

This information refers to the following products

**Rayburn 460K MK1
(Early models
1994-5)**

WARNING

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



Home on the Range.

Users Instructions for Rayburn 460K 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 practical, that these products are so designed and constructed as to meet the general safety requirement when properly used and installed. To this end, our products are thoroughly tested and examined before despatch.

IMPORTANT NOTICE: Any alteration that is not approved by Aga-Rayburn could invalidate the approval of the appliance, operation of the warranty and could affect your statutory rights.

Control of Substances - Health and Safety - Important.

This appliance may contain some of the materials that are indicated below. It is the Users/Installers responsibility to ensure that the

necessary personal protective clothing is worn when handling where applicable, the pertinent parts that contain any of the listed materials that could be interpreted as being injurious to health and safety, see below for information.

Firebricks, Fuel beds, Artificial Fuels - when handling use disposable gloves.

Fire cement - when handling use disposable gloves.

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

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

INTRODUCTION

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.

Your Rayburn 460k has been designed to provide cooking, central heating and domestic hot water when you require it. It is designed to run intermittently.

If the weather is very cold, or if you prefer, the 460k can be run on a continuous low setting and turned up as required.

The Rayburn 460k burns 28 seconds Kerosene to BS 2869: 1988 Class C2.

This appliance must be commissioned by an approved engineer. See list of Authorised Commissioning Engineers supplied with your cooker.

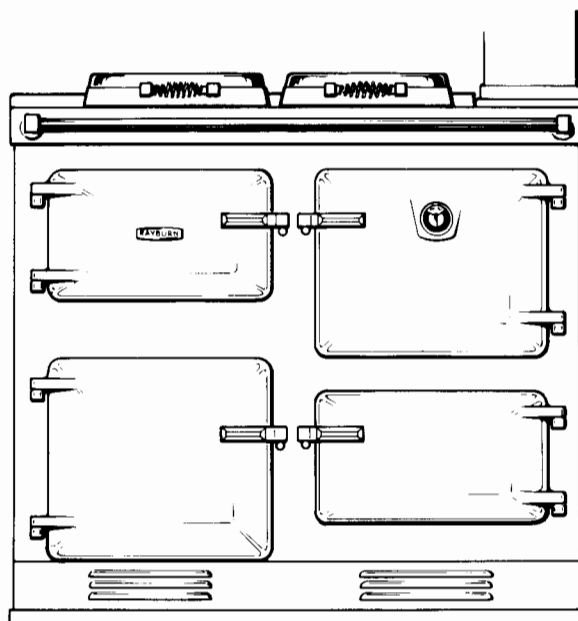
A Rayburn programmer is supplied as an integral part of the appliance and allows the cooking and heating functions to be used separately or together.

Two independently fired oil burners are fitted. These are:-

1. The boiler burner which gives domestic hot water and central heating or domestic hot water only.
2. The cooker burner gives control of hotplate and oven temperatures.

Your Rayburn comes complete with:

