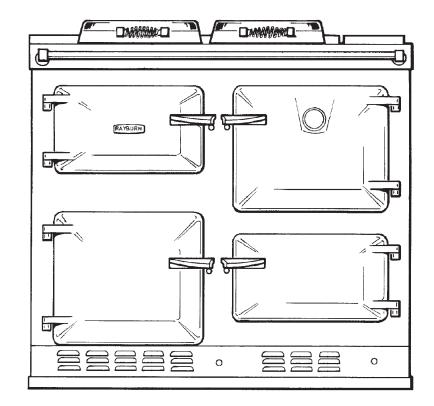


## Users Instructions

400K (P/F)

For use in GB and IE



DESN 512548 A

PLEASE READ THESE INSTRUCTIONS BEFORE USING THIS APPLIANCE

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### 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.

Thank you for buying a Rayburn Appliance. To get the best from it, please read this leaflet and carefully follow the instructions before using your Rayburn for the first time.

### **Consumer Protection**

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: PLEASE READ THE ACCOMPANYING WARRANTY.

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

### Health & Safety

See Installation & Servicing Instructions for details.

### The Appliance

The Rayburn has been designed so that it can be turned on and off as required.

If the weather is very cold, or if you prefer, the appliance can be run continuously on the low setting and turned up as required. **DO NOT USE TO WARM A ROOM WITH THE APPLIANCE OVEN DOORS OPEN.** 

**DO NOT LEAVE THE ROASTING OVEN DOOR OPEN -** If left for any length of time over-heating may cause the overheat thermostat to activate which will require re-setting by a qualified engineer.

This Rayburn is for use with Kerosene C2 to BS2869 Part 2 : 1988

This appliance must be commissioned by an approved engineer, such as OFTEC.

A Rayburn cooker timer is supplied as a standard part of the appliance.

Your Rayburn comes complete with the following:-

- 1 meat tin
- 1 grill rack
- 1 solid shelf 1 cookbook
- 2 grid shelves 1 users instruction
- 1 servicing instruction 1 installation instruction
- 1 Commissioning Form

### **Oil Delivery**

Switch off the cooker temporarily where possible, whilst the oil is being refilled and leave it off for 1 hour. This will allow any sediment to settle and prevent it from being drawn back into the burner, resulting in a break down. Ask your oil supplier/driver to advise you before oil tank is refilled.

### Air Supply

Please Note:

- The permanently open air supply into the kitchen must never be blocked off.
- The air supply to the cooker is through the right hand side of the kick strip. This should never be blocked
  off. Avoid household lint and dust build up. If it is necessary to clean this area, the cooker should be switched off. See
  that household pets do not lie over this air entry zone.

Useful Information About the Cooker	About the Installation
Model: Rayburn 400K P/F	Installer
Fuel Type: Kerosene C2	Address
Serial No.	
Burner Type: Monoflame Minor 1 Pressure Jet	
Oil Tank Capacity	
Oil Supplier 1.	Installation Date
2.	Service Engineer

### **Features/Accessories**

### Doors

Fig. 1

To open the doors. Twist the handle slightly to disengage the door catch from the locking spindle and pull the door open.

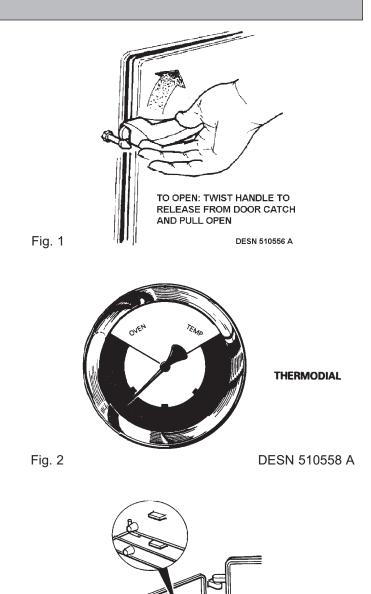
### Thermodial

See Fig. 2

The thermodial positioned on the main oven door is an approximate guide to the internal oven temperature. All thermodials vary slightly but the settings generally indicate the following temperatures.

Simmer approximately	90-150°C
Bake approximately	150-200°C
Roast approximately	200-250°C

On opening the oven door the temperature will appear to drop as it registers cooler air away from the oven. Close the door and after a few minutes the dial will have regained its position. This will soon become familiar.



