

10/05 EINS 511985



308K OFCERT Licence No.: 0400040014  
300K OFCERT Licence No.: 0400040013



## Better than you ever imagined

# Installation & Servicing Instructions for Rayburn Cookmaster 300K and Rayburn Cookmaster Plus 308K Oil-Fired Cooker

### Consumer Protection Act 1987

As responsible manufacturers we take care to make sure that our products are designed and constructed to meet the required safety standards when properly installed and used.

**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/Gas 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.

## INTRODUCTION

The Rayburn Cookmaster Plus 308K is a cooker providing domestic hot water and cooking facilities. It is available with a vertical flue and outlet only, with the oil burner operating on natural draught.

The boiler is designed for use in an open vented water system only, with gravity D.H.W. primaries.

The heat exchanger is manufactured from a high quality stainless steel and where permitted by local water authorities may be used on direct hot water systems, although it is preferable to use the indirect system. Alternatively, the Rayburn Cookmaster 300K is a non-boiler model. However with this model the **IDLING TEMPERATURE MAY BE HIGHER.**

These appliances must only be used with Commercial Kerosene current issue to BS 2869: Class C2 suitable for vapourising burners.

**IMPORTANT: IN ORDER TO ACHIEVE THE OPTIMUM PERFORMANCE FROM THIS APPLIANCE, IT IS ESSENTIAL THAT THE INITIAL COMMISSIONING OF THE APPLIANCE IS UNDERTAKEN BY SELECTED, TRAINED INSTALLING SERVICE ENGINEERS (SUCH AS OFTEC APPROVED).**

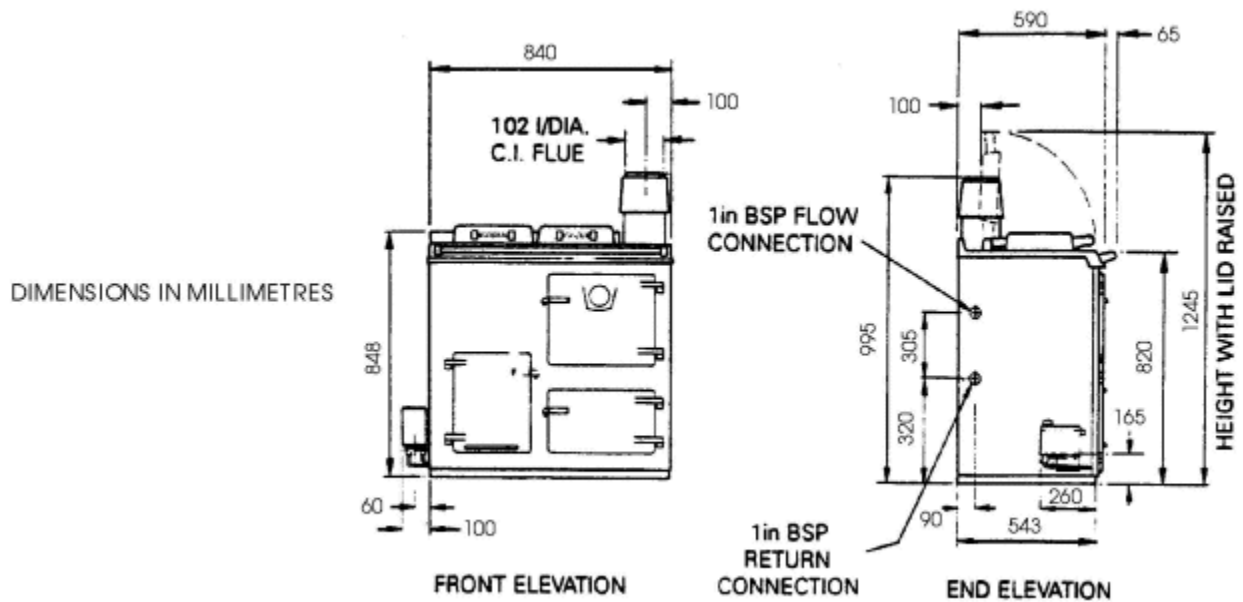
**YOUR RAYBURN STOCKIST WILL PROVIDE ADVICE ON THE LOCATION OF THE NEAREST INSTALLING ENGINEER. WE ALSO RECOMMEND YOU CONTRACT OUT THE PERIODIC SERVICING OF THE APPLIANCE TO THIS INSTALLING SERVICING ENGINEER.**

**THIS APPLIANCE IS A CONTROLLED SERVICE BY DEFINITION AND REQUIRES EITHER FITMENT UNDER THE REMIT OF BUILDING CONTROL OR INSTALLATION BY AN OFTEC REGISTERED 105 TECHNICIAN (CLASSED AS A COMPETENT PERSON) WHO CAN SELF CERTIFY HIS OWN WORKS.**

**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.**

		Boiler Model - 308K		Non-Boiler Model 300K	
		Cooker	Cooker	Cooker	Cooker
		LOW	HIGH	LOW	HIGH
Heat Input	kW	2.78	7.42	2.16	5.48
	Btu/h	9,497	25,321	7,386	18,700
Heat Output Water	kW	0.59	2.34		
	Btu/h	2,000	8,000		
Oil Input	cc/minute	4.5	12.0	3.5	8.5 - 9.0
Boiler Water Connections		Weight of Appliance		300Kg	
Flow (one) Rp 1 (1in BSP Int)		Overall Dimensions		Height: 995mm Width: 940mm Depth: 655mm	
Return (one) Rp1 (1in BSP Int)					
Both connections are located towards the rear edge of the appliance L.H. side panel.		FUEL - COMMERCIALKEROSENE current issue to BS.2869: Class C2 suitable for vapourising burners			
Oil Valve Inlet Rp¼(¼in BSP Int)					
Flue Outlet Dia. 102mm					

[raywarranty@aga-web.co.uk](mailto:raywarranty@aga-web.co.uk)



DESN 511031

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

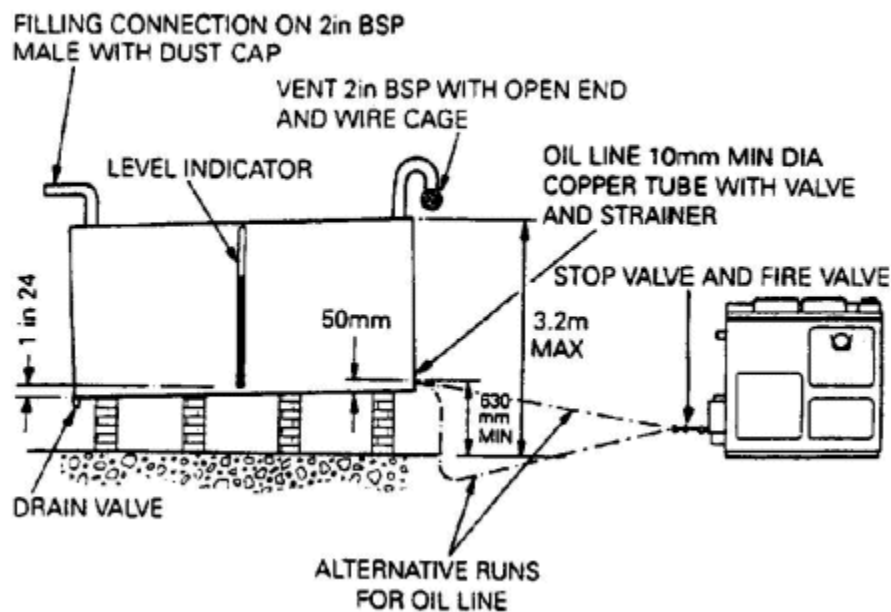


Fig.1 Oil Storage tank and pipeline details DESN 510210

## INSTALLATION INSTRUCTIONS

The installation of the appliance must be in accordance with the relevant requirements of the current Building Regulations, current I.E.E. Wiring Regulations and the byelaws of the local Water Authority.

