THE LITTLE WENLOCK GAS (GS1i)

Installation and Servicing Instructions

Top Rear Open Flue 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.

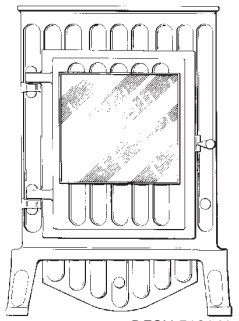
Glues and Sealants - exercise caution - if these are still in liquid form use face mask and disposable gloves.

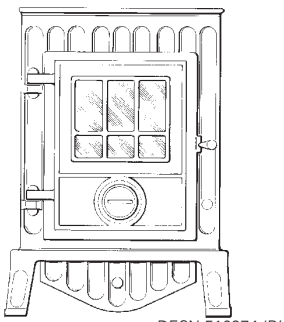
Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre, Kerosene Oil - may be harmful if inhaled. May be irritating to skin, eyes, nose and throat. When handling avoid inhaling and contact with skin or eyes. Use disposable gloves, face-masks and eye protection. After handling wash hands and other exposed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

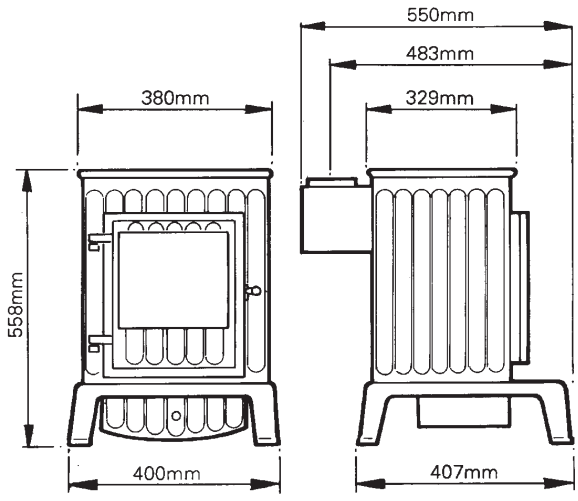
GAS DATA		
	NAT GAS	PROPANE
MAX	**kW**	**kW**
HEAT INPUT (GROSS)	7.0	6.4
HEAT OUTPUT (GROSS)	3.95	3.5
MIN	**kW**	**kW**
HEAT INPUT (GROSS)	3.35	3.35
HEAT OUTPUT (GROSS)	1.75	1.60

Gas Connection 8mm OD Tubing
Flue Spigot size - 102mm Dia
Ignition - Piezo Spark Generator
Appliance weight - 63.5 kg

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


DESN 510141 'A'
STANDARD DOOR OPTION


DESN 510274 'B'
TRADITIONAL DOOR OPTION



DESN 510121

INTRODUCTION

The Little Wenlock Gas (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 door if required.

The Little Wenlock Gas 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 Little Wenlock Gas (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: Illustrations show the appliance fitted with the standard door option.

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: Part 1 Flues & Part 2 Air Supply

BS.5871: Installation of Gas Fire. 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. No clearance is required in front of the hearth.

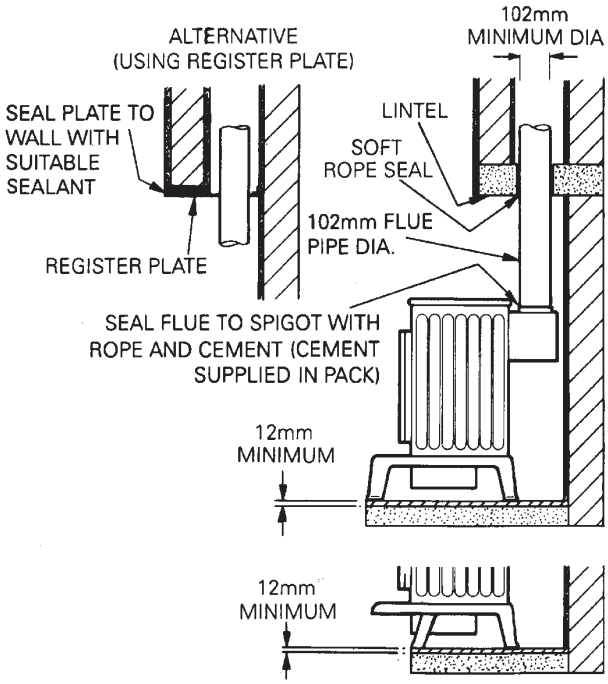
The stove must be installed with a hearth capable of withstanding a maximum temperature of 150˚C. Conglomerate marble, marble and tiled surrounds can meet this requirement.

