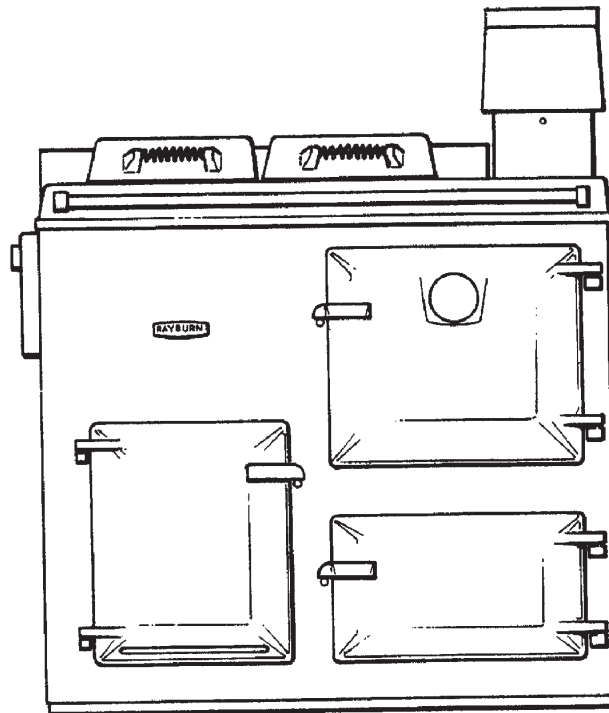




from **AGA**

208G/L



Installation Instructions

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 AGA.

***THIS APPLIANCE MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS
AND THE REGULATIONS IN FORCE AND ONLY USED IN A SUITABLY VENTILATED LOCATION.***

PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLING THIS APPLIANCE



For use in GB and IE

Consumer Protection

As manufacturers and suppliers of cooking and heating products. We take every care to ensure, as far as is reasonably practical, 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: PLEASE READ THE ACCOMPANYING WARRANTY

Any alteration that is not approved by AGA could invalidate the approval of the appliance, operation of the warranty and could affect your statutory rights.

Health & Safety

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

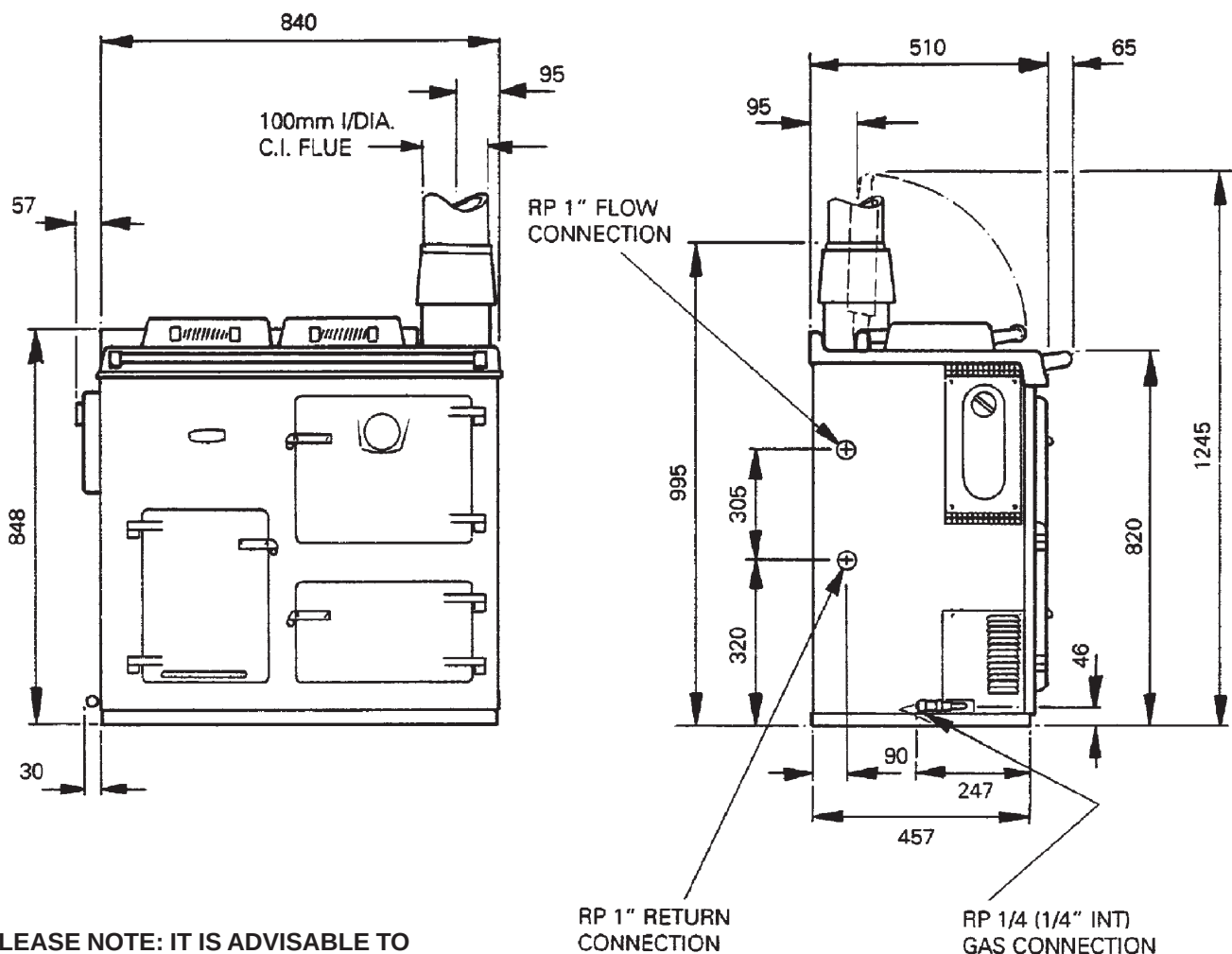
Exercise caution - if these are still in liquid form use face mask and disposable gloves.

Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre

Maybe harmful if inhaled. May be irritating to skin, eyes, nose and throat. When handling avoid 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.

NOTE: SMOKE/SMELL EMITTED DURING INITIAL USAGE

Some parts of the cooker have been coated with a light covering of protective oil. During initial operation of the cooker, this may cause smoke/smell to be emitted and is normal and not a fault with the appliance, it is therefore advisable to open doors and or windows to allow for ventilation. Lift the insulating lids to prevent staining the linings



PLEASE NOTE: IT IS ADVISABLE TO CHECK THE ACTUAL SIZE/WIDTH OF YOUR APPLIANCE BEFORE FINALLY FIXING ANY KITCHEN UNITS SINCE ENAMELLED CAST IRON CAN VARY IN SIZE.

DIMENSIONS IN MM

DESN 511371

GENERAL SPECIFICATIONS

	COOKER HIGH	COOKER LOW
HEAT INPUT kW	8.0	1.8
HEAT OUTPUT WATER kW	2.2	0.36

	NAT. GAS (G20) Cat I _{2H}	PROP. GAS (G31) Cat I _{3P}
INLET PRESSURE mbar	20.0	37.0
BURNER MARKING - Injector size	3.0	1.55
PILOT MARKING	4212	4208

Boiler Water Connections
 Flow (one) Rp 1 (1in.BSP Int)
 Return (one) Rp 1 (1in.BSP Int)

Both connections are located towards the rear edge of the appliance L.H. side panel.

Gas Inlet Rp 1/4 (1/4" BSP Int)

Flue Outlet Dia. 100mm
Min. Operating Pressure of Boiler 0.23 bar

Max. Operating Pressure of Boiler 1.75 bar

Weight of Appliance 318kg

INTRODUCTION

The Rayburn 208G/L Gas Cooker is a combined cooker and domestic hot water heater.

It is available in Open Flue form only, operating on natural draught, the boiler being designed for use on an open vented indirect hot water system only, operating with gravity D.H.W. primaries.

The appliance is available with Right hand oven and Right hand flue outlet only.

A single gas burner provides heat to both hot water and cooker and is controlled by a manually operated 5 position gas tap.

REGULATIONS

In the interests of safety all gas appliances should be installed by competent persons in accordance with the regulations in force.

GAS SUPPLY

Installation Pipes

Do not use pipes of a smaller size than the appliance gas connection.

The complete installation must be tested for soundness and purged.

LOCATION

The appliance must be installed on a solid level floor or base of incombustible material which is capable of supporting the total weight.

The location chosen for the appliance must permit the installation and the provision of a satisfactory flue and an adequate air supply. The location must also provide adequate space for servicing and air circulation around the appliance.