It should be in accordance also with any relevant requirements of the Local Authority and the relevant recommendations of the following current British Codes of Practice:

**BS.5410** Installation of oil fired space heating and hot water supply purposes. Boilers of rated output not exceeding 44kW.

## Building Regulations

**J/1/2/3** Provision for introduction of air supply and discharge of products of combustion for appliances.

**BS.4543** Specification for chimney for oil fired appliances. Part 3.

## Building Regulations

**J/1/2/3** Provision for protection against fire and heat.

## LOCATION

### Appliance Hearth

This 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 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. See "[Installation of Appliance](#)".

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

### OIL STORAGE - [See fig.1](#)

The minimum recommended oil tank size is 1400 litres (300 gallons) and the Codes of Practice governing its installation are covered by BS.5410.

The requirements for mild steel tanks should be to BS.799 Part 5. Plastic Oil Tanks to OFTEC Standard OFS T100. The oil storage tank must be positioned with the bottom of the tank not less than 630mm, and the top not more than 3.2m above the base of the cooker.

### Oil Pipe Line

The oil line from the storage tank to the appliance must be fitted with a remote acting fire valve (such as a Teddington KBB-66°C) located outside the building, or where the supply enters the wall on the inside of the building and with the heat sensing phial of the fire valve, located as near as practicable on the L.H. side of the cooker.

A 5-10 micron oil filter should also be fitted in the oil line, and the minimum size of the copper oil pipe line should not be less than 10mm diameter.

A stop valve must be fitted near the appliance, in an accessible position.

We also recommend an additional remote acting fire valve be fitted close to the oil control valve, with its heat sensing phial located in the burner housing, but not touching, the inner burner door.

## FLUE SYSTEM - [See Fig.2](#)

Detailed recommendations for fluing are given in the current Building Regulations J/1/2/3.

The following notes are intended to give a general guidance:-The cross sectional area of the flue serving the appliance must not be less than the area of the flue outlet of the appliance and be at least 4.5m high.

The flue pipe to be used must not be less than 102mm internal diameter. Flue pipes and fittings should be constructed from one of the following materials:-

- a) Mild Steel with a wall thickness of 3mm minimum.
- b) Stainless Steel to BS.1449. Part 2.
- c) Cast Iron to BS.41.
- d) Mild Steel, acid resistant vitreous enamel lined to BS.1344. Part 2

### Chimneys

Chimneys should be built of masonry or be assembled from factory-made insulated components.

Masonry chimneys may be built of any masonry material, with a lining, of if flue blocks., without a lining.

The chimney lining should be 125mm minimum diameter and be formed of moisture and acid resistant liners to BS.1181 with rebated or socketed joints uppermost. Alternatively, linings may be imperforate clay flue pipes as described in BS.65 or flue blocks to BS.1289 and installed to BS.6461.

A 125mm minimum diameter factory-made, insulated chimney, complying to BS. 4543 may be fitted and installed to BS.7566.

### Use of older existing chimneys

Older chimneys must be swept thoroughly, and a suitable flexi liner fitted.

### Chimney Terminations

All chimneys should terminate above the highest roof ridge level in accordance with current Building Regulations and statutory requirements as outlined in BS.6461 Part 1 and BS.7566 Parts 1 to 4.

However well-designed, constructed and positioned, the satisfactory performance of a flue can be adversely affected by the down-draught caused by adjacent tall buildings and trees or even nearby hills. These deflect the wind creating a zone of high pressure over the terminal causing it to blow directly down the chimney flue.

A suitable anti-downdraught terminal such as the Marcone will usually effectively combat low pressure down-blow but no known cowl is likely to prevent down-draught due to a high pressure zone.

### Chimney Cleaning

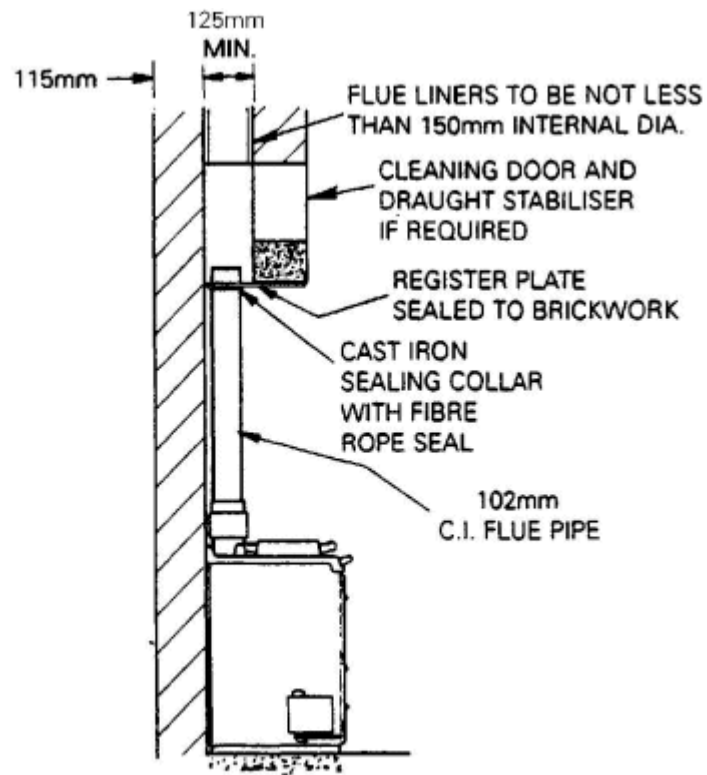
Ensure there are accessible airtight flue cleaning doors in order to obtain cleaning access to the complete chimney. Providing the appliance is operating correctly, an annual chimney flue clean will suffice, but if in doubt, arrange for a half yearly clean, preferably at the beginning/end of the central heating season.

### Flue Draught

For correct performance of the appliance, it is recommended that the flue pull be a minimum of 1mm H<sub>2</sub>O.

## High Chimney Draughts

A well sealed, tall exposed chimney on a hill, is an instance where generated draughts could be excessive and must be controlled.