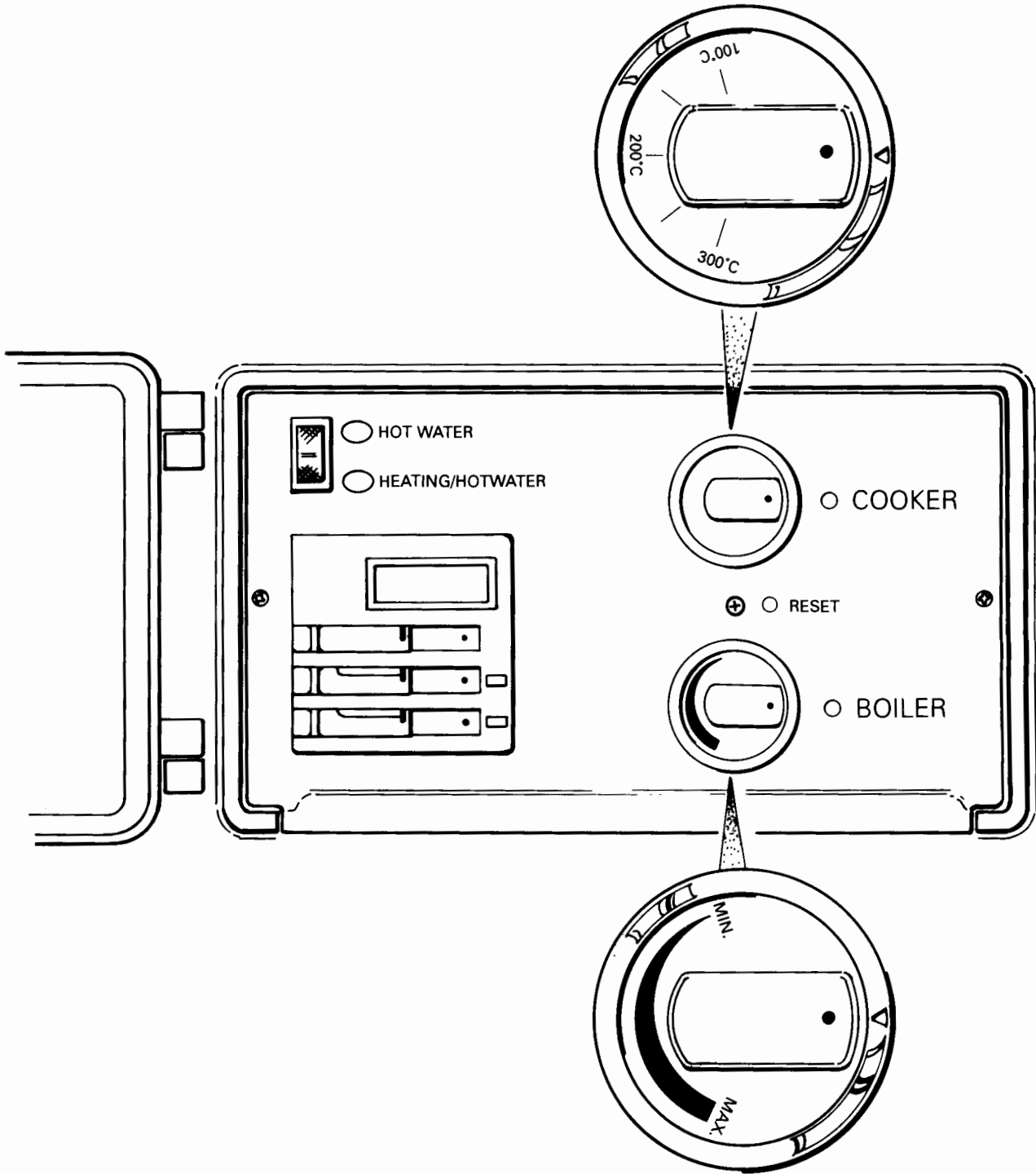
- | | |
|--------------------------|----------------------------|
| 1 Meat Tin | 1 Users Instruction |
| 1 Grill Rack | 1 Installation Instruction |
| 1 Solid Shelf | 1 Servicing Instruction |
| 2 Grid Shelves | 1 Commissioning Form |
| 1 Wire Brush | 1 Commissioning |
| 1 Cookbook | Engineers List |
| 1 Guarantee Registration | |



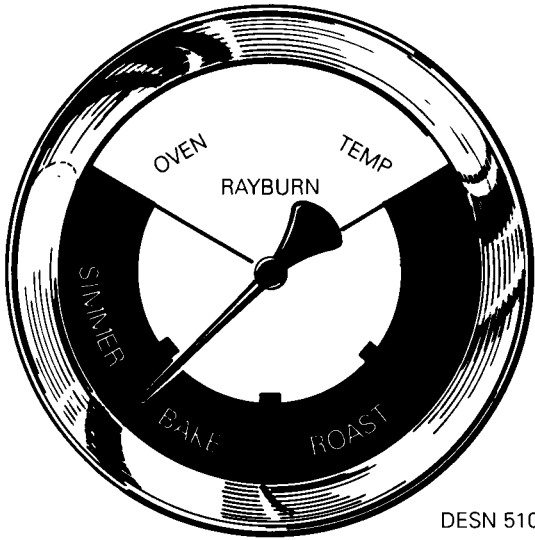
DESN 510517

PAT. APP 2 280 747
AND OTHER GB & IE
PATENTS PENDING

CONTROLS



DESN 510554 'A'

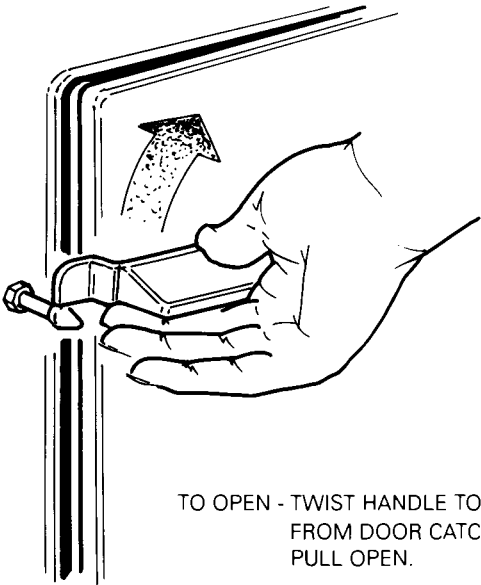


DESN 510555

THE THERMODIAL ON THE MAIN OVEN DOOR IS A GUIDE TO THE CENTRE OVEN TEMPERATURE WHEN COOKING. SEE COOKING CHART ON PAGE 4 AND COOKING HINTS ON PAGE 5 FOR FURTHER INFORMATION.