**Oven Grid Shelves** See Fig. 3

To ensure the correct operation of the oven grid shelves, ensure that they are inserted as shown.

### Fig. 3

DESN 510111

ENSURE SHELVES ARE INSERTED AS SHOWN

### Solid Plain Shelf

The solid plain shelf can be used in two ways:-

- As a baking sheet for scones, pizzas, meringues, etc. Its high quality means it will not warp in the oven and is designed to fit directly on to the runners in the oven, leaving the grid shelves free.
- As a heat deflector. If the oven is too hot or food already in the oven is beginning to over-brown, slide the solid plain shelf onto the top runner above the food and it will help prevent further browning by deflecting and absorbing heat.

It can be used from the start of cooking or can be inserted during cooking. Remember to remove the plain shelf at the end of cooking as it may affect the oven temperature if left in place.

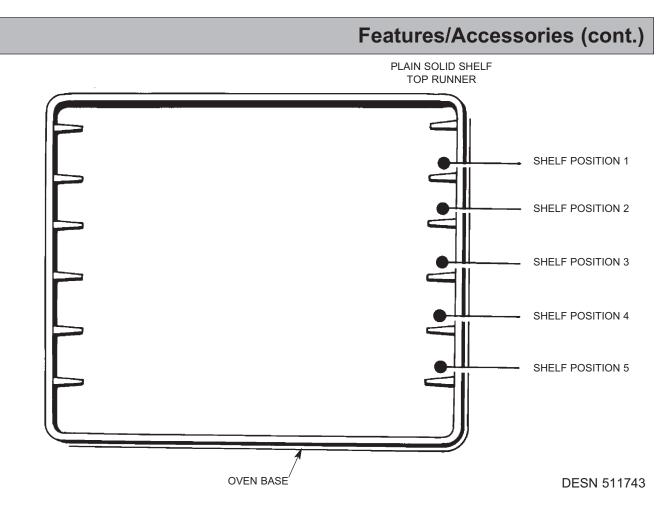


Fig. 3A

Further accessories, tins, grid shelves, solid shelves, saucepans, aprons and gauntlets, etc. are available from your Rayburn stockist.

### 7-Day Programmer (optional extra)

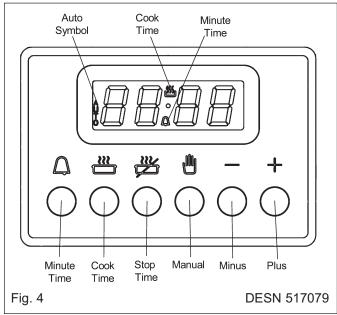
This control is available giving three individual time settings and an override control. It may be used for the following:-

- 1. Pre-set morning programme to turn cooker to desired temperature, so that the cooker is available for immediate use on rising.
- 2. Mid-day or evening timing to suit meal times.
- 3. Alternative third programme setting if needed.

### Note:

When using the external programmer, the internal clock within the Rayburn should be in the manual mode. The minute timer can still be used.

### Introduction to the Timer



You can use the clock (Fig. 4) to turn the oven on and off. The clock must be set to the time of day before the oven will work .

The table below describes the symbols shown on the digital display.

Symbol	Function	Notes
$\square$	Minute Minder is on	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Oven can be operated	If the 'cook' 💥 symbol is not displayed the program has either:
		Ended and the oven is non-operational or, The oven is being contolled by an automatic program that has not started.
[AUTO]	Oven is being controlled in semi- automatic or automatic mode.	
[dot]	Flashes during setting the time of day.	

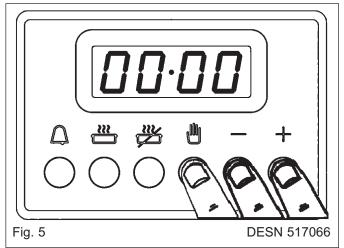
### Setting the Time of Day

When the cooker is first connected to the mains, or if there has been a prolonged power interruption, the clock display flashes [ 0.00 ] and [AUTO].

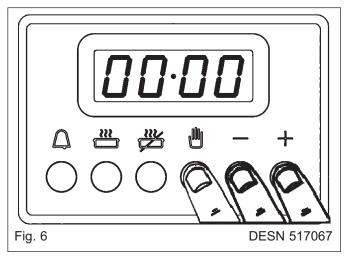
During the time setting process the centre dot will flash. When the process is complete the dot will stop flashing and the  $\stackrel{\text{\tiny W}}{\longrightarrow}$  symbol will be displayed.

