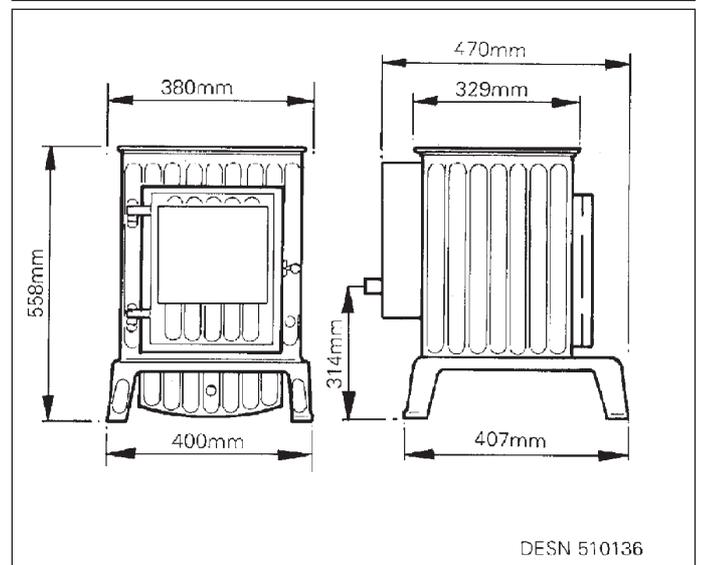
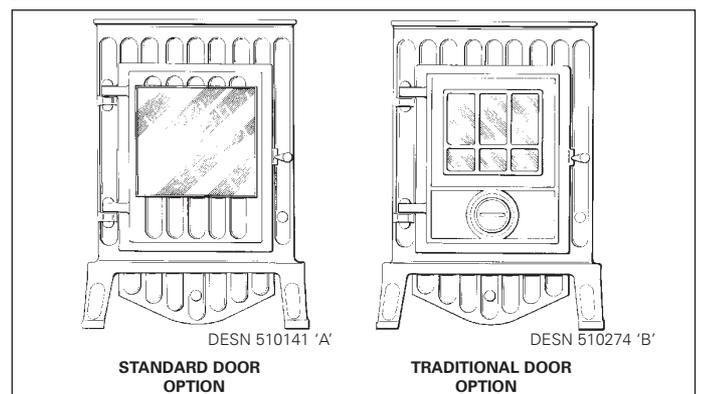
Due to newness the stove may give off a slight smell for a short period after commissioning. This is quite normal and will disappear after a few hours operation, open windows and doors if required.

The Coalbrookdale GS1i has one access door as part of its design. The glass fronted door is for access to the coals and apart from initial commissioning of the stove, or in case the pilot is required to be lit with a taper due to malfunction of the spark ignition system. **UNDER NO CIRCUMSTANCES MUST THE STOVE BE OPERATED WITH THIS DOOR OPEN OR IF THE GLASS IS CRACKED OR BROKEN.**

The Coalbrookdale GS1i has been designed similar to a solid fuel stove to relevant safety standards, but during use, many parts of the appliance can become **HOT** to touch. We recommend that you provide and secure a fireguard complying with BS 6539 when the room is used by elderly, infirm or young persons.

Note: The illustrations show the appliance fitted with the standard door option.

SETTING PRESSURE (COLD)	
NATURAL	PROPANE
MAX	MAX
mbar	mbar
17.7 ± 1	36.0 ± 1
Burner Injector Nat-Cat 82-420	Burner Injector Propane Cat 92-190
Pilot Injector Nat-NG 9008	Pilot Injector Propane-LPG 9206



## INSTALLATION INSTRUCTIONS

The installation of the appliance must be in accordance with the relevant requirements of the Gas Safety (Installation and Use) Regulations 1984 (as amended), Building Regulations and the Building Standards (Scotland) (Consolidation) Regulations. It should be in accordance also with any relevant requirements of the local Gas Region and Local Authority, and the relevant recommendations of the following current British Codes of Practice & Standards:

**BS. 6891:** Installation of pipes and meters. Low pressure installation pipes.

**BS. 5440:** Parts 1 Flues & Part 2 Air Supply

**BS. 5871:** Part 1 Installation of Gas Fires. Convector Heaters, Fire/Back Boilers.

**BS. 6461:** Codes of Practice for factory-made insulated chimneys for internal application.

**BS. 8303:** Solid fuel appliance flue system.

In your own interests and that of safety to comply with the law all gas appliances should be installed by competent persons (Corgi Registered) in accordance with the above regulations and with these instructions. Failure to install the appliance correctly could lead to prosecution.

## THE LOCATION

To ensure adequate circulation of convected air it is recommended that the stove should not be installed into a recess of a depth any greater than 300mm.

The appliance must be installed on a base of incombustible material, at least 12mm thick, extending to at least the front of the stove supporting legs or level with the supporting front legs when fitted in their alternative position, and to 85mm beyond each side of the stove (570mm). See fig. 1, 1a and 1b.