**FIXED IN A PREPARED RECESS**

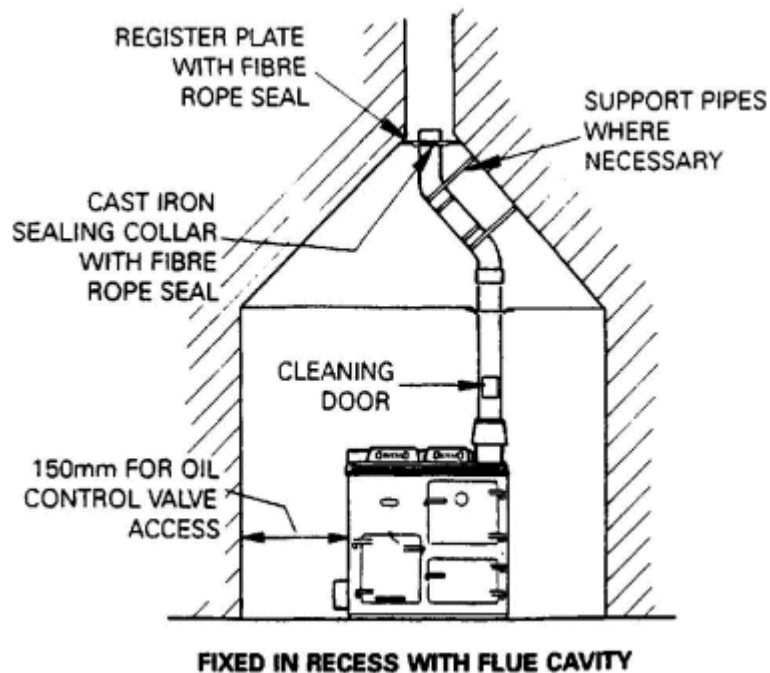
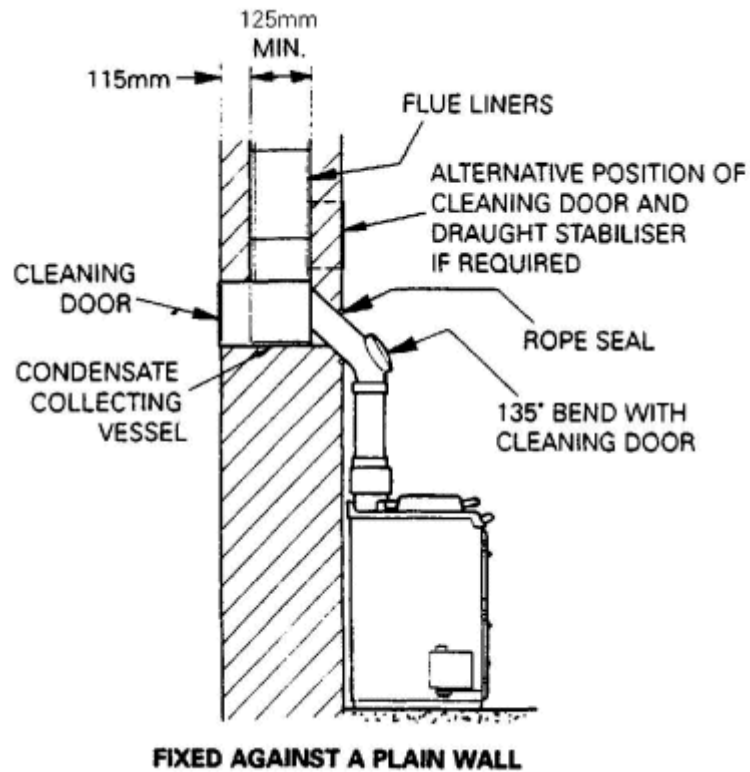


Fig.2 Flue Layouts

Should this occur, a flue stabilizer must be fitted either in the flue pipe or chimney, but in the same room as the appliance.

## Flue Gas Temperature

Typical flue gas temperature under normal operating conditions are 200 - 250°C.

Maximum flue gas temperature typically 330°C (308K at maximum setting).

**UNDER NO CIRCUMSTANCES SHOULD 90° BENDS BE USED IN THE FLUE SYSTEM**

## **AIR SUPPLY**

Detailed recommendations for air supply are given in the current Building Regulations J/1/2/3.

The following notes are intended to give general guidance:-

### **Kitchen or Internal Space Air Supply**

Wherever a flued appliance is to be installed, it must have a permanent air vent. This vent must be either direct to outside air or to an adjacent room or internal space which must itself have a permanent air vent of at least the same size direct to outside air. The minimum effective area of the permanent air vent in the outside wall must be 30.5cm<sup>2</sup> (4.75in<sup>2</sup>).

### **Effect of Extractor Fan**

Avoid if possible the installation of an extractor fan in the same room as the appliance or the room where the permanent vent is located. Additional air inlets must be fitted to introduce compensating air, equivalent to the capacity of the fan when fitted.

## **HOT WATER SYSTEM**

Hot water systems should be in accordance with the relevant recommendations given in BS.6700.

The following notes are of particular importance:-

1. In domestic hot water systems the hot water storage vessel should preferably be of the indirect cylinder of calorific type.
2. The hot water storage vessel should be insulated, preferably, with not less than 75mm thick mineral fibre, or its equivalent.
3. Pipework should be insulated to help prevent heat loss and possible freezing, particularly where pipes are run through roof spaces. Cisterns situated in area which may be exposed to freezing conditions should also be insulated.
4. Draining taps must be located in accessible positions which permit the draining of the appliance and hot water storage vessel. Draining taps should be at least 1/2in BSP nominal size and be in accordance with BS.2879.
5. The appliance boiler section should be connected to a cistern water supply, subject to a maximum head of 18.25m (1.8 Bar).
6. Water carrying copper tubes should be to BS.2871, Part 1.
7. Hot water systems should be in accordance with the relevant recommendations given in BS.6700.
8. 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 (30 gallon) hot water storage cylinder of the double feed type e.g.



(Manufactured by Albion Cylinders) complying with the BS.1566, should be insulated, preferably with not less than 75mm thick mineral fibre or its equivalent, 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 at the lowest point of the system.

A towel rail of not more than 0.55m<sup>2</sup> heating surface may be heated providing the flow and return pipes are not more than 5m each in length, and provided the cylinder and pipes to the cylinder are insulated.

**NOTE:** The appliance **MUST NOT** be operated if the water system is out of operation or has been drained.

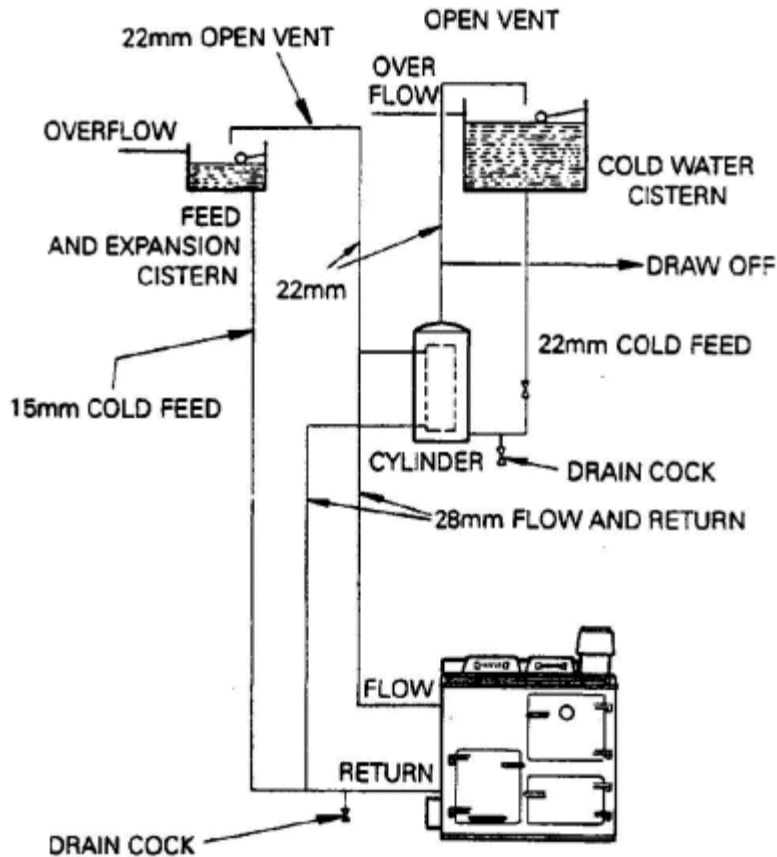


Fig.3 Typical Gravity System DESN 511035

## Corrosion Inhibitor

**A corrosion inhibitor can be used when installing this appliance to an Indirect hot water cylinder only.**

If the cylinder is very close to the cooker, a towel rail is advisable as a heat leak and lagging should not be applied.