The appliance is floor-mounted and the space in which the minimum clearances for servicing/installation must have the following:

Between wall and L.H. side of appliance

150mm

Between wall and R.H. side of appliance

25mm

Above the raised insulating cover handle

75mm

In addition, adequate clearance must be available at the front of the appliance to enable it to be operated and serviced.

Flue pipes and fittings must not be closer than 25mm to combustible materials and where passing through a combustible partition sleeve providing an air space of at least 25mm.

Spaces around the flue pipes passing through walls or floors should be sealed against the passage of smoke and flame.

Where the cooker is to stand in a recess or against a wall which is to be tiled, **in no circumstances should the tiles overlap the cooker top plate.**

If a shelf is to be fitted above the appliance, the depth of the shelf must be no greater than 330mm with a minimum clearance of 760mm between the top of the appliance and the underside of the shelf.

FLUE SYSTEM

SEE FIG. 1

The following notes are intended to give general guidance. The cross sectional area of the flue serving the cooker must not be less than the area of the flue outlet of the cooker. If flue pipe is to be used it must not be less than 100mm internal diameter.

A straight vertical section of cast iron flue pipe of a length not less than 600mm MUST be utilised immediately above the flue spigot before any bends are used.

In any event the minimum flue length MUST not be less than 3m.

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

- (a) Cement
- (b) Aluminium or stainless steel
- (c) Cast iron or mild steel acid resistant vitreous enamel lined.

If a chimney is to be used, it preferably should be one that is composed of or lined with a non-porous acid resistant material.

A flue pipe constructed in cast iron, should form the initial connection to lined chimneys.

Where a chimney is to be used which is not composed of or lined with a non-porous acid resistant material it should be lined with a stainless steel flexible flue liner in accordance with the relevant standards.

Before connecting the appliance to or inserting a liner into a flue that has been previously used, the flue MUST be thoroughly swept clean of any soot and loose materials. If a baffle plate, etc. is fitted in the flue it must be removed before connecting the appliance to, or inserting a liner into the flue.

The flue should terminate in accordance with the regulations in force.

AIR REQUIREMENTS

The appliance can only be installed in a room which meets the ventilation regulations in force. But, in any event the room must have a permanent vent of minimum free air area of 37cm².

Effect of an Extractor Fan

If there is any type of extract fan fitted in the same room as an appliance, there is a possibility that if adequate air inlet from outside is not provided, spillage of the products from the appliance flue could occur when the extract fan is in operation.

Where such installations occur, a spillage test must be carried out.