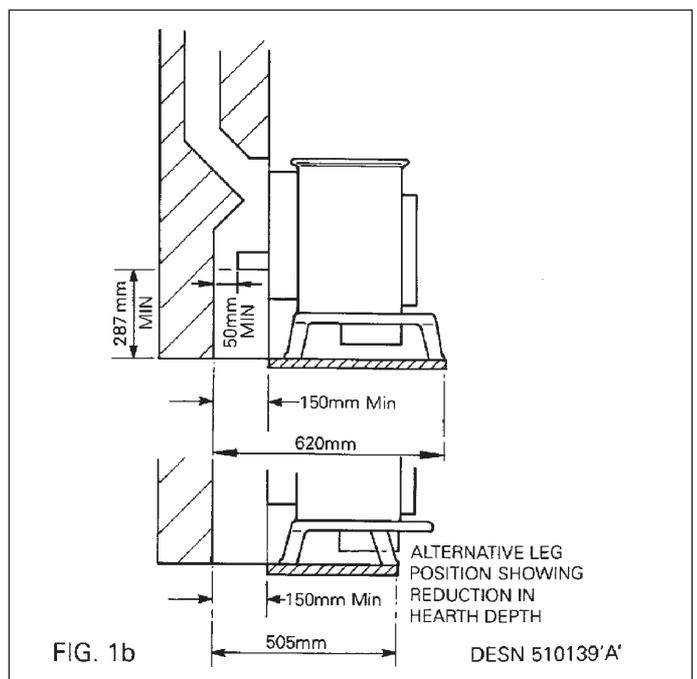
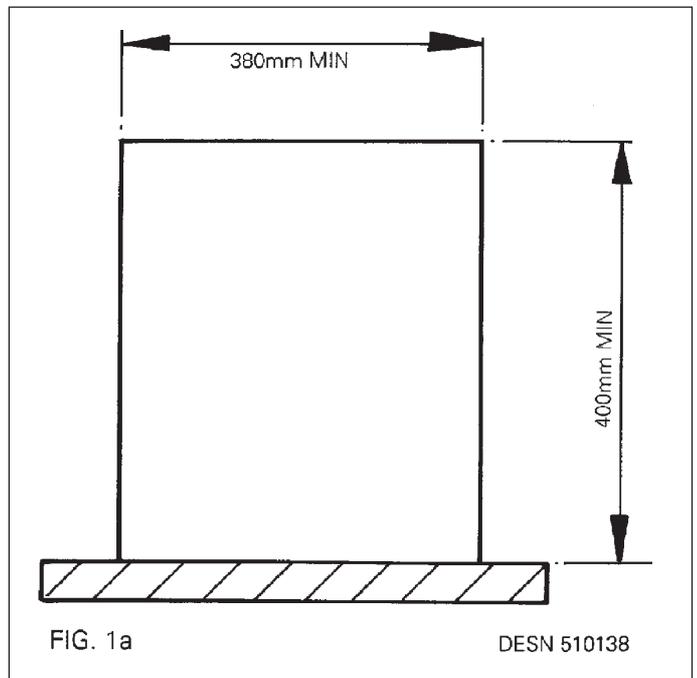
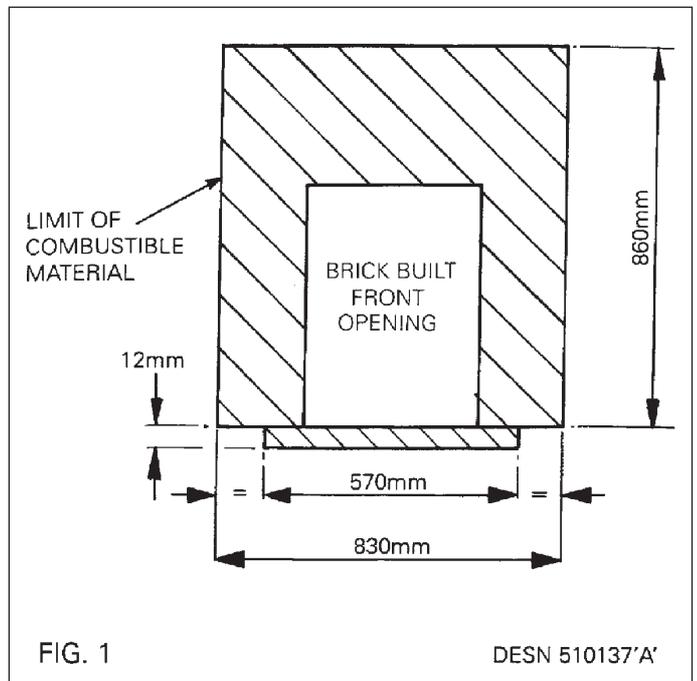
The hearth must be capable of withstanding a maximum temperature of 150°C. Conglomerate marble, marble and tiled surrounds can meet this requirement.

## REMOVAL OF COMBUSTIBLE MATERIAL

Combustible material must be cleared from the area shown in fig. 1.

If any opening larger than that shown in fig. 1a is to be used, the opening size must be reduced using non combustible material to bring it within the limits required for closure plate mounting. It must be at least 380mm wide and 400mm in height.

There must be a minimum distance of 215mm between the sides of the stove and any combustible material.



## THE FLUE - See fig 1a/1b

The stove may be connected to an existing masonry chimney with a cross sectional dimension not less than 175mm.

or a lined masonry chimney to BS.6461 Part 1.

or a pre-cast flue block chimney to BS,1289 or BS.6461 or chimneys which have been approved to the relevant British Standards as being suitable for use with solid fuel appliances.

or factory made systems which have been approved by an accredited test house as being suitable for use with appliances covered in BS.5871 Part 1.

Alternative detailed recommendations for fluing are given in the current issue BS.5440 Part 1 which also covers relevant details for termination.

The following notes are intended to give general guidance:

The chimney must have a minimum effective vertical height of 3 metres from the floor.

Clearance for shelves: A wooden shelf may be fitted above the stove. The underside of the combustible shelf above the top of the fire should be dimensioned accordingly.

Depth of shelf	Height to underside of shelf
150mm	558mm
175mm	575mm
200mm	600mm
225mm	650mm
250mm	700mm
275mm	750mm
300mm	800mm

If a brick chimney is to be used it **MUST** be swept prior to installation.

Before installing the stove, or inserting a liner, check that the flue is sound, free from obstruction and clean. If a register plate, restrictive plate, or damper etc is fitted in the flue, it **MUST** be removed or locked fully open.

If the stove is to be fitted in a fireplace in which the air supply enters below floor level this supply must be sealed off.

The catchment space and opening size must not be less than the dimensions in figs 1a/1b. The flue spigot must pass through the closure plate by at least 20mm and must have a minimum dimension of 50mm from its open end to any obstruction.

**Under no circumstances must a flue spigot extension be fitted.**

Ensure that the air relief opening at the bottom edge of the closure plate is completely clear.

