



Universal Range Cooker *OIL*

Instructions for Use, Installation and Servicing

For use in GB, IE (Great Britain and Eire)

This appliance has been certified for use in countries other than those stated. To install this appliance in these countries, it is essential to obtain the translated instructions and in some cases the appliance will require modification. Contact Redfyre for further information.

IMPORTANT

For use with 230v 50Hz electricity supply only.

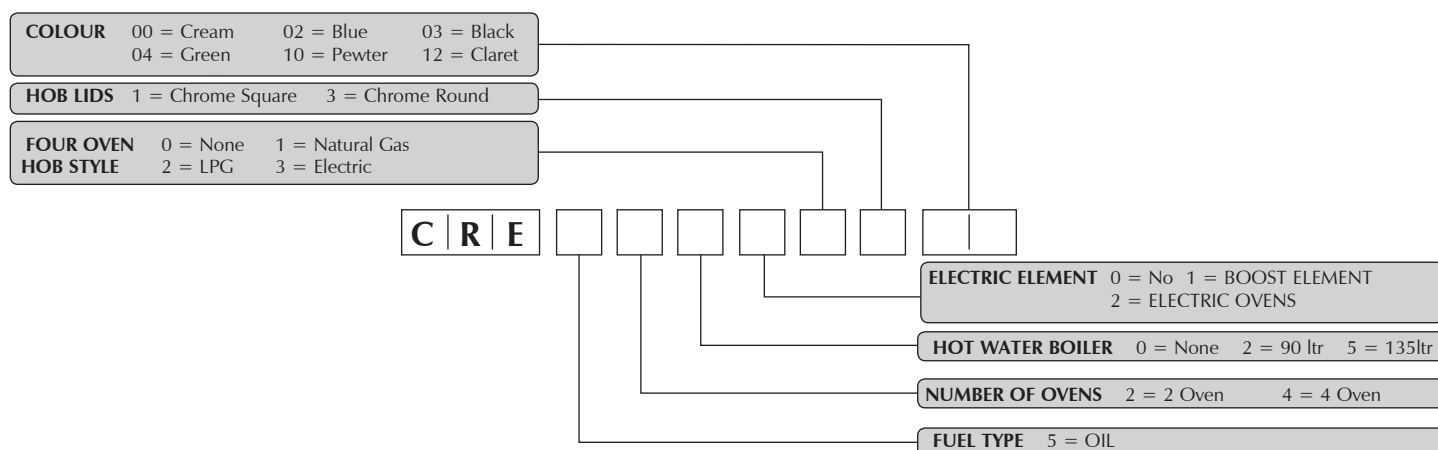
The front and top of this cooker will become hot whilst in operation, it is therefore recommended that a suitable guard should be used for the protection of young children, the elderly or infirm.

**Please read these Instructions carefully before installation or use.
Keep them in a safe place for future reference and when servicing the cooker.**

The commissioning sheet on the third page should be completed by the Installer.

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COVERING THE FOLLOWING MODELS



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APPLIANCE COMMISSIONING CHECKLIST

IMPORTANT NOTICE

Explain the operation of the appliance to the end user, hand the completed instructions to them for safe keeping, as the information will be required when making any guaranteed claims.

FLUE CHECK	PASS	FAIL
1. Flue is correct for appliance		
2. Flue flow test		
3. Spillage test		
4. Chimney flue draught reading	MM	WG
OIL CHECK		
1. Are all joints and connections airtight		
2. Oil depth in the burner base		MM
3. Check KBB operation		
4. CD10 and CD11 completed and returned		
ELECTRICAL CHECK		
1. Earth bond continuity		
2. Insulation resistance check		
3. Electrical insulation flash test		

DEALER AND INSTALLER INFORMATION

Dealer	Installation Company
.....	
.....	
Contact No.	Engineer
Date of Purchase	Contact No.
Model No.	OFTEC Reg No.
Serial No.	Date of Installation
Fuel Type	

This product is guaranteed for 2 years from the date of installation, as set out in the terms and conditions of sale between REDFYRE COOKERS and your local REDFYRE dealer. **This guarantee will be invalid, to the extent permitted by law, if the above Appliance Commissioning Checklist is not fully completed by the installer and available for inspection by a REDFYRE engineer.** The guarantee will only be valid during the second year, to the extent permitted by law, if the annual service recommended in the Instructions for Use has been completed by a Oftec registered engineer, and a copy of the service visit report is available for inspection by a REDFYRE engineer.

USER INSTRUCTIONS

Congratulations, you are now the proud owner of a new Redfyre Universal Cooker. As manufacturers we are proud of the features and quality of construction of all our cookers.

1. DESCRIPTION

- 1.1 The Redfyre Universal Range cooker is a heat-store cooker using a single burner powered by Oil. The heat from this burner is built up and stored in the massive cast iron components of the cooker interior. This stored heat is transferred to each of the four ovens and the two hot plates to provide the unique cooking qualities of a range cooker. The heat-store cooking process is ideal for winter warmth and cooking style
- 1.2 In addition to the primary heat source mentioned above, the Redfyre Universal Range Cooker has the benefit of an electrically powered fan oven, grill and conventional oven to increase the cooking capability of the left-hand ovens, or to replace the cooking function when the oil burner for heat store cooking is turned off, such as in the summer.

User Information

- 1.3 **To cover the variety of cooker features and operating modes in the Universal, this User Section is divided into five categories:**
- Cooker Features
 - Winter Operating
 - Summer Operating
 - Hob Operations
 - Care of the Cooker

2. GENERAL

- 2.1 As manufactures and suppliers of cookers and heating products we take care to ensure these products meet all safety requirements when properly used and installed. To this end, our products are thoroughly examined and tested before delivery.
- 2.2 This appliance must be installed in accordance with the rules in force and only used in a sufficiently ventilated space.
- 2.3 A qualified installer must install and service this appliance. In the UK and Ireland this person must be OFTEC registered and be a competent Electrical Engineer.
- 2.4 No alterations to the cooker should be carried out whatsoever. Do not adjust any sealed components because this may affect both the performance of the appliance and your own safety.
- 2.5 A cooker that is incorrectly installed, altered in any way or not serviced can invalidate approval of the appliance, its warranty and may affect your statutory rights.
- 2.6 Do not allow clothes, furnishings or any combustible material to come into contact with any flue pipe.
- 2.7 The outside cooker surface is coated with vitreous enamel. Take care not to accidentally scratch this surface by sliding utensils across it. Use suitable recommended products to clean these surfaces. **DO NOT** use oven cleaners or cleaners containing citric acid, see Section 11 and 2 General Advice.
- 2.8 **DO NOT** place combustible materials onto the hotplate surfaces even when the cooker is off.
- 2.9 **DO NOT** spray aerosols in the vicinity of this appliance while it is operating.
- 2.10 **DO NOT COVER THE FLUE OUTLET AT THE REAR OF THE TOP SURFACE.**
- 2.11 Do not use unstable saucepans and always position handles away from the edge of the hotplate.

USER INSTRUCTIONS

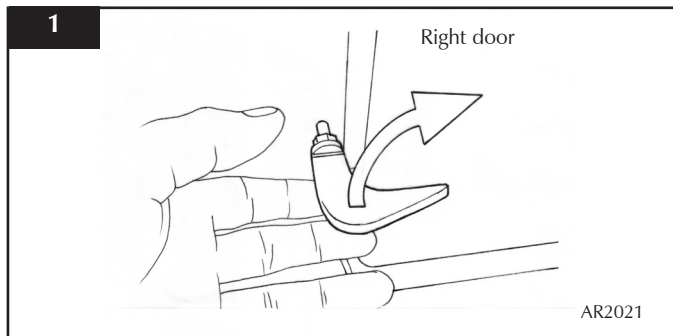
COOKER FEATURES

3. DOORS, OVENS, SHELVES

3.1 OVEN DOORS

To open the doors:

- Lift upwards and out from the left end of the handle as illustrated



To close:

- Use a 'gentle' slamming movement

3.2 OVEN INTERIORS

The right-hand ovens are cast-iron, while the left side are constructed from heavy gauge steel with a shot blast surface to maintain the authentic range cooker look.

The smooth stainless steel runners support shelving with integrated safety features:

- They are extremely strong
- When extended, a shelf 'stop' prevents the shelf being pulled so far out it becomes unstable
- The shelf includes a raised back edge to prevent dishes sliding backwards as the shelf is pulled out
- The shelves are reversible, the underside performing as a traditional sliding shelf

3.3 ACCESSORIES SUPPLIED

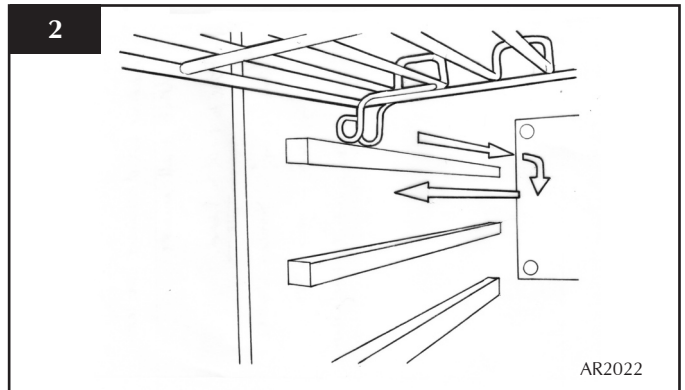
- 1) Three wire oven shelves
- 2) Large (oven-size) roasting pan with wire trivet
- 3) Grill pan with wire trivet
- 4) Removable grill pan handle

** All shelves and trays are interchangeable across both ovens

Half size roasting tins are available (2 of these exactly fit the oven depth)

3.4 REPLACING SHELVES

- Place shelf onto the stainless steel runner, Diagram 4



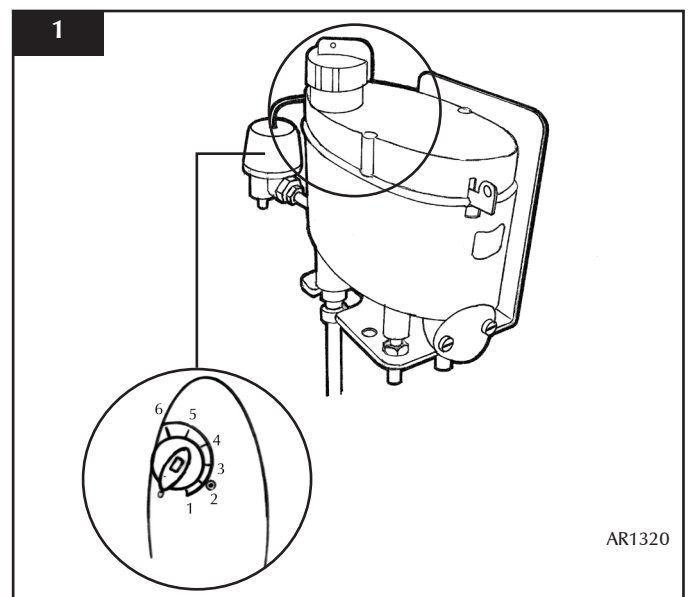
- Push the shelf to the back of the oven
- Let it drop into place
- Pull forward - this demonstrates the safety stop feature described in 3.2b) above

You can also turn the shelves upside down so that they perform in the conventional way without stops or raised back edge. Take extra care if using the shelves in this way.

4. CONTROLS FOR OIL OPERATIONS

Note: For instruction on lighting the Oil Burner, turn to *Winter Operating*, Section 7.

- 4.1 The controls for the oil burner and top oven can be found at the left-hand side of the cooker on the oil control valve. This can also be located in a cupboard, Diagram 1.



On a high setting of 5 or 6:

Top Right Oven - becomes a Roasting Oven

USER INSTRUCTIONS

COOKER FEATURES

Bottom Right - has more moderate heat to be used for baking and slow cooking. An additional electric Boost element in the roof of this oven converts it to a second Roasting Oven when necessary, see *Controls for Electric Operation*, 5.4.