If the rear wall (behind the appliance) is of combustible material there must be an air gap of at least 75mm or a shield of non-combustible material, at least 25mm thick the width and height of the appliance. See fig. 1.

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

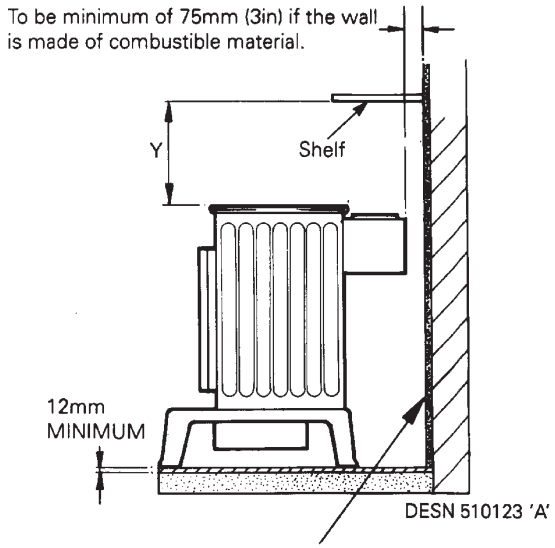
Depth of Shelf	Height to underside of shelf Y
150mm	558mm
175mm	575mm
200mm	600mm
225mm	650mm
250mm	700mm
275mm	750mm
300mm	800mm

NOTE: IF THE FLUE PIPE PASSES THROUGH THE SHELF REFER TO SECTION 'SHIELDING OF FLUE PIPES'.



ALTERNATIVE LEG POSITION (SHOWING REDUCTION IN HEARTH DEPTH)

DESN 510122 'C'



DESN 510123 'A'

THIS PART OF THE WALL AT THE BACK AND SIDE OF THE APPLIANCE TO BE SOLID NON-COMBUSTIBLE MATERIAL WITH A THICKNESS OF AT LEAST 25mm IF THE MINIMUM CLEARANCES FOR COMBUSTIBLE MATERIALS CANNOT BE OBTAINED.

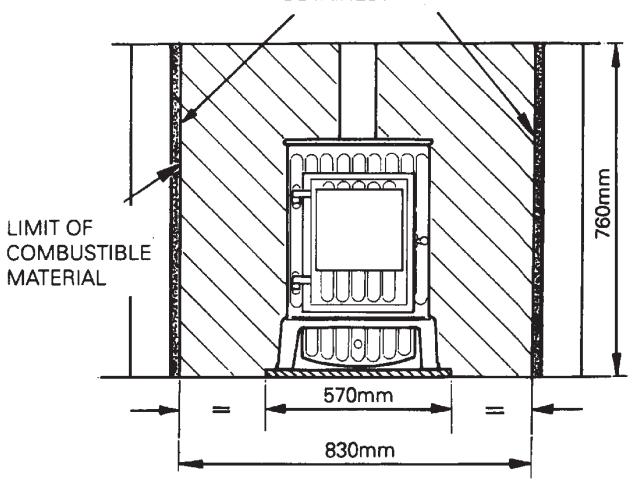


FIG. 1 Flue Layouts

DESN 510124 'C'

THE FLUE - See fig 1

The appliance may be used/connected to a solid fuel appliance flue system having a diameter not less than 102mm.

Alternately, detailed recommendations for gas fluing are given in current issue BS.5440: Part 1.

The following notes are intended to give general guidance:

The cross sectional area of the flue serving the stove must not be less than the area of the flue outlet of the strove and be of at least 3m effective height from the floor level. If the flue pipe is to be used, it must not be less than 100m internal diameter.