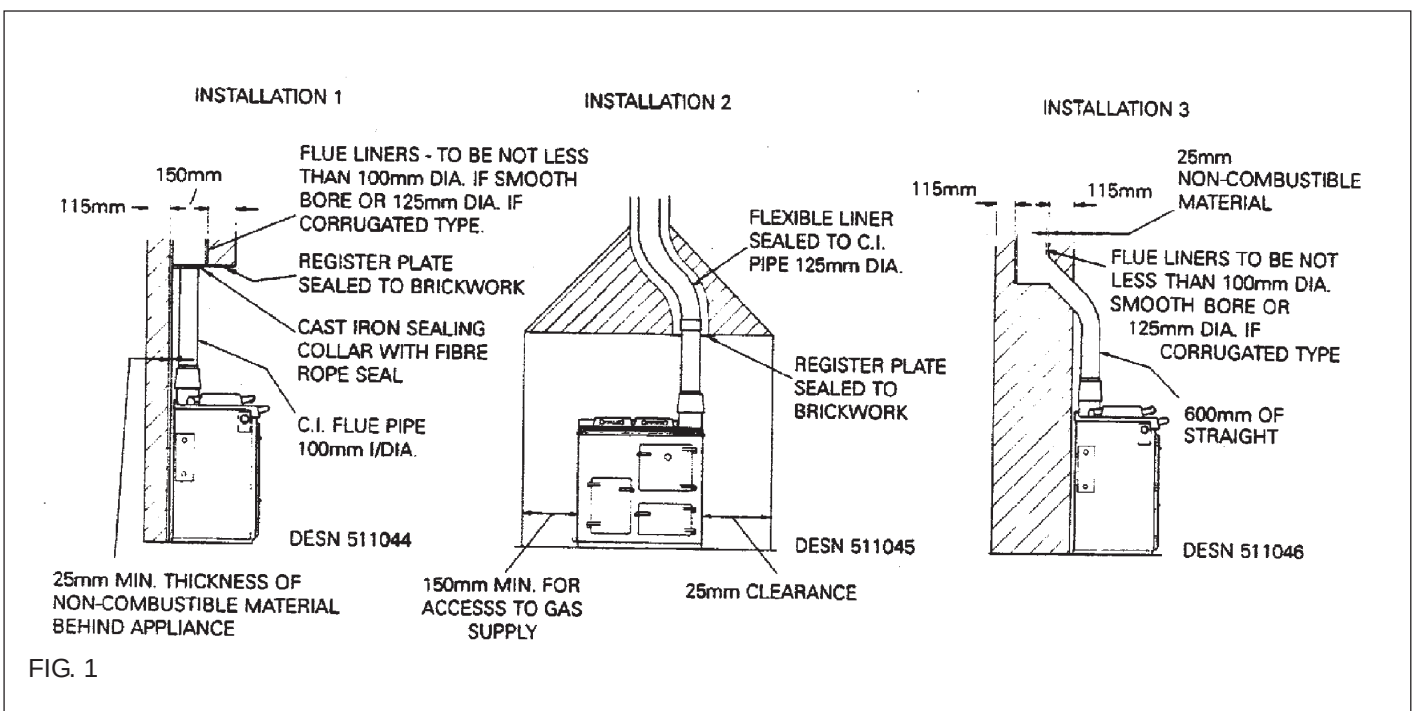


FIG. 1

WATER CIRCULATION SYSTEM

The following notes are of particular importance:-

Pipework should be insulated to help prevent heat loss and possible freezing, particularly where pipes are run through roof space and ventilated under floor spaces.

Cisterns situated in areas which may be exposed to freezing conditions should also be insulated.

Draining taps must be located in accessible positions to permit the draining of the whole system. Including the appliance and hot water storage vessel.

The appliance boiler section should be connected to a cistern water supply, subject to a maximum head of 18.0m.

The hot water storage vessel should be insulated, preferably, with not less than 75mm thick mineral fibre, or its equivalent.

The use of horizontal pipe runs should be avoided wherever possible in order to prevent the collection of air in the system. If horizontal runs are unavoidable, the pipes should rise upwards in the direction away from the appliance.

Hot Water Storage Vessel

It is recommended that an indirect 140 litre hot water storage cylinder of the double feed type should be lagged and fixed vertically as near as possible to the appliance.

The water draw-off pipes to the taps must be dead leg connection from the vent/expansion pipe. A drain tap must be fitted to the lowest point of the system.

Note: The appliance MUST not be operated if the water system is put out of operation or has been drained.

Water Connections

The two Rp1 (1in BSP int) flow and return connections are located towards the rear edge of the appliance left hand side panel, and pipe connections should be made with R1 (1in BSP ext) x 28mm dia copper compression fittings.

Gravity Domestic Hot Water

The 28mm O.D. primary flow and return pipe must rise continuously from the boiler section to the cylinder to ensure good gravity circulation and extended to provide an open vent. The 28mm O.D. primary flow and return pipes must not exceed 10m in length. Pipe runs in excess of 5m must be lagged.

PRELIMINARY INSTALLATION

The appliance is delivered in a fully assembled condition with the exception of the following items which are supplied separately packed and require assembly.

1. Draught Diverter Assembly - See Fig. 3.
2. Appliance Rear Distance Bracket - (For use when appliance is installed 25mm away from a rear wall of combustible material). See Fig. 4.
3. Handrail & Brackets. See Fig. 5.

SITE LOCATION

1. Remove the appliance assembly from its transit wooden pallet by the temporary location of a sloping ramp board between the pallet and the floor. With the appliance on the floor, lift the front of the appliance (manually or crowbar) and insert a 1in BSP x 1m long tube between the front of the appliance base plate and the floor. Draw the tube balanced appliance forward until the tube is at the rear of the appliance and then insert a second similar tube at the front of the appliance, between the base plate and floor. The tube supported appliance can now be slowly "rolled" across the floor and positioned with its back against the wall, and in its intended position for flue connection.

Using a crowbar at the rear corner of the appliance base plate, take the weight of the appliance on the crowbar and remove the rear roller tube, followed by similar action on the front tube.

NOTE: IF THE REAR WALL IS OF COMBUSTIBLE MATERIAL, THERE MUST BE AN AIR GAP OF 25mm BETWEEN THE WALL AND REAR OF APPLIANCE. FIT REAR DISTANCE BRACKET AS SHOWN IN FIG. 4.