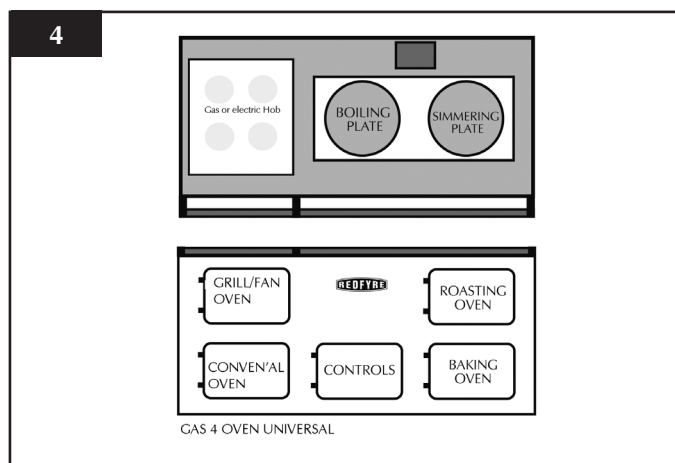
Top Left - has shallow heat for very slow cooking

Bottom Left - is a plate warmer

4.2 HOT PLATE

NOTE: KEEP THE HOT PLATE LIDS CLOSED WHEN NOT IN USE.

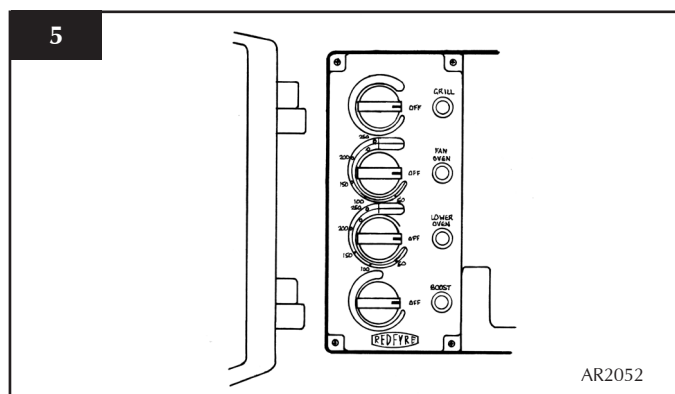
The two hot plates are heated as a by-product of the oil burner function and give you a boiling or frying hot plate and a simmering plate. See *Winter Operating*, 7 for instruction.



4.3 You also have a choice of either gas or electric hob, or an aluminium warming plate, see *Hob Operations*

5. CONTROLS FOR ELECTRIC OPERATIONS

You find the controls for the ovens behind the lower middle door, Diagram 5



5.1 Neon indicators above the top right-hand oven alert you that an oven is on:

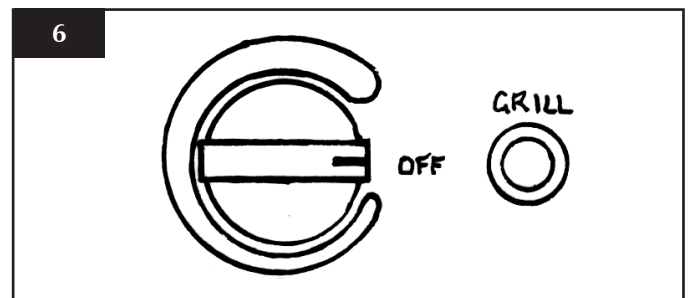
- Boost element = Right-hand neon
- Either of the left side Ovens or Grill = Left-hand neon

CAUTION:

This cooker is excellent for drying tea towels and cloths but we DO NOT advise drying cloths on the left-hand side of the cooker when you are using the electric ovens.

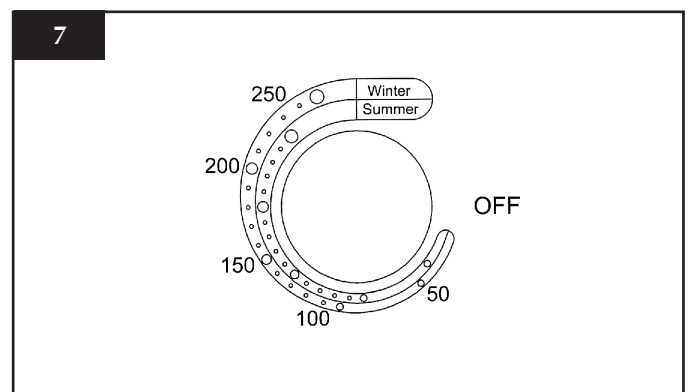
5.2 FAN / GRILL OVEN

The top left oven can be used either as a grill or a fan-assisted oven. The neon next to the control indicates that the grill is ON



FAN ASSISTED OVEN

This fan oven is electrically operated and has greater speed than the conventional oven beneath, but can be used in the same way for baking and cooking modes.



Note the summer and winter settings. These settings show the difference in temperature between a winter operation with the main burner ON, and a summer operation with the main burner OFF.

- Select Winter settings if the cooker burner is ON
- Select Summer settings if the cooker burner is OFF

5.3 CONVENTIONAL

Lower Oven - This oven is electrically operated and provides a further baking or roasting oven to provide a maximum range of cooking ovens.

USER INSTRUCTIONS

COOKER FEATURES/ WINTER OPERATING

- Rotate the Lower Oven thermostat to a setting in line with either the Winter or Summer settings explained under 5.2 above.

5.4 BOOST

The Boost thermostat is an electric addition to lower right oil oven. Use this option to greatly increase the heat in the bottom right Baking oven. With the main cooker burner lit you must gauge the amount of additional heat you want to produce.

6. USING OIL ONLY

Traditionally, this heat-store cooker is lit and left to run day and night. Set the Oven Heat Thermostat to achieve a steady warmth. Manipulation of this thermostat will increase or decrease the oven temperature according to cooking requirements.

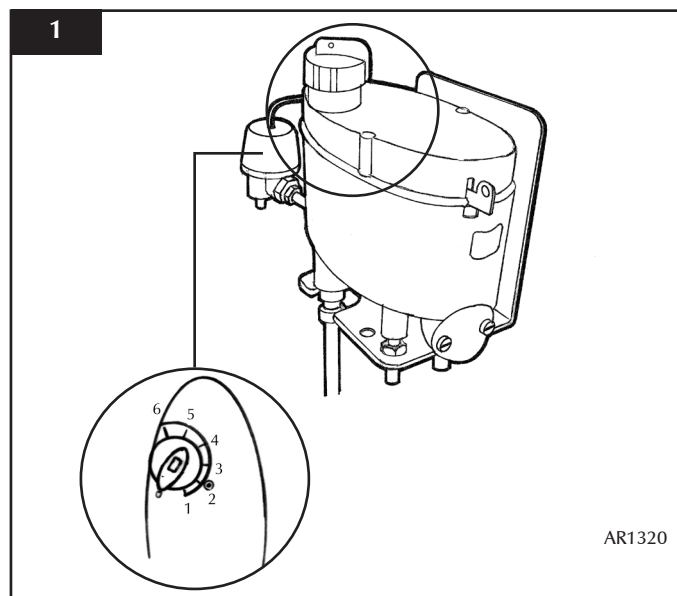
Note: The cooker takes several hours to reach full operating temperature.

7. LIGHTING THE OIL BURNER

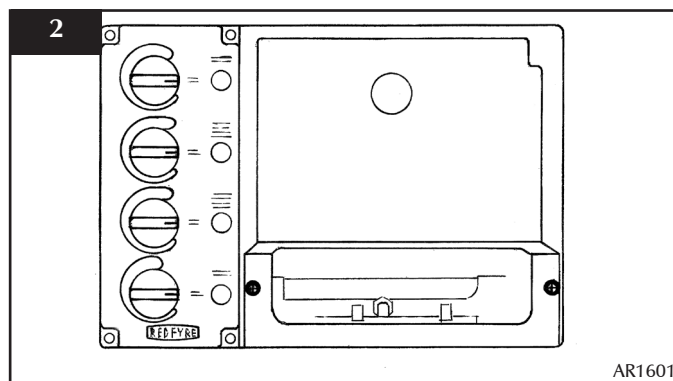
UNDER NO CIRCUMSTANCES ATTEMPT TO LIGHT A HOT BURNER

- 7.1 Turn ON the oil supply at the Isolation Valve. The controls can be found at the left-hand side of the cooker on the oil control valve. This can be located inside a cupboard.

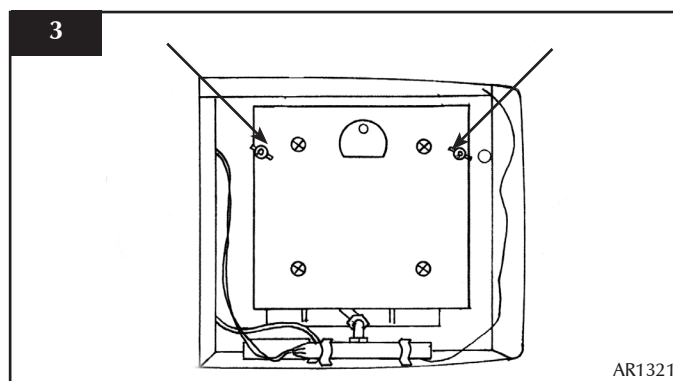
- Lift the arming lever at the front of the oil control valve, Diagram 1



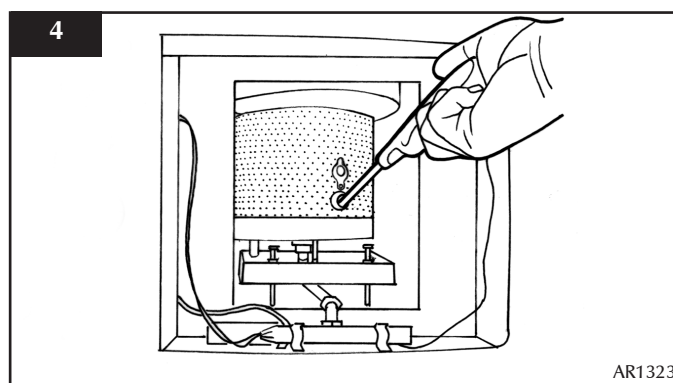
- Remove the two screws retaining the front cover. See diagram 2.



- Open control compartment door and remove the two wing nuts securing the Burner access door, Diagram 3



- Lift the Lighting Port flap located at the front of the outer burner shell, Diagram 4



- Insert a suitable taper or gas match through the lighting port to light the wick

Take care not to disturb the Burner Shells, Diagram 4

IMPORTANT: Ensure the Lighting Flap is accurately located on its seat. Additional care must be taken when refitting the Burner Access Door to ensure an effective seal.

- 7.2 Immediately after lighting turn the oil control valve knob to setting 1. See diagram 1.
- 7.3 After about 30 minutes, increase the oil flow rate by turning the oil control knob to setting 4. To reduce heat-up time,

USER INSTRUCTIONS

WINTER OPERATING

turn to setting 6 for approximately 3 hours and then turn down to the recommended setting.

- 7.4 Allow the Burner to establish for approximately 1 hour. Open the viewing port and check the flame picture. If yellow/orange flames are detected turn the burner OFF and call an approved installation engineer.

7.5 TEMPERATURE GAUGE

Above the top right oven door there is a temperature gauge with three sections: black, silver and red. When the cooker has achieved a stable temperature you can mark the silver section with a permanent marker to show the best temperature setting for your chosen dishes.

When the oven temperature is low it is an indication that the whole range is below temperature. Frequent adjustment of temperature is not suited to this type of cooker.

8. HOT PLATE

NOTE: KEEP THE LIDS TO THE Hot plateS CLOSED WHEN PLATES ARE NOT IN USE.

The hot plates heat as the ovens heat and are centrally adjusted using the Oven Heat Thermostat, Diagram 8

- **Boiling** - The left-hand hot plate is fairly fierce and can be used for rapid boiling, browning or frying dishes.
- **Simmering** - The right-hand hot plate is used for gentle browning, slow boiling for vegetables, reheating and simmering.

9. TURNING THE BURNER OFF

- Turn the control knob clockwise to the OFF position. See diagram 1.
- Turn off the Oil supply at the Isoaltion valve.

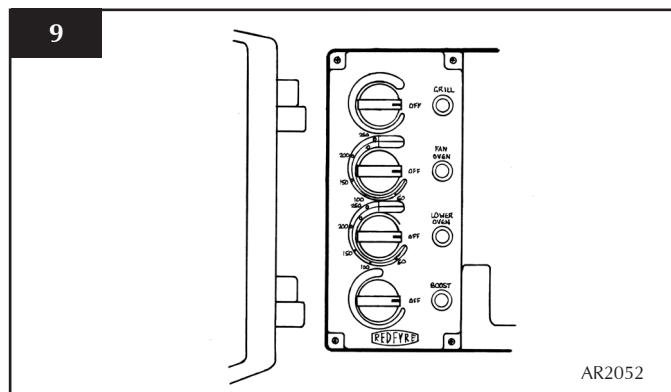
Frost Protection (DHW version only)

For short periods of absence, leave the cooker operating at a low thermostat setting.