## AIR SUPPLY

The stove does not normally require any additional purpose made ventilation.

## EFFECT OF EXTRACTION FAN

If there is any type of extraction fan fitted in the same room as the stove, there is a possibility that if adequate air inlet area from outside is not provided, spillage of the products from the appliance flue could occur when the extractor fan is in operation. Where such installations occur, a spillage test as detailed in BS.5440: Part 1 must be carried out.

## GAS CONNECTION

The complete installation must be tested for soundness and purged as described in BS. 6891.

The gas inlet to the stove is 8mm dia compression, and providing the distance from the service cock to the stove does not exceed 1.5m, 8mm dia rigid or semi-rigid supply pipe may be used.

Above this length, 15mm dia rigid or semi-rigid pipe should be used.

A service cock **must** be fitted adjacent to this appliance.

## APPLIANCE ASSEMBLY

### Unpacking

Remove all parts from inside the pack and ensure that no damage has occurred during delivery transit. If so, please contact your local stockist.

### Items in Pack:

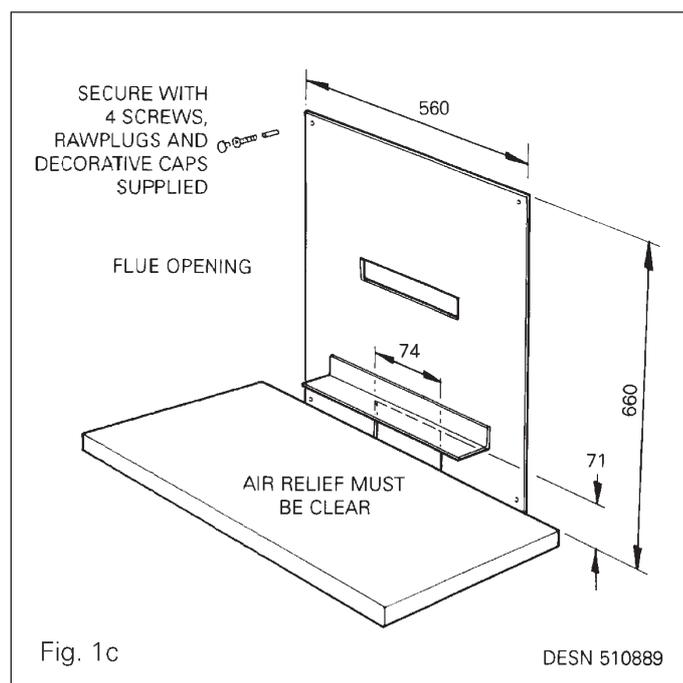
Instructions-Installation/Service and Operating  
Coal Guard  
Small Coals (9)  
Large Coals (14)  
Control Cover  
Door Locking Tool  
Clay Aggregate  
Closure Plate  
Fixing Screws and Rawlplugs

### Proceed to assemble the stove as follows:

If the reduced leg position is required. Gently lay the stove on its side. Unscrew the front legs secured with one screw. Refit in second hold further back with screw previously removed.

## CLOSURE PLATE

The closure plate must always be fitted as in Fig. 1C with the four rawlplugs, screws and decorative caps supplied. Adhesive tape or other sealing material which is suitable for the type of surface may be used. (The closure plate supplied with the stove may be cut, on site, to the correct size depending upon the size of the fireplace opening). Locate the stove so that the flue spigot protrudes at least 20mm into the chimney cavity.



## INSTALLING THE APPLIANCE

Position the appliance in accordance with the instruction given in the section 'LOCATION' and connect the flue pipe in accordance with the section 'THE FLUE'.

### FLEXIBLE PIPE/CONNECTIONS MUST NOT BE USED.

Connect the stove to the gas supply. (See Gas Connection).

## LAYING THE FUEL BED

Open the door of the stove (Using the tool supplied). See Fig. 2.

Pour the aggregate into the burner tray as illustrated in Fig. 3.

Fit the coal guard as illustrated in Fig. 3.

**Do not compress** or tap down. Any excess should be kept and handed to the user for future use.

### Positioning the Coals

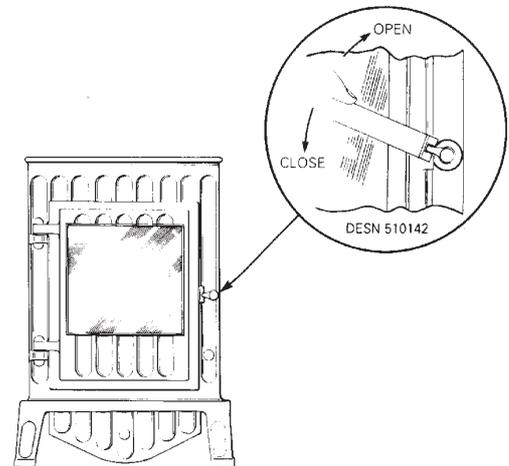
Carefully place the coals on the coal bed as illustrated in Figs 4, 5, 6, 7 and 8.

Close the door and lock (Using the tool supplied).

**WARNING:** USE ONLY THE SIMULATED COALS SUPPLIED WITH THE APPLIANCE TO BUILD THE BED. UNDER NO CIRCUMSTANCES USE EXTRA COALS OR PUT ANY OTHER MATERIAL ON THE FUEL BED.

DO NOT OPERATE THE STOVE WITH THE DOOR OPEN OR IF THE GLASS IS CRACKED OR BROKEN.

Hands should be washed after handling coals. (If gloves are not used).



DESN 510141 'A'

FIG. 2

# LAYING THE FUEL BED

POUR THE CLAY AGGREGATE SUPPLIED INTO THE TRAY UNTIL IT IS FLUSH WITH THE TOP OF THE BURNER TRAY.

FIT THE COAL GUARD TO THE FRONT OF THE BURNER TRAY, ENSURING THAT IT IS CENTRALLY LOCATED.