## Appliance Boiler

The appliance boiler is of stainless steel construction.

## INSTALLATION OF APPLIANCE GENERAL

The combined appliance is floor-mounted and the space in which the appliance is to be fitted must have the following minimum dimensions:-

**Between wall and L.H. side of appliance** 150mm  
**Between wall and R.H. side of appliance** 10mm,  
 OR IF THE WALL PROJECTS BEYOND THE FRONT OF THE APPLIANCE - 50mm (See Fig. 4 )  
**Above the raised insulating cover handle** 75mm

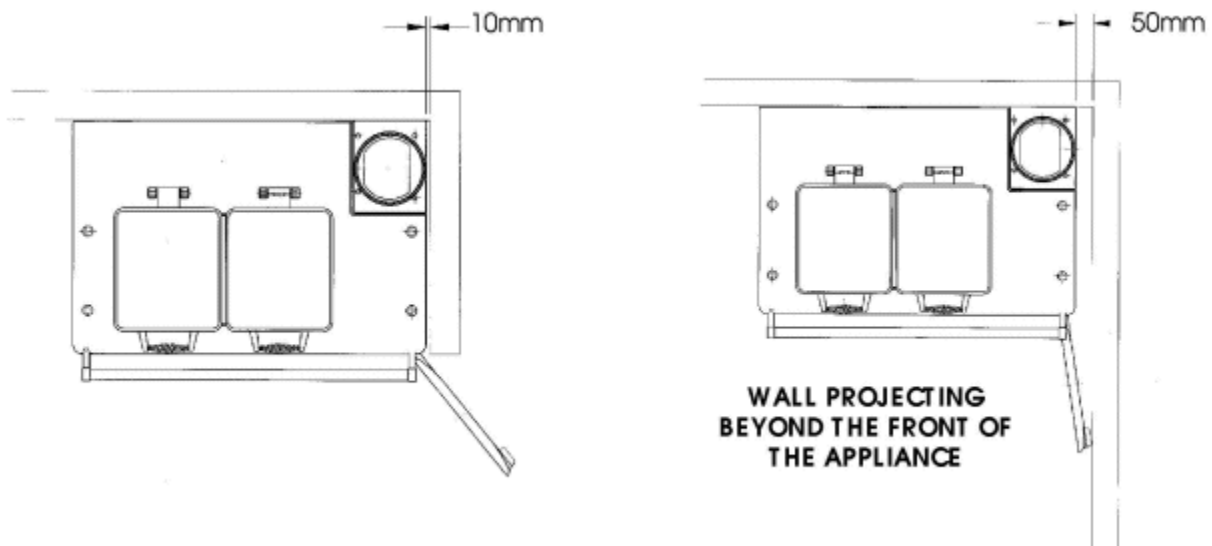


Fig. 4

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

Flue pipes and fitting must not be closer than 25mm to combustible materials and where passing through a combustible partition such as a ceiling or roof, must be enclosed in non-combustible 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.

## 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. Complete, but dis-assembled oil burner with spare set of wicks.
2. Oil Constant Level Valve and Support Bracket.
3. Flue Outlet Assembly.
4. Handrail Tube.
5. Appliance rear distance bracket - For use when the appliance is installed near a rear wall or combustible material - See Fig.6.
6. Boiler sealing cement.
7. 8mm dia copper oil feed tube.
8. Boiler pipe Collars-Boiler Model Only.

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).

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.**

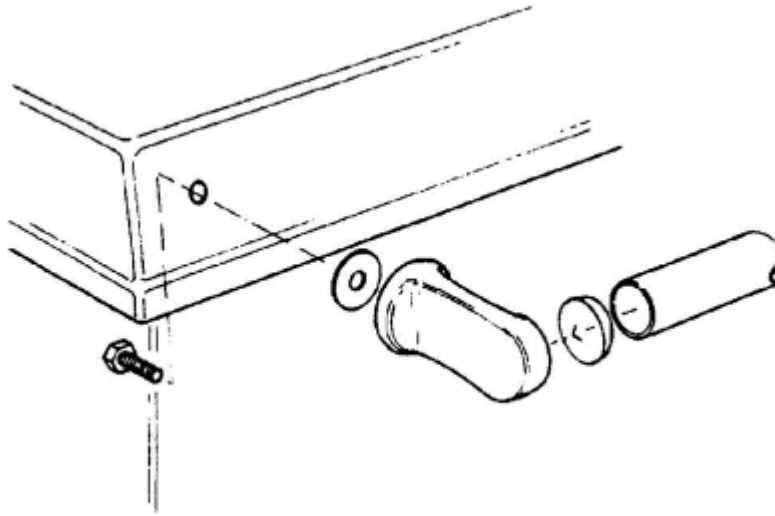


Fig. 5 DESN 510454 A

## SITE LOCATION

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,

tighten the locating bolts ([Fig. 5](#)).

1. Check that the hearth is level, then move the appliance from its transit wooden pallet, and position it with its back against the wall and in its intended position for flue connection.  
**NOTE:** IF THE REAR WALL IS OF COMBUSTIBLE MATERIAL, THERE MUST BE AN AIR GAP OF 25mm BETWEEN THE WALL AND REAR AS SHOWN IN [FIG.4](#).
2. Locate and secure flue outlet spigot to top plate with sampling hole at front. Place horizontal baffle on spigot and locate flue outlet hood on baffle supported by internal screws. [See Fig.7](#).
3. Locate and fit flue pipe into flue socket, sealing joint with fire cement.
4. Connect and terminate the flue system in accordance with standard practice.
5. Coat the male thread of the oil burner pipe assembly elbow with oil resistant jointing compound and screw into the burner base, check position of elbow. [See Fig.8](#) (Boiler Model) or [Fig. 8A](#) (Non-Boiler Model).

Visually confirm that the oil burner pipe is level or slopes upwards to the oil entry in the burner base, to avoid air locking.

6. Fit oil burner base to support plate and secure with 3 bolts.
7. Lift up insulating covers and remove hotplate. (Boiler Model Only).
8. Place and locate the cast-iron baffle and stainless steel baffle assembly as per [Fig.9](#) through the hotplate aperture. Replace the hotplate with the fins over the oil burner position.

## WATER CONNECTIONS

Pipe connections should be made to the two Rp1 (1in BSP int) flow and return tapings in the boiler on the LH side of the appliance.

Pipe connections should be made with Rp1 (1in BSP ext) x 28mm dia copper compression fittings or steel pipe nipples.