The time of day can be set in two ways:

Press and hold the button. Now press the [+] or [-] buttons to increase or decrease the time (Fig. 5). Holding the [+] or [-] buttons for more than 2 seconds will advance/decrease the set time quickly. Release the buttons to set the time of day.



Press and hold both the and buttons down (Fig. 6). Now press the [+] button (or {-] button) until the correct time shows.



Do not forget that it is a 24-hour clock .

If you need to reset the clock/cooker, turn off the power and wait several minutes, then start again.

### AUTOMATIC COOKING CONTROL

This can be used to set an automatic cooking programme. It switches the oven on and off at the pre-set times.

The maximum length of cooking programme which can be set is 23 hours and 59 minutes e.g. a delay time + cooking time = maximum 23 hours and 59 minutes.

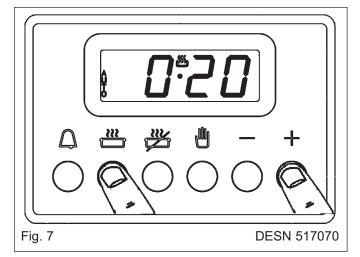
Before setting a programme, check that the clock is telling the correct time of day, and have the following information to hand.

- The length of time the food needs to cook.
- The time that the food is to finish cooking.
- The oven control setting required.
- The '*cook period*', which is the length of time you want the oven to cook for.
- The 'stop time' which is the time of day you want the oven to stop cooking.

### Setting a Cook Duration

Press and hold the button and set the required '*cook* period' by pressing the [+] button (*or* [-] button) (Fig. 7). The clock will now control the cook period of your oven. The symbol and [AUTO] will be displayed.

Once the '*cook period*' is reached, the beeper sounds and the [AUTO] symbol flashes . Turn the oven control knob to 0 and then press any button to stop the beep. Press to return to manual cooking.



### Setting a Cook End Time

Press and hold the '*stop time*' B button (Fig. 8) and then press the [+] button (*or* [-] button) until the required '*stop time*' shows (Fig. 9). The B symbol and [AUTO] will show in the display.

Once the '*stop time*' is reached, the beeper sounds and the [AUTO] symbol flashes. Turn the oven control knob to 0 and then press any button to stop the beep. Press to return to manual cooking.

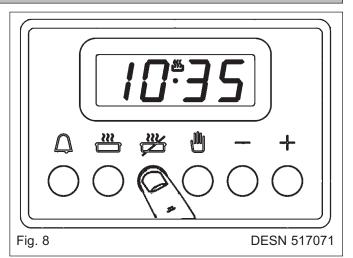


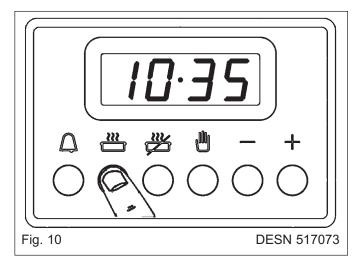
Fig. 9

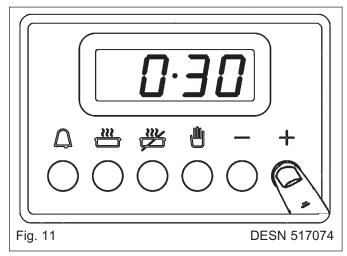
#### To Start and Stop the Oven Automatically

Before you set the clock for automatic operation you must have two numbers clearly in mind - the '*cook period*' and the '*stop time*'.

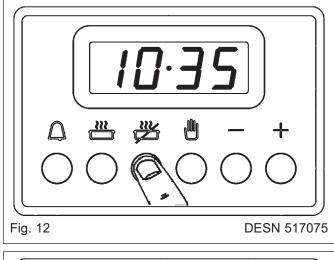
**Note:** You cannot set a start time directly - this is set automatically by setting the '*cook period*' and the '*stop time*'.

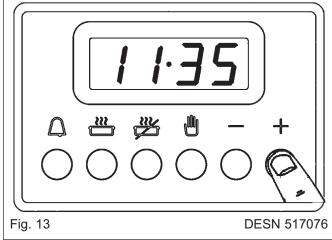
Press and hold the button (Fig. 10) and then press the [+] button (*or* [-] button) until the required 'cook period ' shows (Fig. 11).