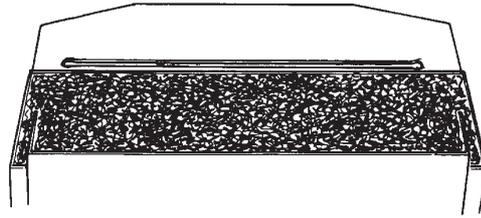
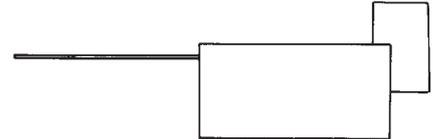


FIG. 3



DESN 510881

PLACE 4 LARGE COALS TO THE REAR OF THE BURNER TRAY AS SHOWN.

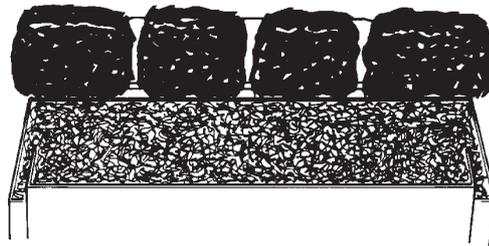
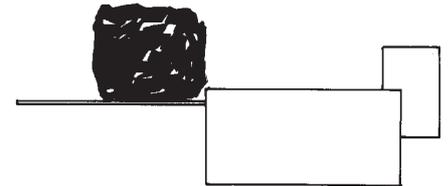


FIG. 4



DESN 510882

PLACE 3 LARGE COALS ON TOP OF THE 4 COALS AS SHOWN.

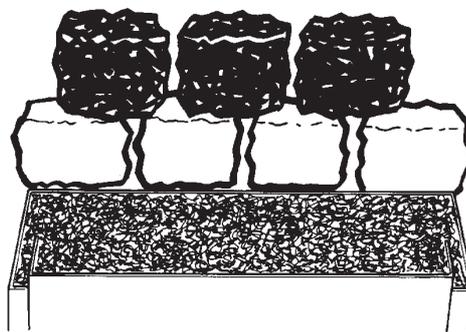
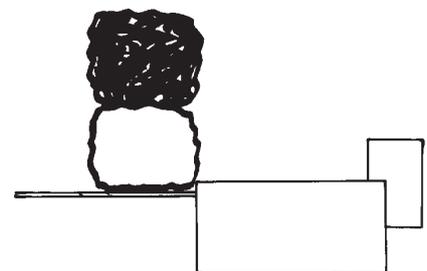


FIG. 5



DESN 510883

PLACE THE 9 SMALL COALS  
ONTO THE AGGREGATE IN  
GROUPS OF 3 AS SHOWN.

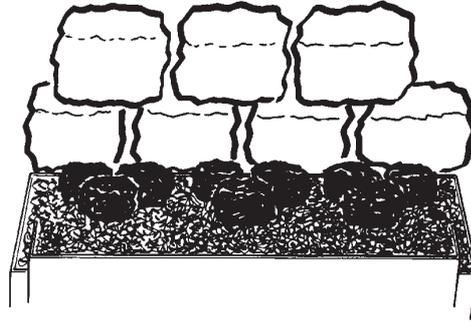
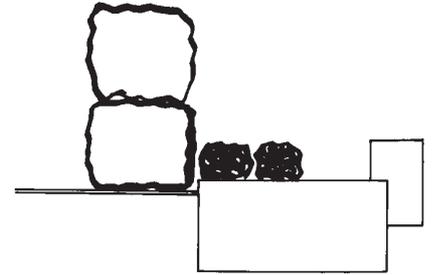


FIG. 6



DESN 510884

PLACE 3 LARGE COALS ON TOP  
OF THE SMALL COALS AS SHOWN.

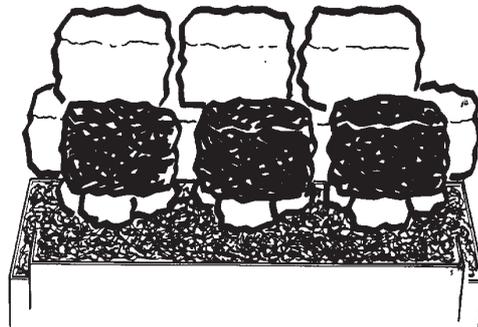
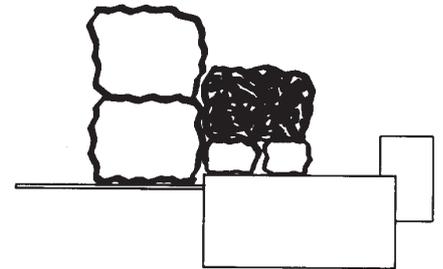


FIG. 7



DESN 510885

PLACE THE REMAINING 4 LARGE  
COALS ACROSS THE FRONT OF  
THE BURNER TRAY/COAL GUARD  
AS SHOWN.

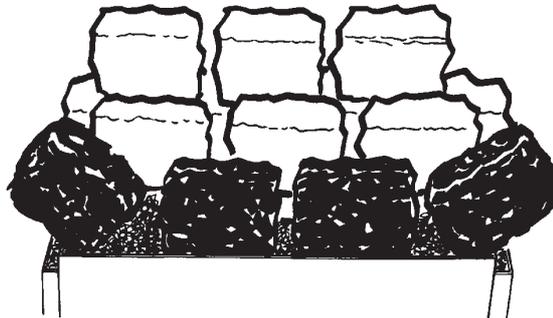
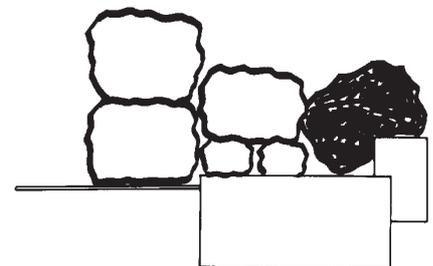


FIG. 8



DESN 510886

# COMMISSIONING AND TESTING

## NO SMOKING OR NAKED LIGHTS

The whole installation must be inspected and tested for soundness, and purged up to the gas service cock in accordance with BS.6891.