Flue Pipes

Flue pipes and fittings should be constructed from one of the following materials:

a) Cement to BS.567

b) Aluminium or stainless steel to BS.715.

c) Cast iron or mild steel to BS.41 acid resistant vitreous enamelled lined.

If a chimney is to be used, it **MUST** be one that is composed of or lined with a non-porous acid resistant material. (Chimneys lined with salt glazed earthenware pipes are acceptable, if the pipes comply with the current issue of BS.65).

Shielding of Flue Pipes

Flue pipes should:

(a) be at least 25mm from any combustible material, or

(b) where passing through a wall, floor or roof, be separate from any combustible material by a non-combustible sleeve enclosing an air space or at least 25mm around the flue pipe, or

(c) where passing through a compartment wall or a compartment floor, be cased with a non-combustible material with at least half the fire resistance needed for the wall or floor (see Approved Document B3 Internal fire spread (structure)).

For a double-walled flue pipe, the 25mm distance may be measured from the outside of the inner pipe.

Factory-Made Insulated Chimneys

Factory-made insulated chimneys should be:

(a) constructed and tested to meet the relevant recommendations given in BS.4543 Factory-made insulated chimneys, Part 1: Methods of test for factory-made insulating chimneys and Part 2: Specification for chimneys for solid fuel fired appliances, and

(b) installed in accordance with the manufacturers' instructions or to meet the relevant recommendations of BS. 6461: Installation of chimneys and flues for domestic appliances burning solid fuel (including wood and peat) and BS. 7566 Parts 1 to 4 Installation of factory-made chimneys to BS.4543 for domestic appliances.

A flue pipe constructed to one of the standards in (a) to (c) above, should form the connection from the stove to lined chimneys.

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.

The flue should terminate in accordance with the relevant recommendations given in BS.5440: part 1.

The point of termination must not be within 600mm of an openable window, air vent or any other ventilation opening.

Check that the chimney serves only one appliance, and that the flue and associated connection joints are properly sealed.

AIR SUPPLY

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

EFFECT OF EXTRACTION FAN

If there is any type of extractor 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, 8m 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, Servicing and Operating
Coal Guard
Small Coals (9)
Large Coals (14)
Control Cover
Door Locking Tool
Clay Aggregate
Cement (For sealing flue spigot)

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 hole further back with screw previously removed.

INSTALLING THE APPLIANCE

Position the appliance in accordance with the instructions 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 THIS 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).

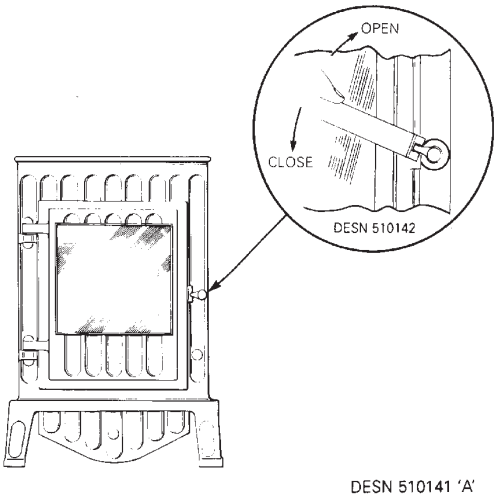


FIG. 2

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.

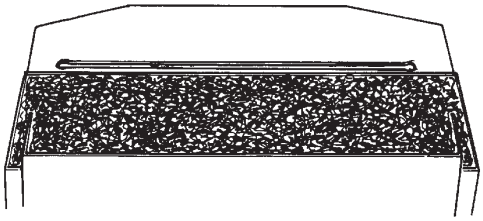
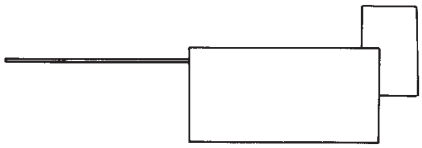


