

This information refers to the following products

Rayburn Royal OF22

Rayburn 222K

(Oil fired Models)

Please note that some original pages may not appear in original numerical order, but have been rearranged for clarity or deleted if not appropriate.

WARNING

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

EXCELLENT COOKERS & MORE THE RAYBURN OIL RANGE...



THE RAYBURN OF7 Provides: Cooking and Domestic Hot Water — non boiler model available for cooking only.
APPROXIMATE FUEL CONSUMPTION (GALLS. PER WEEK)

Cooking and Domestic Hot Water 12 gall/week.

THE RAYBURN OF22 Provides Cooking, Domestic Hot Water and Central Heating up to 120 sq. ft. of radiator surface (6 radiators).

APPROXIMATE FUEL CONSUMPTION (GALLS. PER WEEK).

Cooking and Domestic Hot Water and Central Heating 25 gall/week.

APPLICABLE TO BOTH MODELS

COLOURS: Both models available in attractive Sable, Gloss Brown and Gloss White vitreous enamel. (Matt Brown and Matt Black Finish available - price on application)

DIMENSIONS:

	Hotplate	Height	Width	Depth
39 $\frac{1}{4}$ " (997mm) high	—	—	21 $\frac{1}{2}$ " (546mm)	7 $\frac{3}{4}$ " (197mm)
36 $\frac{1}{2}$ " (927mm) wide	Roasting/baking oven	12" (305mm)	14" (356mm)	15 $\frac{7}{8}$ " (403mm)
22 $\frac{5}{8}$ " (575mm) deep	Warming Oven	8" (203mm)	14" (356mm)	15 $\frac{7}{8}$ " (403mm)

DOMESTIC HOT WATER

100gallons over 24 hours — recommended cylinder capacity 140 litres (30 gallons).

SUITABLE FUEL

Kerosene (28 secs)

YOUR RAYBURN STOCKIST



Home on the Range.

Installation and Servicing Instructions for Rayburn 222K Oil-Fired Central Heating Cooker

Applies to both models
OF22 and 222K

Consumer Protection

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, the warranty and could also infringe the current issue of the statutory requirements.

IMPORTANT:

This appliance could contain any 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 – 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.

IMPORTANT: IN ORDER TO ACHIEVE THE OPTIMUM PERFORMANCE FROM THIS APPLIANCE, IT IS ESSENTIAL THAT THE INITIAL COMMISSIONING OF THE INTERNAL OIL BURNERS, ARE UNDERTAKEN BY SELECTED, TRAINED INSTALLING SERVICE ENGINEERS.

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

INTRODUCTION

The Rayburn 222K is a combined cooker and hot water boiler providing central heating, domestic hot water and cooking facilities.

It is available with a vertical flue outlet only, with identical cooker and boiler burners operating on natural draught.

There are two independently controlled oil burners, one providing heat to the central heating section, whilst the other provides heat to the cooker and domestic hot water only.

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

The boiler burner will provide heat to 11.3m² (121ft²) of radiator surface and pipes exclusive of domestic hot water requirements.

The recommended heating surface area is based on an average heat emission of 0.5kW/m² (160Btu/ft² h).

		Cooker Only LOW	Cooker Only HIGH	Cooker LOW Boiler HIGH	Cooker HIGH Boiler HIGH
Heat Input	kW Btu/h	2.4	7.9	10.3	15.8
Heat Output Water	kW Btu/h	0.70	2.3	6.5	8.0
Oil Input Rate	cc/minute	4.0	13.0	17.0	26.0

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.

Oil Valve Inlet Rp ¼ (½in BSP int)

Flue Outlet Dia. 127mm

Weight of

Appliance 305kg

Appliance Overall Height: 927mm

Dimensions Width: 940mm

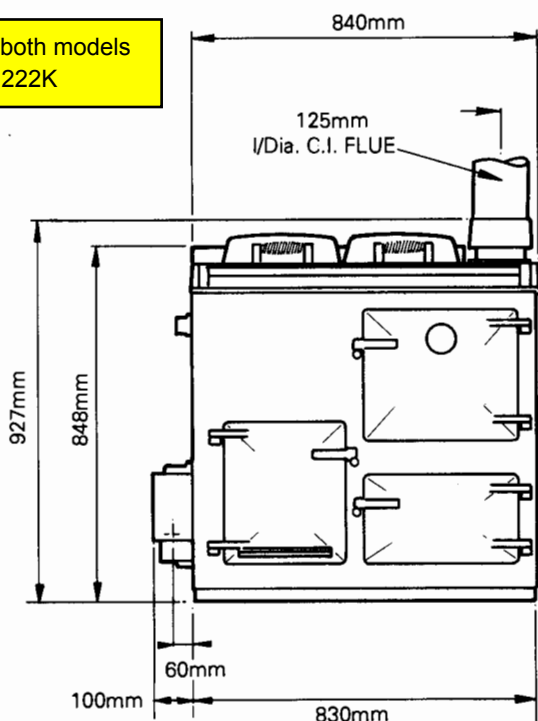
Depth: 575mm

FUEL - COMMERCIAL KEROSENE

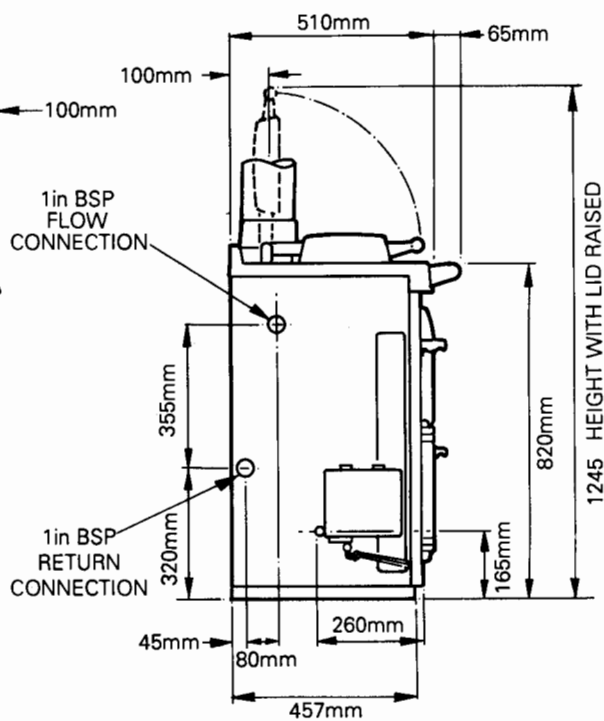
28 Seconds to BS.2869: 1988 Class

C2.

Applies to both models
OF22 and 222K



FRONT ELEVATION



END ELEVATION

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 bylaws of the local Water Undertaking.

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:

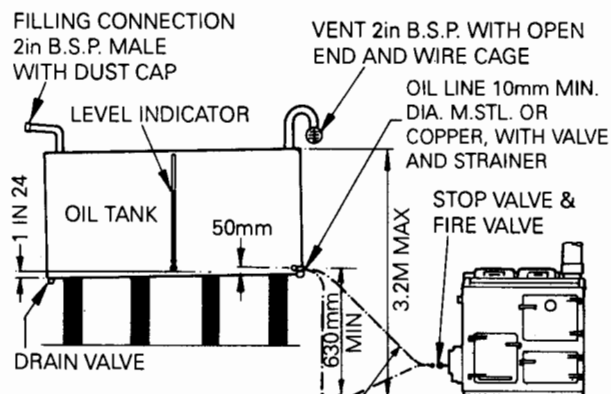
BS.5410 Installation of oil fired space heating and hot water supply purposes. Part 1. Boilers of rated output not exceeding 44kW.

BS.5449 Central heating for domestic premises. Part 1. Forced circulation hot water systems.

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.



ALTERNATIVE RUNS FOR OIL-LINE

Fig.1 Oil Storage tank and pipeline details

Building Regulations

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

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.

Location

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. See "**Installation of Appliance**" (pages 5-7).

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 and advice should be sought from the manufacturers for the installation of Plastic Oil Tanks as an alternative consideration.

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 should be fitted with a remote acting 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.

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 general guidance:-
The cross sectional area of the flue serving the appliance must be not less than the area of the flue outlet of the appliance.

The flue pipe to be used must be not less than 125mm internal diameter. Flue pipes and fittings should be constructed from one of the following materials:-

- Mild Steel with a wall thickness of 3mm minimum.
- Stainless Steel to BS.1449 Part 2.
- Cast Iron to BS.41
- 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, or if flue blocks, without a lining.

The chimney lining should be 150mm 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 Part 1.

A 150mm minimum diameter factory-made insulated chimney, complying to BS.4543 may be fitted and installed to BS.7566 Parts 1 to 4.

Use of older existing chimneys

Older chimneys may well be constructed without chimney liners, and where it is proposed to replace an existing appliance, the chimney must be thoroughly checked against blockage, and the internal/external chimney condition checked against porosity or leakage and loose pointing.

Doubtful chimney soundness should be checked by a smoke test, and action taken to remedy any damage/faults. If in doubt seek the Building Control Inspectors guidance on

uses.

Ensure the chimney is swept over its entire height before connection of new appliance, also confirm no other appliance can share the chimney and that any chimney mid-feather walls are intact and the complete chimney airtight. When confirmed, sufficient draught will be available to operate the appliance correctly.

Chimney Terminations

All chimneys should terminate above the roof 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 'OH' or 'VEDETTE' will usually effectively combat low pressure down-blow but no known cowl is likely to prevent down-draught due to a high pressure zone.