Remove the pressure test point sealing screw on the burner feed pipe, located at the left hand side of the control valve, connect a suitable pressure gauge. (See Fig. 9).

The control tap is marked with the following positions:-

OFF	●
PILOT ONLY	★
MINIMUM	🔥
MAXIMUM	🔥

The stove is fitted with a piezo spark ignitor.

**Note: If the main burner or pilot are extinguished for any reason do not attempt to re-light the pilot for three minutes.**

## TO LIGHT THE PILOT

Ensure that the control knob is in the OFF (●) position (Fig. 10)

Fully depress the control knob and turn anti-clockwise (keeping the control knob fully depressed) until the spark position (★) is reached (Fig. 11). If the pilot has not lit repeat the operation.

Once the pilot is lit continue to hold in the control knob for a further 10 -15 seconds to establish the pilot. When the control knob is released the pilot should remain alight. If the pilot fails to remain alight refer to fault finding section of this document.

If required the pilot may be lit by a long spill or taper as follows:

Open the door of the stove (using the tool supplied). (See Fig. 2)

Apply lighted long spill or taper to the pilot (See Fig. 12) positioned at the front LH side of the burner tray.

Fully depress the control knob and turn anti-clockwise (keeping the control knob fully depressed) until the spark position (★) has been reached and the pilot should light.

Once the pilot is lit remove the long spill or taper, continue to hold the control knob for 10 to 15 seconds to establish the pilot. When the knob is released, the pilot should remain alight, repeat the procedure, but hold the knob in longer.

**When pilot is established close the door (using the**

tool supplied).

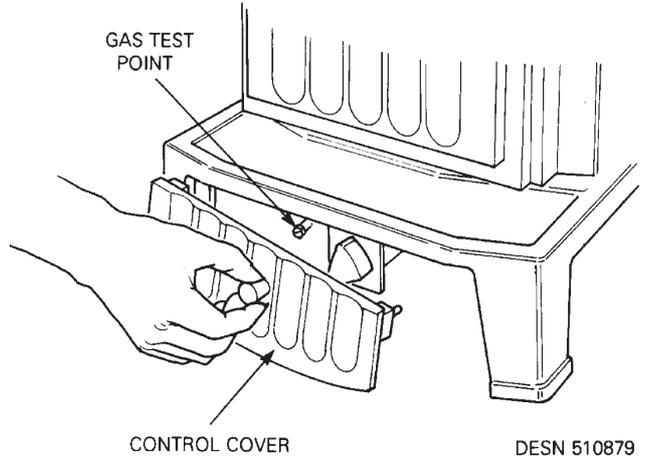


FIG. 9

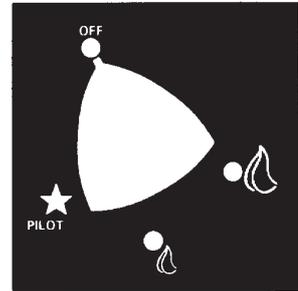


FIG. 10

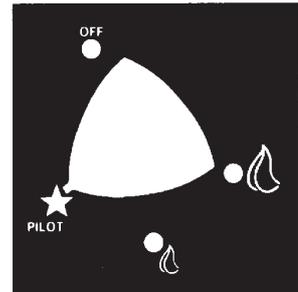


FIG. 11

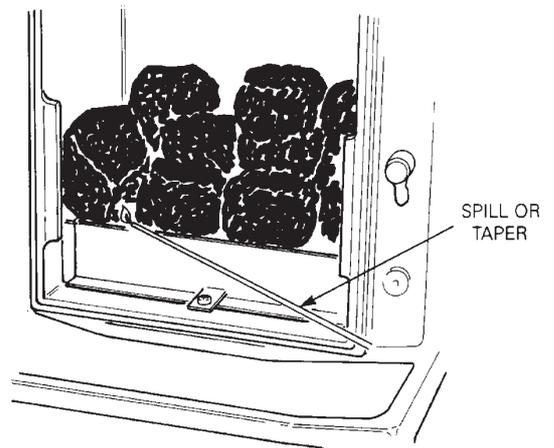


FIG. 12

## TO LIGHT THE STOVE

If the pilot is not alight, follow procedure to light pilot.

Turn the control knob anti-clockwise until the full on position (☰) (See Fig. 13). The main burner will light. At this setting the pressure should be 17.7+/-1.0mbar with an inlet pressure of 20mbar for natural gas or 36 +/- 1.0mbar with an inlet pressure of 37mbar for propane.

Depress and turn the control knob clockwise to the pilot position (✳) (Fig. 14). The stove will go out and the pilot will remain alight. Remove the pressure gauge and replace the test point sealing screw.

Turn stove to maximum setting (☰) (Fig. 15) and check for gas soundness.

FIG. 13

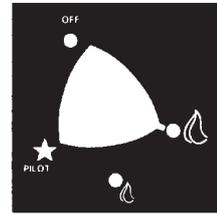


FIG. 14

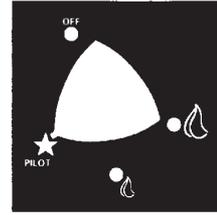
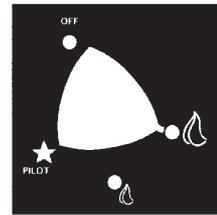


FIG. 15



## TO TURN STOVE OFF

Turn the gas control knob to the minimum gas rate position (⊖) (Fig. 16), slightly depress the control knob and continue turning to the pilot position (✳) (Fig. 17). The fire will go out, and the pilot will remain lit and may be left on permanently.

FIG. 16

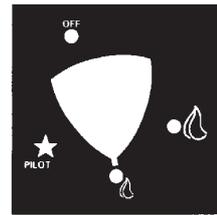
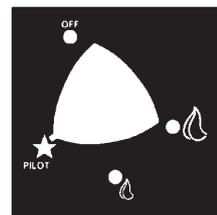


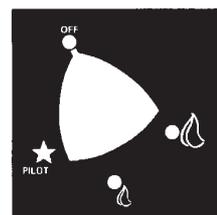
FIG. 17



## TO TURN STOVE AND PILOT OFF

Turn the stove off as described. Depress the control knob, turn to the off position (●) (Fig. 18) and the pilot will go out.