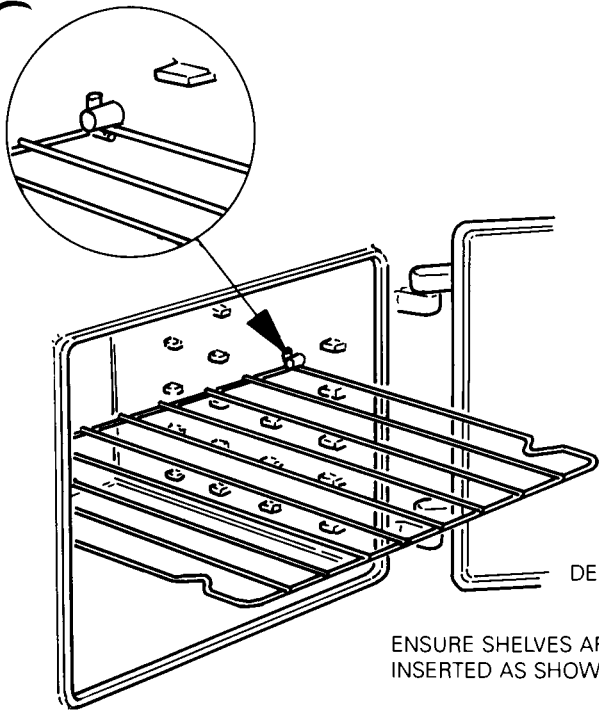
THERMODIAL

DOOR OPENING



TO OPEN - TWIST HANDLE TO RELEASE FROM DOOR CATCH AND PULL OPEN.

DESN 510556



DESN 510111

GRID SHELF LOCATION

ENSURE SHELVES ARE INSERTED AS SHOWN

COOKER

The operation of the cooker is controlled by a built in programmer. It can be operated under automatic or manual control. See section 'PROGRAMMER'.

MAIN OVEN & HOTPLATE CONTROL

The main oven and hotplate temperatures are controlled by the cooker thermostat control knob which is situated behind the controls door. See section 'CONTROLS'. Turning the control knob clockwise increases the temperature.

HOTPLATE

The single hotplate of your Rayburn is graduated in temperature. Just slide pans to a hotter or cooler area depending on whether boiling or simmering is required. The hottest area is in the middle right hand side.

The hotplate temperature is also variable, depending upon the setting used; the higher the setting then the higher the hotplate temperature.

Made of thick cast iron, the hotplate is machined flat. In order to ensure perfect contact and even heat distribution it is recommended that all pans and kettles used have thick, flat machined bases. Pans should also have tight fitting lids for greatest efficiency. Keep the insulated hotplate covers down when the hotplate is not in use to conserve heat.

THE MAIN OVEN

The oven thermostat control knob is marked ● (OFF) then temperature graduated. (See diagram, Page 2).

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 of the temperature in the main oven for food such as meringues, casseroles, milk puddings, etc. This means that it can be used as a cooking oven when the main oven is at a higher temperature ie. over 200°C (400°F).

THE RAYBURN COOKBOOK

The cookbook is supplied with your Rayburn 460k cooker is generic to all Rayburns. When following the recipes consult these operating instructions to ascertain details relevant to the Rayburn 460k



COOKING CHART (MAIN OVEN)

	Temperature	Shelf	Approximate Time
Scones	220°C (425°F)	1 or 2	10 - 15 mins
Small Cakes	190°C (375°F)	3	15 - 20 mins
Victoria Sandwich	180°C (350°F)	3 + 5 OR 4	20 - 30 mins (Move lower cake up when top cake cooked) 20 - 30 mins (Both cakes on one shelf)
Semi-rich fruit cake	150°C (300°F)	4 or 5	2 hours
Rich Fruit Cake	135°C (275°F)	4 or 5	Depending on size
Shortcrust - tartlets	200°C (400°F)	2 or 3	20 mins
Shortcrust Pie	200°C (400°F)	4 or 5	45 mins
Quiche	200°C (400°F) - 220°C (425°F)	Floor	45 mins
Puff Pastry	210°C (410°F) - 220°C (425°F)	2 or 3	15 mins
Meringues	100°C (212°F) - 120°C (240°F)	5	1 1/2 - 2 hours
Casseroles	120°C (240°F)	4 or 5	3 hours or more
Bread - rolls	210°C (410°F) - 220°C (425°F)	2	15 - 20 mins
Bread - loaf	210°C (410°F) - 220°C (425°F)	4 or 5	35 mins
Soufflé	180°C (350°F)	4	30 mins

Shelf positions are counted downwards ie: top shelf position is number 1.
The positions are a guide only and can of course be altered to suit.