## Gravity Domestic Hot Water

The 28mm O.D. primary flow 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 each in length. Pipe runs in excess of 5m must be lagged.

**Seal the boiler body to the combustion chamber with fire cement** provided, or non-boiler models remake any disturbed seals on firebrick assembly.

## OIL CONTROL VALVE INSTALLATION

1. Fit and lightly secure oil control valve support bracket to cooker LH side panel. [See Fig.10](#). Using a spirit level, check that the horizontal face of the support bracket is level in all directions, then tighten and secure bracket fixing screws.
2. Mount oil control valve on support bracket and adjust its height (via locknuts) so that the "OILLINE" mark on the LH side of the oil control valve body, measures a vertical height of 256mm from the valve body "mark" to the base plate level.

**NOTE:** IF THE APPLIANCE IS MOUNTED ON A PLINTH, ADD THE HEIGHT OF THE PLINTH TO THE DIMENSION GIVEN. CHECK USING A SPIRIT LEVEL, THAT THE TOP OF THE VALVE IS LEVEL IN ALL DIRECTIONS.

## BURNER INSTALLATION

1. Open outer burner door and lift/remove inner burner door.
2. Withdraw oil burner base assembly and place on a work surface. Locate perforated shell assemblies onto burner base (lighting port at burner front), and check that the shell assemblies seat correctly (near airtight), and that the top horizontal baffle fits on top of the shells. Remove the shells, and check that the vapourising chamber plug fits snugly into the base, and that the vapourising wicks fit into the burner base grooves.
3. Transfer the oil burner base assembly into combustion chamber with centre support at the rear end and the two front support screws forward in the combustion chamber. Adjust the front support leveling screws of the burner assembly until it is level in all directions, then tighten the locknuts on the leveling screws. Use a cross spirit level to ensure burner is level in all directions.

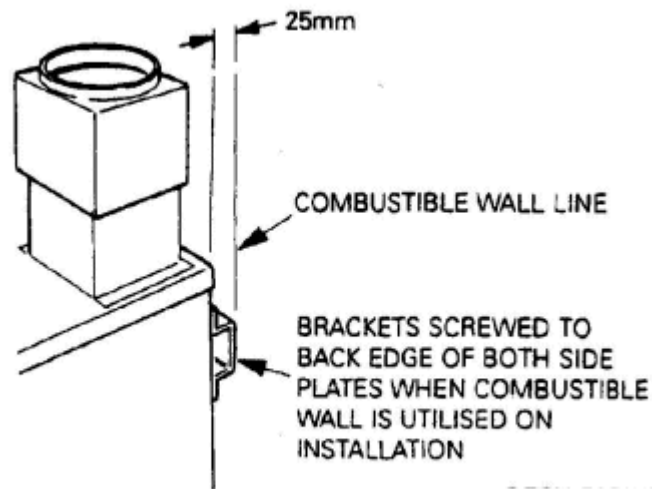


Fig.6 Clearance Between Cooker and Combustion Wall DESN 510119

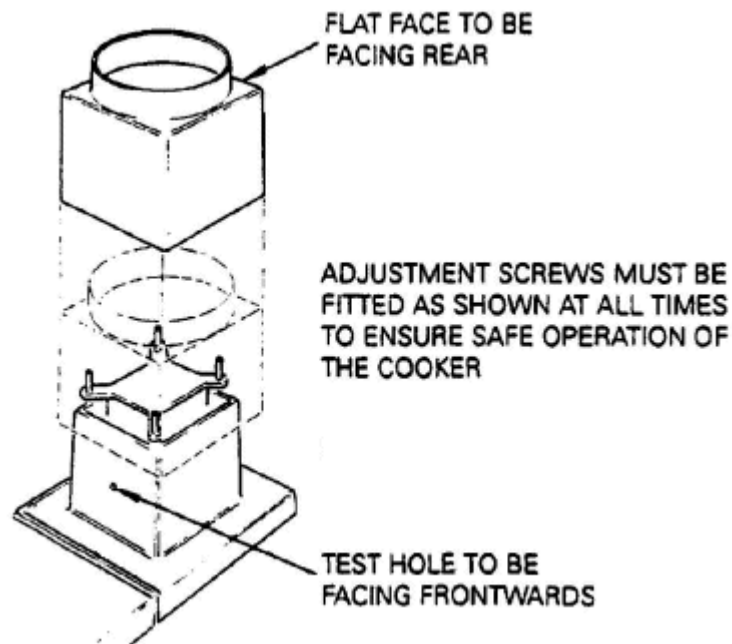


Fig .7 DESN 510827

**NOTE:** THE BURNER BASE MUST BE LEVEL.

4. Insert the copper oil feed pipe through the side of the cooker with the front end turned upward for connection to the burner base front elbow. The opposite end of the pipe should be connected to the elbow on the outlet of the oil control valve.  
**NOTE:** KINKING OF THE OIL FEED PIPE MUST BE AVOIDED OTHERWISE AIRLOCKING WILL OCCUR. ALWAYS RUN THE PIPE TO A LOW LEVEL POINT, THEN GRADUALLY PROVIDE A CONTINUAL UPWARD SLOPE TO THE BURNER.
5. Connect oil supply tank feed pipe to inlet of oil control valve open all oil valves to allow oil into control valve. It may be necessary to purge the oil line to prevent air locking.