Wherever possible, it is recommended that skirting board is removed for the width of the appliance to enable the rear edge of the appliance top-plate to make contact with the vertical wall, and avoid a rear air gap (Combustible walls excepted).

2. Assemble and locate the flue draught diverter assembly on the top plate. See Fig. 3.
3. Fit a 600mm minimum vertical height of flue pipe into the draught diverter flue socket before any bends, sealing joint with fire cement.
4. Connect and terminate the flue system in accordance with standard practice. See Fig. 1.
5. The handrail brackets are held on the front ends of the cooker top-plate casting. Remove the travel nuts and replace with the handrail brackets ensuring the fibre protecting washers are in position. Insert the handrail with fitted endcaps into the brackets, positioning them correctly, and tighten the locating bolts. See Fig. 5.

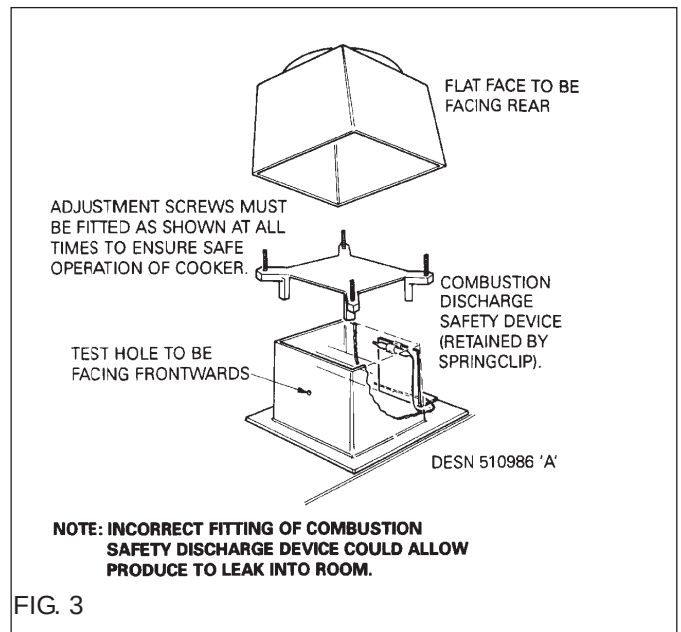


FIG. 3

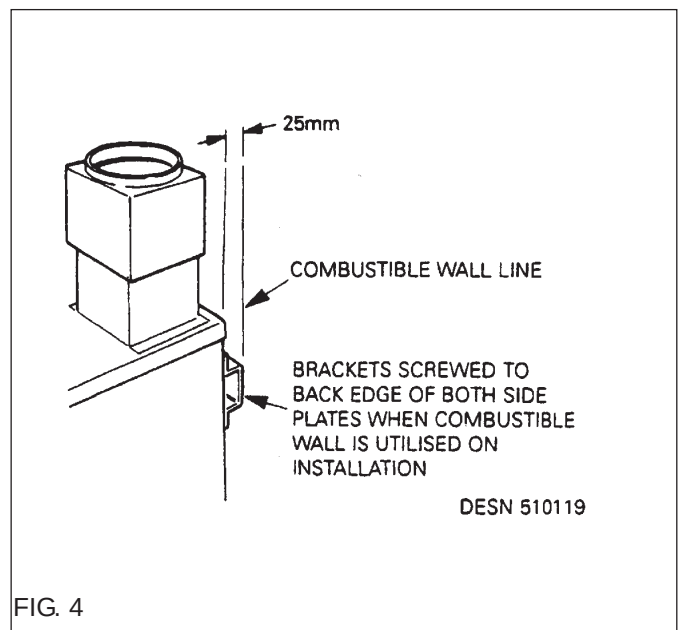


FIG. 4

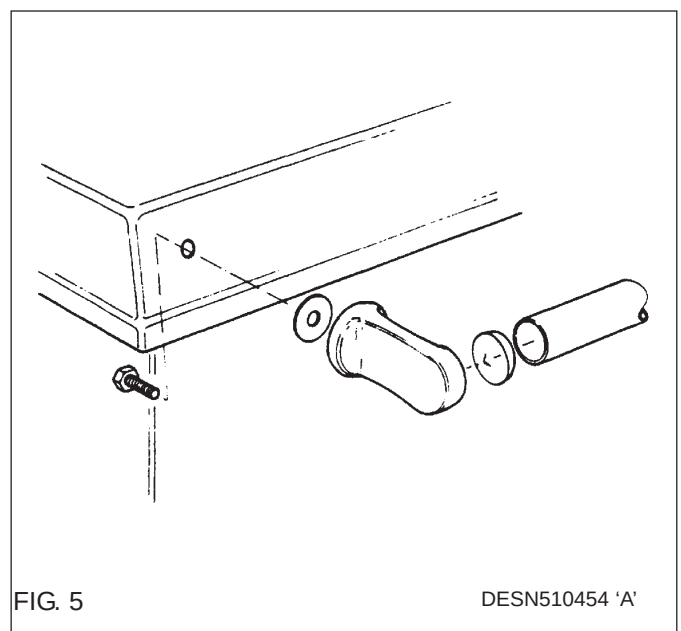


FIG. 5

Gas Installation

Connect the gas supply to the integral union gas service cock on the left hand side of the appliance.

Test the whole of the gas installation, including the meter for soundness and purge in accordance with the regulations in force.

COMMISSIONING AND TESTING

SEE FIG. 6

Water Circulating System

The boiler/cylinder system should be thoroughly flushed out with cold water and checked for water soundness. Refill system and check that all air locks are cleared.

Gas Circuit

The whole gas installation must be inspected and tested for soundness and purged up to the appliance gas cock in accordance with the regulations in force.

Lighting Main and Pilot Burner

This appliance is fitted with a combustion discharge safety device (CDSD) which will switch off the appliance in adverse flue conditions.

Before turning on the main burners ensure that the manual reset button **P** is depressed.

Before lighting ensure cooker control knob **A** is in the ● position.