Applies to both models
OF22 and 222K

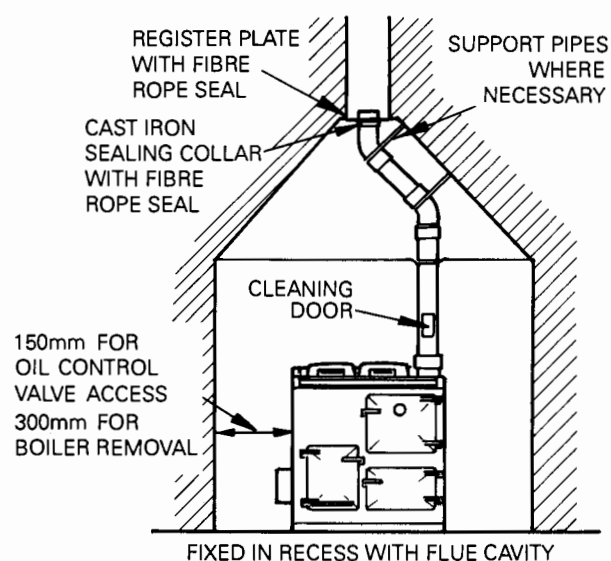
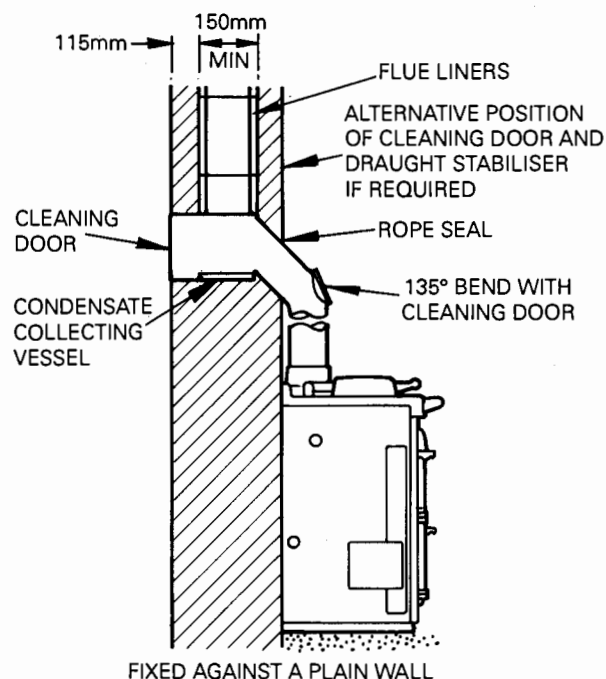
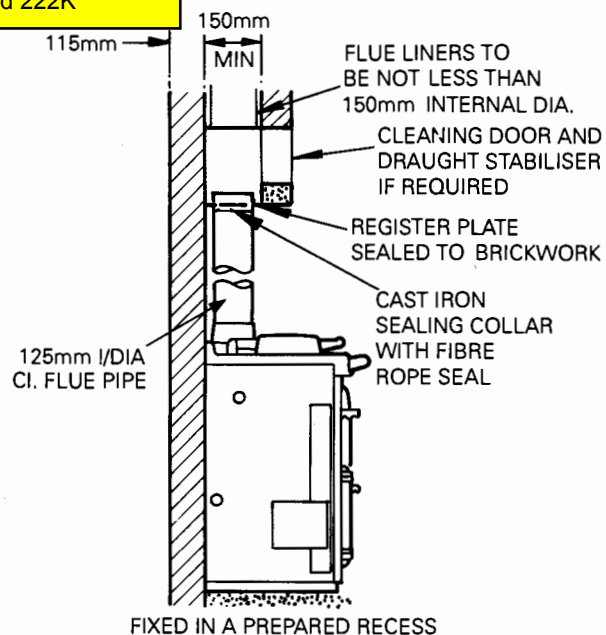


Fig.2 - Flue Layouts

Applies to both models
OF22 and 222K

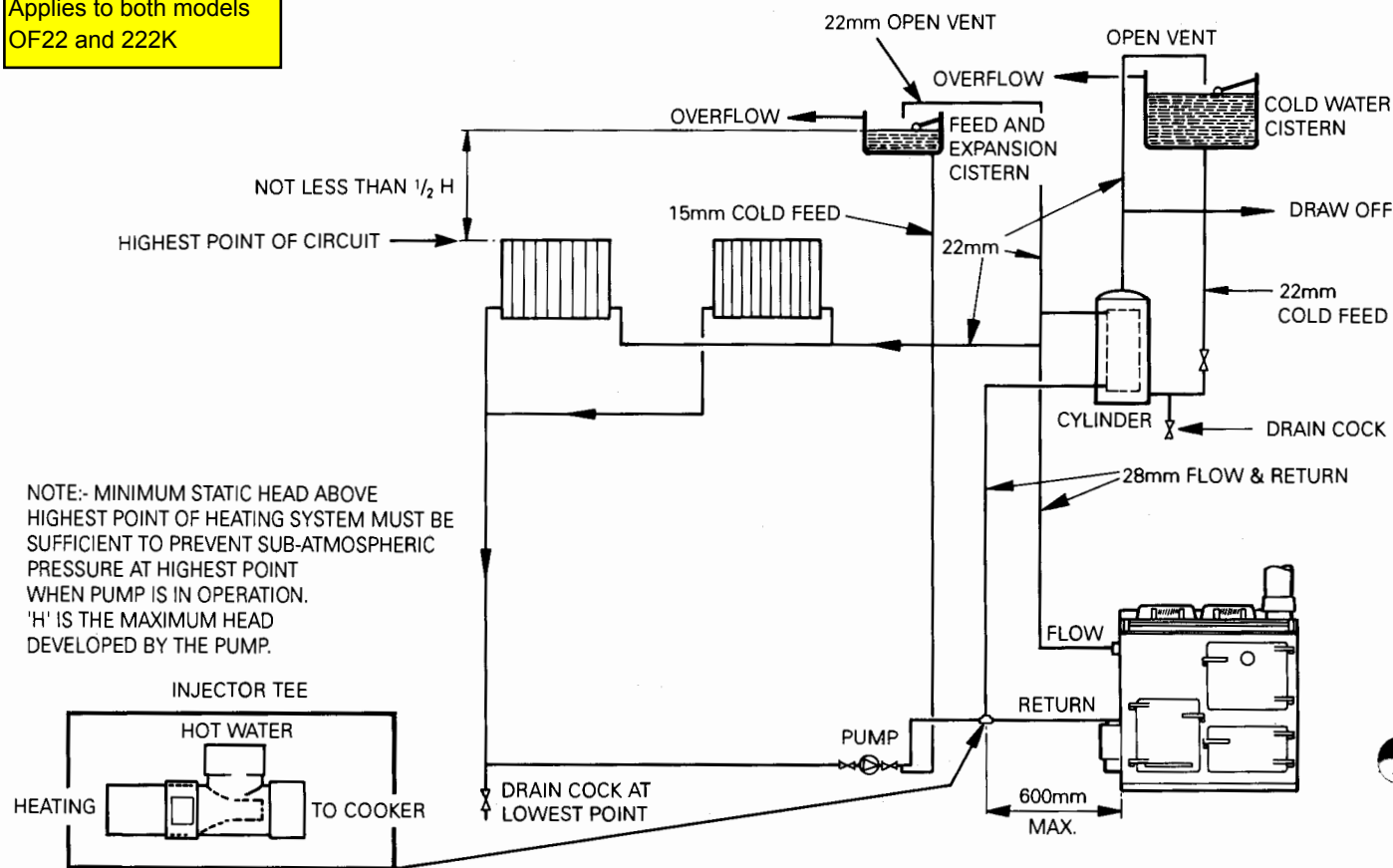


Fig.3 - Typical D.H.W. Gravity System

DESN 510671

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.

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.

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

AIR SUPPLY

Detailed recommendations for air supply are given in the Building Regulations, and in BS 5410: Part 1. The following notes are intended to give general guidance.

1. Combustion and ventilation air supply to oil fired appliances has to comply with the Building Regulations and with BS 5410: Part 1. The air supply requirement for oil fired appliances is 550mm^2 per kW of maximum rated output above 5kW. These requirements are illustrated in OFTEC Technical Book No. 3.

2. The combustion air supply to open flued appliances should normally be provided at high level into a room where it will not cause discomfort by creating a cold draught across the floor.

3. If combustion air is supplied through an under floor duct the grilles at each end should be positioned in the vertical plane to reduce risk of blockage. Ducts should be sized so as to reduce resistance to air flow.

4. The ventilation requirement for kitchens in part F of the Building Regulations is for mechanical extract at the rate of 60 litres per second or 30 litres per second if the fan is incorporated in a cooker hood. This amount can be reduced if spillage of flue gases might be caused by the outflow of air from the room.

Background ventilation is also required, either producing a constant mechanical extract rate of one air change per hour or by having ventilation openings of not less than 4000mm^2 .

5. Extract fans should be positioned as far away from the open flue as possible and should have a sufficient dedicated air supply. To undertake a test the oil fired appliance should be set in operation and the doors and windows of the room containing it should be closed. The extract fan should then be run at its maximum setting. The Oil Fired heating appliance should be observed to operate satisfactorily both before and after the fan is switched on.

6. It is preferable for the air supply for an extract fan to be located where it can serve the fan without the air stream passing close to the oil fired appliance.

7. Oil fired appliances must not draw combustion air from a garage.

WATER CIRCULATION SYSTEM

Detailed recommendations for the water circulation system are given in BS.5449:1 (for smallbore and microbore central heating systems) and BS 6700.

The following notes are of particular importance:-

1. In a combined central heating and domestic hot water system the hot water storage vessel must be of the indirect cylinder or calorifier type.

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

3. Pipework not forming part of the useful heating surface should be insulated to help prevent heat loss and possible freezing, particularly where pipes are run through roof spaces and ventilated under-floor spaces.

Cisterns situated in areas 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 whole system, including 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 (60ft).

6. Central heating, smallbore or microbore systems should comply with the recommendations of BS.5449, Part 1 and water carrying copper tubes should be to BS.2871, Part 1.

7. The heating system must be designed (and adjusted if necessary) to give a temperature differential across the boiler at full output of 10°-14°C (18°-25°F).

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

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

CONTROLS

The appliance is only mechanically controlled. Therefore the control of central heating system must be achieved by the addition of a clamp on thermostat via the pump.

Temperature controls i.e. time switch, motorised valves cylinder thermostats can also be incorporated to suit your system, but under no circumstances should the flow be entirely isolated.

A frost thermostat, if fitted, should be set to operate at a temperature of approximately 4°C (39°F).

CIRCULATING PUMP

It is recommended that the selected pump be of a proprietary type and manufacture, and be adequate to give the required temperature differential between the flow and return.

The pump should be able to meet the requirements of the system design and be fitted in a readily accessible position, see Fig.3.