FIG. 3



DESN 510881

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

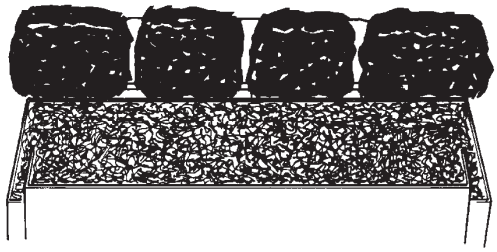
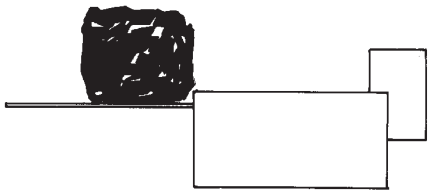


FIG. 4



DESN 510882

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

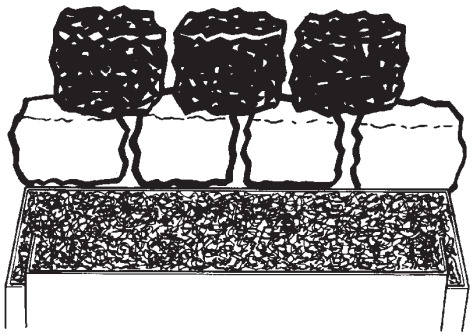
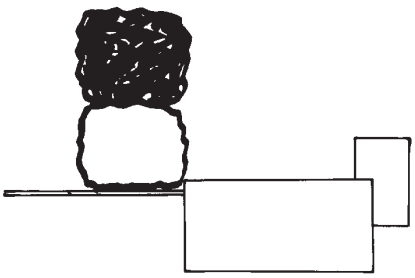