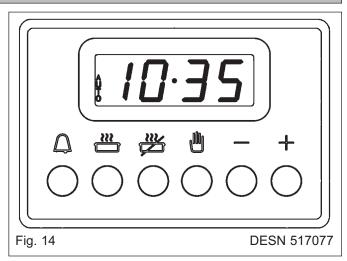


Now press and hold the  $\xrightarrow{W}$  button (Fig. 12) and then press the [+] button (*or* [-] *button*) until the required '*stop time*' shows (Fig. 13). Release the buttons.





[AUTO] will now show in the display and the  $\stackrel{\text{\tiny{22}}}{\longrightarrow}$  symbol will be off (Fig. 14).



Set the oven to the required temperature. When cooking is finished [AUTO] will flash and the beeper will sound. Turn the oven knob to the OFF position first, and then press any button once to stop the beep; press the button to return to manual cooking.

If you are out, do not worry about the beeper going off, it stops after a while. When you return, turn the oven knob to 0 first, and then press 1 to return to manual cooking.

# AUTO is showing, You Want to Reset to Manual Cooking

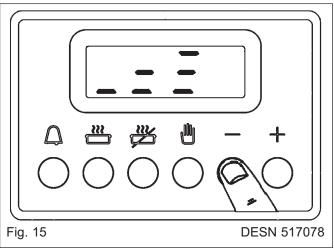
To return to manual cooking mode from an Automatic setting, simultaneously press the [+] and [-] key, this will clear the automatic program and return to manual mode.

Please note that this action will also clear the [Minute Minder] setting.

### **Beeper Tone Adjustment**

The beeper tone can be adjusted to three different levels.

Whilst in the time of day mode, press and hold the [-] button for a period until the display shows the Tone Bars (Fig. 15).



Release the [-] button and immediately press again, this will adjust the tone down by a bar. Continue the process until a comfortable tone is reached.

Please note, during a power reset the clock will remember the last tone set.

For an overview of the functions refer to table below.

Symbol	Function	Notes
$\square$	Sets the Minute Minder	Used with the [+] and [-] buttons
<b>**</b>	Sets the duration/ cook period	Used with the [+] and [-] buttons
Ĩ.	Sets the end/ stop cook time	Used with the [+] and [-] buttons
	Allows the time of day to be set when 'AUTO' is not active	Used with the [+] and [-] buttons
Ű	Resets the cooking control to manual	
[-]	Decreases time interval	Holding this button down allows a quick set
[+]	Increases time interval	Holding this button down allows a quick set
[+]&[-]	Clears all 'AUTO' and minute minder programs	

### **Automatic Dimming**

Providing there are no automatic programs set, and the minute minder is not active, your clock will automatically dim during the hours between 22:00 and 06:00.

Using this facility on the Rayburn timer allows the user to select the amount of time the appliance is on and the finish/off time.

### HINTS ON THE USE OF THIS FACILITY

\* The Rayburn should be **<u>COLD</u>** before starting any automatic cooking where there is a delay in the start time.

Because the Rayburn is made from cast iron and will therefore retain the heat for a number of hours after it is turned off, food should **<u>NOT</u>** be loaded into the appliance for automatic cooking if the Rayburn has been used earlier in the day, <u>or is slightly warm</u>, even if it has been turned off for some hours.

### FAILURE TO OBSERVE THESE POINTS COULD RESULT IN FOOD POISONING

- \* Only choose foods that require the same amount of time to cook and require the same oven temperature.
- \* Food should be thoroughly thawed before it is put into the oven.
- \* Warm food should **NEVER** be placed in the oven if there is a delay to the start of cooking. ie Stews prepared by frying the meat/vegetables should be cooked immediately.
- \* Dishes containing left-over food should not be cooked by this method.
- \* On warm days or in centrally heated houses, the delayed start should be minimum, to avoid the growth of harmful bacteria.
- \* Dishes containing liquid should not be too full, to prevent boiling over.
- \* At the end of the automatic cooking time although the Rayburn will switch off automatically it will remain hot for hours after. FOOD MUST BE REMOVED IMMEDIATELY OR OVER COOKING WILL RESULT.
- \* This facility should be used for the main oven only **NOT** the lower oven or hotplate.
- \* When starting from cold add an extra 40 minutes to the cooking time as an allowance for the Rayburn to warm up.
- \* If a full load is to be cooked add an extra 30 minutes to the total cooking time.