COOKING HINTS

The ovens are indirectly heated from the outside by hot gases from the heat source so that no flame or elements are within the ovens. This means that full use can be made of the whole cooking space. Both ovens are vented to the flue so cooking smells disappear to the outside.

MAIN OVEN

This oven is hotter towards the top than the bottom.

For perfect results turn food during cooking.

On low settings the oven can be used for long slow cooking such as casseroles, stock, soup, ratatouille, curries, meringues, creme caramel, rice pudding, etc. Turn up to a higher setting for baking fruit cakes, victoria sandwiches, small cakes, soufflés, scones, bread and roasting etc. (See temperature/setting chart on previous page for details).

One of the many benefits of the cast iron oven is that the floor of the oven is hot and can be used as a cooking area in its own right.

1. For Baking - no need to bake a pastry case or quiche "blind" just place the flan dish directly on the oven floor for the whole, or part of, the cooking time to achieve "soggy-free" pastry bases that are crisp and golden. In the same way an apple pie can be part cooked on the oven floor to ensure a well cooked base.
2. For Frying - when the oven is hot the floor of the oven can be used for frying. Think of it as a hidden hot plate. A cast iron dish is recommended. Allow it to heat up first before adding the food. It's an excellent method for frying bacon and egg, fish such as trout/salmon or onions etc. Any fat splashes are carbonised on the insides of the oven so cleaning is minimal (carbonised crumbs can be brushed out using a stiff brush) and frying smells are taken away through the flue.

The top of the oven is where grilling takes place. Do this when the oven is turned to a high setting. The heat radiating from the roof of the oven seals and cooks the food efficiently. Arrange the food on the grill rack in the meat tin set on the highest set of runners.

Cast iron retains the heat well so you can peep at a cake or soufflé to see how it is cooking without it sinking. As the meat tin supplied with your Rayburn fits directly on to the runners the grid shelves are left free for other dishes. For safety reasons the grid shelves are non-tilt, use as directed in section 'USER INFORMATION'.

THERMODIAL

The thermodial on the main oven door is a guide to the condition of the internal oven. On opening through, the pointer will appear to drop as it registers cooler air away from the oven, do not worry, close the door and after a few minutes it will regain its position.

LOWER OVEN

A valuable oven for slower more gentle cooking when the main oven is turned up high, as it is roughly half the temperature of the main oven. Ideal for meringues, casseroles, milk puddings, egg custards etc. When cooking a casserole in this oven allow it to heat through and simmer for 5-10 minutes on the hotplate or main oven floor before transferring to the lower oven. Although there are runners on the sides of the oven for the grid shelf/meat tin, dishes may also be cooked on the floor of the oven.

SOLID SHELF

The solid shelf can be used as a baking sheet or as a heat deflector to protect food from over browning/cooking. It is ideal as a solid baking sheet as it maximises the whole oven area. When in position the solid shelf and the space above can still be used for cooking, while it is protecting the food below. As a heat deflector slide it in two runners above the food. To be effective it must be used from cold and therefore it should be stored outside the oven.

HOT PLATE

Apart from its obvious use for boiling and simmering, the hot plate can be used directly, for making toast, toasted sandwiches, drop scones, see the Rayburn cookbook for details. After cooking directly on the hotplate make sure you brush off any crumbs or this could impair the boiling performance of the kettle or sauce pans.

ACCESSORIES

Further accessories, tins, shelves, solid shelves, saucepans, apron and gauntlets, etc are available from your Rayburn Stockist.

LOCATION OF OVEN GRID SHELVES

To ensure the correct operation of the oven grid shelves, ensure that they are inserted as shown (See section 'USER INFORMATION').

DOORS

To open the doors. Twist the handle slightly to disengage the door catch from the locking spindle and pull door open. (See section 'USER INFORMATION').

To close the doors. Gently push the door shut until the door catch engages with the locking spindle.