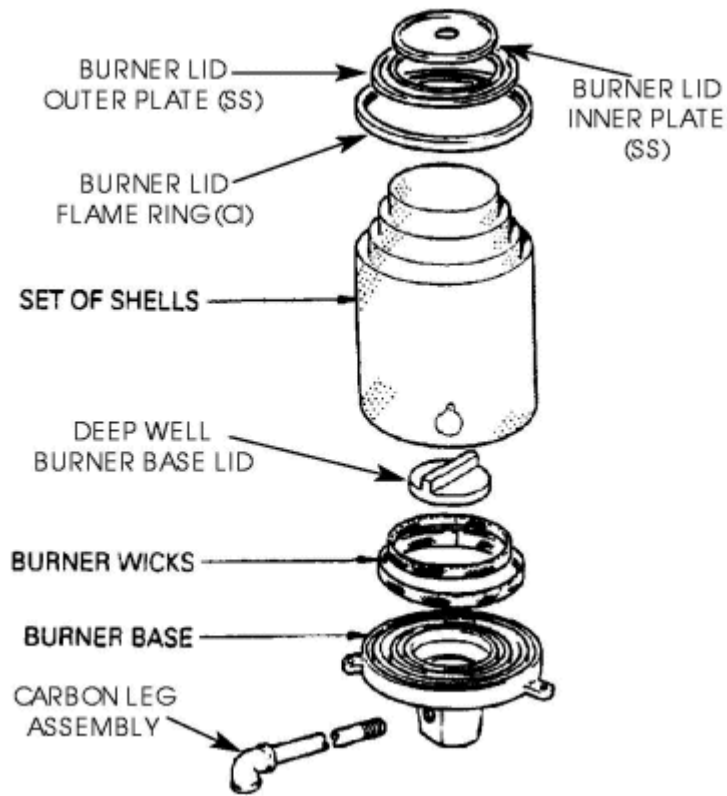


Fig.8 Burner assembly - 308K Boiler Model DESN 511029

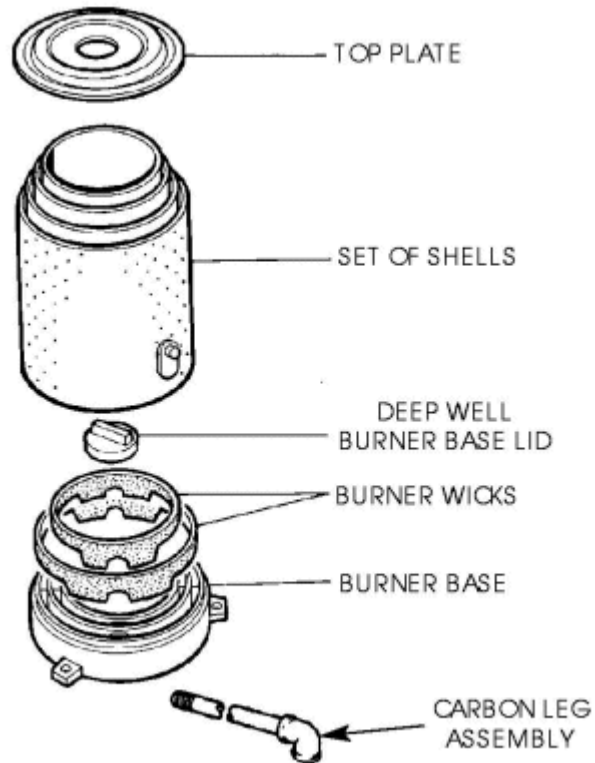


Fig. 8A Burner assembly - 300K Non-Boiler Model

## CHECKING THE BURNER OIL LEVEL

1. Open all oil valves to allow oil into the oil control valve. It may be necessary to purge the oil line to prevent airlocking.
2. Depress the trip lever **D** on the front of the oil control valve **A**, and turn cooker oil control knob **C** to No.6 setting. [See Figs. 11 & 12.](#)

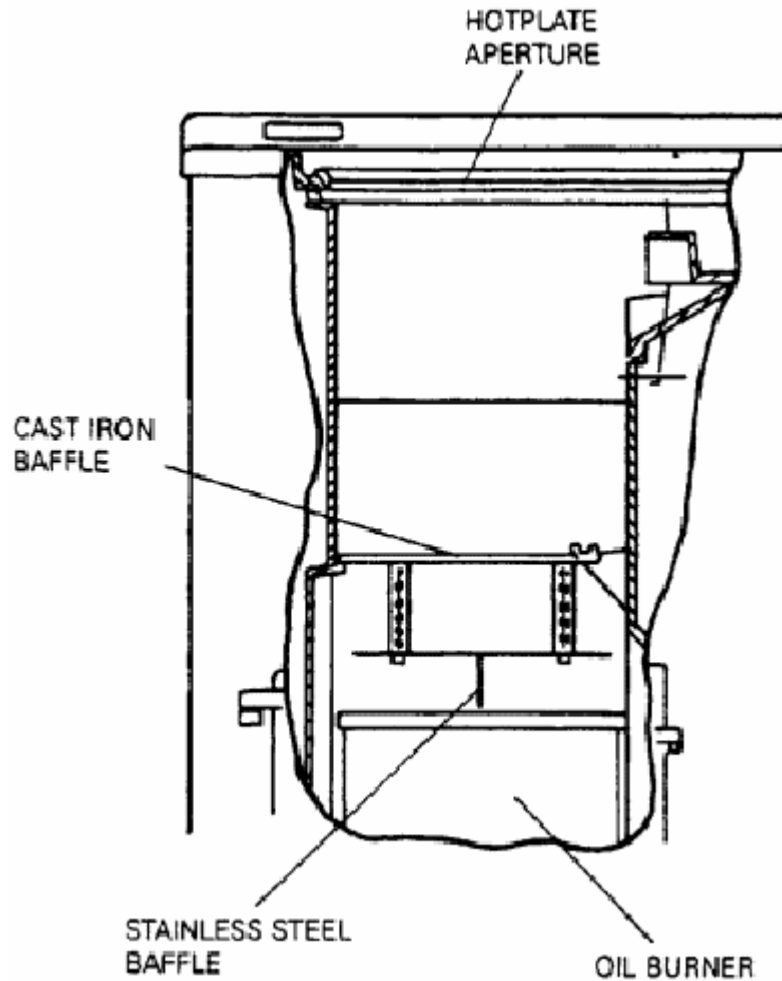


Fig.9 Boiler Model Only

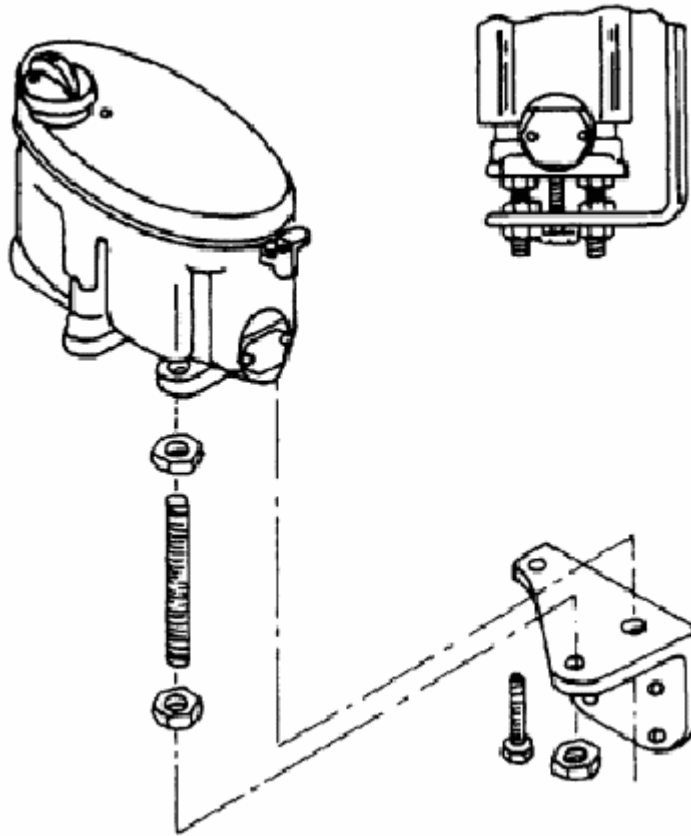


Fig. 10

Oil should enter the burner base in due course and after about 10-15 minutes, the depth of the oil should have settled to a static depth of 5-6mm deep where oil enters the oilways of the **burner base**.

To correct the oil depth, adjust the oil control valve height via the adjusting screws between the valve and mounting bracket.

Re-check the oil burner and valve are level in all directions.