It may be positioned either on the boiler section flow or the return depending on the system design.

Boiler Output	5.7kW (19,500 Btu/h)
Temperature differential across the boiler	10°C-14°F (18°F-25°F)
Water Flow Rate	354-492 litres/h (78-108 gal/h)

Isolating Valves

Isolating valves (preferably of the keyless type) must be fitted to the inlet and outlet of the circulating pump to facilitate service and replacement of pump without draining the system.

Hot Water Storage Vessel

It is recommended that an indirect 140 litre (31 gallon) hot water storage cylinder of the double feed type e.g. (Manufactured by Albion Cylinders) complying with the BS.1566 Part 1: DF Type 8, 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 when radiators are fitted.

In combined systems, the water draw-off pipes to the taps must be dead leg connection from the vent expansion pipe. A drain must be fitted at the lowest point of the system.

Applies to both models
OF22 and 222K

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 clearances for servicing:

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 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.

IMPORTANT: UNDER NO CIRCUMSTANCES SHOULD THE GAP BELOW THE FLUE DIVERTER HOOD BE SEALED.

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 burners with spare set of wicks for each burner.
2. Oil Constant Level Valve and Support Bracket.
3. Flue Outlet assembly including damper plate.
4. Special Injector Tee - For use with hot water gravity primaries.
5. Appliance rear distance bracket - For use when the appliance is installed near a rear wall of combustible material - See Fig 4.
6. Handrail and Brackets.

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).

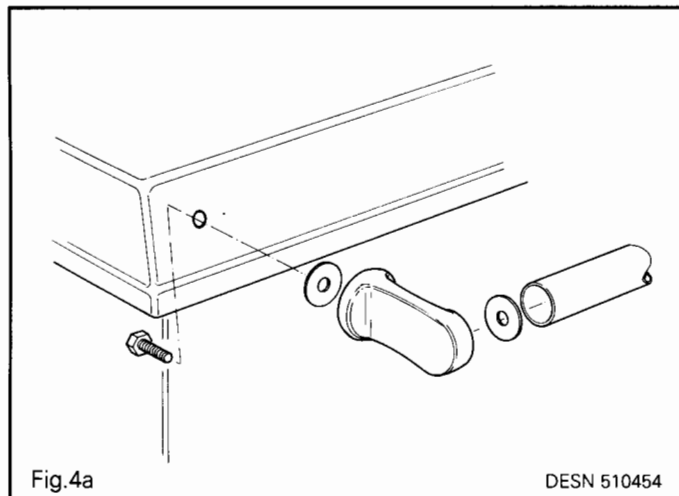


Fig.4a

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Applies to both models
OF22 and 222K

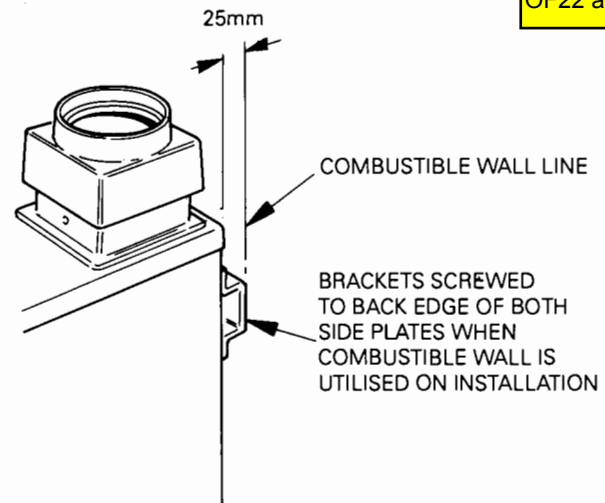


Fig.4 - Clearance Between Cooker and Combustible Wall

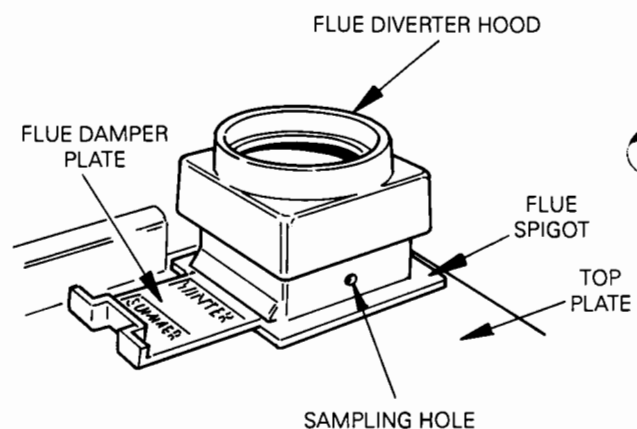


Fig.5 Flue assembly

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 into the brackets, positioning them correctly, and tighten the locating bolts (Fig. 4a)

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.**

SITE LOCATION

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 OF APPLIANCE. FIT REAR DISTANCE BRACKET AS SHOWN IN FIG.4.

2. Locate flue hood (flat face at the back) on flue outlet spigot and insert flue damper plate by tilting it to engage in slot. See Fig.5.
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.

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 RP1 (1in BSP ext) x 28mm dia. copper compression fittings.

GRAVITY DOMESTIC HOT WATER AND PUMPED HEATING

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 in length. Pipe runs in excess of 5m must be lagged.

To obtain continued Domestic Hot Water gravity circulation with the circulating pump operative, the special injector tee (supplied with appliance) must be connected to the heating/cylinder return pipes with the outlet of the tee connected to the boiler section return tapping. See Fig.3.

OIL CONTROL VALVE INSTALLATION

1. Fit and lightly secure oil control valve support bracket to cooker LH side panel. See Fig.7.
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 "OIL LINE" mark on the LH side of the oil control valve body, level measures a vertical height of 205mm from the valve body "mark" to the base of the appliance. See Fig.8.

NOTE: CHECK USING A SPIRIT LEVEL, THAT THE TOP OF THE VALVE IS LEVEL IN ALL DIRECTIONS.

3. Remove the long access panel adjacent to the control valve and insert the capillary phial of the control valve into the exposed phial socket at the top of the boiler body.
Replace the access panel, covering the capillary tube.

COOKER AND BOILER BURNER INSTALLATION

1. Open outer burner door and lift/remove inner burner door.
2. Remove combustion chamber vertical divider plate from combustion chamber via its two fixing bolts on top of divider plate. See Fig.8.
3. Coat the male thread of the oil burner pipe assembly elbows with oil resistant jointing compound and screw into the burner bases. See Fig.6.
Visually confirm that the oil burner pipe is level or slopes upwards to the oil entry in the burner base, to avoid air locking.
4. Fit the oil burner base levelling screws and secure with locknuts. Two screws at the front and one in the centre at rear of base. Adjust the projecting length of rear screw to 55mm from burner base and secure with locknut.

5. With both oil burner bases on a work surface, locate perforated shell assemblies onto oil burners (lighting ports at burner front) and check that the shell assemblies seat correctly (near airtight) that the vapourising chamber plate fits snugly into base and that the burner heat baffle fits on top of the shells. Remove shells and vapourising plates. Confirm the wicks fit into the burner base grooves. See Fig.6.
6. Transfer the LH boiler oil burner base into combustion chamber with single screw support at the rear. The two front support screws should be placed in location recesses of the combustion chamber at the front. Adjust the front support levelling screws of the boiler burner until it is level in all directions, then tighten the locknuts on the levelling screws. Use a cross spirit level to ensure burner is level in all directions.
7. Place the RH oven oil burner base and place in location recesses in combustion chamber base.
Level it in the same manner as the boiler burner, **confirm both burner bases are level with each other**, then lock levelling screws.

WARNING: THE BURNER BASES MUST BE LEVEL

8. Insert the copper oil feed pipes through the side of the cooker, with the front ends turned upward for connection to each burner base elbow.
The opposite ends of the pipes should be connected to the elbows on the twin outlets of the oil control valve.

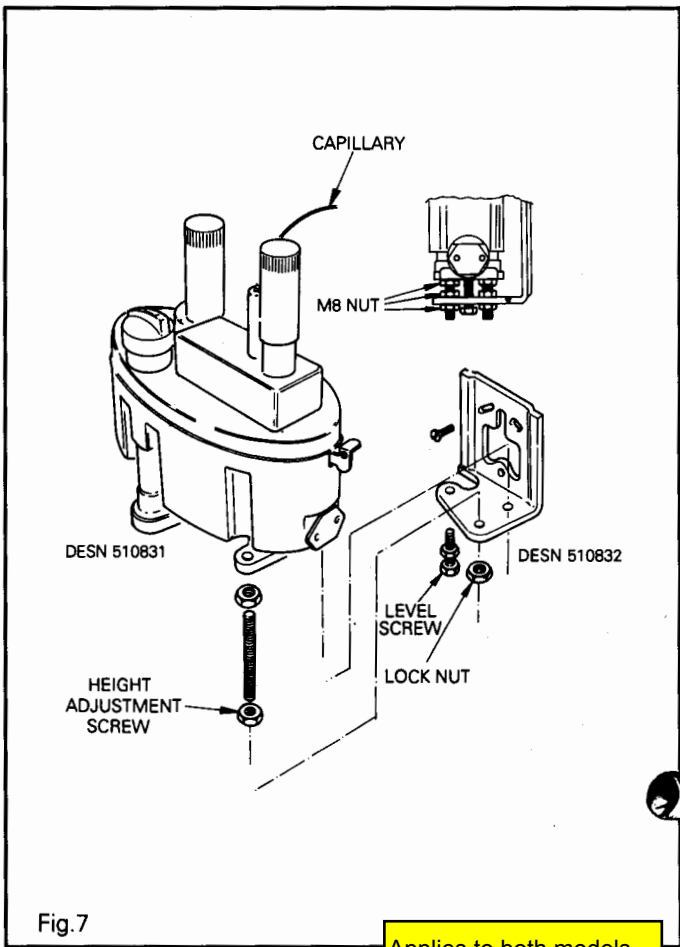
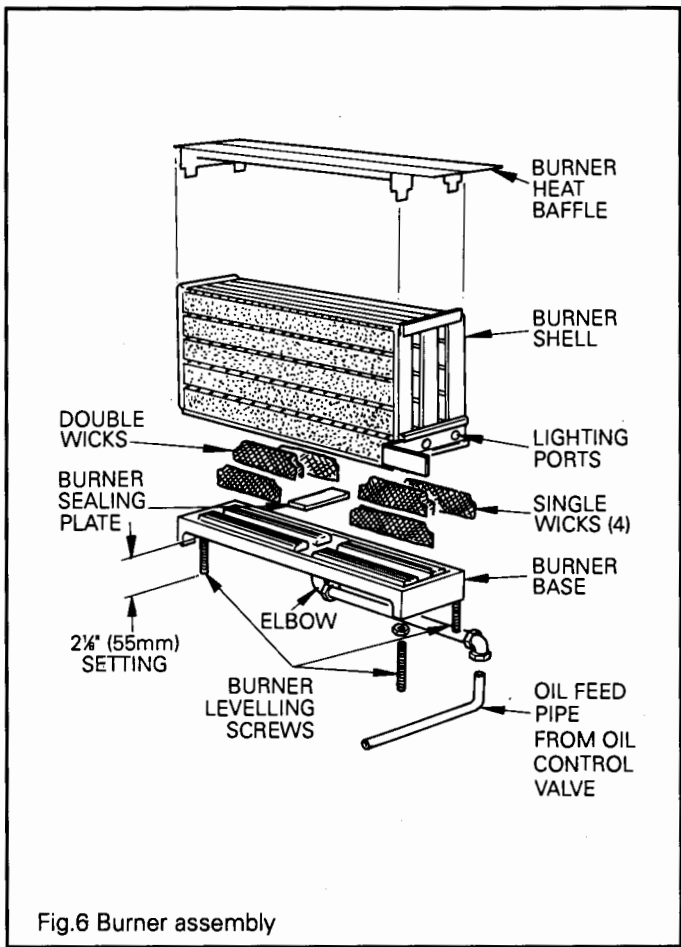
NOTE: KINKING OF THE OIL FEED PIPES MUST BE AVOIDED OTHERWISE AIRLOCKING WILL OCCUR. ALWAYS RUN THE PIPES TO A LOW LEVEL POINT, THEN GRADUALLY PROVIDE A CONTINUAL UPWARD SLOPE TO THE BURNER.