10. USING OIL & ELECTRIC

- 10.1 You can transform your Range cooker into a very efficient catering appliance. To do this, use the oil operations described in Section 6 to operate the right-side oil ovens and introduce further flexibility with electric. This gives you great scope and speed for cooking by increasing the number of ovens at your disposal: a) Boost, b) Fan Oven, c) Grill and d) Conventional Oven

The controls are behind the bottom centre door. The thermostat gives a choice in settings for Winter and Summer because if oil is powering the cooker an oven is already partially heated.



- a) A **Boost** is provided to increase the heat in the bottom right Baking Oven, effectively turning this into a second Roasting oven:

- Rotate the Boost thermostat to a setting in line with the Winter temperature gauge.

The neon indicates the Boost is ON

- b) Left-hand **Fan Oven** - Likewise, while the right-hand ovens are working on oil, you can convert the cool upper-left oven to a Fan Assisted oven or Grill:

- Rotate the Fan Oven thermostat to a setting in line with the Winter temperature gauge

The neon indicates the Fan Oven is ON

- c) **Grill** - To convert the upper left oven into a grill:

- Rotate the Grill thermostat to your desired setting

The neon indicates the Grill is ON

- d) **Lower Oven** - if the right-side ovens are working on oil, you can convert the lower left oven to a **Conventional Oven**:

- Rotate the Lower Oven thermostat to a setting in line with the Winter temperature gauge

The neon indicates the Lower Oven is ON

- 10.2 To turn the Boost, Fan, Conventional Oven or Grill off:

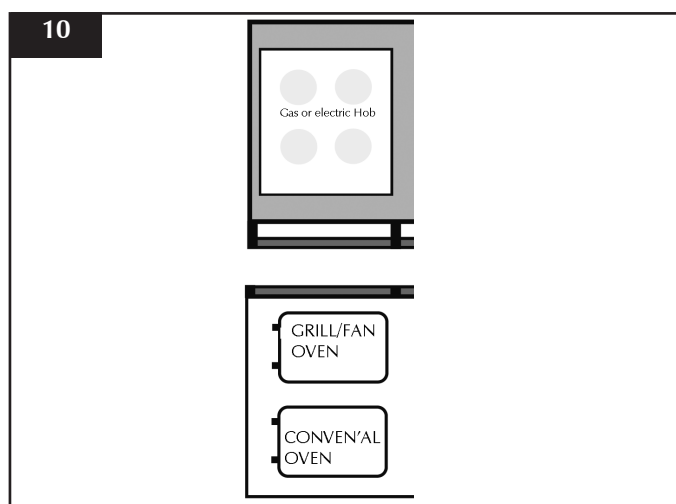
- Rotate the thermostats until the indicator points to OFF

USER INSTRUCTIONS

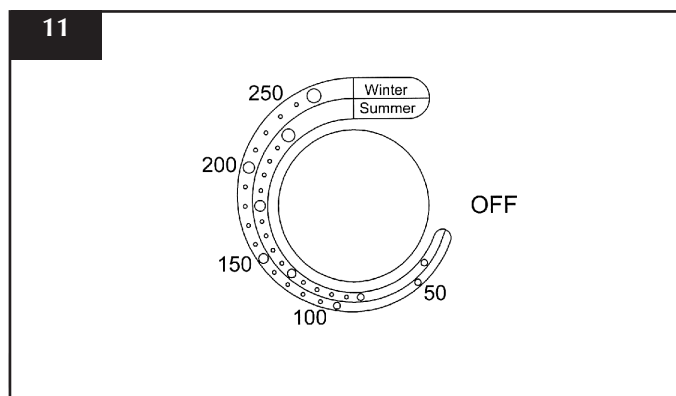
SUMMER OPERATING/HOB OPERATIONS

11. ELECTRIC ONLY

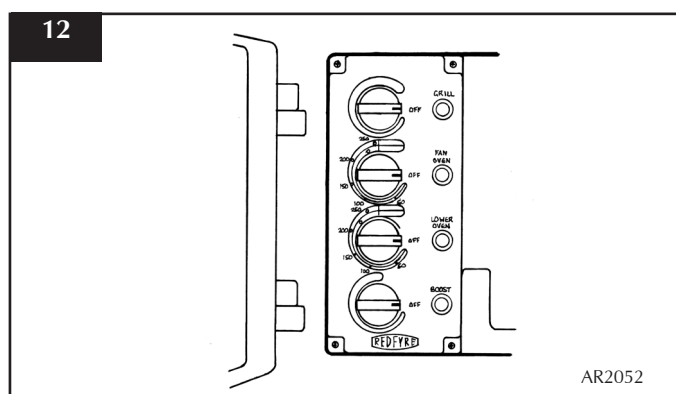
During the warm summer months, you can turn off the oil burner to close down the heat-store facility. The hot plates will be cool with the main burner off and the Hob is used for all frying, boiling or simmering.



Note: Always select Summer settings if the cooker burner is OFF



The controls are behind the bottom centre door:



11.1 FAN / GRILL

The Fan Oven can be used either as a Grill or a Fan-assisted oven

Grill only:

- Rotate the top control to heat the grill element

The neon next to the control indicates the Grill is ON.

The Fan-Assisted oven has greater speed than the conventional oven beneath but can be used in the same way, offering all baking and cooking modes:

- Rotate the Fan oven thermostat dial to the desired Summer setting

The neon next to the control indicates the Fan Oven is ON.

11.2 LOWER OVEN

Conventional Oven - This oven provides a further baking or roasting oven without fan

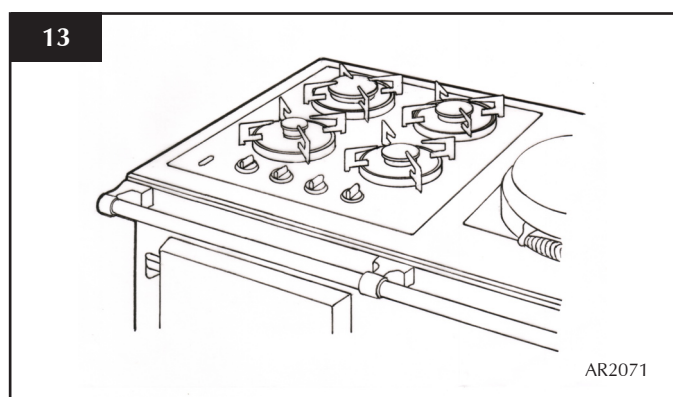
- Rotate the Lower Oven thermostat to a setting in line with either the Summer settings

The neon beside the control indicates the Lower Oven is ON.

11.3 BOOST

The Boost thermostat for the lower right oil oven can be used during the summer months, but we do not recommend its use, except perhaps for storage and plate warming. The thickness of the cast iron precludes efficient baking.

12. GAS HOB



The Gas has four burners:

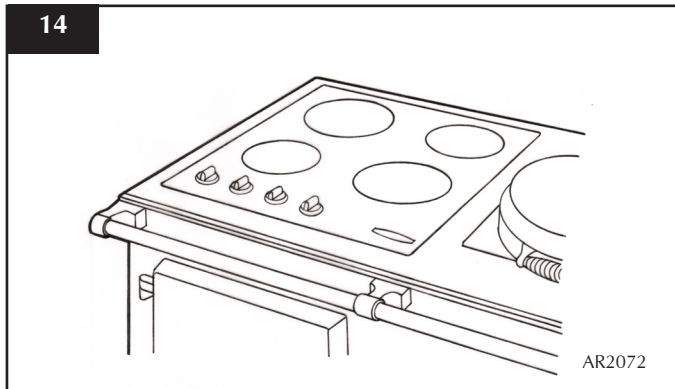
- 1 x 3,00kW Rapid burner
- 2 x 1.75kW Semi-rapid burners
- 1 x 1.00kW Auxillary burner
- Front controls
- Underknob auto-ignition

USER INSTRUCTIONS

HOB OPERATIONS/CARE OF THE COOKER

10. ELECTRIC HOB

14



This Hob has four radiant electric hobs with the following power ratings:

left-back, 1800W

left front, 1200W

right-back, 1200W

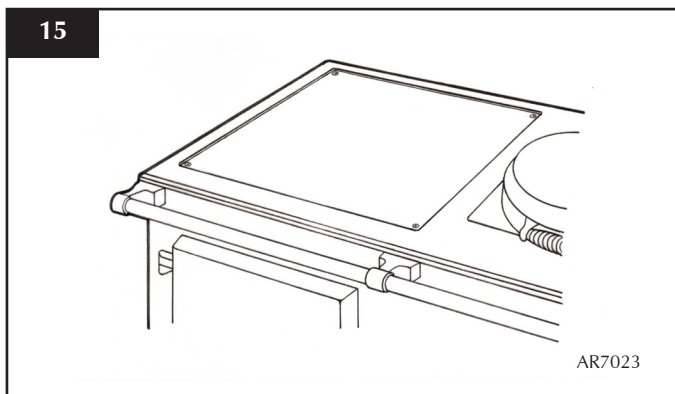
right-front, 1500W

Each control has a setting from 0 to 10 giving you a wide field of adjustment from slow melting through to fast boiling.

REFER to Care of the Cooker for advice on cleaning the Hob surface.

ALUMINIUM PLATE

15



An optional aluminium plate can be fitted instead of the gas or electric hob to act as a warming plate.

11. GENERAL ADVICE

IMPORTANT

11.1 We recommend you switch off the cooker at the mains and let it cool before cleaning or carrying out any maintenance work.

- **NEVER use caustic, citric or abrasive cleaning products on your cooker because these scratch and damage its surface**

- **ALWAYS try to wipe up spillages when they happen**

You will get better results if you clean the cooker when it is cool, see 11.3.

11.2 You can use hot soapy water and a cloth to clean the front and finish with a soft dry cloth to avoid streaking.

11.3 We recommend you switch off the cooker at the mains and let it cool before cleaning or carrying out any maintenance work.
The chart in Section 14 below suggests cleaning methods.

12. VITREOUS ENAMEL FINISH

12.1 A vitreous enamel finishes the surround of hotplates on some models and coats the front, doors and top plate. Burnt-on food should be removed carefully using a plastic kitchen scrubber. **DO NOT USE wire wool as this can damage the enamel finish.**

12.2 The side panels of Redfyre cookers are finished in stove enamel:

- Clean with a damp cloth only

13. CLEANING THE HOTPLATES

- Use a wooden handled wire brush to clean the hotplates
- Care must be taken not to scratch the enamel surround where applicable. Steel hot plates can be cleaned with wire wool and soapy water
- ALWAYS follow the grain of the stainless steel

13.1 The inside of each hotplate lid can be cleaned using wire wool and soapy water while following the grain of the stainless steel.

14. CLEANING THE OVENS

14.1 The cast iron interior reduces any spills inside the oven to powder over a period of time. You need only brush out the oven when dirty:

- Clean racks and linings when cool

USER INSTRUCTIONS

HOB OPERATIONS

14.2 Wire brush any stubborn carbon stains and vacuum or brush away the deposits. The wire brush may scratch the interior surface of the oven but does no harm. Because the oven surface is natural you must prevent oxidation by drying all surfaces thoroughly after cleaning.

- Use wire wool and soapy water to clean the stainless steel surround at the front of the oven when it is cool
- ALWAYS follow the grain of the stainless steel when scrubbing

14.3 Doors can be lifted off their hinges to clean. **DO NOT immerse the whole door in water because this will affect the insulation in the door.**

Redfyre parts appropriate cleaning methods	Hot water & soap	Wire Brush	Cream cleaner	Nylon Brush	V.E.D.C. cleaners
Top Plate Vitreous enamel	✓			✓	✓
Surround	✓			✓	✓
Hot plates	✓	✓	✓	✓	
Oven Internal	✓	✓	✓	✓	
Shelves	✓		✓	✓	
Oven Internal	✓			✓	✓
Seal	✓		✓		
Oven Front	✓				
Sides	✓				
Doors	✓				
Chrome handles	✓				
Towel rail	✓				
Top plate	✓			✓	✓
Hotplate lids	✓				

15. RUNNING IN

15.1 The new surface coating on your Redfyre cooker “burns off” to create a harmless odour during its first hours of use. The smell disappears after a short period but if it persists ask your installer for advice.