FIG. 5



DESN 510883

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

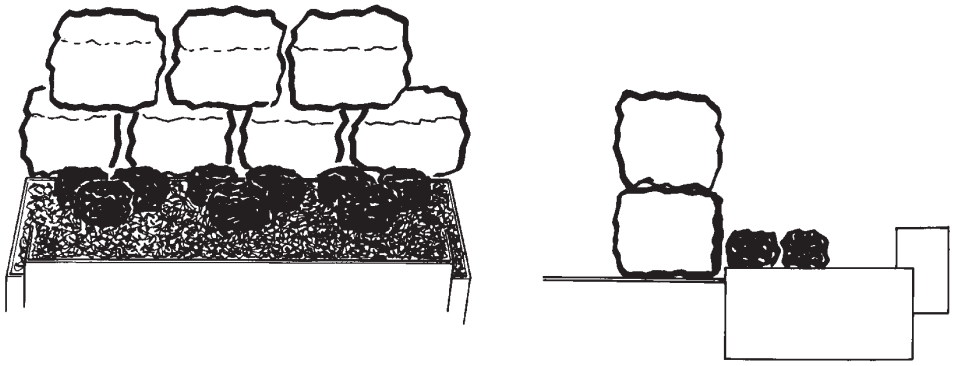


FIG. 6

DESN 510884

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

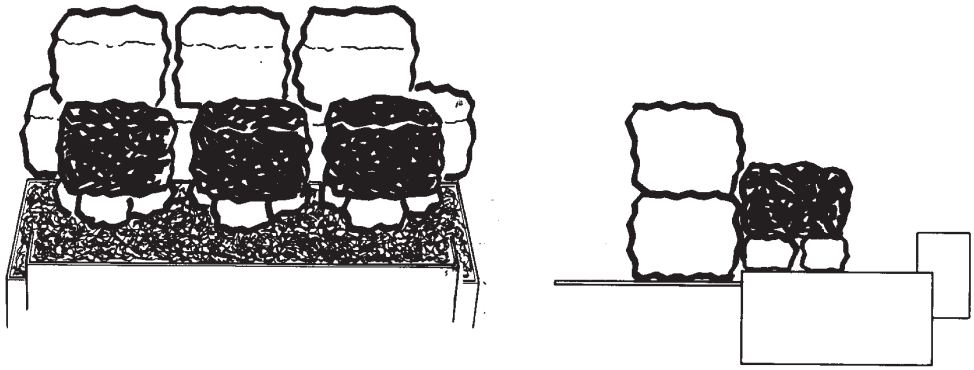


FIG. 7

DESN 510885

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

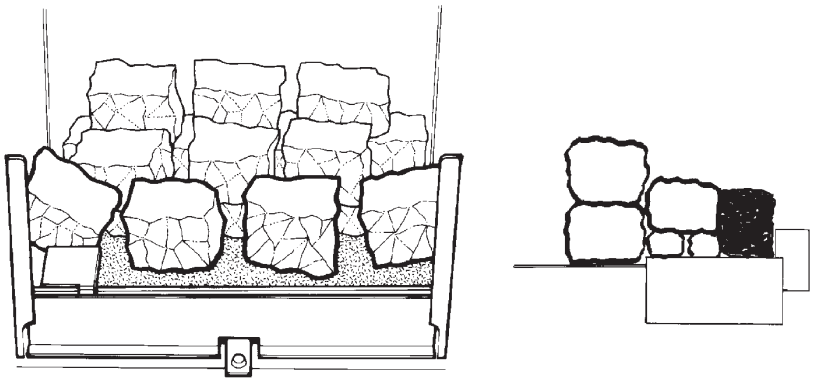


FIG. 8

DESN 513560

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 plastic 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.

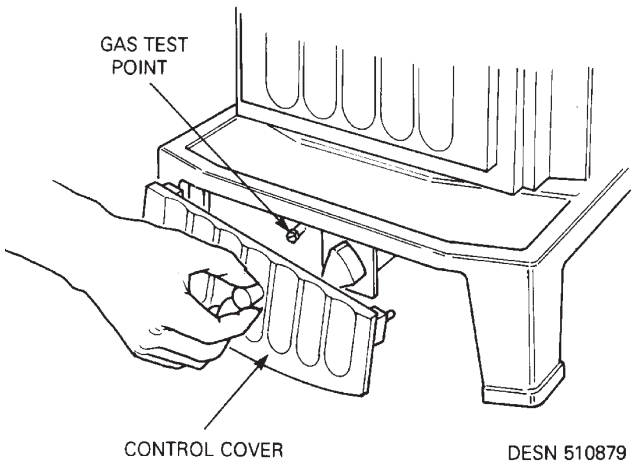


FIG. 9

TO LIGHT THE PILOT

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

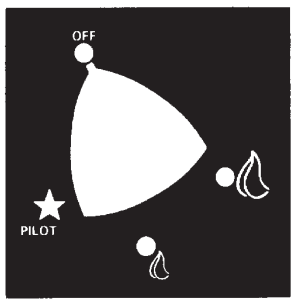


FIG. 10

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.

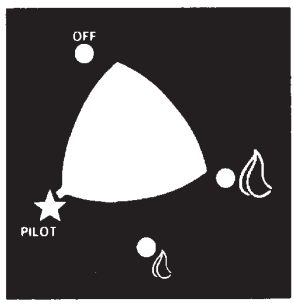


FIG. 11

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 a 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, if the pilot fails to remain alight, repeat the procedure, but hold the knob in longer.

When the pilot is established close the door (using the tool supplied).

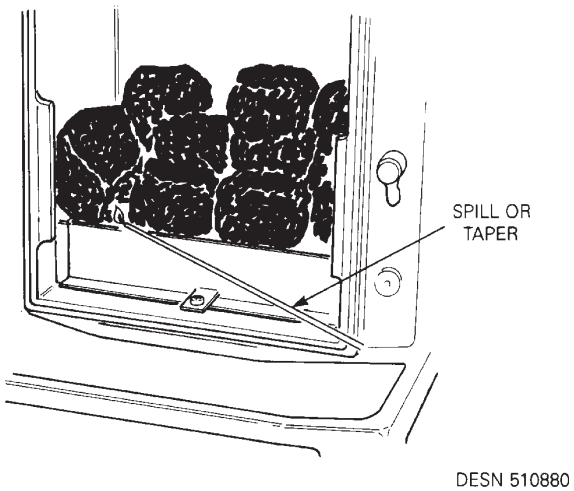


FIG. 12

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

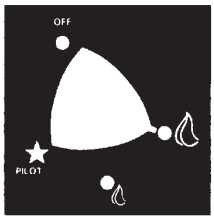


FIG. 14

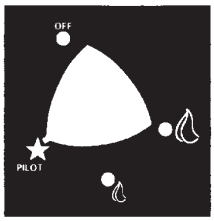
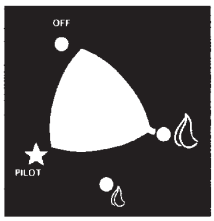