9. Confirm oil feed pipe connections are correctly connected.
The boiler burner connection to the oil control valve is furthest away from the appliance, the nearest being the cooker oil control valve outlet.
10. 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.

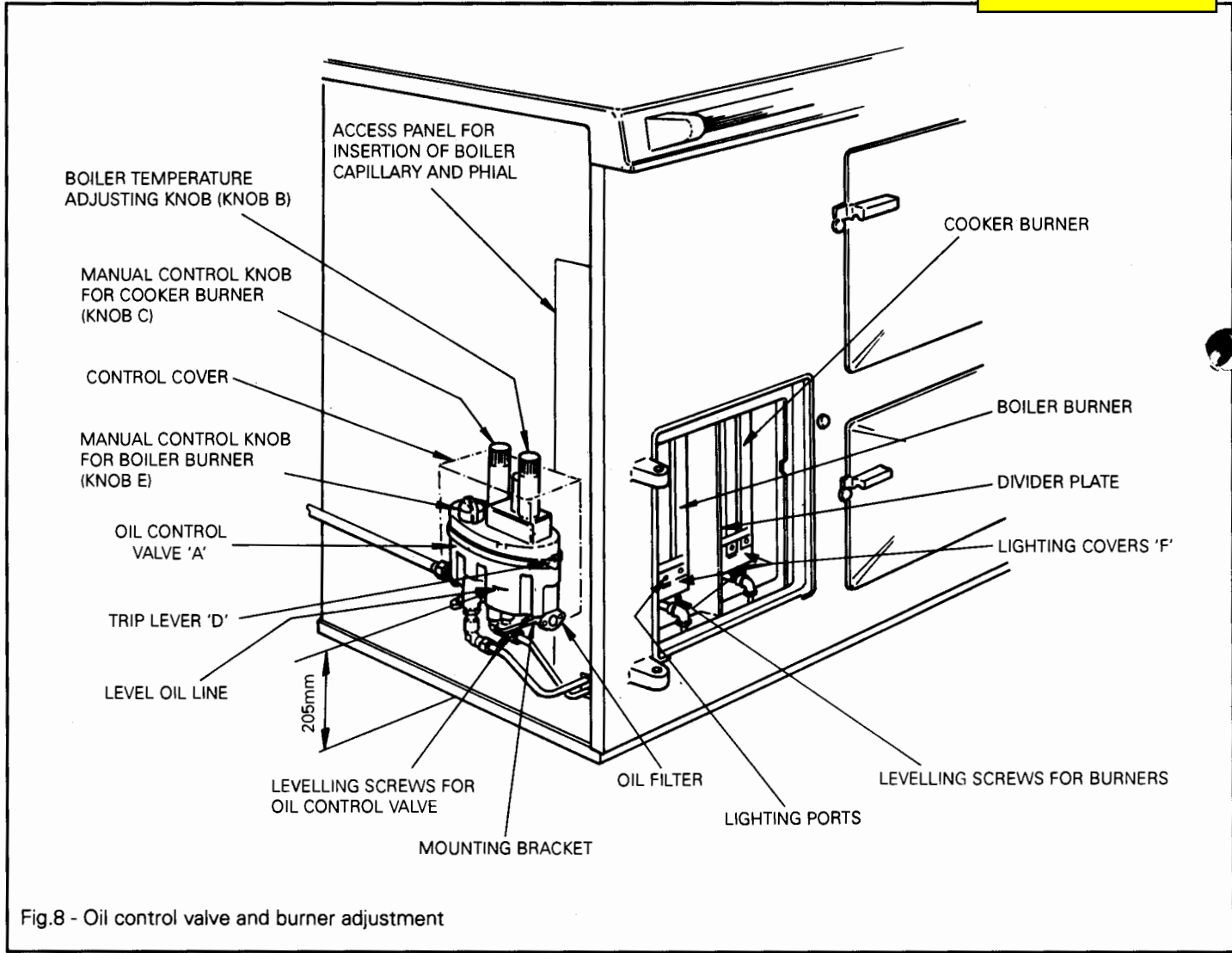
CHECKING THE COOKER AND BOILER OIL LEVELS

1. Open all oil valves to allow oil into the 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** and burner oil control knob **B** to No.6 setting. See Fig.8.
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 8-9mm deep in centre oilway **in both burner bases**.
Adjust (if necessary) the oil control valve height via the adjusting screws between the valve and mounting bracket.
When correct, ensure the valve mounting bracket is secured and that the valve and burner are level in all directions.

Applies to both models
OF22 and 222K



Applies to both models
OF22 and 222K



COMMISSIONING AND TESTING

WATER CIRCULATION SYSTEM

The whole of the system should be thoroughly flushed out with cold water without the pump in position. Ensure that all valves are open.

With the pump fitted, the system should be filled and air locks cleared. Vent all heat emitters and check for water soundness.

CHECKING COOKER BURNER OIL FLOW RATES

1. Ensure the boiler oil control valve knob is at an **OFF** setting.
2. Check for correct cooker burner oil flow rates in the following order only:
 - (i) Fit a test feed pipe to cooker oil feed pipe, measure the oil flow rate by stopwatch.
 - (ii) Set the cooker control knob to **No.1** and wait about 5 minutes for the burner to settle to low fire rate.
 - (iii) It should measure 4.0 to 4.25cc per minute.

3. Incorrect Low Fire Oil Rate

ALWAYS ADJUST THE LOW FIRE RATE FIRST

If the measured oil rate is incorrect, adjustment should be made by the low fire adjustment screw on the top of the oil valve. See Fig.9.

Look at cooker control knob **C** and observe a slotted head screw, adjacent and to the left of knob position 1.

Gently turn the screw anti-clockwise to decrease or clockwise to increase the low fire oil rate taking care not to exceed about $\frac{1}{8}$ turn screw increments until correct oil rate is established.

- (iv) Set the cooker control knob to No.6 and wait about 5 minutes for the burner to attain high fire rate. It should measure 12.75 to 13.0cc per minute.

4. Incorrect High Fire Oil Rate

THE HIGH FIRE RATE MUST NEVER BE ADJUSTED UNTIL THE LOW FIRE RATE IS CONFIRMED.

If the measured oil rate is incorrect, adjustment should be made by the high fire adjustment screw on the top of the oil valve. Adjacent to control knob **C** will be seen a slotted head screw, adjacent and to the left of knob position 5. See Fig.9.

Gently turn the screw anti-clockwise to increase or clockwise to decrease the high fire oil rate, taking care not to exceed about $\frac{1}{8}$ turn screw increments, until correct oil rate is established.

5. Refit oil pipe to burner base.

6. Remove the inner burner door and make final inspection to ensure burner shell assembly has remained sealed to burner base.

CHECKING BOILER BURNER OIL FLOW RATES

1. Ensure the cooker oil control valve knob is at an **OFF** setting.
2. Check for correct boiler burner oil flow rates in the following order only:
 - (i) Fit a test feed pipe to boiler oil feed pipe, measure the oil flow rate by stopwatch.