16. SERVICING

- 16.1 The cooker must be serviced every 6 months by a qualified OFTEC registered engineer. In all correspondence, always quote the model and serial number found on the data badge.
- 16.2 You must turn off your cooker 12 hours before servicing. Your cooker cannot be serviced while it is hot.

17. VENTILATION

- 17.1 The use of oil range cookers produces heat and moisture in the room in which it is installed. Ensure that the kitchen is well ventilated.
- 17.2 Prolonged extensive use of the cooker may call for additional ventilation by opening a window, or more effective ventilation, such as increasing the level of mechanical ventilation where present.

18. INSTRUCTION DETAILS

- 18.1 The Commissioning sheet at the front of this book must be completed by your installer to help with any future correspondence. This records the essential installation details. In all correspondence you must quote the model and serial number.

19. HOT SURFACES

- 19.1 Protect children and the infirm from the hot surfaces of this cooker by providing a suitable guard. All parts of the cooker should be regarded as a working surface with the exception of the hob and door handles.
- 19.2 Parts of the cooker become very hot (e.g. hotplates and ovens) when in use and remain hot for a long period after use. Take great care when using the cooker and use oven gloves whenever appropriate.

20. CLEARANCES TO APPLIANCE

- 20.1 Clearances to the sides of appliance must be at least 10mm
- 20.2 The shelf height above hot plate must be at a minimum of 800mm:
- Ensure a clearance of 25mm around the flue pipe.

USER INSTRUCTIONS

CARE OF THE COOKER

21. AFTER SALES SERVICE INFORMATION

We provide a 2 year warranty and a nationwide network of Service Engineers

We also provide qualified FIELD SERVICE ENGINEERS who are available to attend a breakdown or manufacturing fault occurring whilst the appliance is under guarantee.

Below is a step by step guide to reporting a fault with your appliance.

What to do in the event of an appliance fault or breakdown:

Step 1: Always contact your installer or commissioning engineer in the first instance. He must thoroughly check all his work PRIOR to requesting a service visit from Redfyre.

Step 2: If your appliance has developed a fault during the guarantee period, your installer should contact the Redfyre Service Centre for assistance.

What happens if my installer/engineer is unavailable?

Step 3: Contact Redfyre direct. We will provide you with the name and telephone number of our Service Agent. However, a charge may apply if the fault is not covered by the appliance guarantee (payment will be requested on site by our independent Service Agent).

A charge will be made where:

- Our Field Service Engineer finds no fault with the appliance.
- The cause of a breakdown is due to other parts of the plumbing/heating system or is caused by equipment not supplied by Redfyre.
- Where the appliance falls outside the 2 year guarantee period (See terms and conditions enclosed).
- The appliance has not been correctly installed, commissioned or serviced as recommended. (See Commissioning, Installation and Servicing instructions).
- The breakdown occurs immediately following an annual service visit. In this instance, your appointed Service Agent must check all his work PRIOR to requesting Redfyre to attend.

PLEASE NOTE:

Unauthorised invoices for attendance and repair work carried out on this appliance by any third party will not be accepted by Redfyre.

Every enamelled part on your cooker is unique and has its own individual characteristics. Coloured parts may differ slightly in shading. This will not impair performance in any way and is quite normal.

IMPORTANT CUSTOMER NOTICE

Cosmetic damage, stains and scratches produced by cooking and cleaning are NOT covered by the statutory guarantee.

INSTALLATION INSTRUCTIONS

TECHNICAL INFORMATION

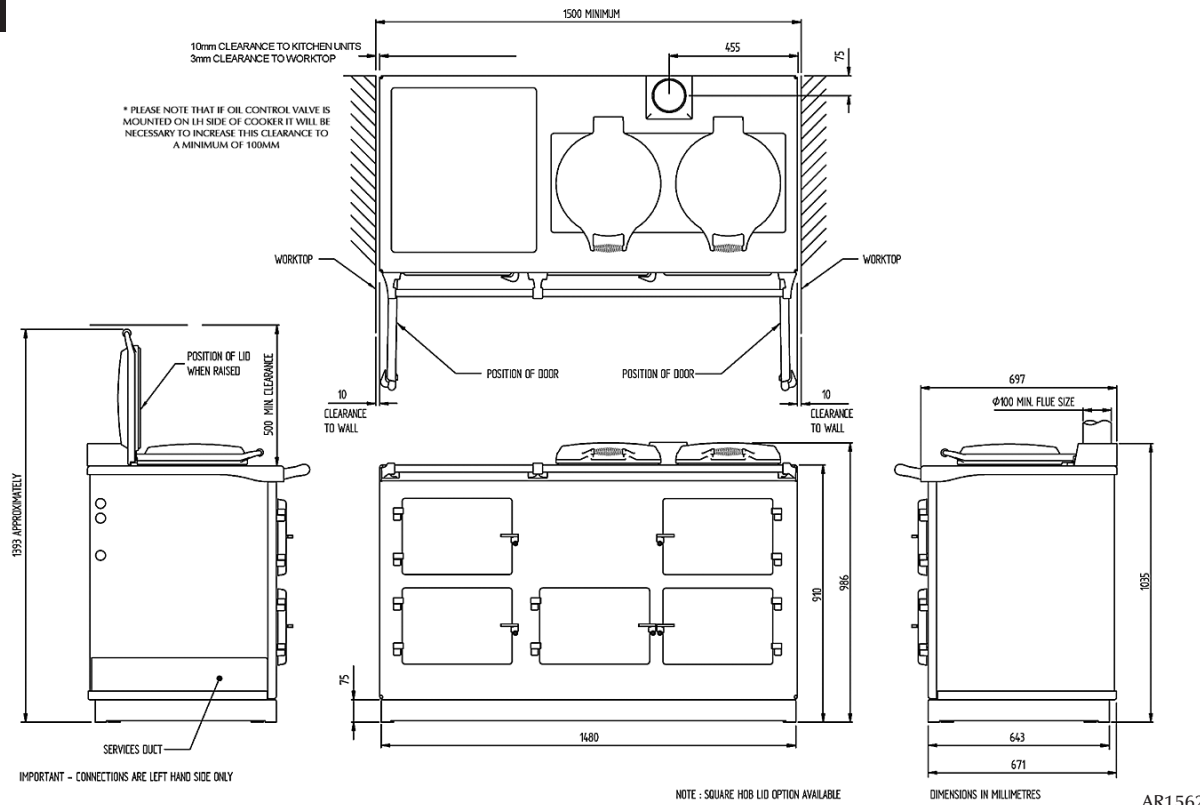
BURNER SPECIFICATION	6" DON, NATURAL DRAUGHT VAPOURISING TYPE
APPLIANCE TYPE/FUEL	OIL FIRED: KEROSENE TO BS2869 CLASS C2 (28 SECOND)
COUNTRY OF ORIGIN	UNITED KINGDOM
OIL FLOW RATES	MIN = 4 cc/MINUTE MAX = 8cc/MINUTE
OIL CONTROL VALVE	ORIGINAL
FLUE DRAUGHT	MIN 0.02" WG – 0.50 mm WG MAX 0.04" WG – 1.00 mm WG
HEAT INPUT	5 kW MAXIMUM
HEAT OUTPUT	90 BOILER = 1.2 kW
OIL CONNECTIONS	10 mm Ø COMPRESSION
FLUE OUTLET	102 mm Ø
WEIGHT	4 OVEN = 585 kg max
ELECTRICAL SUPPLY	230V 50 HZ
BOOST ELEMENT + ELECTRIC OVENS	8.325 kW 30A
BOOST ELEMENT + ELECTRIC HOB + ELECTRIC OVENS	14.125 kW 45A
ELECTRIC CABLE	10 mm twin + earth pvc

The adjustment conditions for this appliance are stated on the DATA BADGE which is located on the burner access panel found behind the controls door.

INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

1



NOTE: There is an optional plinth which increases all heights by 75mm.

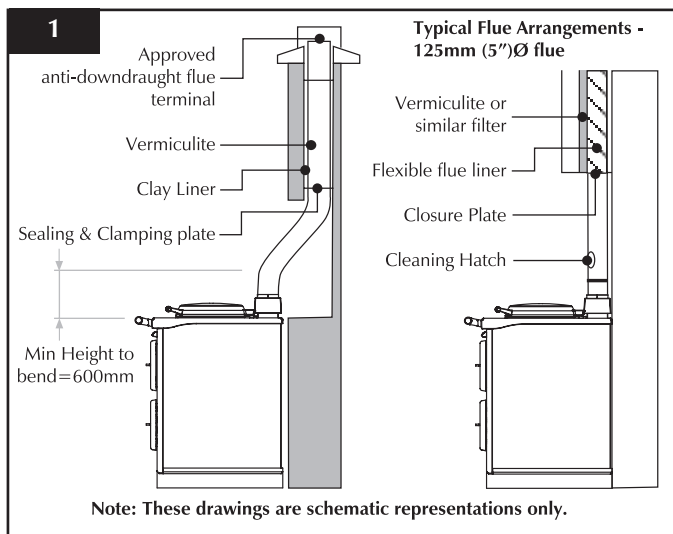
INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

The Universal is normally delivered in kit form for assembly on site to be carried out by an engineer trained by Redfyre Cookers. Please refer to the Build Instructions which are supplied separately.

One very important point to note with the oil fired models is that the oil control valve is fitted on the left-hand side of the cooker. When fitting the cooker, extra clearance is required for the control valve. (See dimensions diagrams for all clearances).

2. FLUE SYSTEMS



NOTE: The first section of flue from the draught divert to the sealing plate must be 102mm $\varnothing$ (4"),

- 2.1 This appliance is designed to operate with a Class 2 flue, nominally 125 mm (5") in diameter. To ensure correct performance, both flue and termination should conform to the relevant British Standards.

NOTE: COMBUSTION TESTING, FLUE GAS ANALYSIS AND DRAUGHT MEASUREMENT MUST BE CARRIED OUT ON SITE BY THE APPROVED COMMISSIONING ENGINEER.

- 2.2 The quality of the flue is vital for satisfactory operation. A thorough pre-installation check by a flue specialist is advisable. If an existing flue is to be used, the specialist will advise on re-lining and the correct choice of cowl or terminal for site wind conditions etc.
- 2.3 Before installing the appliance into an existing flue, check that:
- The flue is clear of obstructions. Repair any structural damage.
 - The flue is continuous. Any breaks in seals, flue liners etc. must be rectified. A flexible steel liner (oil grade), BS4543 Parts 1 & 3 is highly recommended.
 - The flue diameter is uniform over its entire length.

- The flue is not serving another appliance. Never connect to a shared flue.
 - The flue is not constructed wholly of a single-skin pipe. This must not be used under any circumstances. It has minimal heat retention properties, and will lead to an overall loss of efficiency, as well as condensation in the flue and ovens.
 - Vermiculite backfill, or the equivalent, is used whenever a flexible liner is installed. It must be sealed top and bottom.
- Salt-glazed clay or pre-cast liners are acceptable.

3. FLUE HEIGHT

- 3.1 A minimum of 4 metres (15 feet) is required between the cowl and the top of the cooker. This ensures that the flue gases are vented into relatively non-turbulent air, and will be less affected by nearby buildings or trees etc. in certain circumstances, trees or other obstructions may need to be removed.
- 3.2 Installation with flues in excess of 10 metres in height is not recommended. Very tall flues are likely to exceed the maximum flue draught specified in the technical data. High flue draughts can cause problems with oven and hob temperatures and increase running costs.
- 3.3 The cowl must be at least 1 metre above any obstruction within 600 mm, and the siting of the flue should comply with OFTEC regulations.

4. HORIZONTAL RUNS

- 4.1 Horizontal runs of greater than 450 mm (18") should be avoided. If the flue has to be offset, the recommended angle is 60°. and the legal minimum 45°. Never use a bend of 90°.
- 4.2 If the installation is using an existing flue, horizontal runs should be avoided. A vertical rise of 600 mm (24") is the mandatory minimum before turning into the flue. If it is necessary to exhaust into an extended flue after the mandatory 600 mm rise, the horizontal run must not exceed 450 mm.

NOTE: ALL FLUE CONNECTIONS MUST BE FULLY SEALED AND INSPECTED BY THE INSTALLER ON COMPLETION.