FIG. 15



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

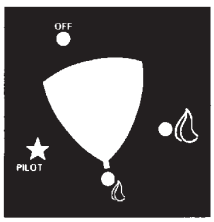
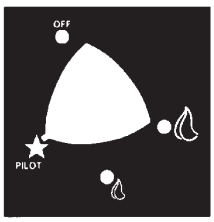


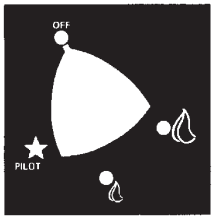
FIG. 17



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 doors 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.

SPILLAGE MONITORING SYSTEM

NOTE: The appliance incorporates a spillage monitoring system which will extinguish the pilot in the event of adverse flue conditions. If the pilot continues to shut off, specialist advice should be sort:

The spillage monitoring system:

a. must not be adjusted
b. must not be put out of operation
c. should only be replaced with original manufacturer's parts

WARNING: If the fire goes out under normal operation, and continues to extinguish after re-lighting, spillage gas occurred and the flue should be checked.

This appliance is fitted with a pre-set oxygen depletion system incorporated into the burner ignition unit. Therefore this system must not be adjusted or put out of operation and must be replaced with a complete unit of original manufacture, in the event of renewal.

THE PILOT ASSEMBLY IS AN ATMPOSHERIC SENSING DEVICE. WHEN THE SPILLAGE MONITORING SYSTEM IS EXCHANGED, ONLY AN ORIGINAL MANUFACTURERS PART SHOULD BE USED.

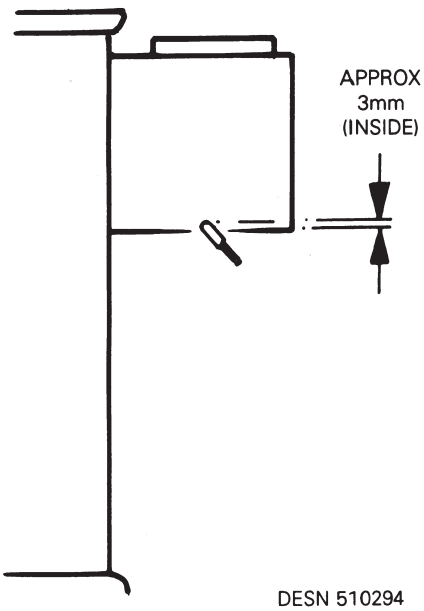


FIG. 19

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.