FIG. 18



## CHECK FOR CLEARANCE OF PRODUCTS OF COMBUSTION

Ensure that all doors and windows of the room are closed.

Light the stove as described. leave on maximum rate for 5 minutes.

If there is a fan in a nearby room then the spillage test must be repeated with the fan turned on and any interconnecting door between the stove and the fan location left open.

A spillage test as detailed in BS. 5440 must be carried out after 5 minutes as follows:- By holding a smoke match so that match head is approximately 3mm up inside the lower edge of the draught diverter (See Fig. 19). Spillage is indicated by smoke being displaced outwards from the draught diverter. If in doubt repeat after a further 10 minutes.

If spillage is detected the chimney may be faulty. The fault must be corrected before leaving the stove installed.

If the fault cannot be corrected turn off and disconnect the gas supply to the stove and seek expert advice.

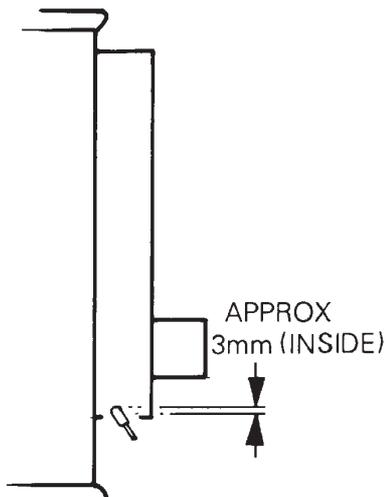


FIG. 19

DESN 510293

## INSTRUCT USER

Hand over all the instructions to the user and explain how to light and operate the appliance.

Impress upon the user that the coals must be located in accordance with the instructions and that the appliance **MUST NOT** be operated with the stove door open or if the glass is cracked or broken. The appliance should be serviced at regular intervals by a competent person to ensure safe operation.

Point out the removable warning labels which the customer must remove and read.

Advise the user that any smell emitted from the stove on initial lighting will quickly clear away with use.

The door tool must be stored in a safe place out of the reach of children.

# SERVICING AND REPLACEMENT PARTS

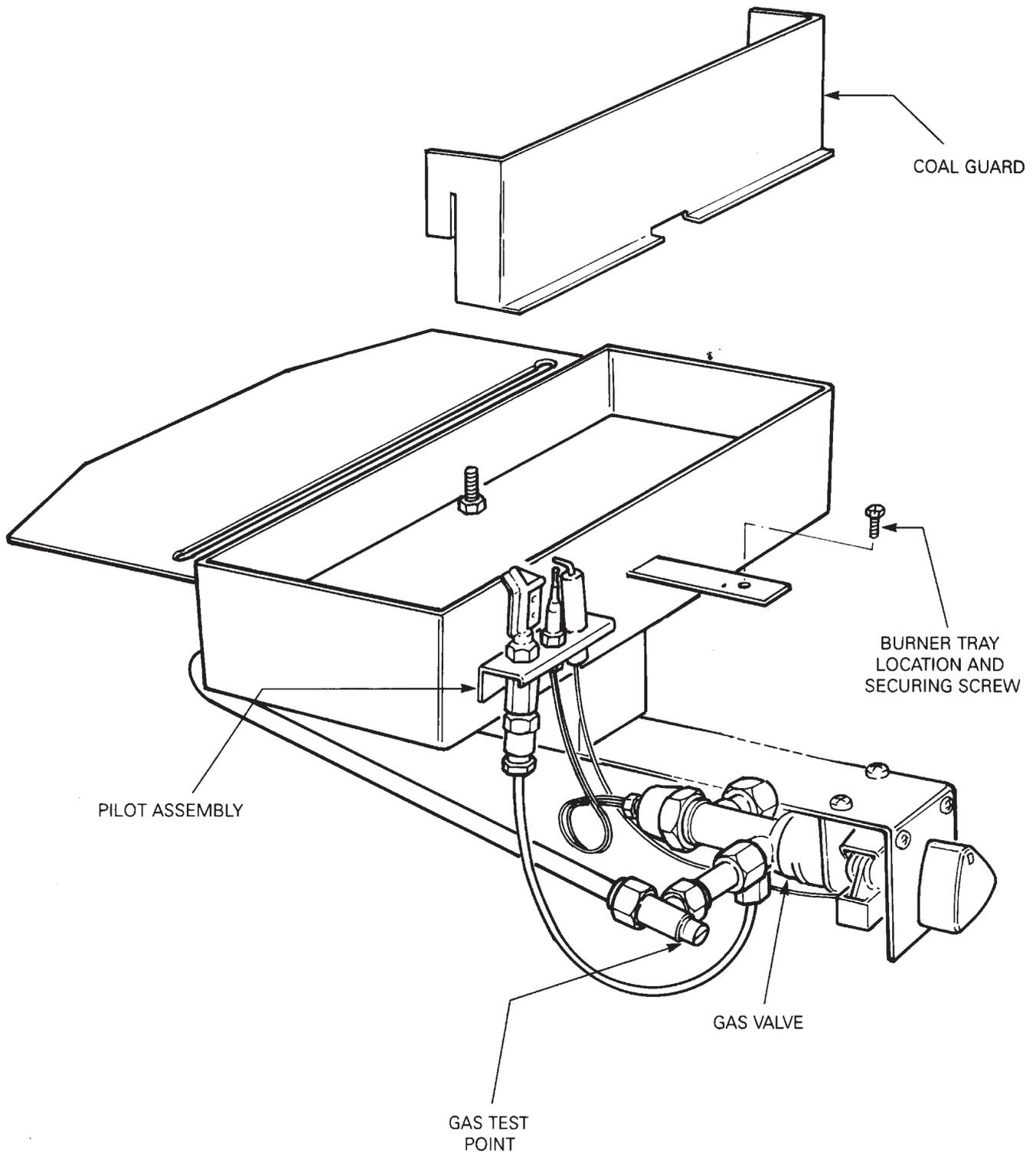


FIG. 20

DESN 510887

## SERVICING

It is recommended that the stove is inspected/serviced annually by a competent person (e.g. A Corgi Registered Installer).