5. FLUE CLEANING

- 5.1 Annual inspection and cleaning of the flue is recommended. Therefore a cleaning door, or some other means of access, should be incorporated into the system.

INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

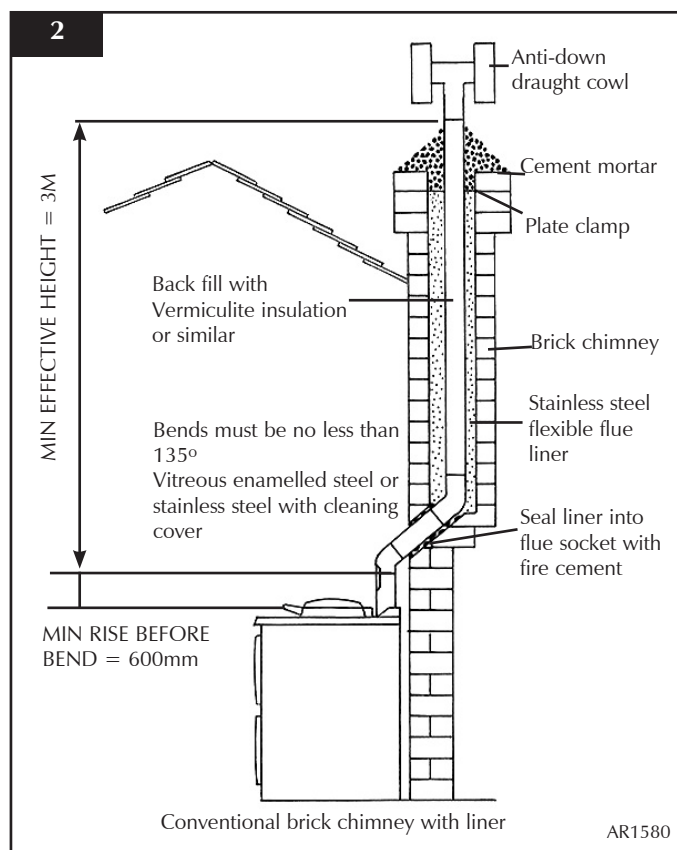
6. WIND PRESSURE ON BUILDINGS

- 6.1 Flues should not be terminated in a high pressure area.

7. TERMINATIONS

- 7.1 The most appropriate cowl depends entirely on conditions at the site. Several may have to be tried before one is found that gives good all-year performance. In some circumstances it may not be possible to entirely exclude down draughts caused by surrounding buildings or trees, so fit an anti-down draught cowl, preferably of the OH type. A 'Chinaman's Hat' is not sufficient and a GC 1 type cowl must not be fitted.

OH Ltd. Telephone Number 01223 291222

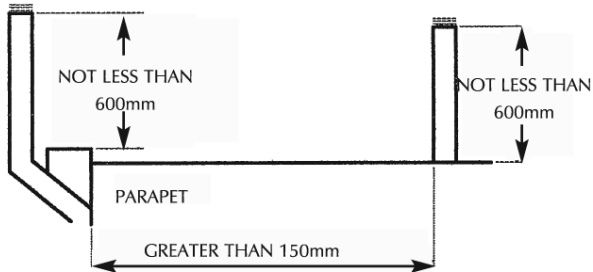


INSTALLATION INSTRUCTIONS

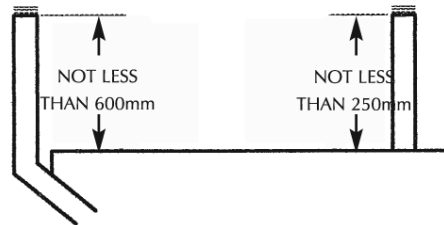
SITE REQUIREMENTS

3

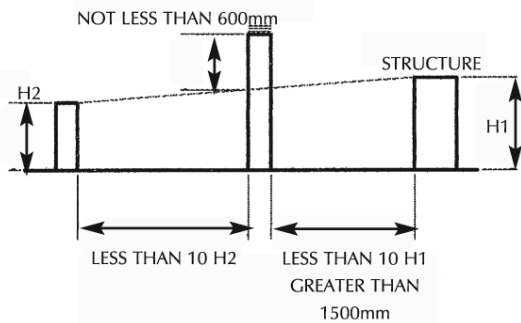
RECOMMENDED FLUE POSITIONS FOR SOME ROOF CONDITIONS



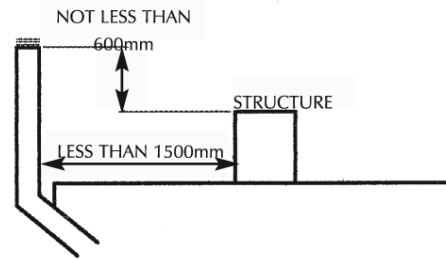
FLAT ROOF WITH PARAPET



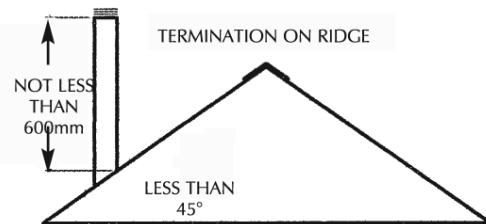
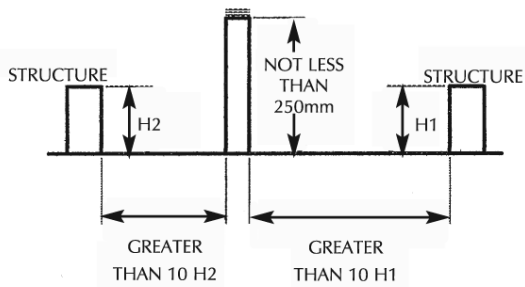
FLAT ROOF WITH NO PARAPET



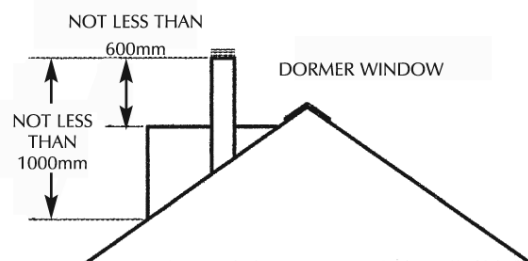
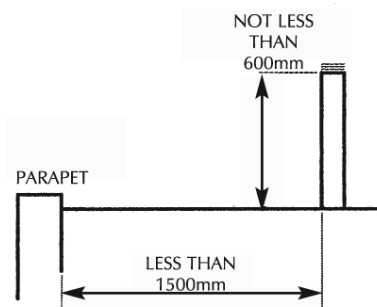
FLAT ROOF, ENVELOPE TYPE



FLAT ROOF WITH STRUCTURE
CLOSE TO FLUE OUTLET



PITCH ROOF, INTERNAL ROUTE; PITCH NOT
EXCEEDING 45° AND RIDGE TERMINAL



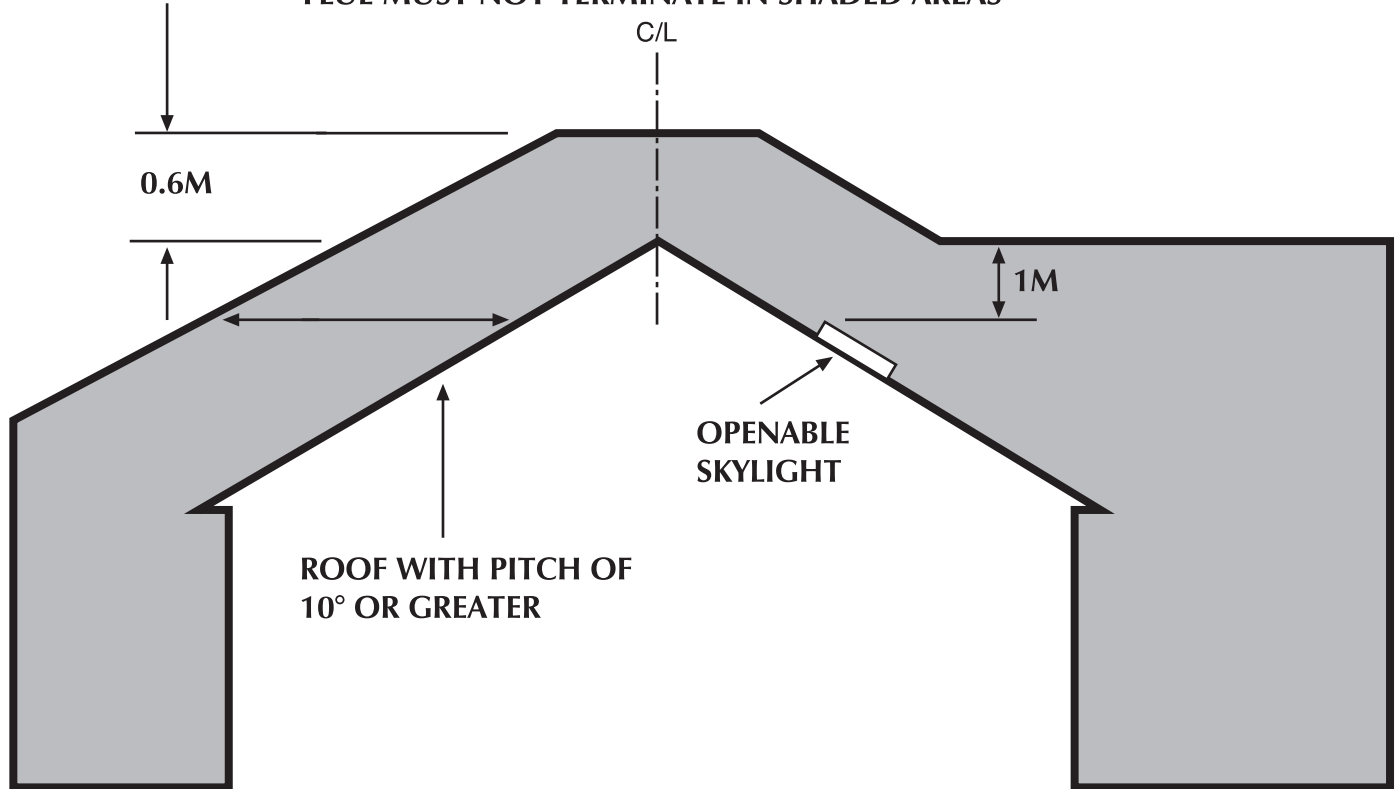
PITCH ROOF, CHIMNEY WITHIN 1.5M FROM
DORMER WINDOW MEASURED HORIZONTALLY.

INSTALLATION INSTRUCTIONS

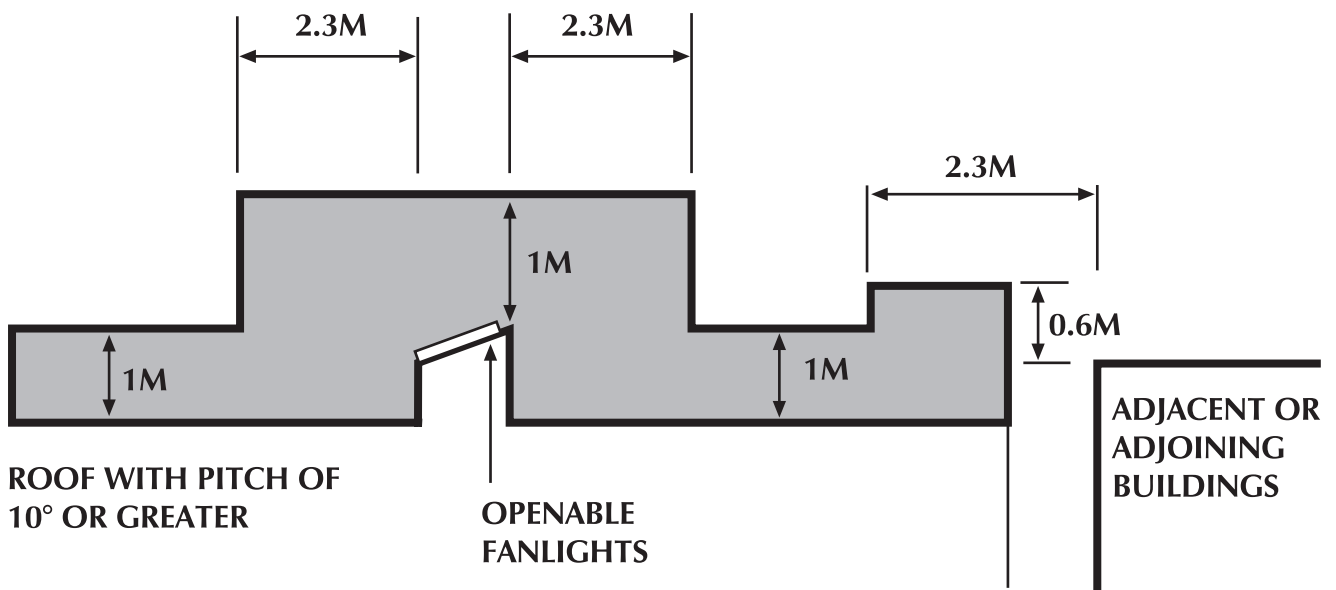
SITE REQUIREMENTS

4

OIL FIRED TERMINAL POSITIONS FLUE MUST NOT TERMINATE IN SHADED AREAS



THIS IS A GUIDE TAKEN FROM THE BUILDING REGULATIONS 1990 EDITION. HOWEVER, AN ANTI-DOWN DRAUGHT DEVICE MAY STILL BE NEEDED IN CERTAIN CONDITIONS.



INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

8. OIL SUPPLY

OIL

- 8.1 The Oil Burner is factory set to burn Class C2 Kerosene to BS2869.

OIL STORAGE TANKS

- 8.2 Size and Location of Tank

The tank should be large enough to allow for economic deliveries and be located in the most unobtrusive position, having regard to the need for safety, filling, maintenance (if steel tank) and head of oil required.

- 8.3 Whilst it is highly unlikely that a fire could start from an oil tank, it does need to be protected from a fire that may originate in a nearby building. For this reason, the tank should not be located nearer than 1.8 metres from a building, nor closer than 760 mm from a site boundary. Where a tank has to be less than 1.8 metres, the building wall must not have any openings other than small ventilation openings. The wall shall have a 30 minute resistance to an internal fire and extend 1.8 metres from any part of the tank.
- 8.4 Alternatively, a non-combustible radiation barrier must be provided which meets the requirements of BS5410. This standard applies to tanks up to a capacity of 3,400 litres.

FIRE PROTECTION – PART J

- 8.5 Where a storage tank is close to a dwelling, fire cladding must be provided to the eaves if less than 1.8m from the top of the tank
- 8.6 The cladding must extend 300mm beyond the tank
- 8.7 The tank must be sited on a non-combustible base.

J6 – PROTECTION AGAINST POLLUTION

A tank must be banded if:-

- a) Less than 10 metres from “controlled water” such as a stream, ditch, river, lake, pond, canal or coastal water.
- b) Less than 50 metres from a well, spring or drinking water.
- c) The tank cannot be viewed from the delivery point.
- d) There is a risk of oil reaching a manhole cover or drain.
- e) If the capacity exceeds 2500 litres.
- f) Sited over hard ground or hard surfaced ground that could allow spilled oil to enter “controlled water”.

STEEL TANKS

- 8.8 Steel tanks should comply with the requirements of BS799, Pt 5, 1987 and mounted on brick or block piers with a waterproof membrane between the piers and tank.

- 8.9 The tank should be fitted with fill and vent connections (weather protected), a drain-off cock, shut-off valve and an oil level indicator.

PLASTIC TANKS

- 8.10 Polythene tanks are now widely used because of their advantages over traditional steel tanks:
- a) They do not need pier supports and can be mounted directly on any flat surface giving uniform support for the tank base.
 - b) They do not corrode and therefore never need painting.
 - c) They are easier to handle because of their lower weight.
 - d) They have a 10 year manufacturer’s guarantee.

Plastic tanks should be fitted with similar components to those used with steel tanks.

OIL SUPPLY LINE (see diagram 5)

- 8.11 A maximum head of 4 metres should be exceeded – 35kpa pressure. The oil shut-off valve should be fitted as close to the burner as practical to enable the burner to be disconnected without undue loss of oil. A 5-10 micron oil filter must be fitted (preferably close to the tank in an accessible position). The filter must be connected in the oil supply pipe and positioned externally.
- 8.12 All oil line joints must be completely sealed and the total pipe run thoroughly flushed out before connecting to the burner. No soldered joints are permitted in the oil line.

FIRE VALVE

- 8.13 A remote acting 60°C fire valve must be fitted in the oil line outside the building with its sensing phial positioned adjacent to the oil control valve.
- 8.14 An additional 90°C fire valve must be fitted near to the cooker on the incoming oil line with its sensing phial positioned within the cooker. Clips are provided for retaining the phial.

9. VENTILATION

- 9.1 Combustion appliances shall be so installed that there is an adequate supply of air to them for combustion and for the efficient working of any flue pipe or chimney. See detailed recommendations in Building Regulation J.
- 9.2 The required minimum effective area of a permanent air vent in the outside wall in the room in which the cooker is installed is 550mm² for all models with or without DHW options.

This size may need to be increased depending on conditions, for example, if an extractor fan exists.

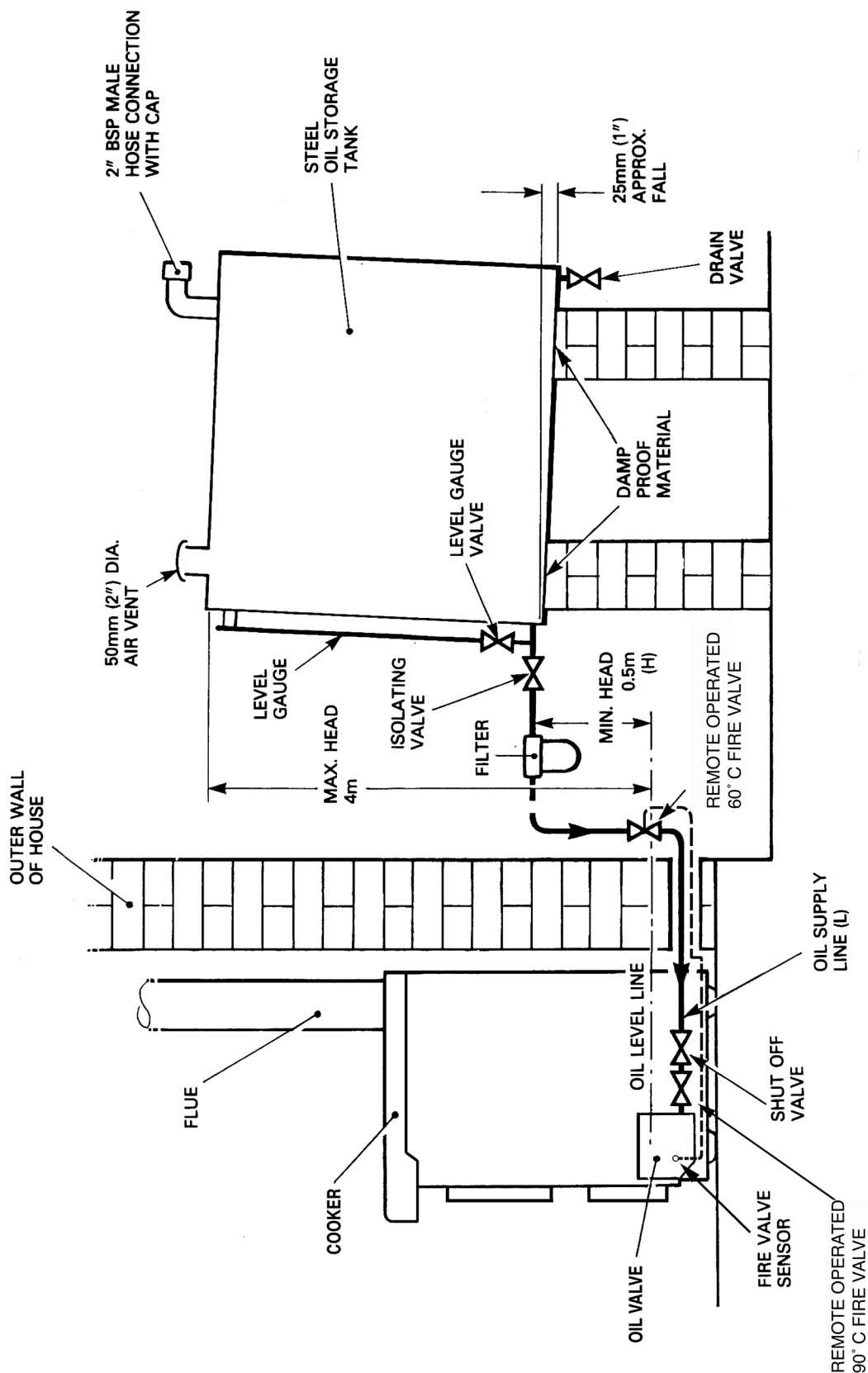
INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

5

MAXIMUM OIL SUPPLY LINE LENGTH 'L'

H METRES	0.5	1.0	1.5	2.0
PIPE 10mmOD	10	20	40	60
PIPE 12mmOD	20	40	80	100

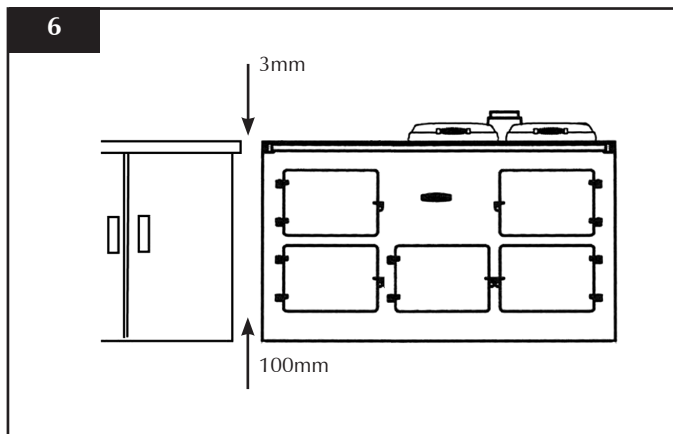


INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

10. APPLIANCE LOCATION

- 10.1 It is important that the cooker stands on a flat surface of non-combustible material capable of supporting the total weight of the cooker. Where a plinth is required, the recommended size is 650 mm x 950 mm for the Two Oven model and 650 mm x 1450 mm for the Four Oven. The height is variable depending on the height of the user or kitchen work tops. A purpose-built adjustable plinth is available as an optional extra.
- 10.2 Kitchen units can be fitted up to either side (allowing for gas connections). If a pine or similar wood surface is used, take care the wood is well seasoned and protected from the side of the cooker to prevent drying out or splitting.
- 10.3 You need to allow at least a 3 mm gap between the kitchen surfaces, cupboards or walls for expansion and services.



NOTE: If the Oil Control Valve is mounted on the Left Hand side of the cooker it will be necessary to increase this clearance to a minimum of 100mm.

INSTALLATION INSTRUCTIONS

INSTALLATION

1. IMPORTANT

- 1.1 This appliance should be installed according to regulations in force and only used in a well-ventilated space. Read these instructions before installing or operating.
- 1.2 The Redfyre Universal must be installed by a competent person and this person must be an OFTEC trained and registered engineer.
- 1.3 The person(s) who installs this appliance, commissions, services and carries out remedial work (e.g. electrical fault finding), must have suitable engineering qualifications.
- 1.4 The Traditional is supplied in kit form to be assembled on site.
- 1.5 Engineers carrying out the assembly must be trained by Redfyre.
- 1.6 There is a manual detailing how to assemble the cookers correctly which forms part of these Installation Instructions. This is only supplied to officially trained engineers. Please contact Redfyre for further details.

2. HEALTH & SAFETY

- 2.1 Redfyre takes every reasonable care to ensure products are designed and constructed to meet all general safety requirements when properly used and installed. This standard means products are comprehensively tested and examined before despatch.
- 2.2 Note the points and items listed under 2.3, 2.4 and 2.5. It is the Engineer's responsibility to ensure protective clothing or equipment is worn for personal health and safety when handling hazardous materials.
- 2.3 **Glass rope, mineral wool, insulation pads, ceramic fibre, glass insulation**, can be harmful if inhaled, irritating skin, eyes, nose or throat. On handling, avoid inhalation and contact with eyes by using disposable gloves, face masks and eye protection. When disposing, reduce dust with water spray and ensure parts are securely wrapped. Wash hands and other exposed parts after handling. When disposing, reduce dust with water spray and ensure parts are securely wrapped.
- 2.4 The glues, sealants and paints of this product present no known hazards if used in the manner anticipated.
- 2.5 This appliance is heavy and care must be taken when installing.