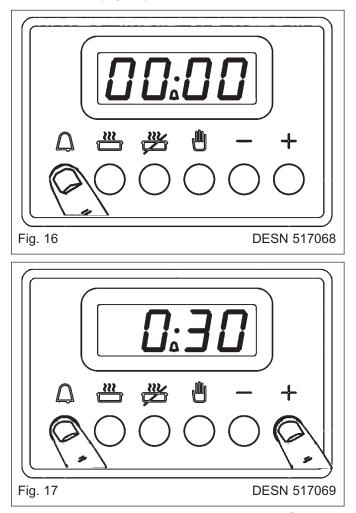
### \* ENSURE FOOD IS THOROUGHLY COOKED BEFORE SERVING

\* In the event of a short term power failure the auto cook will automatically adjust the amount of cooking time. As the Rayburn retains its heat - **OVER COOKING MAY RESULT**.

### **Using the Minute Minder**

### **Minute Minder**

Press and hold the  $\triangle$  button (Fig. 16), and then press the [+] button (*or* {-] *button*) until the length of time you want is shown (Fig. 17).



You can check the time remaining by pressing  $\bigtriangleup$  . When the beeper sounds cancel it by pressing any button.

To reset the minute minder time; simultaneously press the [+] and [-] buttons whilst the minute minder function is selected.

Note: this will clear all automatic programs.

## **Main Oven Operation**

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

- The oven is indirectly heated from the outside by hot gases from the heat source so that no flame or elements within the oven means full use can be made of the whole cooking area.
- The oven is hotter towards the top than the bottom.
- To heat the main oven and increase the hotplate temperature turn the cooker control knob to desired setting as required.
- There are 5 runners or shelf positions within the oven on which the grid shelves, solid shelf and meat roasting tin fit directly.
- When left on L setting the main oven will maintain a low idling temperature suitable for slow cooking .
- As the Rayburn is made of cast iron, the time for the appliance to heat up and cool down is longer than with a conventional oven.

### Hints

- \* Do not forget the thermodial reflects the temperature in the middle of the oven, by moving the food higher or lower or use of the solid plain shelf a hotter or cooler temperature can be achieved.
- \* The main oven has good all round temperature. Joints of meat gain colour more quickly than in a conventional oven, this is due to the heating from all round the cast iron oven (not just an element or gas flame). Moisture is quickly sealed in, giving a succulent moist finish.
- \* There is so little heat loss when opening the oven door that cakes can be checked without fear of them sinking.
- \* For perfect baking results some baked goods such as trays of biscuits, small cakes or items nearer the top or on the floor of the oven, may need turning during cooking.
- \* One of the many benefits of the cast iron main oven is that when the oven is hot the floor of the oven is hotter than that of a conventional cooker and can be used directly for cooking.
- \* No need to bake quiche pastry cases "blind", just place the flan dish on the oven floor for "soggy-free" pastry or finish off the base of fruit pies etc. This position is also useful for shallow frying (a cast iron dish is recommended) with the added advantage that fat splashes are carbonised so that cleaning is minimal and cooking smells are taken away through the flue.

### Grilling

The top of the oven is where grilling takes place. When the main oven is hot use the meat tin with a grill rack (used on the highest position) so that the fat can drip into the tray. Position the food on the rack and put into the oven on the highest runner. The heat from the cast iron roof of the oven will cook and colour the food - turn as necessary. Turn the grill rack over to the lowest position and it becomes a trivet for roasting meat and poultry. It is also useful as a cooling rack.

### The Hotplate

The rise in temperature of the hotplate corresponds with rise in oven temperature. The higher the main oven temperature the hotter the hotplate. It is graduated, being hotter on the right side suitable for boiling and cooler on the left side for simmering and slower cooking.

### Hints

- \* To get the best results when cooking on the hotplate always use good ground bases. This ensures maximum contact and heat transfer from the heat source to the food being cooked.
- \* The hotplate can be used directly, for making toasted sandwiches, drop scones, etc, see the Rayburn Cookbook for details.
- \* Keeping the hotplate free from crumbs and debris will also maximise efficiency. Even a few small crumbs on the hotplate will considerably slow down the time it takes for a kettle to boil.
- \* Keep the hotplate as hot as possible by always keeping the lids closed when not in use. This also conserves fuel.