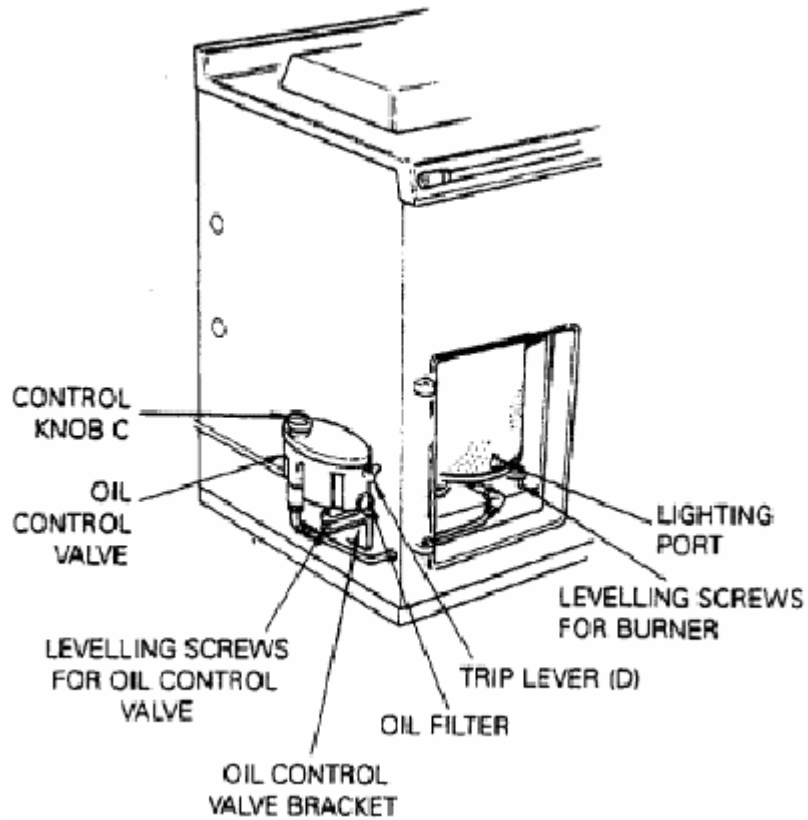


Fig. 11

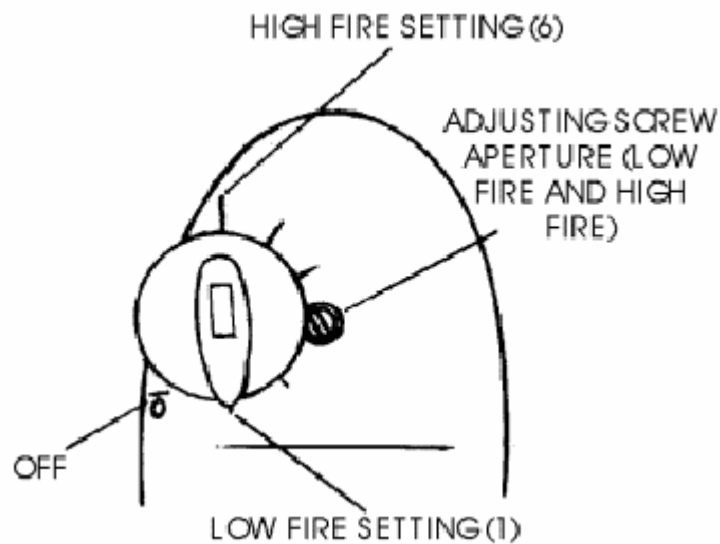


Fig. 12 DESN 511910

## General

- Turn oil valve control knob to **OFF**, disconnect the copper pipe connection at the burner base and

withdraw. Draw off the oil in the burner base. Alternatively the oil can be sucked out using an aspirator.

- b. Fit the burner wicks, vapour chamber, sealing plate and perforated shell assembly with top baffle assembly, checking that the shell assembly seats airtightly on the burner base.  
**NOTE:** ENSURE 'CUT-OUTS' ON BURNER WICKS LINE UP WITH OIL CHANNELS ON BURNER BASE ([SEE FIG. 8](#)).
- c. Replace the burner and reconnect oil pipe.
- d. Ensure burner shell assembly locations are seated airtight by carefully holding the assembly and turning it in a restricted manner.

## COMMISSIONING AND TESTING CHECKING BURNER FLOW RATES

1. After checking the burner is level and that the oil is the correct depth in the burner disconnect the oil feed pipe to the burner and attach adaptor for measuring oil rates by the DRIP FEED METHOD.
2. Turn the cooker oil control valve knob C on the oil control valve to No.6 setting to establish oil flow, allowing 2 min. Always set low fire rate first.
3. Turn the cooker oil control valve knob C on the oil control valve to No.1 setting - check low fire setting - this should be 4.5cc/min for the boiler model or 3.5cc/min for the non-boiler model.  
**NOTE:** ALLOW 7 MINUTES FOR THE FLOW TO STABILISE BEFORE TAKING THE RATE. IF THE RATE IS INCORRECT THEN ALLOW 2 MINUTES BETWEEN RE-SETTING AND THE NEXT RATE.
4. If the rate is incorrect then turn the low fire adjusting screw as shown on the cover plate to increase or decrease the flow. [See Fig. 12](#).  
**NOTE:** When the control valve knob C is set to No. 1 (Low Fire), the low fire adjusting screw is visible through the aperture ([see Fig. 12](#)). Likewise, when the control valve knob C is set to No. 6 (High Fire), the high fire adjusting screw is visible through the same aperture.  
Turn adjusting screw anti-clockwise to increase flow and clockwise to decrease flow.
5. Now turn the cooker oil control valve knob C on the oil control valve to No.6 (High Fire) and check rate - AGAIN ALLOW TIME AS ABOVE FOR THE OIL RATE TO SETTLE. If incorrect adjust high fire rate by turning the high fire adjusting screw as shown on the cover plate. [See Fig.10](#). This should be 12cc/min for the boiler model or 8.5 to 9.0 cc/min for the non boiler model. ALLOW TIME FOR RATE TO SETTLE.

## LIGHTING THE OIL BURNER - [See Fig. 11](#)

1. Remove the oil control valve cover, then depress the trip lever **D** on the front of the oil control valve and turn the cooker oil control valve knob **C** to No.6 setting. Allow 15 minutes for oil to enter and settle in cooker burner base.
2. Open outer burner door adjacent to the bottom warming oven door, remove/lift out inner burner door.
3. Lift hinged lighting cover on the front of the burner shell and expose the lighting port.
4. Insert a taper through the lighting port and light the front wick, then close the lighting cover.
5. Replace inner burner door and close outer burner door.  
**NOTE:** ENSURE INNER COOKER BURNER DOOR IS CORRECTLY LOCATED AND SEALED.
6. Return oil control valve knob **C** to its No. 1 setting for about 30 minutes, until the burner is hot, then re-set to No.6 for cooking.

### 7. Check for Clearance of Products of Combustion

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

Light the cooker as described. Leave on maximum rate for 30 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 cooker and the fan location left open.

A spillage test must be carried out after 30 minutes as follows:- By holding a smoke match so that match head is approximately 3mm to 5mm inside the lower edge of the draught diverter (See Fig. 13). 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 cooker installed.

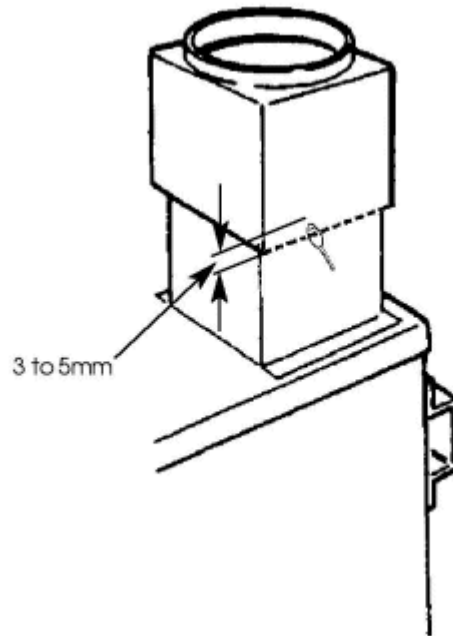


Fig. 13 DESN 512032

#### 8. Smoke Test: On Burner

Identify a sampling hole in the front of the flue hood assembly. See Fig. 7.