KEROSENE & GAS OIL FUELS (MINERAL OILS)

- 2.6 The effect of mineral oils on the skin vary according to the duration of exposure. The lighter fractions also remove the protective grease normally present on the surface of the skin rendering the skin dry, liable to cracking and more prone to damage caused by cuts and abrasions.

- 2.7 Skin rashes (oil acne). Seek immediate medical attention for any rash, wart or sore developing on any part of the body.
- 2.8 Avoid, as far as possible, any skin contact with mineral oil or with clothing contaminated with mineral oil.
- 2.9 Never breathe any mineral oil vapors. Do not fire the Burner in the open i.e. out of the Cooker as a misfire will cause unburnt oil vapors.
- 2.10 Barrier cream containing lanolin is highly recommended together with a strict routine of personal cleaning.
- 2.11 Under no circumstances should mineral oils be taken internally.

3. UNIVERSAL (WITH AN ELECTRIC HOB AND ELECTRIC OVENS)

WIRING EXTERNAL TO THE APPLIANCE MUST BE IN ACCORDANCE WITH THE CURRENT IEE WIRING REGULATIONS, ELECTRICITY AT WORK REGULATIONS AND ANY LOCAL REGULATIONS.

- 3.1 The appliance must be connected by a competent person, using fixed wiring via a DOUBLE POLE SWITCHED 45 amp OUTLET with a minimum contact clearance of 3 mm.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

- green/yellow	Earth
- blue	Neutral
- brown	Live

If the mains lead needs replacing we recommend that the operation is carried out by a qualified electrician replacing it with a lead of the same size and temperature rating.

POWER SUPPLY

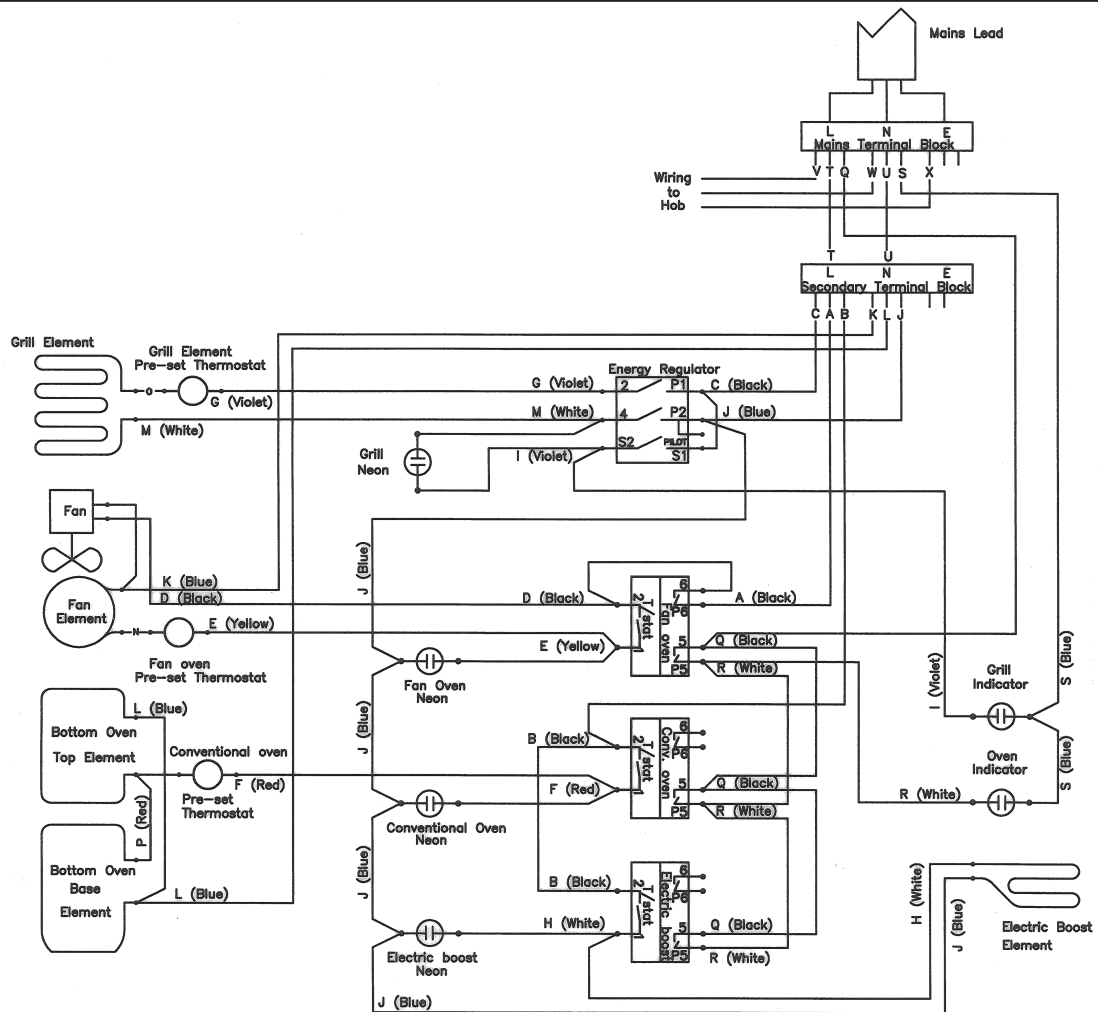
Note: the power supply can be rated at 30 amp of the cooker is fitted without an electric hob.

-

INSTALLATION INSTRUCTIONS

INSTALLATION

1



WIRING DIAGRAM FOR UNIVERSAL COOKER

AR1564

INSTALLATION INSTRUCTIONS

INSTALLATION

5. SETTING/ADJUSTING DOOR LATCH PINS

5.1 Set the door latches once the Traditional is assembled:

Setting:

- Loosen locking flange nut and remove door latch pin, nut and black washer
- Apply 'Loctite' to door pin and re-assemble door latch pin, washer and flange nut, but do not tighten flange nut
- Fit door
- Adjust door latch pin, until the door seal seats securely and evenly around the front plate. The door latch pin can only be adjusted with the door in open position. Close the door and check the seal
- Tighten the flange nut to ensure that the door latch pin is locked in position

Door Adjustment

- Open every door
- Loosen locking flange nut for each door
- Adjust each door's latch pin until the door seal seats securely and evenly around the front plate. The door latch pin can only be adjusted with the door in the open position. Close the door to check the seal.
- Tighten the flange nut to ensure that the door latch pin is locked in position

CD10 FORM

It is a requirement under OFTEC regulations that the installation is recorded on a CD10 form (a copy is attached at the end of this manual). Once completed, a copy is to be given to the end user and one copy sent to Gazco Ltd. Failure to do so may invalidate the guarantee.

COMPLETE THIS FORM NOW.

All tests are to be conducted under the rules in force following best practice procedures. In the UK these are the procedures laid down by OFTEC

INSTALLATION INSTRUCTIONS

COMMISSIONING

1. THE SLEEVE BURNER

- 1.1 Ensure that oil level control bracket is level in all directions.
- 1.2 Adjust the oil level line on the body of the oil control valve to approximately 225 mm (8 7/8") from the base of the cooker.
- 1.3 Open the control door and remove inner burner door held in position by two wing nuts.
- 1.4 Disconnect the compression elbow and withdraw the oil burner base assembly and place on a flat surface.
- 1.5 Disassemble the burner and fit the oil burner base assembly into the cooker and reconnect the oil feed pipe.
- 1.6 Adjust the front support levelling screws of the burner base so that the **BURNER IS LEVEL IN ALL DIRECTIONS. SEE SECTION 4.**

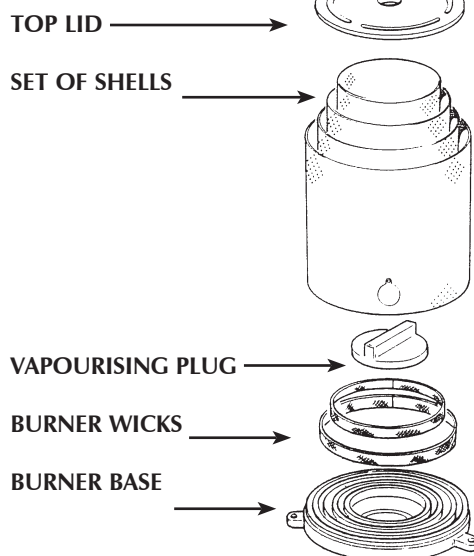
2. CHECKING THE BURNER OIL LEVEL

- 2.1 Remove the Burner Shells and Wicks
- 2.2 Turn on the oil supply.
- 2.3 Lift the Arming Lever of the Oil Control Valve.
- 2.4 Turn the Oil Control Valve Knob fully anti-clockwise, allow the oil to flow into the Burner Base for approximately 15 minutes. It may be necessary to purge the oil line of air.
- 2.5 Check the oil level in the Burner Base, this should be between 5mm and 6mm.
- 2.6 To adjust the oil level, raise or lower the Oil Control Valve using the 3 adjusting/levelling studs.
- 2.7 Following a height adjustment, allow the oil level to stabilise before re measuring the oil depth.
- 2.8 Refit the wicks, vapourising chamber lid, Burner Shells and Burner lid.

IMPORTANT: ENSURE THE BURNER SHELLS ARE ACCURATELY SEATED ON THE RESPECTIVE SPIGOTS ON THE BASE AND THAT NO WICK MATERIAL IS TRAPPED UNDER THE SHELLS.

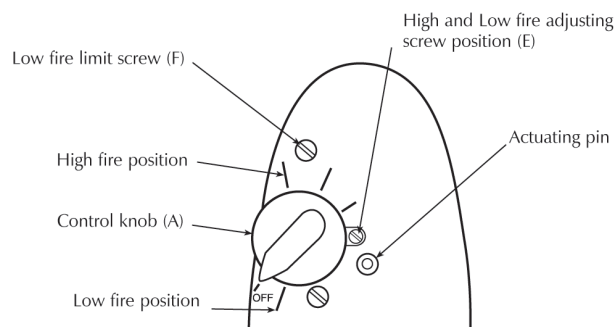
ENSURE THE BURNER WICKS ARE FITTED WITH THE CUT OUTS FACING DOWNWARDS AND IN LINE WITH THE RADIAL PORTS OF THE BURNER BASE.

1

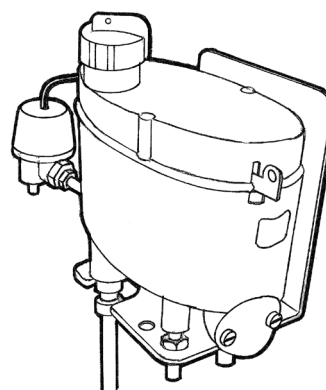


2

CONTROL VALVE ADJUSTMENT



3



AR1602

INSTALLATION INSTRUCTIONS

COMMISSIONING

3. CHECKING OIL FLOW RATES

NOTE: THE OIL CONTROL VALVE IS FACTORY SET. SHOULD ONLY REQUIRE ADJUSTMENT IF IT IS SUSPECTED THAT THE PERFORMANCE OF THE BURNER IS IMPAIRED.

- 3.1 Turn off the oil supply at the Isolation Valve.
- 3.2 Turn the Oil Control Valve Knob fully clockwise to turn off the oil feed to the Burner..
- 3.3 Place a measuring cylinder under the outlet port of the Oil Control.
- 3.4 Disconnect the oil feed pipe from the Oil Control to the Burner.
- 3.5 Turn the Control Knob fully anti-clockwise, allow oil to flow into the receptacle for approximately 2 minutes to establish an even flow.
- 3.6 Turn the Control Knob off (fully clockwise), empty the oil from the measuring cylinder. Replace the cylinder under the outlet port, turn the Control Knob anti-clockwise to position 1. Measure the oil flow over a given period ie. 1 minute. This should be 4ccs/min. If adjustment is required, turn the adjustment screw, Diagram 2, clockwise to decrease and anti-clockwise to increase.

IMPORTANT: The adjustment screw should only be turns 1/8th of a turn at a time. Allow the rate to stabilise for 10 minutes and recheck the flow rate.