### The Lower Oven

- \* The temperature of the cast iron lower oven is dependent on the temperature in the main oven.
- \* As a guide it is around half the temperature of the main oven.
- \* This means it can be used as a cooking oven, when the main oven is at a higher temperature, ideally 200°C or slightly higher. Food such as casseroles, meringues and milk puddings can then be cooked satisfactorily.
- \* When cooking a casserole or meat dishes in the lower oven always start off by allowing casserole to come to the boil then cook for 5-10 minutes on the hotplate or in the main oven before being transferred to the lower oven.
- \* Although there are runners on the sides of the oven for the grid shelves/meat tin, dishes may also be cooked on the floor of the oven.
- \* Note that if the appliance is left on high setting or run continuously for a long period of time, the temperature of the lower oven may climb higher than half that of the main oven temperature.

### The Rayburn Cookbook

The cookbook supplied with your Rayburn is general to all Rayburns. When following the recipes consult these operating instructions to ascertain details relevant to your Rayburn.

# **COOKING CHART (MAIN OVEN)**

	Setting	Shelf Position	Approximate Time
SCONES	7	3	10-15 mins
SMALL CAKES	5	4	20 mins (Turn the tray round halfway through cooking. For best results place the solid plain shelf on the top runner)
VICTORIA SANDWICH	4	3 + 5	25-35 mins (Move the lower cake up when the top cake is cooked. For best results place the solid plain shelf on the top runner)
SEMI-RICH FRUIT CAKE (Dundee, Cherry Cake, etc)	2-3	5	1 1/2 - 2 hrs
RICH CELEBRATION FRU	JIT CAKE	1	5 Depending on size
SHORT CRUST TARTLET	<b>S</b> 6	2 or 3	15-20 mins
SHORT CRUST PIE	6	4 or 5	45 mins
QUICHE	6	Floor	35-40 mins
PUFF PASTRY	8	2 or 3	10-15 mins
MERINGUES	LOW	5	1 1/2 - 2 1/2 hrs
CASSEROLES	1-2	3, 4 or 5	2-3 hrs
BREAD - ROLLS	8	4 or 5	20-30 mins
BREAD - LOAF	8-9	5	30-40 mins
BISCUITS	5	2 or 3	10-15 mins
SOUFFLE	5	4	30-35 mins
YORKSHIRE PUDDING	7	2 or 3	25-35 mins
SLOW/FAST ROASTING	SEE RAYBURN COOKBOOK FOI TIMES	,	Depending on Joint

Shelf Positions are counted downwards ie top shelf is No. 1 position (See Fig. 3A)

The positions are a guide only and can of course be altered

### REMEMBER: BE CAREFUL OF THE HOT APPLIANCE

### DO NOT USE A STEAM CLEANER TO CLEAN THIS COOKER

### **Enamelled Top Plate and Front Plate**

- It is not advisable to put very wet clothes onto the handrail, as this may craze the enamel.
- To keep the vitreous enamelled surface bright and clean, wipe over daily with a soapy damp cloth, followed by a clean dry cloth.
- Wipe off any condensation streaks on the front plate as they occur or the vitreous enamel may be permanently discoloured.
- If milk or 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 that they do not harden and become more difficult to remove later. Look for cleaners carrying the VEA (Vitreous Enamel Association) approval logo as this indicates they can be used on the Rayburn.
- For stubborn deposits, gentle localised soaking, not flooding, is easier than rubbing and hot water and detergent will soften most burnt on stains in about 10 minutes.
- A soap impregnated pad can be carefully used on the vitreous enamel (look for VEA mark on suitable cleaners).



# DO NOT USE ABRASIVE PADS, THAT ARE NOT VEA APPROVED, OVEN CLEANER, OR CLEANERS CONTAINING CITRIC ACID ON ENAMELLED SURFACES.

**IMPORTANT NOTE:** AGA recommend Vitreous Enamel Association approved cleaners for cleaning the vitreous enamelled surfaces of this product.

But they are unsuitable for use on chrome and stainless steel components, including the hand-rails and their brackets.

The insulating covers should be cleaned regularly with a NON-ABRASIVE mild detergent, applied with a soft (coarse free) cloth and lightly polished up afterwards with a soft (coarse free) duster or tissue to bring it back to its original lustre.