1. Open outer burner door **B**, lift off door **C** and turn slotted head of appliance gas service cock **D** until slot is positioned in line with pipework. (open).
2. Push in and hold red flame failure button **N** and light the pilot **H** with a taper, continue to hold red button for at least 15 seconds. Pilot should remain alight when released. If it does not WAIT 3 MINUTES and repeat sequence.
3. Remove sealing screw from gas inlet pressure test nipple **L**, fit gas pressure gauge.
4. Push in and turn cooker control knob **A** from ● to 4. The main burner **K** should cross-light from pilot light.
5. Replace combustion chamber door **C**.
6. Turn the control knob **A** to 1 and allow the cooker to warm up for 10 minutes.
7. Turn control knob **A** to 4, check that the main inlet gas pressure is as indicated on the data plate and unaffected when other gas appliances are used.
8. Check that there is no spillage of combustion products from the appliance down-draught diverter by carrying out a spillage test.

Inspect flame pattern and appearance of burner at full fire to establish that there is adequate air for combustion.

9. Close outer burner door **B**.

10. If there is any type of extract fan in the same room as an appliance, 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 extract fan is in operation.

Where such installations occur, a spillage test must be carried out.

HOW TO OPERATE COOKER CONTROL

Overnight and when not required for cooking, leave cooker control knob **A** to **L** position. To increase the temperature of the oven or hotplate, turn the cooker control knob **A** to required temperature. Reduce knob setting gradually in order to maintain required temperature.

Turning Off

Press and hold in cooker knob **A** simultaneously turning it clockwise ● whereupon the main cooker burner **K** will extinguish, leaving the pilot **H** alight.

To extinguish the pilot, turn slot of gas service cock **D** until the slot is positioned across the pipework.