It is recommended that the flue is checked for debris.

After any servicing **ALWAYS** check for gas soundness and carry out a spillage test as detailed in the section 'CHECK FOR CLEARANCE OF PRODUCTS OF COMBUSTION'.

RE-ASSEMBLE PARTS IN REVERSE ORDER.

## SERVICING PROCEDURE

Ensure that the stove is cold.

Isolate the gas supply to the stove.

Hands should be washed after handling coals. (If gloves are not used).

Open the door of the stove (using the tool supplied). Carefully remove all coals from the fire and inspect for Damage/Breakage. Clean any excessive soot from the coals with a soft brush.

Clean any deposits from the surface of the aggregate bed with a soft brush.

A VACUUM CLEANER MUST NOT BE USED, as this could remove the clay aggregate.

If necessary clean the pilot injector as follows:

Remove coal guard (See Fig. 20).

Disconnect gas supply to control valve.

Remove burner assembly tray location and securing screw. (See Fig. 20).

Carefully lift out the burner assembly tray and retain the clay aggregate. if necessary top-up the tray with aggregate during re-assembly as described in 'LAYING THE COALS'.

Undo the pilot pipe connection at the pilot burner.

Remove the pilot assembly securing nut and remove the pilot assembly.

Remove the pilot injector.

Clean the injector and aeration holes. The injector must not be cleaned with a needle or wire.

**DO NOT USE A WIRE BRUSH.**

RE-ASSEMBLE THE PARTS IN REVERSE ORDER.

**IMPORTANT:** Carefully replace the coals as described in the section 'LAYING THE FUEL BED'.

## REPLACEMENT OF PARTS

Ensure the stove is cold.

Isolate the gas supply to the stove.

On completion **ALWAYS** check for gas soundness.

Hands should be washed after handling coals. (If gloves are not used).

Open the door of the stove (using the tool supplied).

Disconnect gas supply to Control Valve.

Remove coals and coal guard (See Fig. 20).

Remove the Burner Assembly Tray Location and Securing Screw (See Fig. 20).

Carefully lift out the burner assembly tray and retain the clay aggregate. If necessary top up the tray with clay aggregate during re-assembly as described in 'LAYING THE FUEL BED'.

The following components can now be replaced, as follows:

### Gas Valve

Disconnect the thermocouple, the injector and pilot feed pipes at the gas valve.

Disconnect the ignition lead at the tap.

Pull off the control knob and remove the gas valve (2 screws).

Fit replacement valve and re-assemble in reverse order, carefully replace the coals as described in 'LAYING THE FUEL BED'.

CHECK THE BURNER PRESSURE AS DESCRIBED IN '**TO LIGHT THE STOVE**'.

### Main Burner Injector

Disconnect the feed pipe at the main injector and remove injector.

Fit replacement injector and re-assemble in reverse order, carefully replace the coals as described in 'LAYING THE FUEL BED'.

### Pilot Assembly

Disconnect the feed pipe at the pilot assembly.

Disconnect the thermocouple connection at the control valve and pull off the ignition lead from the electrode.

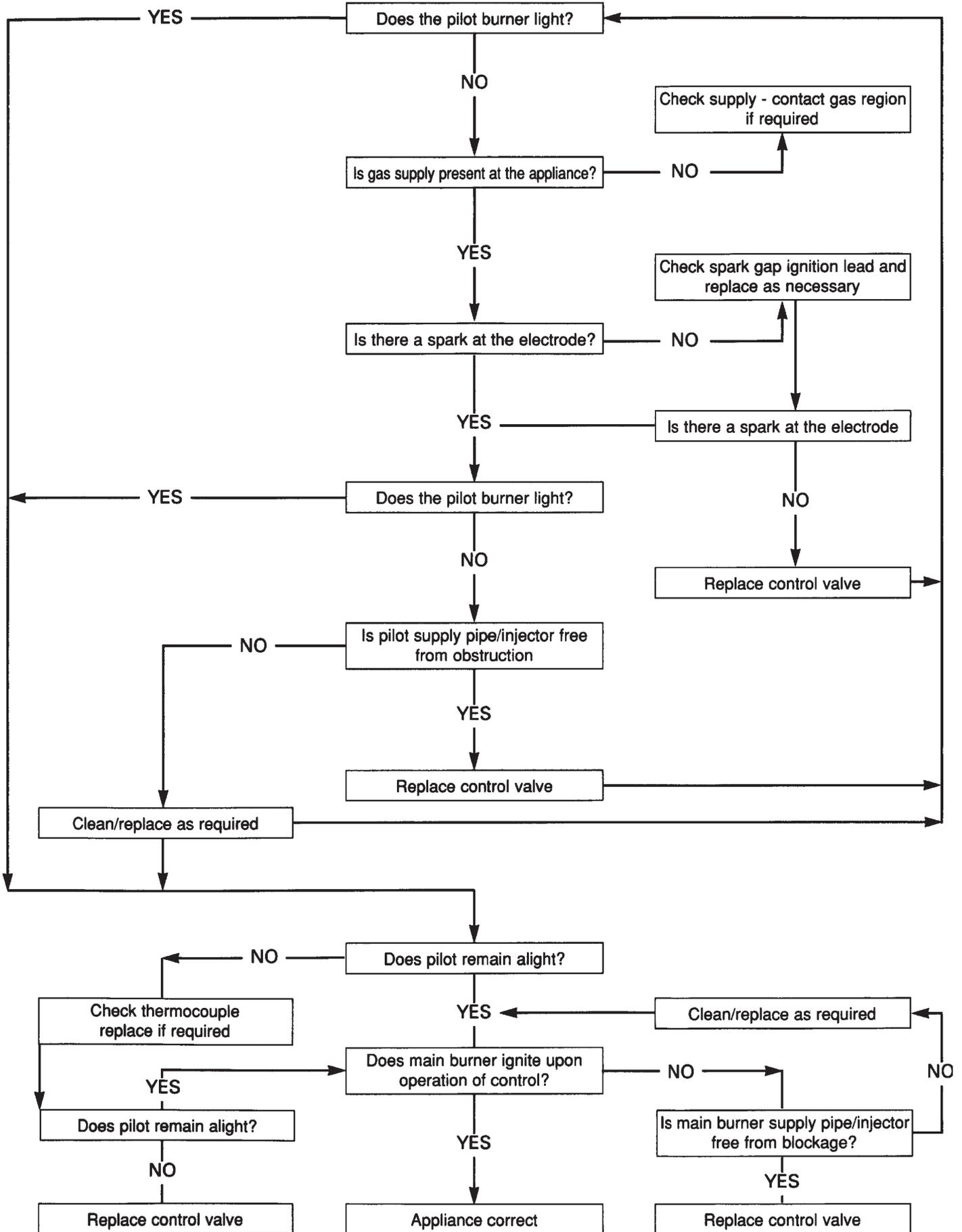
Remove the pilot assembly (one nut).