IT IS NOT ADVISABLE TO PUT VERY WET CLOTHES ONTO THE HAND RAIL AS THIS MAY CRAZE THE ENAMEL,

BOILER

The operation of the boiler is controlled by the built in programmer. It can be operated under automatic or manual control. See section 'PROGRAMMER'.

The temperature of the hot water supplied can be adjusted by means of the boiler thermostat control knob. This knob can also be used to turn the boiler off.

The boiler thermostat knob is situated behind the control door (See Fig. 1). Turn the knob clockwise to increase the temperature of the water.

For safety purposes an overheat thermostat is fitted. This thermostat is a safety cut-out device which is intended to operate if other controls fail. This control will "Lock-out:" and switches everything off except for the programmer and the "pump overrun" facility.

This thermostat has to be manually reset once the temperature has cooled down.

To reset press the centre of the reset button (See Fig. 1) with a small probe (pencil, ball point, etc).

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

HOTWATER/HEATING AND HOTWATER SWITCH SEE FIG. 1

Switch up to
'HOTWATER'

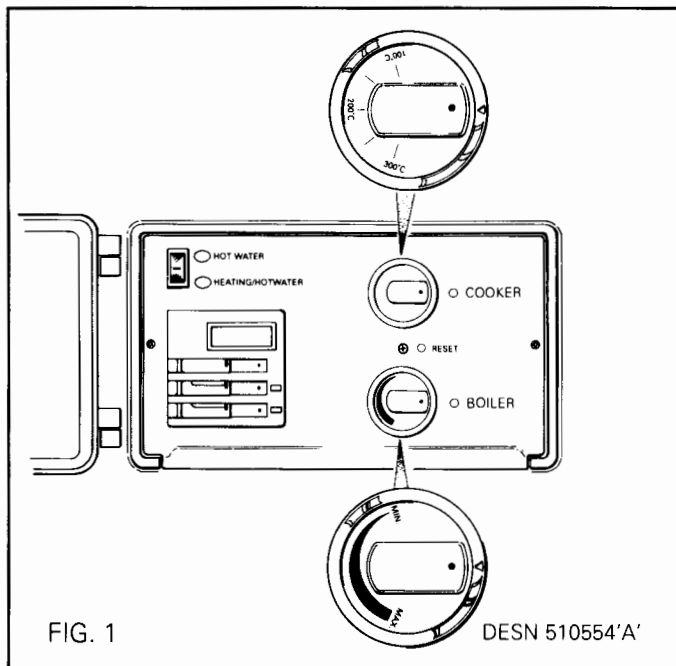
- Water from boiler to hot water cylinder only.

Switch down to

'HEATING/HOTWATER' - Water from boiler to hot water cylinder and central heating system.

FROST PRECAUTIONS

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



PROGRAMMER

SETTING THE CORRECT TIME

1. Move the **TIME SET** selector to the **SET CLOCK** position. The display will now be flashing to indicate it can be changed.

2. Press the **+** or **-** button to set the correct time of day.

Each press of the button will change the time by one minute. Holding the button down for more than a few seconds will change the time quickly. The display will stop flashing to indicate the time has been set.

3. Move the **TIME SET** selector to the **AUTO** position to complete setting the time of day.

SETTING THE PROGRAMME TIMES

The unit has two **ON/OFF** programme times per day to control your Boiler and Cooker. To help you set your personal programme quickly, a built-in programme has been incorporated with commonly used programme times. This programme is selected automatically when the unit is first connected to the mains power or when the **RESET** button is pressed.

Each programme time can be set between 3.00am and 2.50am (on the next day) to allow you to programme past midnight, if required.

1. Move the **TIME SET** selector to the first **ON** position (second from left). The first **ON** time will now be flashing in the display to indicate it can be changed.

2. Press the **+** or **-** buttons to set the first **ON** time.

Each press of the button will change the time by 10 minutes. Holding the button down for more than a few seconds will change the time quickly. The display will stop flashing to indicate the time has been set.

3. Move the **TIME SET** selector to the first **OFF** position. Set the first **OFF** time using the **+** or **-** buttons.

4. Move the **TIME SET** selector to the second **OFF** position. Set the second **ON** time using the **+** or **-** buttons.

5. Move the **TIME SET** selector to the second **OFF** position. Set the second **OFF** time using the **+** or **-** buttons.

6. Move the **TIME SET** selector to the **AUTO** position to complete setting the programme times.

7. Your programmer will now switch your boiler and cooker automatically.

8. Set the cooker and boiler thermostat knobs to the desired settings.

The cooker and boiler burners will automatically fire until the desired temperatures are reached.