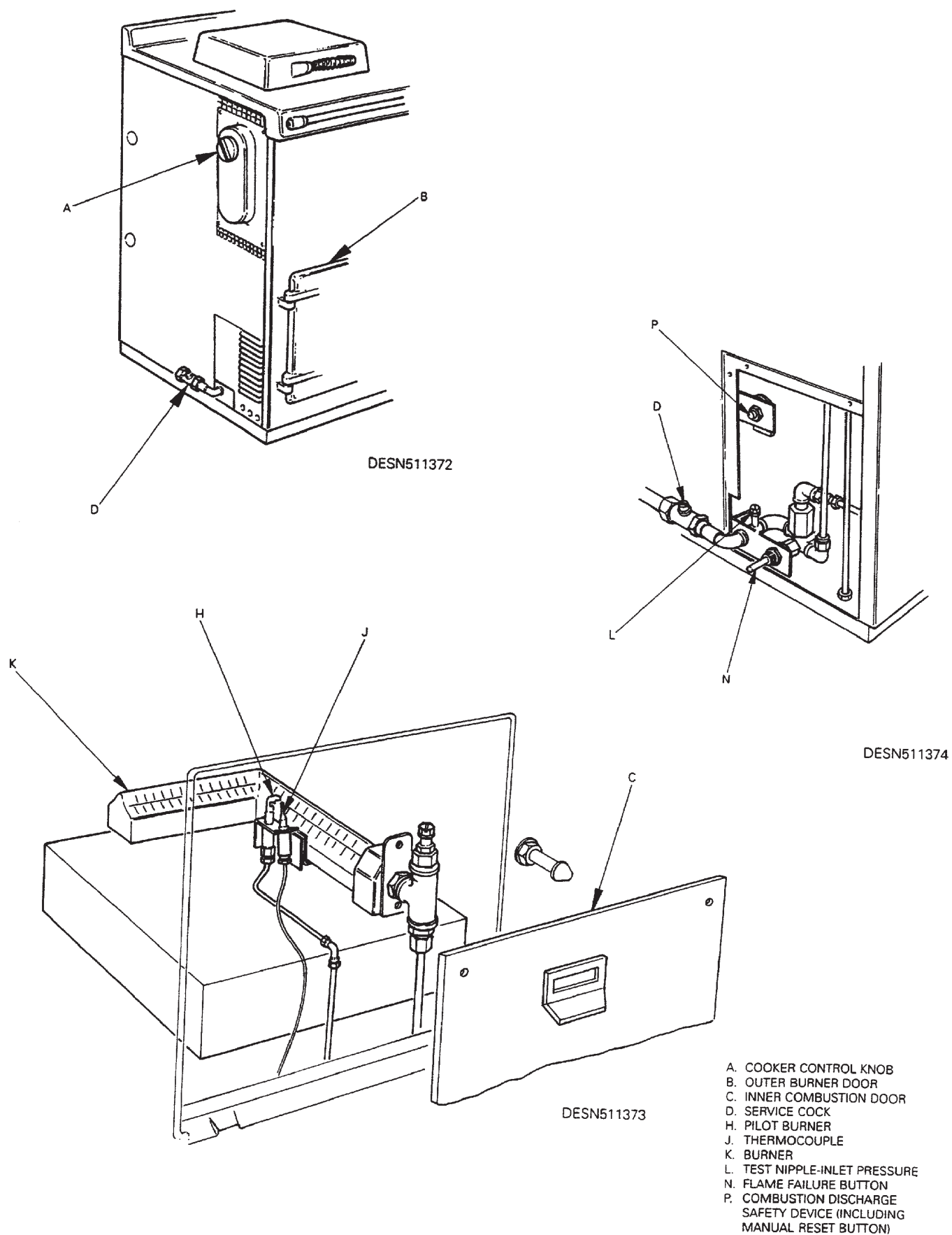


FIG. 6

INSTRUCT USER

Advise the User of the precautions necessary to prevent damage to the heating system and to the building in the event of the heating system remaining inoperative during frost conditions.

Advise the User that, care should be taken not to touch the hotplate, oven, combustion chamber, door and flue areas unless a insulated glove is used as these areas are hot working surfaces and will burn unprotected skin.

Advise the User that, for continued efficient and safe operation of the appliance, it is important that adequate servicing is carried out at regular intervals recommended by the Local Gas Authority, or a competent service engineer.

Hand the User Instructions to the User and demonstrate the correct operation of the appliance and system controls.

SERVICING INSTRUCTIONS

SEE FIG. 6

NOTE: LEAVE THESE INSTRUCTIONS WITH THE USER OR ADJACENT TO THE GAS METER.

Annual Servicing

It is important that servicing be carried out by a competent service engineer, and it is recommended that a contract be made with the local Gas Authority or a competent service engineer.

With normal use, a cooker flueway clean and burner service should be carried out once per annum.

The householder should be advised to turn OFF the cooker control knob the night preceding the day of service, so that the appliance, will have cooled down by the following morning, in readiness for servicing. Before commencing any servicing, turn OFF the gas supply at the appliance gas service cock (bottom LH side).

Oven Door Fit - Both doors must be checked and adjusted if necessary to ensure the alignment with the door catch is correct, the keep is secure and the oven is sealed when the door is closed.

Standard Annual Service Schedule

- a. Service clean of heat exchanger over flueways and hotplate.
- b. Service clean of burner main injector.
- c. Service clean of pilot burner assembly with injector.