Fit the replacement pilot assembly and re-assemble in reverse order.

**NOTE:** Ensure that the insulation sleeving is pushed back over the end of the electrode during re-assembly.

Carefully replace the coals as described in 'LAYING THE FUEL BED'.

# FAULT FINDING CHART



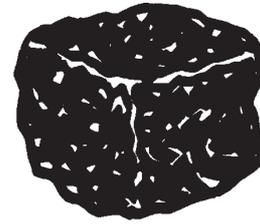
# SPARE PARTS

COALS PACK CONTAINING:-

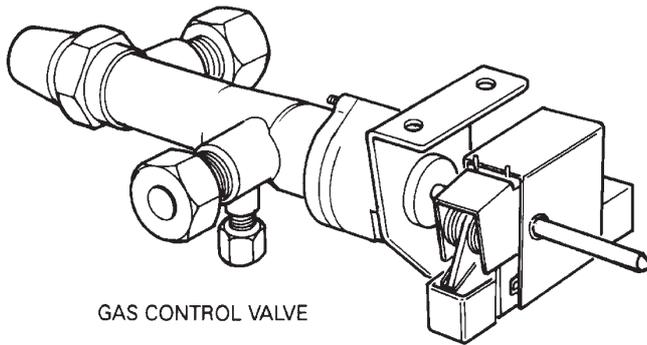
BLACK, 9 SMALL



BLACK, 14 LARGE



DESN 510888



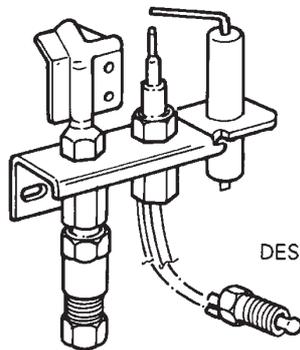
GAS CONTROL VALVE



CONTROL KNOB

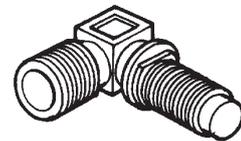
DESN 510726

PILOT ASSEMBLY



DESN 510623

BURNER INJECTOR



DESN 510727

## SHORT LIST OF SPARE PARTS

The following Spare Parts are available from your Distributor:

DESCRIPTION	MAKERS PART NUMBER
1. Gas Valve - NG - PROPANE	HG4M410130 HG4M410131
2. Pilot Assembly - NG - PROPANE	FG4M420330 FG4M420335
3. Burner Injector - NG - PROPANE	HG4M410128 HG4M410129
4. Control Knob	HG4M999413
5. Coals Pack	HG4M410133
6. Aggregate Pack	TCLY410132
7. Door Tool	HS1M93003

THEY SHOULD BE FITTED ONLY BY A COMPETENT PERSON (e.g A CORGI Registered Installer).

**Little Wenlock Gas (GS1i) - Top Rear Open Flue &  
Closure Plate Model**

**AMENDMENT SHEET**

REF: EINS 510877 (TOP REAR OPEN FLUE MODEL) - PAGE 7 (Fig. 8)  
EINS 510878 (CLOSURE PLATE MODEL) - PAGE 7 (Fig. 8)

**DELETE ILLUSTRATION AND REPLACE WITH:**

**PLACE THE REMAINING FOUR LARGE  
COALS ACROSS THE FRONT OF  
THE BURNER TRAY/COAL GUARD  
AS SHOWN.**

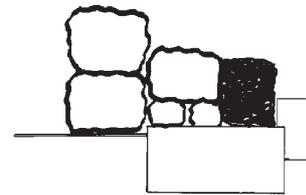
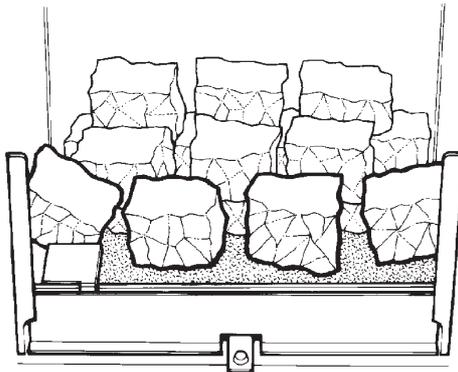


Fig. 8

DESN 513560

**For further advice or information contact  
your local distributor/stockist**

With Aga-Rayburn's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliance described and illustrated at any time.

# **COALBROOKDALE**

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Shropshire TF1 5AQ

[www.aga-rayburn.co.uk](http://www.aga-rayburn.co.uk)  
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