Sample the flue products through the hole for a Smoke Test utilising a Baccarach Smoke Pump where all reading should indicate a Smoke Number 0-1 under the following checks.

- (i) At low fire rate.
- (ii) At high fire rate.

**WARNING:** NEVER ATTEMPT TO RELIGHT A HOT BURNER - DO NOT TURN ON UNTIL THE BURNER IS COOL.

9. The cooker burner will gradually increase its oil rate, and raise the temperature of the oven, taking about 2<sup>1</sup>/<sub>2</sub> hours from cold to attain an oven temperature of 200°C (400°F), leaving the cooker oil control valve knob C at its No.6 setting. Re-set the cooker oil control valve knob C to an intermediate setting and the oven temperature will maintain the desired temperature.
10. Set the cooker oil control valve knob C to No.1 which is the minimum setting when cooking is not required and idling rate is needed.
11. Ensure both hotplate insulating covers are closed down to conserve heat in hotplate

### INSTRUCT USER

1. Advise the User of the precautions necessary to prevent damage to the hot water system and to the

building in the event of the system remaining inoperative during frost conditions.

2. Advise the User that, for continued efficient and safe operation of the appliance, it is important that adequate servicing is carried out at regular 6 monthly intervals.
3. Hand the User Instruction to the User and demonstrate the correct operation of the appliance and system controls. See notes under heading "[METHOD OF APPLIANCE CONTROL](#)" below.

## METHOD OF APPLIANCE CONTROL

An individual controlled oil burner provides heat to the two ovens, hotplate and domestic hot water.

Appliance controls are incorporated at the left-hand side of the cooker.

### Oil Burner - [See Fig. 11](#)

The burner must be lit manually with a lighted taper to establish itself at low fire rate i.e. with the control knob set to No.1 position. Oil flow (heat input) is increased by manually turning the control knob to a higher number setting, to control the desired oven temperature.

No.1 position is the minimum (and idling) rate and setting No.6 is the maximum (and High) rate.

Before the temperature is attained, turn the knob setting down to suit the oven load and temperature requirements.

When not in use, set control knob to No.1 setting.

**NOTE:** THE BURNER IS INTENDED TO RUN IN A CONTINUOUSLY ALIGHT POSITION AT ALL TIMES -AT A LOW POSITION WHEN NOT USED FOR COOKING, THEN TURNING TO THE APPROPRIATE NUMBER WHEN REQUIRED, TURNING OFF THE COOKER IS NOT RECOMMENDED, UNLESS SERVICING IS REQUIRED.

**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

## LEAVE THESE INSTRUCTIONS WITH THE USER FOR FUTURE USE

### SERVICING INSTRUCTIONS BI-ANNUAL SERVICING

It is important that a 6 monthly service be carried out by a competent Service Engineer and it is recommended that a contract be made with such an Engineer. Your Rayburn Stockist will provide advice on the location of the nearest Servicing Engineer.

With normal use, a boiler/cooker annual flueway clean and burner maintenance should be carried out immediately before and after the end of the heating season. An additional cooker flueway clean, halfway through the heating season, may be necessary in some cases.

**The householder should be advised to turn OFF** the cooker oil valve control knob, the night preceding the day of the service, so that the appliance will have cooled down by the following morning, in readiness for servicing.

Before commencing any servicing, isolate the oil supply from the tank and ensure the oil control valve front trip lever is **OFF**.

## STANDARD BI-ANNUAL SERVICE SCHEDULE

- a. Service clean of cooker boiler heat exchanger flueways.
- b. Service clean of cooker flueways and hotplate.
- c. Service maintenance clean/check of oil burner.
- d. Maintenance check on oil control valve.

## TO OBTAIN SERVICING ACCESS

1. To obtain servicing access to oil burner and heat exchanger, proceed as follows:-

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

## TO REMOVE OIL BURNER

2.

- a. Break and disconnect the copper feed pipe at the front elbow of burner. Any residue oil in the copper pipe should be collected by a small tray receptacle.
- b. Lift out burner and remove the burner heat baffle, shell assembly, small vapourising chamber plate and wicks.
- c. Remove carbon deposit from wick grooves, oilways of burner base, and the oil feed pipe. Gently brush any carbon deposits from shell assembly and top heat baffle.

Check the burner wicks and replace in the reverse order of dis-assembly.

**NOTE:** EXAMINE THE VAPOURISING CHAMBER PLATE IS FITTED CORRECTLY, THE LIGHTING PORT IS AT THE FRONT OF THE SHELL ASSEMBLY AND THAT THE SHELLS ARE SEATED CORRECTLY ON THE BASE. REPLACE THE HEAT BAFFLE, BUT DO NOT OFFER BURNER ASSEMBLY TO APPLIANCE YET.

## TO CLEAN THE BOILER & FLUEWAYS

3. Remove oil burner assembly as previously described.

- a. Place a layer of paper in combustion chamber base plate.
- b. Thoroughly brush boiler rear face and cooker LH side in an upward and downward direction. Brush across the oven top.
- c. Remove layer of paper with fallen debris.
- d. Brush and clean in between hotplate ribs on underside.
- e. Examine soft rope seal located on underside of hotplate baffle plate, and replace if worn or frayed.
- f. Examine soft seal rope located around hotplate aperture in top plate. Replace if frayed or damaged.
- g. Examine soft seal rope located around inner combustion chamber door. Replace if frayed or damaged.

- h. Replace hotplate ensuring that the underside fins lie over the combustion chamber.
- i. Replace the oil burner assembly within the combustion chamber, and re-connect the copper oil pipe to the elbow.

**NOTE:** ENSURE THE COPPER PIPE IS NOT KINKED, OTHERWISE AIR LOCKING WILL PREVAIL.

### **TO CHECK THE OIL CONTROL VALVE**

- 4. Check that the inlet valve from the oil tank is closed.
  - a. Remove the oil filter from the front of the oil control valve, draining the oil into a prepared receptacle. Clean the filter if necessary in kerosene or warm water and dry off. Inspect the sealing gasket of the filter and renew if necessary. Replace filter assembly within oil control valve.
  - b. Inspect and clean if necessary any filter on the oil supply tank to the oil control valve of the cooker. Flush the oil supply pipe and ensure it is not air locked.
  - c. Remove top cover of oil control valve, remove metering stem and clean, then check sealing grommet is satisfactory, Replace if worn. After refitting metering stems, ensure it is operating freely under the spring tension.

### **TO REMOVE OVEN TEMPERATURE INDICATOR**

- 5.
  - a. Open main oven door fully and remove four screws securing inner lining panel to outer door casting.
  - b. Remove inner lining panel and slagwood insulation.
  - c. Unscrew two hexagon nuts securing indicator to outer door casting, and remove indicator.
  - d. Fit replacement indicator in reverse order of dismantling.
- 6. Check the oil rates of burner at low and high fire rates together with smoke sampling.

### **LEAVE SERVICING INSTRUCTIONS WITH THE USER FOR FUTURE USE**

**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 at any time.



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