NOTES

(i) On 12 hour clock versions ensure the **AM** or **PM** marker is correct. If not, adjust the time by a further 12 hours.

(ii) Programme times cannot be set out of sequence. If the **-** button is being pressed, the time will stop changing when it equals a previous programme time. If the **+** button is being pressed, subsequent programme times will be pushed forward along with the one being set.

(iii) If the **TIME SET** selector is accidentally left in an **ON/OFF** or **SET CLOCK** position for a period of 10 minutes, the unit will start to operate as if it has been left in **AUTO**. The display will flash when this occurs to remind you to move the selector to the correct position.

REVIEWING AND CHANGING PROGRAMME TIMES

1. To review/change the **ON/OFF** programme times move the **TIME SET** selector to each of the **ON/OFF** positions in turn. Any time can be adjusted by using the **+** or **-** buttons.

Move the **TIME SET** selector to the **AUTO** position to complete reviewing/changing the programme times.

TEMPORARY CHANGE

The two **CHANGE** buttons switch the output **ON** or **OFF** (without altering the programme) when the **TIME SET** selector is in the **AUTO** position and the **HEATING** and/or **HOT WATER** selectors are set to **ONCE** or **TWICE**. When the indicator lamp is **ON**, pressing the **CHANGE** button switches the output **OFF** until the next programme **ON** time.

When the indicator lamp is **OFF**, pressing the **CHANGE** button switches the output **ON** until the next programme **OFF** time.

OPERATING YOUR PROGRAMMER

For normal operation the **TIME SET** selector must be in the **AUTO** position.

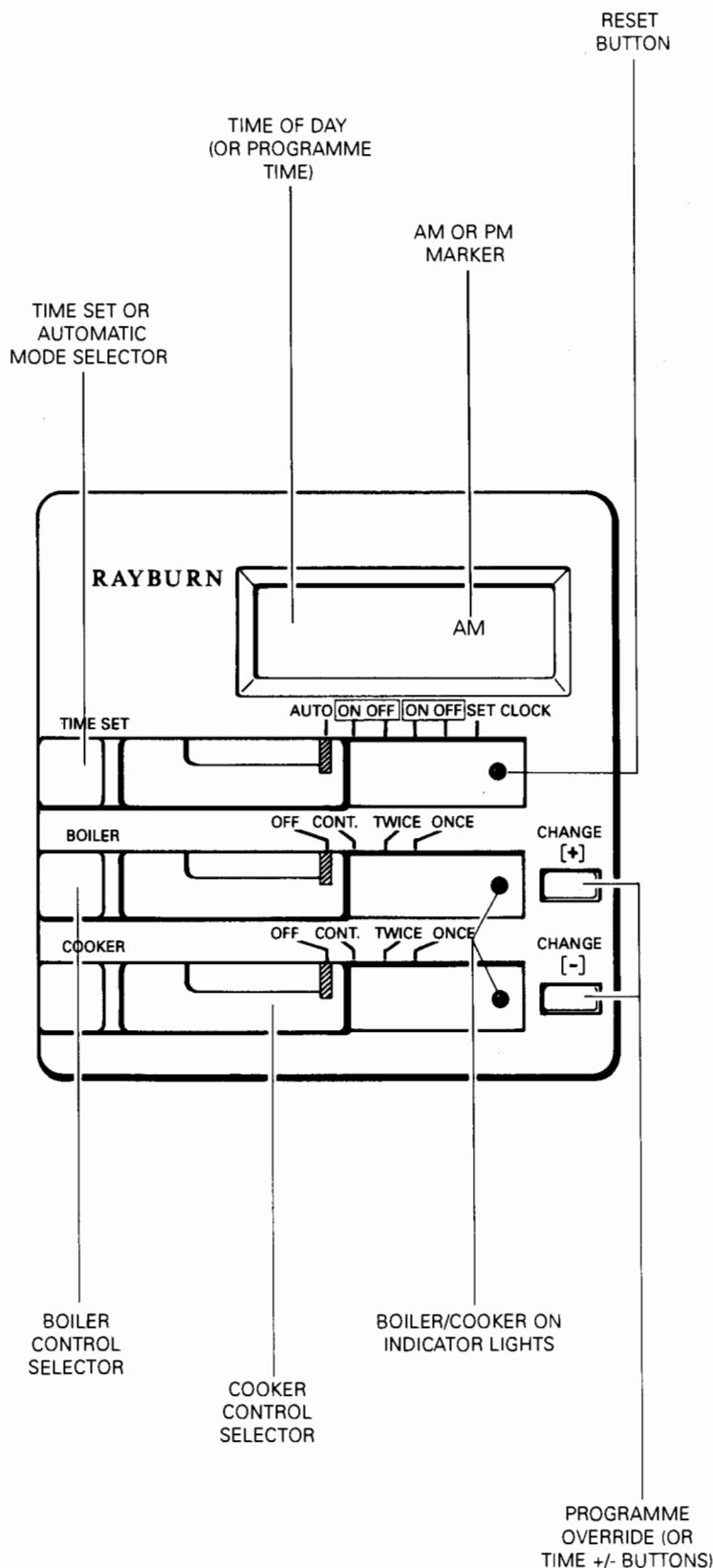
Indicator lamps show when the Boiler or Cooker is switched **ON**.