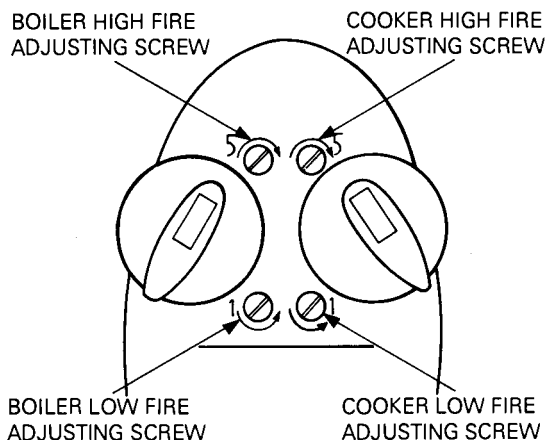


Fig.9

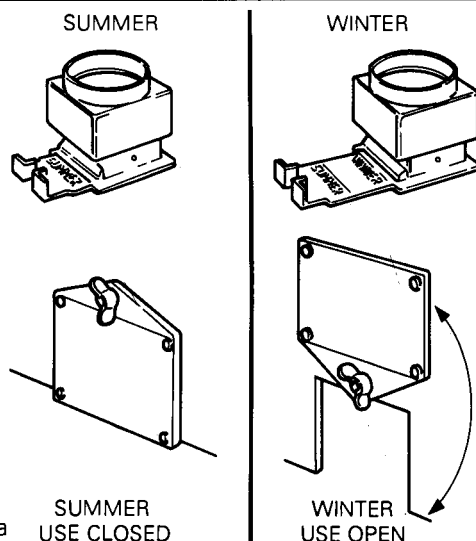


Fig.9a

GENERAL

- a. Turn cooker and boiler control knobs to OFF, disconnect the copper pipe connections at the burner base and withdraw. Draw off the oil in the burner bases. Alternatively the oil can be sucked out using an aspirator.
- b. Fit the burner wicks into slots in burner base sealing plate and perforated shell assembly with top baffle, **checking that the shell assembly seats airtightly on the burner bases.**
- c. Refit divider plate in combustion chamber and secure.
- d. Ensure burner shell assembly locations are seated airtight by carefully holding the assembly and slide it in a restricted forward/backward manner.
- e. Replace the burners and reconnect oil pipes. See Fig.6.

Applies to both models
OF22 and 222K

- (ii) Set the boiler control knob to **No.1** and wait about 5 minutes for the burner to settle to low fire rate.
- (iii) It should measure 4.0 to 4.25cc per minute.
- (iv) Refit oil pipe to burner base.

3. Incorrect Low Fire Oil Rate

ALWAYS ADJUST THE LOW FIRE RATE FIRST

If the measured oil rate is incorrect, adjustment should be made by the low fire adjustment screw on the top of the oil valve. See Fig.9.

Look at boiler control knob and observe a slotted head screw, adjacent and to the right of knob position 1.

Gently turn the screw anti-clockwise to decrease or clockwise to increase the low fire oil rate taking care not to exceed about 1/8 turn screw increments until correct oil rate is established.

- (iv) Set the boiler control knob to No.6 and wait about 5 minutes for the burner to attain high fire rate. It should measure 12.75 to 13.0cc per minute.

4. Incorrect High Fire Oil Rate

THE HIGH FIRE RATE MUST NEVER BE ADJUSTED UNTIL THE LOW FIRE RATE IS CONFIRMED.

If the measured oil rate is incorrect, adjustment should be made by the high fire adjustment screw on the top of the oil valve. Adjacent to control knob **E** will be seen a slotted head screw, adjacent and to the right of knob position 5. See Fig.9.

Gently turn the screw clockwise to decrease or anti-clockwise to increase the high fire oil rate, taking care not to exceed about 1/8 turn screw increments, until correct oil rate is established.

- 5. Refit oil pipe to burner base.

- 6. Remove the inner burner door and make final inspection to ensure burner shell assembly has remained sealed to burner base.

LIGHTING THE COOKER BURNER

Ensure that the boiler shutter and flue damper are closed. See Fig.9a. (Summer Position).

1. Ensure all oil valves are open and oil is in the oil control valve.
2. Depress the trip lever on the front of the oil control valve and turn the cooker oil control valve knob to No.6 setting. Oil will now flow from the control valve.
3. Open outer burner door and remove/lift out the inner burner door.
4. After allowing 20-30 minutes for oil to settle in the cooker burner base, slide lighting cover **F** on front of burner shells to the left and expose three lighting ports.
5. Light all the wicks through the lighting ports and close the horizontal lighting cover **F**.
6. Replace inner burner door and close outer burner door.
7. Turn cooker knob **C** to No. 1 for approximately 20 minutes
8. Turn cooker knob **C** to No.6
9. The oil burner will gradually increase its oil rate, taking about 3 hours to attain 200°C (400°F) from cold.

NOTE: ENSURE INNER BURNER DOOR IS CORRECTLY LOCATED AND SEALED.

Smoke Test: Cooker Burner

Identify a sampling hole in the front of the flue hood assembly. See Fig.5.

Applies to both models
OF22 and 222K

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

- (i) At low fire rate with cooker burner only.
- (ii) At high fire rate with cooker burner only.

LIGHTING THE BOILER BURNER

Rotate boiler shutter through 180° and lock in the open position with the wingnut. Fully open flue damper. See Fig.9a. (Winter Position).

1. Open outer burner door and remove/lift out the inner door.
2. Depress the trip lever **D** on the front of the oil control valve and turn the boiler oil control valve knob **E** to No.6 setting. Oil will flow from the control valve.
3. After allowing 20-30 minutes for oil to settle in the boiler burner base, slide cover **F** on front of burner shells to the left and expose three lighting ports.
4. Light all the wicks through the lighting ports and close the horizontal cover.
5. Replace inner burner door and close outer burner door.
6. Turn boiler knob **E** to No.1 for approximately 20 minutes.
7. Turn boiler knob **E** to No. 6.
8. Replace oil control cover.
9. The oil burner will gradually increase its oil rate and the water heat.

NOTE: ENSURE INNER BURNER DOOR IS CORRECTLY LOCATED AND SEALED.

Smoke Test: Boiler Burner

Identify a sampling hole in the front of the flue hood assembly. See Fig.5.

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

- (i) At low fire rate with boiler burner only.
- (ii) At high fire rate with boiler burner only.
- (iii) At high fire rate with both burners.

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

BOILER CONTROL CHECK

Check that:-

1. The boiler system is full of water and all valves are fully open.
2. Any room thermostat is ON.
3. Any programmer or time switch is set at continuous heating.
4. Ensure that the pump is running and the boiler thermostat set at No.6 (MAX).
5. Allow the heating system to warm up then set the pump adjuster to maintain a boiler "flow and return" temperature differential of 10°-14°C (18°-25°F). Checks must be made by the installer to see that this differential is obtained after the boiler "Flow" temperature is stabilised. The system should be balanced by regulating the water flow rate through individual heat emitters to

ensure a satisfactory water temperature at each emitter. A system balance must also be made, so that the minimum flow required through the boiler is achieved when supplying D.H.W. only.

6. When the water system reaches working temperature, check that the boiler thermostat modulates satisfactorily.
Check that any room temperature controls and programmer or time switch are fully operative.
7. Examine the system for water soundness. The system should then be turned off and rapidly drained while still hot. The water system should again be filled and cleared of all air locks.

INSTRUCT USER

1. 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.
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 Instructions to the User and demonstrate the correct operation of the appliance and system controls.
See notes under heading "**METHOD OF APPLIANCE CONTROL**" below.

Applies to both models
OF22 and 222K

METHOD OF APPLIANCE CONTROL

There are two independently controlled oil burners, the cooker burner providing heat to the two ovens, hotplate and domestic hot water whilst the boiler burner provides heat for central heating and is normally switched **OFF** in the summer.

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

Cooker Burner - See Fig.8

The cooker burner must be lit manually with a lighted taper to establish itself at a low fire rate ie. with the cooker control knob set to No.1 position.

Oil flow (heat input) is increased by manually turning the cooker control knob to a higher number setting, to control the desired oven temperature.

No.1 position is the minimum (and idling) rate and setting up to No.6 will provide a maximum oven temperature of 250°C (480°F).

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 COOKER 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.

Boiler Burner - See Fig.8

The boiler burner must be lit manually with a lighted taper to establish itself at low fire rate ie. with the boiler control knob set at No.1 position.

Oil flow (heat input) is increased by manually turning the boiler control knob to a higher number setting.

Upon water temperature attainment, the sensing phial within the boiler body will activate, and modulate the oil rate downwards to maintain the desired water temperature setting, until temperature recall.

No.1 position is the minimum (and idling) rate and settings up to No.6 will provide a maximum thermostatically controlled oil rate and water temperature.

NOTE: THE BOILER BURNER IS INTENDED TO RUN IN A CONTINUOUSLY ALIGHT POSITION DURING THE HEATING SEASON - AT LOW POSITION WHEN IDLING AND ADJUSTMENT UPWARDS WHEN HEATING IS REQUIRED.

SERVICING INSTRUCTIONS

BI-ANNUAL SERVICING

It is important that a 6 monthly servicing 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 boiler and cooker oil valve control knobs, the night proceeding the day of 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

- Service clean of LH boiler heat exchanger flueways.
- Service clean of RH cooker boiler heat exchanger flueways.
- Service clean of cooker flueways and hotplate.
- Service maintenance clean/check of both oil burners.
- Maintenance check on oil control valve.

TO OBTAIN SERVICING ACCESS

- To obtain servicing access, proceed as follows:-
- Lift out the hotplate.
- Open the outer burner door and lift out the inner combustion chamber door.

TO REMOVE OIL BURNERS

- Break and disconnect the copper feed pipes at the front elbows of each burner. Any residue oil in the copper pipes should be collected by a small tray receptacle.
- Lift out each burner noting their respective duty, for identical replacement. Lift off the burner heat baffle, shell assemblies, small vapourising chamber plate and wicks.
- Remove carbon deposit from wick grooves, oilways of burner base, and the oil feed pipes. Gently brush any carbon deposits from shell assemblies and top heat baffles.
Check the burner wicks and replace in the reverse order of dis-assembly.
- Remove the combustion chamber vertical divider plate

from combustion chamber via its two top fixing bolts.

NOTE: EXAMINE THE VAPOURISING CHAMBER PLATE IS FITTED CORRECTLY, THE LIGHTING PORT 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 HEAT EXCHANGER & FLUEWAYS

- Remove oil burner assemblies as previously described.
- Place a layer of paper in combustion chamber base plate.
- Thoroughly brush boiler cross-tubes, back and LH side in an upward and downward direction. Brush vertical sides of oven flueway and across the oven top.
- Remove layer of paper with fallen debris.
- Brush and clean in between hotplate ribs on underside.
- Examine soft rope seal located on underside of hotplate baffle plate, and replace if worn or frayed.
- Examine soft rope seal located around hotplate aperture in top plate. Replace if frayed or damaged.
- Examine soft seal rope located around inner combustion chamber door. Replace if frayed or damaged.
- Replace hotplate ensuring that the underside fins lie over the combustion chamber.
- Replace divider plate.
- Replace the oil burner assemblies into the location recesses of the combustion chamber, and re-connect the copper oil pipes to the elbows.