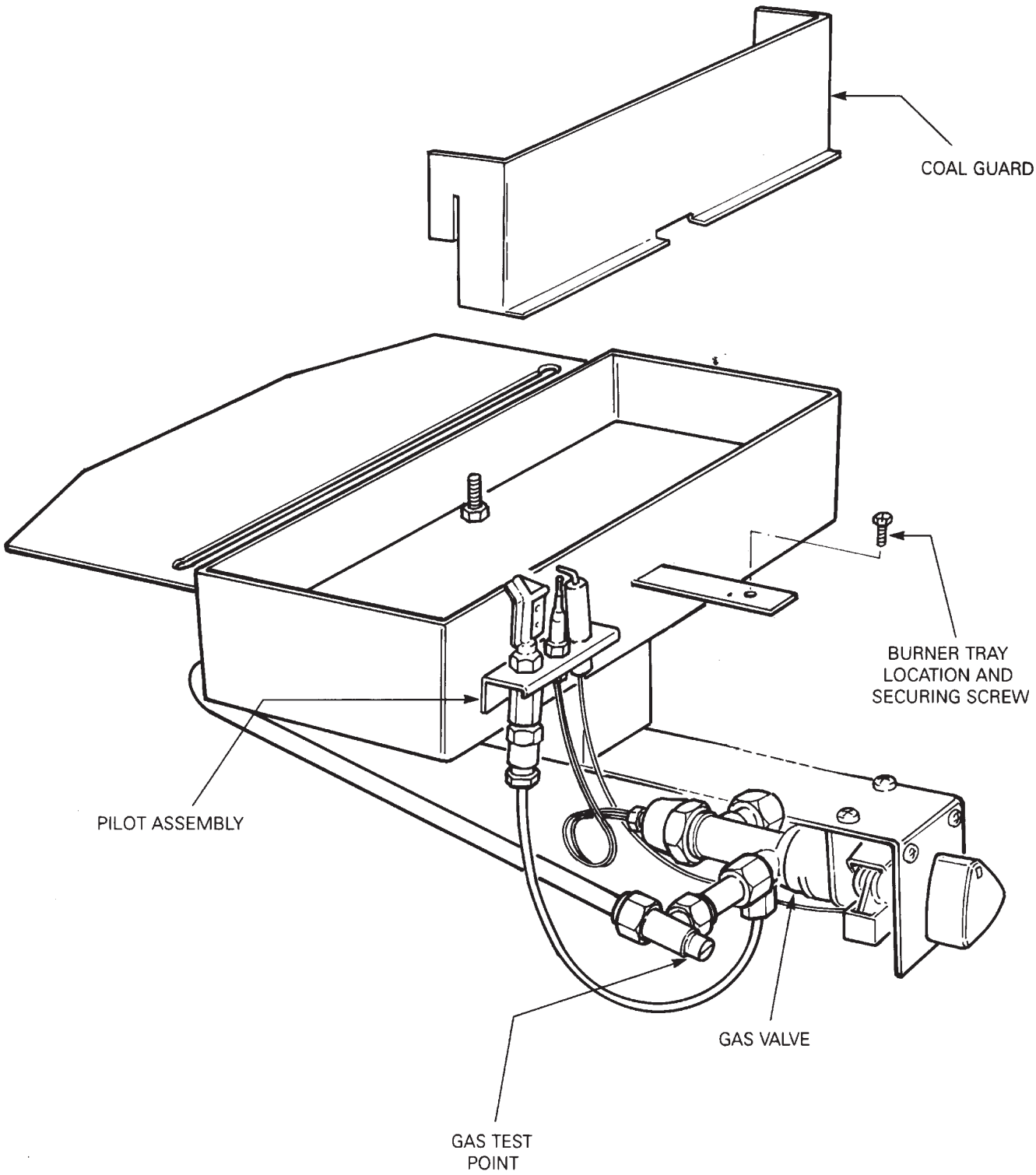

COAL GUARD
BURNER TRAY
LOCATION AND
SECURING SCREW
PILOT ASSEMBLY
GAS VALVE
GAS TEST
POINT
DESN 510887

FIG. 20

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.