1. To Obtain Servicing Access

To obtain servicing access to main gas burner, gas control and heat exchanger, proceed as follows:-

- a. Lift out the hotplate.
- b. Open the outer burner door and remove inner combustion chamber door.

2. To Remove Main Burner

- a. Ensure the appliance service cock **D** is turned OFF.
- b. Disconnect main burner inlet union and pilot union connection at the front of the burner chamber.
- c. Remove two screws securing burner to baseplate, lift up the front of the burner and draw forward carefully to disengage support foot from baseplate location. Withdraw the burner unit until Pilot assembly is accessible, unscrew thermocouple and remove burner.
- d. Gently brush the top face of the burner and examine the flame ports. Remove any lint/fluff from injector, burner venturi and tip downwards to remove debris.
- e. Remove main injector and check it is free of deposits.

3. To Service Pilot Burner

- a. Remove main burner assembly as previously described.
- b. Unscrew thermocouple fixing nut.
- c. Disconnect hexagon nut securing pilot feed pipe to pilot burner.
- d. Remove pilot injector and check to see if it is free of deposits.
- e. Examine probe end of thermocouple **J** and replace if probe end is badly pitted, corroded or malfunctioning.

4. To Clean the Heat Exchanger and Flueways

- a. Remove the main and pilot burner assembly as previously described.
- b. Place a layer of paper on combustion chamber baseplate.
- c. Thoroughly brush vertical rear boiler flueway, cooker flueway in an upward and downward direction. Brush underside of baffle plate above the main burner and also across the oven top.
- d. Remove layer of paper with fallen debris.
- e. Brush and clean in between hotplate ribs on underside.
- f. Examine soft rope seal locate on underside of hotplate baffle plate. Replace if worn or frayed.
- g. Examine soft rope seal located around hotplate aperture in top plate. Replace if frayed or damaged.
- h. Re-fit the main and pilot burner assembly in reverse order of assembly.
Test all disconnected joints for gas soundness.
- i. Replace hotplate ensuring that the underside ribs lie over the combustion chamber.
- j. Turn ON appliance service cock **D**, light pilot and turn oven control knob to confirm the burner lights satisfactorily.

5. To Replace Cooker Control Tap

- a. Turn OFF gas supply at the gas service cock **D**.
- b. Remove control knob and detach cover panel (4 screws).
- c. Disconnect unions of control tap and tap fixing bracket.
- d. Fit new control tap and connect inlet and outlet gas pipes.
- e. Turn ON gas supply at the service cock **D** and light cooker pilot.
- f. Check for gas soundness at control tap inlet unions.
- g. Turn control tap **A** to position 4 and check for gas soundness at control tap outlet unions.
- h. Fit cover plate.
- i. Refit knob.

6. To Remove Oven Temperature Indicator

- a. Open main oven door fully and remove four screws securing inner lining panel to outer door.
- b. Remove inner lining panel sealing washer and slagwool insulation.
- c. Unscrew two hexagon nuts securing indicator to outer door and remove indicator.
- d. Fit replacement indicator in reverse order of dismantling.

7. To Remove FSD

- a. Remove gas inlet cover plate.
- b. Disconnect gas inlet union at gas cock.
- c. Disconnect outlet and pilot feed pipe from FSD.
- d. Unscrew FSD fixing bracket and withdraw FSD from bracket until thermocouple and interrupter wires are accessible, remove wires and unscrew thermocouple.
- e. Remove elbows and bracket from FSD.
- f. Re-assemble in reverse order.
- g. Check joints for gas soundness.
- h. Replace cover.

8. To Remove Combustion Discharge Safety Device

- a. Remove control knob.
- b. Remove screws securing control panel and remove panel.
- c. Remove screws securing gas inlet cover and remove cover.
- d. Remove spindle locknut and wire leads from C.D.S.D.
- e. Remove C.D.S.D. phial from spring clip in down draught diverter hood Fig. 3.
- f. Withdraw C.D.S.D. and fit replacement in reverse order.

IMPORTANT: INCORRECT FITTING OF COMBUSTION DISCHARGE DEVICE COULD LEAD TO COMBUSTION PRODUCTS LEAKING INTO THE ROOM.

NOTE: ONLY APPROVED RAYBURN COMBUSTION SAFETY DEVICES MUST BE FITTED TO THIS APPLIANCE.

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

With AGA'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.



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