NOTE: ENSURE THE COPPER PIPES ARE NOT KINKED, OTHERWISE AIR LOCKING WILL OCCUR.

TO CHECK THE OIL CONTROL VALVE

- Check that the inlet valve from the oil tank is closed.
- 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.
- 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.
- Remove top cover of oil control valve, remove metering stems and clean, then check sealing grommets are satisfactory. Replace if worn. After refitting metering stems, ensure they are operating freely under the spring tension.
- Check the oil rates of both burners at low and high fire rates together with smoke sampling.

LEAVE THESE INSTRUCTIONS WITH THE USER FOR FUTURE USE

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.

Rayburn

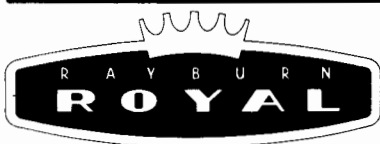
Manufactured By
Aga-Rayburn
PO Box 30
Ketley Telford
Shropshire TF1 4DD



Aga-Rayburn A member of the Glynwed International plc group of companies

For further information contact your local distributor
Applies to both models OF22 and 222K
Technical Sales Spares
01952 642007

For literature requests use
Aga Rayburn Coalbrookdale
0345 125207
0345 626147
0345 125858



Operating Instructions for Rayburn Royal OF 22 Oil Fired Central Heating Cooker

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.

The cooking performance features of the popular and proven solid fuel Rayburn Cookers have been preserved and integrated into the Rayburn Royal OF22 Cooker burning 28 Seconds Kerosene to BS.2869: Part 2: 1988 Class C2.

Summer Use

The cooker side provides domestic hot water and cooking facilities which consist of a heat-graduated hotplate, main oven and warming oven. The independent oil burner is controlled by a manually operated oil valve control knob. The cooker burner should always be continuously burning at low fire rate when not required for cooking. When cooking is required, the burner operates at a high fire rate by adjustment of the control knob and its setting.

Winter Use

An independent boiler oil burner controlled by a manually operated oil valve control knob, heats a hot water boiler to provide central heating for the heating of radiators in addition to the same cooker facilities provided in the summer. A thermal sensing phial within the boiler body, modulates the oil rate to maintain the hot water temperature.

WARNING: COOKER AND BOILER BURNERS: NEVER ATTEMPT TO RELIGHT A HOT BURNER – DO NOT TURN OIL ON UNTIL BURNER IS COOL.

Cooking and Domestic Hot Water –

Summer Use See Fig. 1.

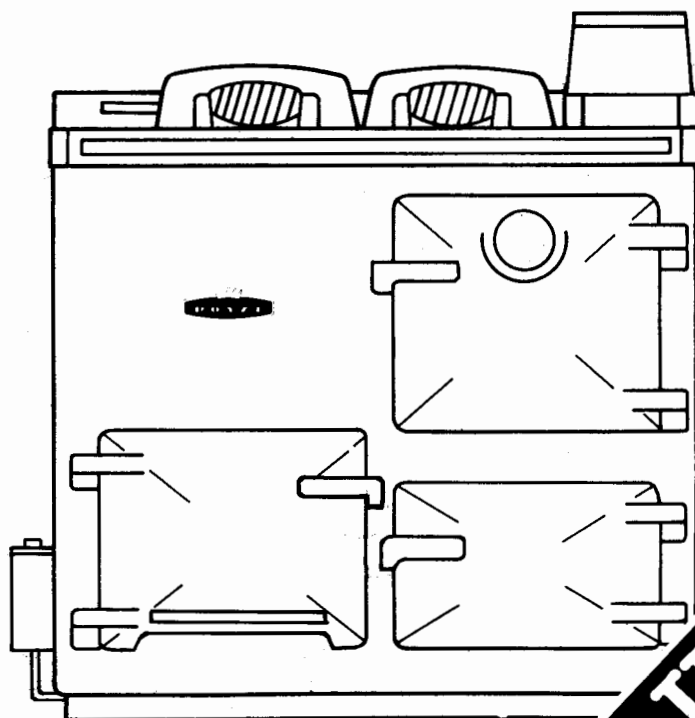
1. Remove the oil control valve cover, then depress the trip lever **D** – (See Fig.1) – on the front of the oil control valve and turn the cooker oil control valve knob **A** to No. 6 setting.
Allow 15 minutes for oil to enter and settle in cooker burner base.
2. Open outer burner door adjacent to the bottom warming oven door, remove/lift out inner burner door.
3. Slide lighting cover on the front of the burner shells, sideways to the left hand and expose the three lighting ports.
4. Insert a lighted taper through the three lighting ports and light the front wicks, 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 cooker control knob **C** to its No. 1 setting for about 20 minutes, until the burner is hot, then re-set to No. 6 for cooking.
7. The cooker burner will gradually increase its oil rate, and raise the temperature of the oven, taking about 2½ hours from cold to attain an oven temperature of 200°C (400°F), leaving the cooker control knob **C** at its No. 6 setting.
Re-set the cooker control knob **C** to an intermediate setting and the oven temperature will maintain the desired temperature.

NOTE: SEE COOK BOOK FOR RECIPES.

8. Set the cooker control knob **C** to **LOW** which is the minimum setting when cooking is not required and idling rate is needed.
9. Ensure both hotplate insulating covers are closed down to conserve heat in hotplate.



Applies to both models
OF22 and 222K

IMPORTANT
The cooker burner is intended to run in a continuously alight condition at all times, at low fire rate when idling. Turning the cooker burner OFF is NOT recommended unless servicing is required.

Oven Control Knob Settings

The cooker control knob **C** is marked **LOW**, then 1 to 6, which provides various main oven temperatures with setting 6 being the highest temperature.

To Turn Off Cooker Burner

- (a) With boiler burner not in use:
Lift the trip lever **D** on the front of the oil control valve to shut off the oil supply to the burner.
- (b) With boiler burner in use:
Turn the cooker oil control valve knob **C** anti-clockwise from No. 6 setting to **OFF**.

WARNING – NEVER ATTEMPT TO RELIGHT A HOT BURNER. DO NOT TURN OIL ON UNTIL BURNER IS COLD.

To Heat the Top Main Oven and Increase Hotplate Temperature

Turn the cooker control knob **C** to the required setting which will take up to 90 minutes to attain after initial warm up from cold.

When the top main oven temperature is reached, the required temperature will be maintained by lowering the setting of the cooker control knob.

HINT: THE SOLID PLAIN SHELF CAN BE USED AS A HEAT DEFLECTOR. (AS WELL AS A BAKING SHEET). SLIDE ONTO THE RUNNERS TOWARDS THE TOP OF THE OVEN WHICH REDUCES THE HEAT UNDER THE SHELF.

The Hotplate

When the main oven is in use the hotplate will be hot enough for normal needs. The hotplate area above the main oven is used for simmering with the opposite end being the hottest.

At other times, increase the setting of the cooker control knob **C** to increase the temperature of the hotplate. Pans and kettles must have flat machined bases for maximum efficiency.

Warming Oven

This is at a low temperature suitable for warming serving plates and dishes. Although not intended as a cooking oven, its temperature does vary with temperature of the main oven. As a guide, it is around a third the temperature of the main oven.

Domestic Hot Water Only (DHW)

The supply of domestic hot water to the cylinder is automatic and is at its maximum when the cooker control knob **C** is on No. 6, reducing as the cooker control knob setting is reduced. The amount of hot water is increased if a considerable amount of cooking is performed. If more hot water is required overnight, set the cooker control knob **C** to a higher setting than **LOW**, which is normally sufficient.

NOTE: IN THE CASE OF EXCEPTIONALLY HIGH DOMESTIC HOT WATER DEMANDS, IT IS RECOMMENDED THAT THE BOILER BURNER IS LIT.

When the Cooker is Not in Use

During periods of the day when the cooker is not required, the cooker control knob **C** should be set at **LOW** to give the lowest burning rate which will in most cases give sufficient heat to the hotplate and hot water. Use the setting that meets your needs.

Overnight

Turn the cooker control knob **C** to **LOW** which gives the lowest burning rate and will maintain an oven temperature of about 125°C (257°F). At a higher setting, the oil

ACCESS PANEL FOR INSERTION OF BOILER
CAPILLARY AND PHIAL

BOILER TEMPERATURE
ADJUSTING KNOB
(KNOB B)

MANUAL CONTROL
KNOB FOR COOKER
BURNER (KNOB C)

CONTROL COVER

MANUAL CONTROL
KNOB FOR
BOILER BURNER E

OIL CONTROL
VALVE A

TRIP LEVER D

LEVELLING SCREWS
FOR OIL CONTROL VALVE

MOUNTING BRACKET

Applies to both models
OF22 and 222K

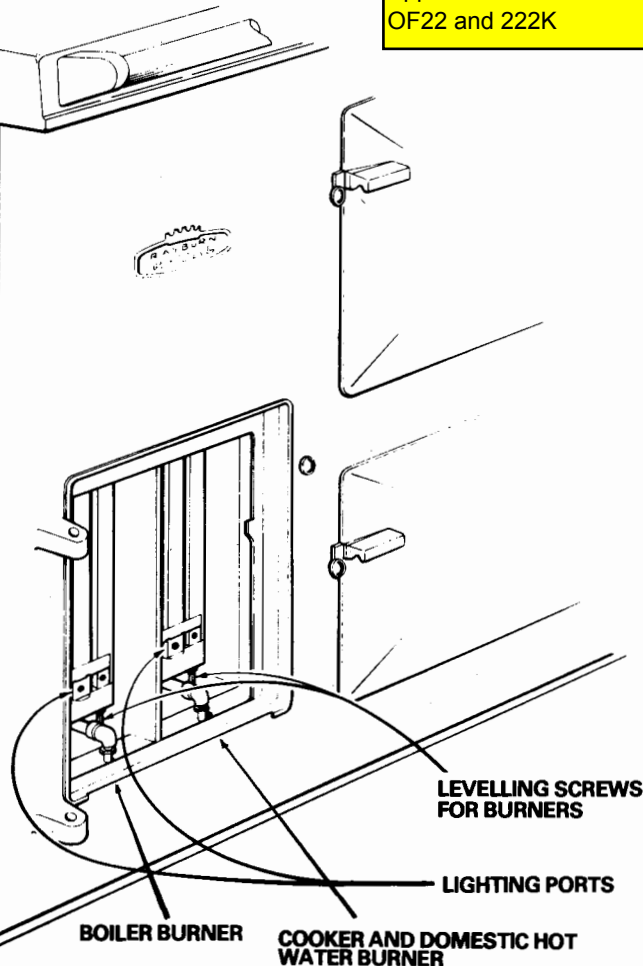


Fig.1 Oil Control Valve with cover removed

consumption will be higher, but the main oven, hotplate and domestic hot water will all be hotter. Turn the cooker control knob **C** to No. 6 setting in the morning to increase the hotplate temperature and minimise the time to boil a kettle of water.