### **Oven Door Linings**

• Using oven gloves carefully lift off the oven doors, lay them on a tea towel to protect the enamel. They can then be cleaned with a cream cleanser or soap impregnated pad. Do not however, immerse the doors in water as they are packed with insulating material which will be damaged by excessive moisture.

### **Insulating Lids**

- **Chrome** Wipe over with a soapy damp cloth followed by a polish with a clean dry cloth.
- Linings The linings of the insulating lids may be cleaned with a cream cleanser or soap impregnated pad. Open the lids to allow them to cool a little before cleaning.

### **Ovens and Hotplate**

- Use a wirebrush for cleaning the hotplate to remove any burnt on spills.
- In the main oven, spills and fat splashes are carbonised at high temperatures. Occasionally brush out with a wire brush. Do not use oven cleaners.
- The lower oven should also be brushed or wiped out occasionally.

### DO NOT USE ANY OVEN CLEANERS

### Accessories

• Oven furniture such as roasting tins, solid plain shelves, grid shelves and grill racks should be cleaned in hot soapy water, soaking if necessary. A nylon scouring pad can also be used.

### DO NOT PLACE IN THE DISHWASHER OR USE CAUSTIC CLEANERS

### **Servicing or Fault**

### **BURNER RESET**

### SEE FIG. 18

If a fault occurs on the burner then it automatically shuts down and the red button on the front plinth will be illuminated. This can be reset, after 1 minute by depressing the button. The reset button is located in the lower plinth panel.

### **OPERATE BY PRESSING WITH FINGER ONLY**

Please wait at least 60 seconds between resetting the lockout button.

If for example the storage tank has been replenished after the oil supply ran out, and resetting the lockout button does not light the burner immediately, it will be necessary to repeat the sequence.

Continued lockouts indicate a burner or oil supply malfunction. The fault should be diagnosed and rectified.

In the event of repeated failure, switch off the oil and electrical supply to the appliance and contact your installer/service engineer.

# FLUE SAFETY DEVICE (IF THE BURNER GOES OUT OR WILL NOT OPERATE)

For safety purposes a flue safety device is fitted. This will only operate under adverse flue conditions. If the switch has operated, it should be pushed in to reset and the pilot re-lit. If this problem persists contact the local engineer to determine and rectify the cause. It is important not to re-set more than once as this may indicate a flue blockage.

### OIL LEAK OR FAULT

If an oil leak or fault exists or is suspected the unit must be isolated from the oil and electrical supply. The appliance must not be used until the fault has been rectified.

Advice/help should be obtained from the installer/servicing company.

### **POWER FAILURE**

In the event of a short term power failure the clock display will disappear and then return on the power supply being reinstated.

However if the power supply is interrupted for any length of time the clock display will be lost. Follow procedure '**TO SET TIME**'.

### FUEL

Please endeavour to see that when the fuel is being delivered into the storage tank, that the appliance is left off during delivery, and preferably for a period of 1 hour afterwards to allow sediment within the tank to settle.

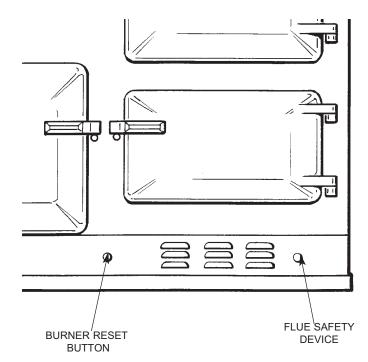


Fig. 18

To avoid break downs through fuel starvation avoid running out of fuel. Order a supply in ample time

### SERVICING

With normal use the cooker will need an annual flueway clean and burner maintenance.

An additional flue-way clean half-way through the season may be necessary in some cases - see Servicing Instructions.

### THE EXTERNAL FLUE

The extractor fan should be regarded as a consumable item and replaced every 2 years.

A HOT APPLIANCE CANNOT BE SERVICED.

The cooker thermostat knob should be turned OFF the night before the day of the servicing so that the appliance will have cooled down.

For further advice or information contact your local distributor/stockist

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





Manufactured by AGA Rangemaster Station Road Ketley Telford Shropshire TF1 5AQ England

www.rayburn-web.co.uk www.agacookshop.co.uk