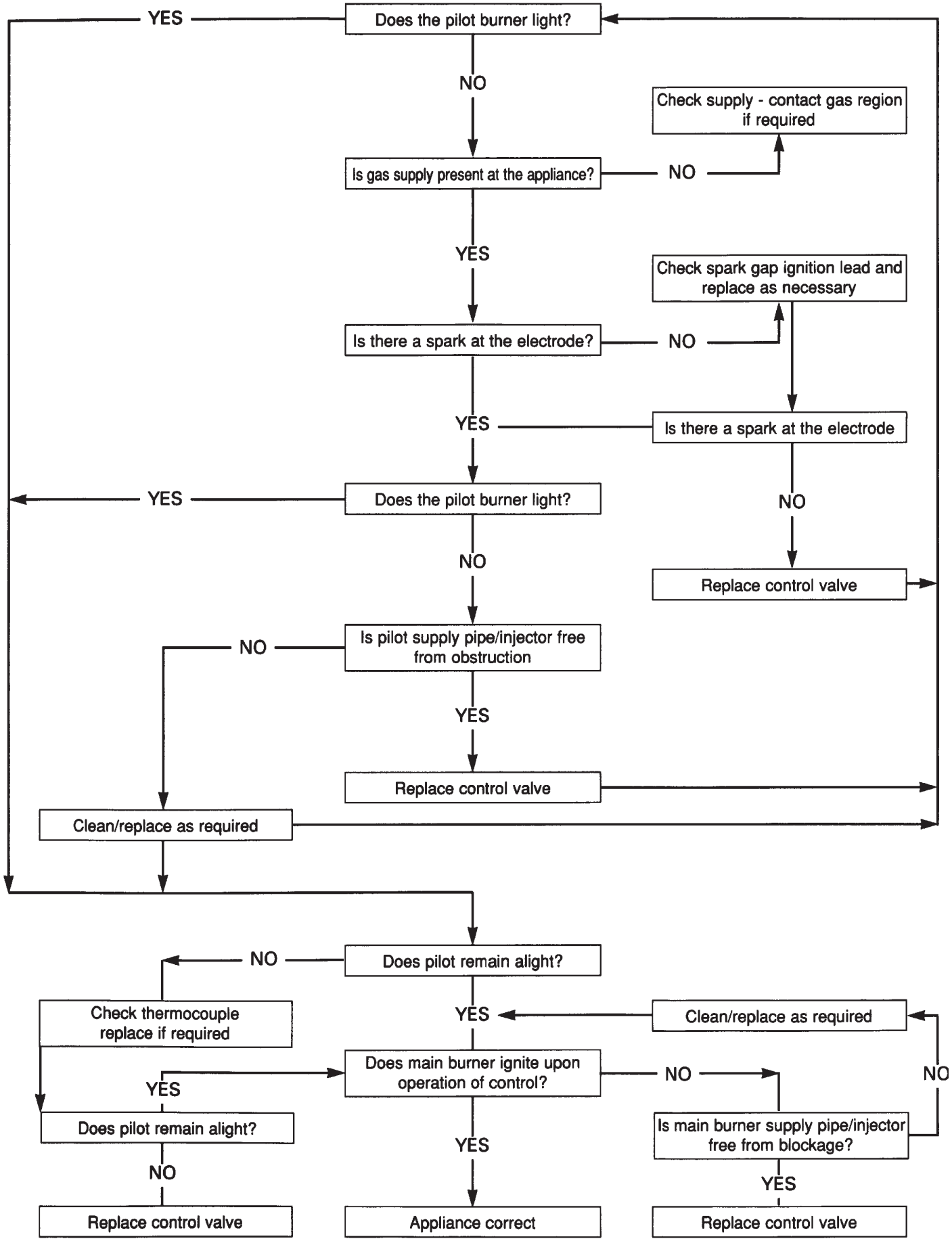
Remove the pilot assembly (one nut).

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'.

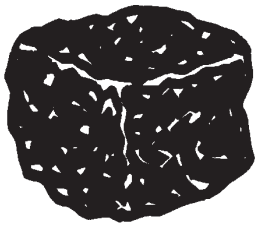
FAULT FINDING CHART



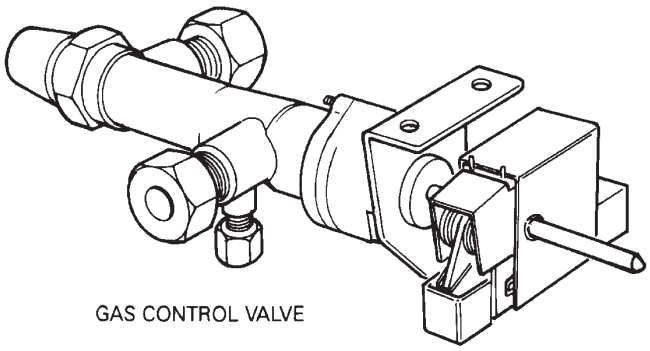
SPARE PARTS

COALS PACK CONTAINING:- BLACK, 9 SMALL

BLACK, 14 LARGE



DESN 510888

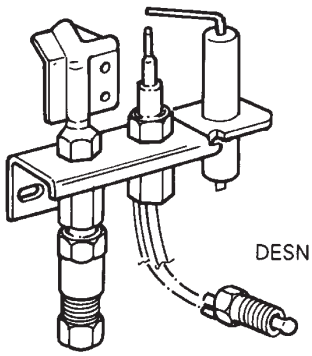


GAS CONTROL VALVE

CONTROL KNOB

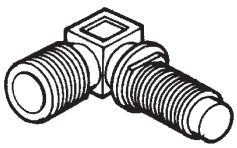
DESN 510726

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).

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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