The recommendations for the best use of the appliance are guidelines only and the respective settings of boiler and cooker control knobs which best suit your requirements will be apparent with experience.

Cooking and Central Heating – Winter Use

Cooker Burner – Use as previously described.

Lighting the Boiler Burner

1. Ensure all oil valves are open and oil is in the oil control valve **A**.
2. Depress the trip lever **D** in the front of the oil control valve **A** and turn the oil control valve knob **E** to No. 6 setting.
3. Open outer burner door adjacent to the bottom warming oven door, remove/lift out inner burner door.
4. Slide lighting cover on the front of the boiler burner shells, sideways to the left hand and expose the three lighting ports.
5. Insert a lighted taper through the three lighting ports and light the front wicks, then close the lighting cover.
6. Replace inner burner door and close outer burner door.

NOTE: ENSURE INNER BURNER DOOR IS CORRECTLY LOCATED AND SEALED.

7. The boiler burner will gradually increase its oil rate, and raise the temperature of the hot water.
8. Turn thermostat knob **B** to the temperature that suits your needs and this thermostatically controls the temperature of the water in the boiler.
The higher the number, the hotter the water.
For overnight use, use a lower setting, a mid-setting in mild weather and a high setting in winter.

To Turn the Boiler Off

1. Remove the oil control valve cover.
2. Turn the oil control valve knob **E** to **OFF** and set the boiler thermostat knob **B** to No.1 setting.
3. Replace the oil control valve cover.

To Extinguish Both Burners

1. Remove the oil control valve cover.
2. Lift the trip lever **D** on the front of the oil control valve to shut off the oil supply to the burners.
3. Turn boiler thermostat knob **B** to No.1 setting and both oil control valve knobs to **OFF**.
4. Replace the oil control valve cover.

NOTE: FOR LONG SHUT-DOWN PERIODS, CLOSE ALL OIL VALVES BETWEEN THE OIL TANK AND THE APPLIANCE.

Frost Precautions

In the event of the boiler being switched **OFF** for long periods during very cold weather, the advice of your installer should be obtained.

Bi-annual Servicing

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 flueway clean half-way through the heating season may be necessary in some cases – see Servicing Instruction.

Both cooker and boiler control knobs should be turned **OFF** by the User the night preceeding the day of servicing so that the appliance will have cooled down by the following morning.

A HOT APPLIANCE CANNOT BE SERVICED.

Your Rayburn stockist will provide advice on obtaining the nearest selected Servicing Engineer, where we recommend you contract out the periodical servicing of the appliance.

Cleaning

REMEMBER: BE CAREFUL OF THE HOT APPLIANCE.

To keep the vitreous enamelled surface bright and clean, wipe over daily with a soapy damp cloth, followed by a clean dry duster. If milk, fruit juice or anything containing acid is spilt on the top plate or down the cooker, be sure to wipe it immediately or the vitreous enamel may be permanently discoloured. Keep a damp cloth handy, while cooking to wipe up spills as they occur, so they do not harden and become more difficult to remove later. If spills do become baked on a cream cleanser can be used. For stubborn deposits a soap impregnated pad can be carefully used on the vitreous enamel.

In the main oven spills and fat splashes are carbonised at high temperatures, occasionally brush off with a stiff brush. The oven door can be removed for cleaning – **do not** immerse in water, and shelves can be soaked and cleaned with a cream cleanser.

Both insulating covers should be raised and allowed to cool before cleaning with a soapy damp cloth. Use a wire brush to keep the cast iron hotplate clean.

General cleaning is best carried out when the Rayburn is cool.

Applies to both models
OF22 and 222K

Cooking Hints

The oven is indirectly heated from outside by hot gases from the heat source so no flames or elements within the oven means full use can be made of the whole cooking space.

The main oven is slightly hotter towards the top than the bottom. At a low idling heat the main oven can be used for long slow cooking such as casseroles, stock, soup, ratatouille, curries, meringues, creme caramels, rice puddings etc. all of which benefit from the gentle slow heat and as the oven is vented into the flue, cooking smells disappear to the outside.

One of the many benefits of the cast iron oven is that the floor of the oven is hotter than that of a conventional cooker. No need to bake quiche pastry cases 'blind' just place the flan dish on the oven floor for half the cooking time for 'soggy-free' pastry. When the oven is hot the floor of the oven can be used for shallow frying (a cast iron dish is recommended) with the added advantages that fat splashes are carbonised so cleaning is minimised and the frying smells are taken away through the flue.

For perfect baking results turn food during cooking. The top of a hot oven is where grilling takes place, use the meat tray with a grill rack so that the fat can drip into the tray.

The thermodial temperature gauge, on the main oven door, is a guide to the internal oven temperature.

Remember though on opening the door the temperature will appear to drop, do not worry, close the door and after a few minutes the true temperature can be read again.

Heat is not lost as quickly from a cast iron oven as a pressed metal box type so you can peep at the cake to see how it is cooking without it sinking.

As you have probably realised, the meat tray supplied with your Rayburn fits the oven size, hanging directly from the runners so leaving the grid shelves free for other dishes.

The oven grid shelves are designed to be non-tilt and should be fitted with the upstand to the top and at the back, so when pulled forward the shelf cannot come right out.

The solid plain shelf, as mentioned before, can be used as a baking sheet or as a heat deflector. If the oven is too hot or food already in the oven is beginning to over-brown slide in the solid plain shelf above the food. To be effective this shelf should be stored out of the oven, so it is used from cold.

DO NOT USE ABRASIVE PADS OR OVEN CLEANERS.

NOTE: TAKE CARE WHEN CLOSING THE DOORS TO LIFT THEM ONTO THE CATCH. IT IS NOT ADVISABLE TO PUT VERY WET CLOTHES ON THE HAND RAIL, AS THIS MAY CRAZE THE ENAMEL.

IMPORTANT – USE 28 SECONDS KEROSENE FUEL ONLY.

Applies to both models
OF22 and 222K

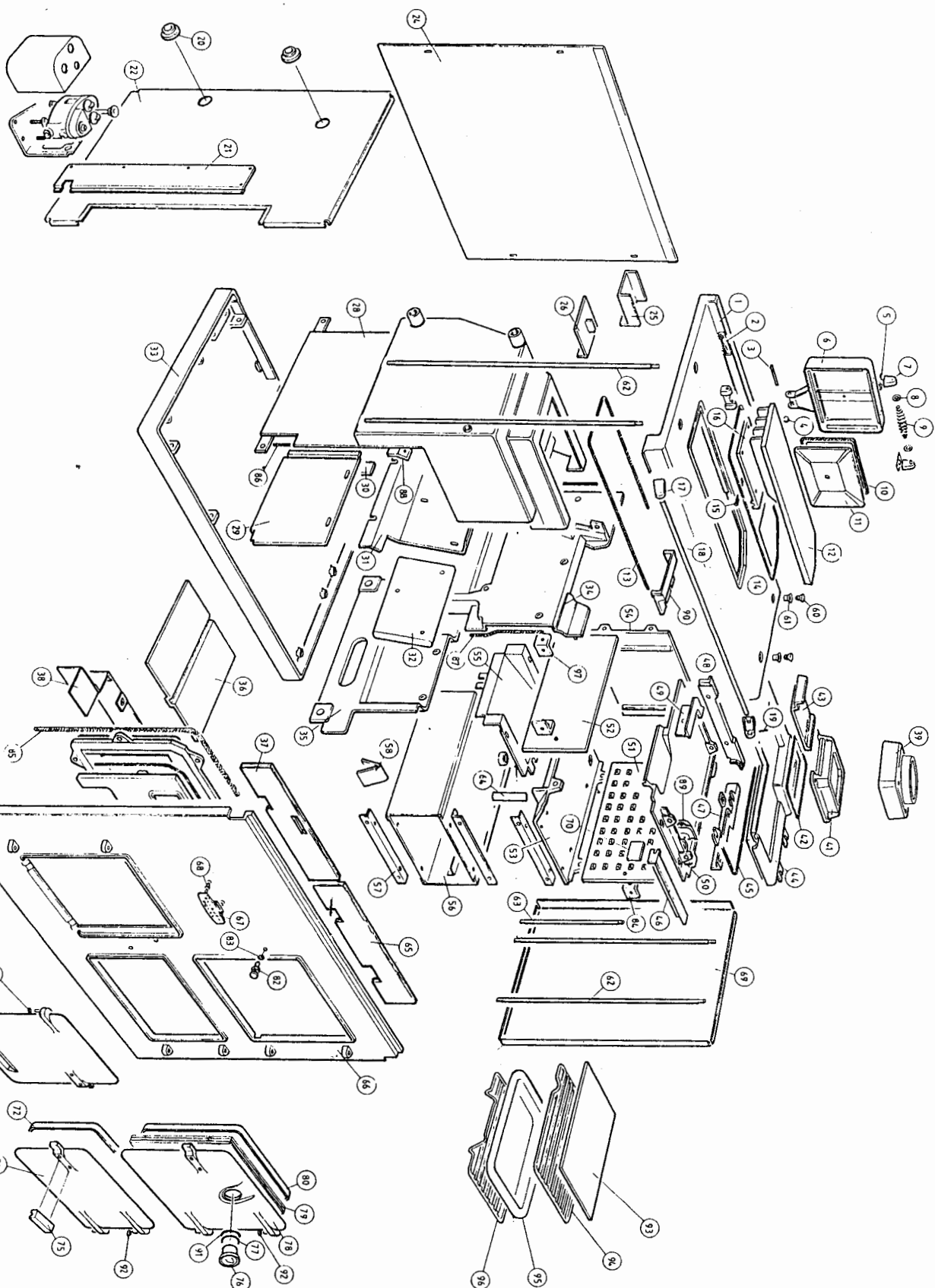
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 **Rayburn**