The two lower selectors are used to control the Boiler and Cooker as follows:

- OFF** The heating will remain **OFF** permanently
- CONT** The heating will remain **ON** permanently
- TWICE** The heating will be switched **ON** and **OFF** automatically at the programme times.
- ONCE** The heating will be switched **ON** automatically after the first programme **ON** time and **OFF** at the last **OFF** time. The first **OFF** and second **ON** times will be ignored.

POWER FAILURE

This unit has a built-in battery to ensure correct operation after a mains power cut. No action should be necessary following a power cut up to 7 days. Longer power cuts may require you to reprogramme the unit.



DESN 510557 'A'

PROGRAMMER

EXAMPLE SETTING

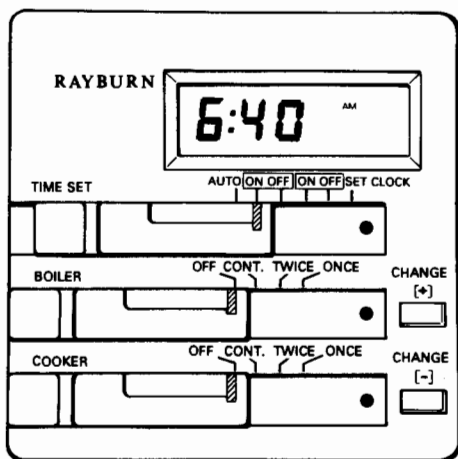
For a typical family, the sequence of Heating and Cooking might be boiler on all day, cooker on twice a day, for example:-

BOILER & COOKER **ON** at 6.40am Rising from bed at 7.00am

COOKER **OFF** at 8.30am Family at work/school but hot water required for washing etc.

EXAMPLE SETTING SEQUENCE

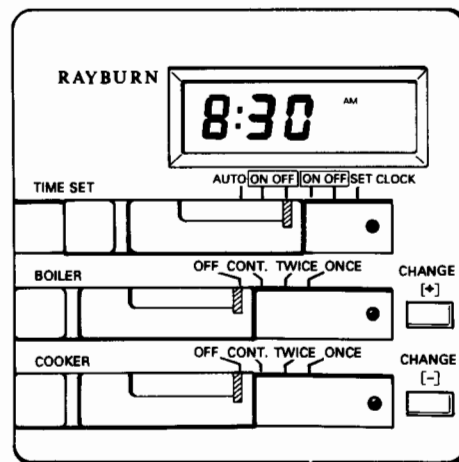
1.



TIMESET slider 1st **ON** select time A.M. 6.40

DESN 510558'A'

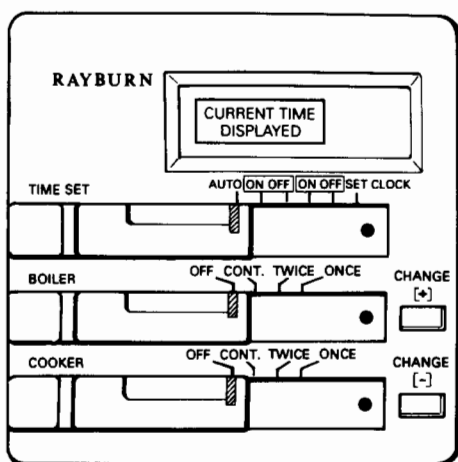
2.



TIMESET slider 1st **OFF** select time A.M. 8.30

DESN 510558'A'

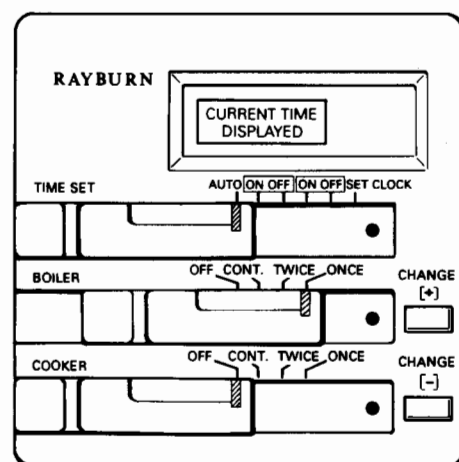
5.