Glynwed Consumer & Building Products Ltd

PO Box 30 Ketley Telford Shropshire TF1 4DD

Telephone (0952) 641100 Telex 35196 Fax (0952) 641961



Applies to both models
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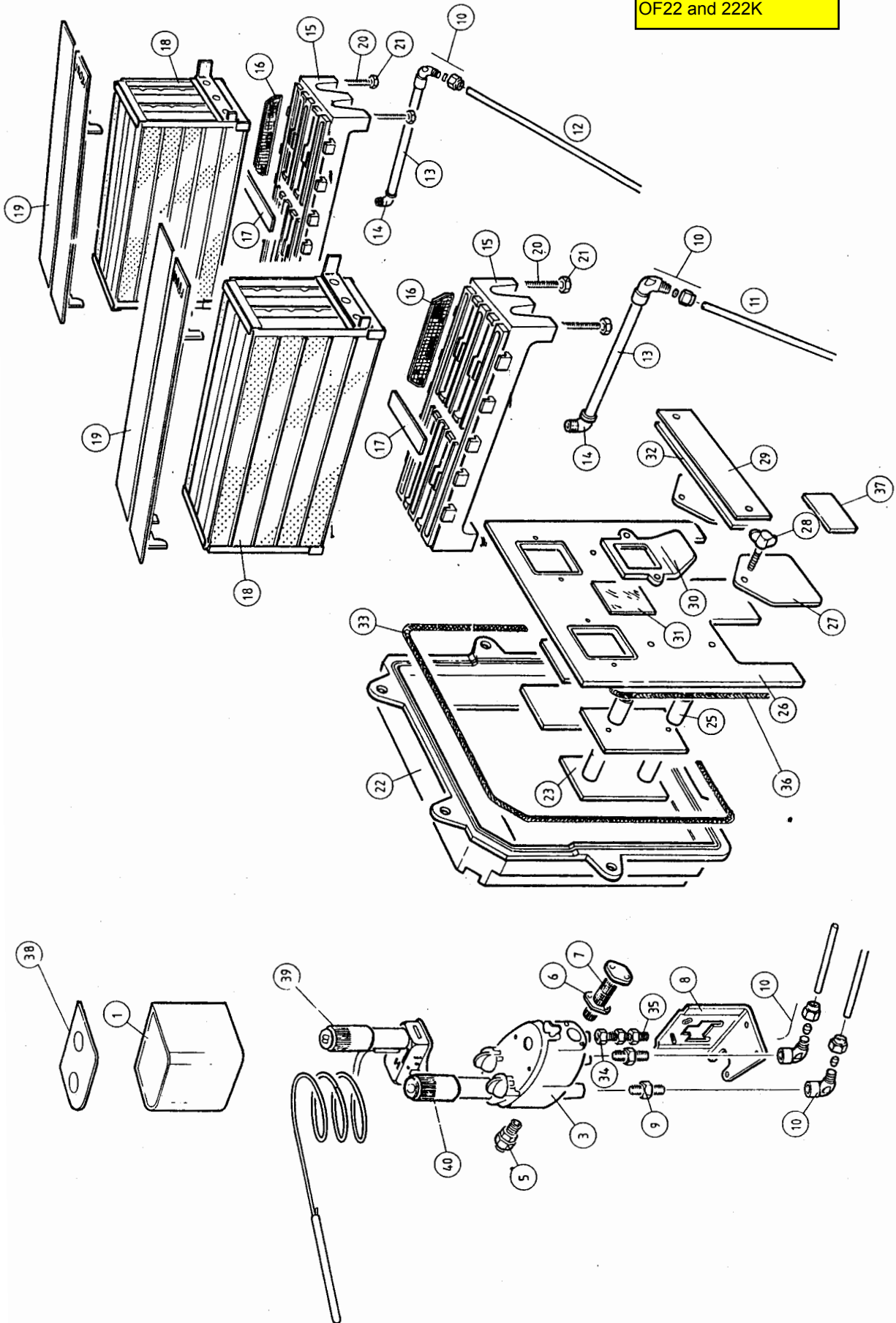
SPARE PARTS LIST

Applies to both models
OF22 and 222K

RAYBURN OF22

1	HOB PLATE	50	TOP OVEN TOP PLATE
2	COOKER MODEL BADGE	51	TOP OVEN R.H FIXED SIDE PLATE
3	HINGE SPINDLE	52	TOP OVEN L.H REMOVABLE SIDE PLATE
4	CIRCLIP FOR INSULATING COVER HINGE	53	TOP OVEN BOTTOM PLATE
	SPINDLE	54	TOP OVEN BACK PLATE
5	SEATING WASHER FOR HANDLE BRKTS	55	OVEN REFLECTOR DUCT
6	INSULATING COVER	56	WARMING OVEN
7	HANDLE BRACKET	57	OVEN RETAINING BRACKET
8	CUP WASHER	58	SUPPORT FOR WARMING OVEN
9	COIL HANDLE	60	CORNER STAY BUTTON
10	SEAL - MARSEAL 800S 1060mm LONG	61	CORNER STAY NUT
11	INSULATING COVER LINING PLATE	62	CORNER STAY ROD
12	HOT PLATE	63	OVEN STAY ROD
13	ROPE 13mm DIA 1060mm LONG	64	WARMING OVEN VENT PIPE
14	ROPE 13mm DIA 1470mm LONG	65	TOP HEAT SHIELD
15	ROPE 13mm DIA 152mm LONG	66	FRONT PLATE
16	HOT PLATE BAFFLE	67	NAME BADGE
17	HANDRAIL BRACKET	68	TUBULAR SPRING CLIP
18	HANDRAIL	69	R.H SIDE PANEL
19	ROLL PIN	70	SERIAL N° PLATE
20	FLOW AND RETURN PIPE COLLAR	71	OUTER BURNER DOOR
21	COVER PLATE	72	LOWER OVEN DOOR LINING PANEL
22	L.H SIDE PANEL	74	LOWER OVEN DOOR
23	OIL CONTROL & BURNERS (SEE SEPARATE ILLUSTRATION)	75	HANDLE
24	BACK PLATE	76	THERMOMETER
28	BOILER	77	SEALING RING
29	BURNER CHAMBER DIVIDER PLATE	78	TOP OVEN DOOR
30	SEALING PLATE	79	INSULATION PANEL
31	BOILER WATERWAY BAFFLE PLATE	80	TOP OVEN DOOR LINING PANEL
32	BOILER INSULATION PAD	82	DOOR CATCH
33	BASE PLATE	83	WASHER (DOOR CATCH)
34	FIREBOX R.H SIDE PLATE	84	OVEN RETAINING BRACKET
35	BURNER CHAMBER R.H SIDE PLATE	85	ROPE 13mm DIA x 1220mm LONG
36	BOILER CHAMBER BASE PLATE	86	ROPE 7mm DIA x 230mm LONG
37	FIREBOX HEAT SHIELD	87	ROPE 15mm DIA x 915mm LONG
38	PIPEWORK DUCT	88	BURNER HOUSING DIVIDER LOCATION PLATE
39	DIVERTER HOOD	89	OVEN TOP VENT PLATE
41	SPIGOT BASE	90	HOTPLATE BAFFLE SEALING PLATE
42	ROPE 15mm DIA 530mm LONG	91	ROPE 7mm DIA x 180mm LONG
43	DAMPER	92	NYLON WASHER
44	HOB PLATE PROTECTOR PLATE	93	OVEN SHELF (PLAIN)
45	ROPE 13mm DIA 1030mm LONG	94	OVEN GRID SHELF
46	OVEN TOP FRONT FLUE PLATE	95	MEAT TRAY
47	OVEN TOP R.H FLUE PLATE	96	GRILL RACK
48	OVEN TOP BACK FLUE PLATE	97	FIREBOX SIDE FIXING BRACKET
49	OVEN TOP L.H FLUE PLATE		

Applies to both models
OF22 and 222K



SPARE PARTS LIST

RAYBURN OF22

OIL CONTROL & BURNERS

1	CONTROL VALVE COVER	21	$\frac{1}{4}$ " BSW LOCK NUT
2	THERMOSTATIC CONTROL COMPLETE	22	BURNER HOUSING
3	OIL CONTROL VALVE	23	INNER FIREDOOR BAFFLE (BURNER)
5	COMPRESSION STUD COUPLING	25	DISTANCE PIECE
6	FILTER GASKET	26	INNER FIREDOOR
7	FILTER	27	INNER FIRE DOOR BLANKING PLATE
8	SUPPORT BRACKET	28	WINGED SCREW
9	$\frac{1}{4}$ " BSP ADAPTOR	29	WARNING LABEL
10	$\frac{1}{4}$ " BSP COMPRESSION ELBOW	30	RETAIING PLATE
11	5/16" O/D BOILER FEED PIPE	31	SIGHT GLASS
12	5/16" O/D COOKER FEED PIPE	32	WARNING LABEL GASKET
13	CARBON LEG	33	ROPE 7mm DIA 1190mm LONG
14	$\frac{1}{4}$ " BSP MALE/FEMALE ELBOW	34	5/16" BSW LOCK NUT
15	BURNER BASE	35	5/16" BSW STUD
16	WICK	36	ROPE 8mm DIA x 670mm LONG
17	SEALING PLATE	37	BLANKING PLATE INSTRUCTION PANEL
18	BURNER SHELL	38	OIL CONTROL VALVE COVER PLATE
19	BURNER HEAT BAFFLE	39	BOILER BURNER CONTROL SPINDLE
20	$\frac{1}{4}$ " BSW STUD	40	COOKER BURNER CONTROL SPINDLE

Applies to both models
OF22 and 222K