TIMESET slider **AUTO**

DESN 510558'A'

6.



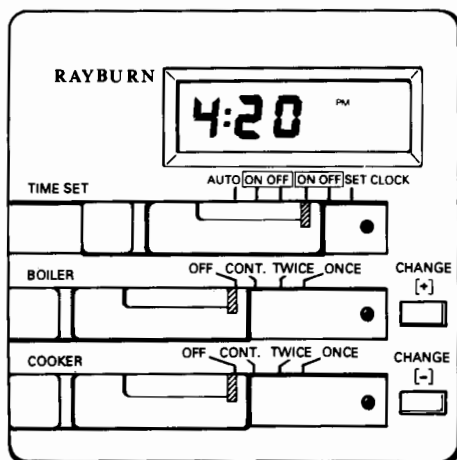
BOILER slider **ONCE**

DESN 510558'A'

COOKER ON at 4.20pm Family returning home

BOILER & COOKER OFF at 10.50pm Family gone to bed, heating and cooking no longer required.

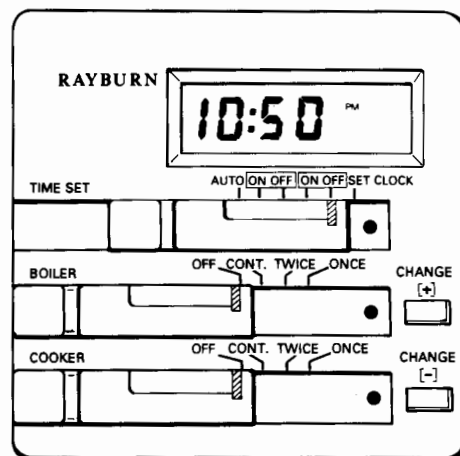
3.



TIMESET slider 2nd **ON** select time P.M. 4.20

DESN 510558'A'

4.



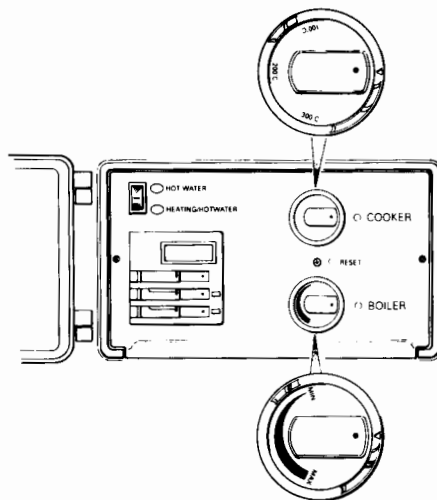
TIMESET slider 2nd **OFF** select time P.M. 10.50

DESN 510558'A'

COOKER slider **TWICE**

DESN 510558'A'

8.



The Hotwater/Heating and hot water switch should be set down to **HEATING/HOT WATER**.

Set the **BOILER** and **COOKER** thermostat knobs to the desired setting.

The programmer will now switch your boiler and cooker automatically.

DESN 510554'A'

CLEANING

REMEMBER TO BE CAREFUL OF THE HOT APPLIANCE

To keep the vitreous enamel surface bright and clean, wipe over daily with a soapy cloth, followed by a polish with a clean duster.

If milk, fruit juice or anything containing acid is split 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. Look for cleaners carrying the VEDC (Vitreous Enamel Development Council) approval logo as this indicates they can be used on your Rayburn.

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 out the ovens with a stiff brush. Do not use oven cleaners.

The oven doors can be removed for cleaning the linings. Do not immerse in water. Lay the door on a towel on the work surface to protect the enamel and clean the linings with a cream cleanser or soap impregnated pad.

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. Get into the habit of wiping them before lowering. Use a wire brush to keep the hotplate clean. General cleaning is best carried out when the Rayburn is cold.

DO NOT USE ABRASIVE PADS, OVEN CLEANER, OR CLEANERS CONTAINING CITRIC ACID ON ENAMELLED SURFACES.

SERVICING

With normal use a boiler/cooker annual flueway clean and burner maintenance should be carried out immediately before the end of the heating season.

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

A HOT APPLIANCE CANNOT BE SERVICED.

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

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 your Installation Servicing Company.

POWER FAILURE

In the event of power failure your appliance will become inoperative. When the power is restored it will automatically restart, if programmed or manually set to do so.