NOTE: AVOID KINKING IN THE OIL FEED PIPE AS THIS MAY CAUSE AIR LOCKS. ALWAYS RUN THE PIPE TO A LOW POINT AND THEN ALLOW IT TO FOLLOW A GRADUAL UPWARD SLOPE TO THE BURNER.

4. BURNER LEVELLING

- 4.1 Open the Burner Door and remove the Burner Cover.
- 4.2 Remove the Burner Lid, Burner Shells, Vapour Chamber Lid and Wicks.
- 4.3 Place a Cross Test Level on the Burner Base, adjust the levelling studs until the Base is level in all directions. Tighten the lock nuts on the levelling studs and recheck for level.
- 4.4 Turn the Oil Control knob to maximum and allow the oil to enter the Burner Base. Allow 15 minutes for the oil level to stabilise. Check the oil depth, this should be between 5mm and 6mm. Correct if necessary by adjusting the height of the Oil Control Valve as in 4.3 above.
- 4.5 Replace the Wicks ensuring that the cut outs are arranged in line with the radial ports and facing downwards.
- 4.6 Replace the Vapour Chamber Lid. Make sure that both surfaces are clean and free from damage. Place the Lid in position and rotate applying hand pressure. Remove the lid and check that a complete witness mark is present. Replace the lid.

NOTE: UNDER NO CIRCUMSTANCES MUST ANY SEAL-ANT (FIRE CEMENT OR SILICON) BE USED. THE WEIGHT OF THE VAPOUR CHAMBER LID ITSELF IS SUFFICIENT TO EFFECT A SATISFACTORY SEAL.

- 4.7 Replace the Burner Shells ensuring they locate on their respective spigots. The seams of the Shells should be orientated at 90° to one another to prevent as local starvation of air.
- 4.8 Replace the Burner Lid.

5. BURNER LIGHTING DETAIL

- 5.1 After checking the high and low oil flow rates. Turn the control knob to the maximum setting, i.e. setting 6.
- 5.2 Lift the lighting port cover located at the front of the burner shell.
- 5.3 Insert a suitable taper through the lighting port to light the wick. It is then important to close the lighting port cover.
- 5.4 Immediately after lighting, turn the oil control valve to its low setting (setting 1).
- 5.5 Replace the burner access door. It is important that the door is correctly located and sealed. Close the outer control door.
- 5.6 After 30 minutes, carry out a SMOKE TEST.
 - a) Drill a hole in the flue pipe to accept smoke pump probe.
(This hole will require plugging after testing).
 - b) Sample the fume products through the hole using a Bar-rach smoke pump where all readings should indicate a smoke number 0-1 at low and high fire.
- 5.7 After the smoke test, set the control knob to setting 3 for a Two Oven cooker and setting 4 for a Four Oven cooker.

NOTE: ALL NATURAL DRAFT BURNERS DEPEND FOR EFFICIENT OPERATION ON REASONABLE FLUE CONDITIONS. THE FLUE DRAUGHT SHOULD BE NO LESS THAN 0.02"WG AND NOT MORE THAN 0.04"WG (0.5mm TO 1.0mm) SHOULD EXCESSIVE FLUE DRAUGHT BE PRESENT, THEN A STABILISER SHOULD BE FITTED IN THE FLUE SYSTEM.

6. EXTRACTOR FANS

- 6.1 If an extractor fan is fitted. it could affect the performance of the appliance. The supply of air should be such that the operation of the appliance and flue is unaffected when the external windows and doors are closed, the internal doors are open and extractor fan is running. (A flue draught interference test should be carried out). Extractor fans should be fitted far enough away from the appliance to minimise the risk of interference with the flue. A separate air supply opening must be sized to allow the entry of sufficient air to ensure that the fan does not affect the operation of the flue to the appliance.

INSTALLATION INSTRUCTIONS

COMMISSIONING

7. FLUE DRAUGHT INTERFERENCE

- 7.1 With the appliance and extractor fan in the same room close all doors and windows. Any adjustable ventilation opening should be closed. If the extractor fan is fitted in a different room to the appliance, the external doors and windows should be closed, internal doors between the fan and the appliance should be left open.
- 7.2 When the window and doors have been closed, the extractor fan should be set in operation at its full capacity. After the fan has established its normal airflow pattern the appliance should be set to maximum fuel flow rate. Combustion conditions readings should then be taken with and without the extractor running. The test should be carried out to ensure that there is no interference with the performance of the appliance under all operation conditions.
- 7.3 The effects of other appliances which extract air to the outside, such as tumble dryers, should also be taken into consideration.

8. ELECTRICAL TESTS

Electrical warning

THIS APPLIANCE IS SUPPLIED IN COMPONENT AND SUB- ASSEMBLY FORM. WHILST THE SUB-ASSEMBLIES THEMSELVES HAVE BEEN TESTED FOR ELECTRICAL SAFETY AT REDFYRE, IT IS ESSENTIAL THAT THE WHOLE APPLIANCE IS TESTED WHEN IT IS FULLY ASSEMBLED.

THIS WORK CAN ONLY BE UNDERTAKEN BY A SUITABLY QUALIFIED ELECTRICIAN TRAINED IN THE USE OF SPECIALISED EQUIPMENT. THE TEST MUST INCLUDE;

- **EARTH BOND CONTINUITY**
- **INSULATION RESISTANCE CHECK**
- **ELECTRICAL INSULATION FLASH TEST**

IMPORTANT

IF THERE IS NO MAINS SUPPLY OR THE ABOVE TESTS CANNOT BE CARRIED OUT, ENSURE THAT A WARNING LABEL IS ATTACHED TO THE APPLIANCE STATING THAT IT SHOULD NOT BE USED UNTIL ELECTRICALLY TESTED BY A SUITABLY QUALIFIED ELECTRICIAN AND INFORM THE CUSTOMER.

SERVICING INSTRUCTIONS

REPLACING PARTS

IMPORTANT

It is essential that range cookers are serviced and flue ways inspected and cleaned at regular 12 month intervals.

The work must be carried out by trained service engineers.

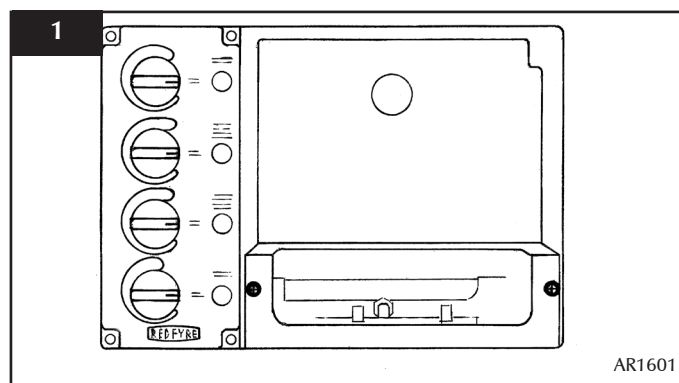
The appliance should be turned off at least 12 hours before the arrival of the engineer to allow it to cool.

1. GENERAL

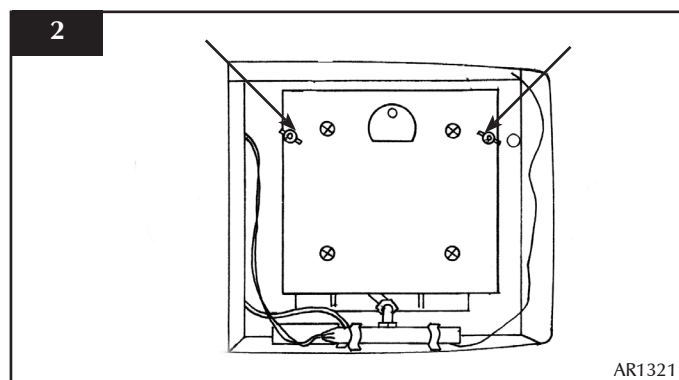
- 1.1 All major components can be replaced from the front of the cooker.
- 1.2 Make sure both electrical and oil supplies are isolated before carrying out any servicing work.

2. OIL BURNER

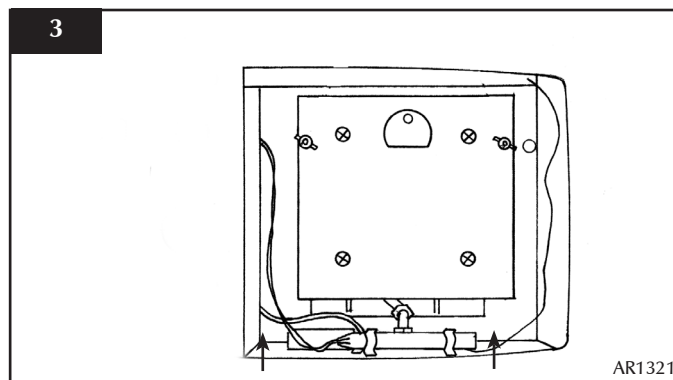
- 2.1 Behind the control door remove the two screws retaining the front cover. See diagram 1.



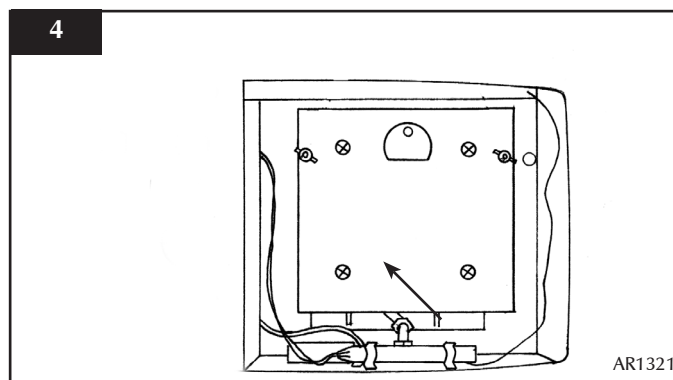
- 2.2 Remove the two wing nuts retaining the burner door. See diagram 2.



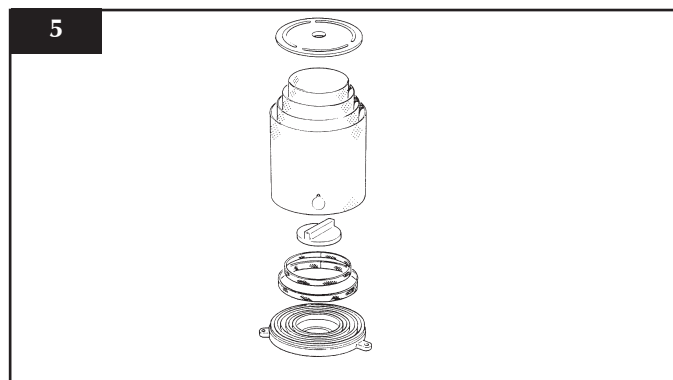
- 2.3 Remove the KBB phial from the two clips on the lower panel and remove the two screws to allow access to the oil feed pipe. See diagram 3.



- 2.4 Place a suitable container under the oil feed pipe elbow and undo the compression joint. See diagram 4



- 2.5 Lift out the burner assembly and dismantle all the components. See diagram 5



- 2.6 Remove all the carbon deposits from the burner base, oil ways and feed pipe. Gently brush any carbon deposits from the shells and top lid. Also clean the vaporising plug. Check the wick and replace if necessary.
- 2.7 Reassemble in reverse order.

SERVICING INSTRUCTIONS

REPLACING PARTS

ENSURE THE WICKS ARE ASSEMBLED WITH THE CUT-OUTS AT THE BOTTOM EDGE NEAREST THE BURNER BASE AND THEY ALIGN WITH THE OIL WAYS. THE VAPORISING PLUG MUST BE FITTED CORRECTLY AND THE SHELLS SEATED TO THE BURNER BASE WITH AN AIR TIGHT SEAL. THE LIGHTING PORT SHOULD BE FACING FORWARD. FINALLY FIT THE LID.

NOTE: IF THE COOKER IS BEING SERVICED AS A WHOLE, DO NOT FIT THE BURNER UNTIL THE FLUE WAYS HAVE BEEN CLEANED.

3. FLUE WAYS

- 3.1 Remove the burner as described in section 1.
- 3.2 Remove the three screws on each of the hotplates. Lift out both plates. These are very heavy.
- 3.3 Remove the "D" baffle from the barrel noting its orientation.
- 3.4 Clean all the flue ways with a suitable brush.
- 3.5 Reassemble in reverse order and ensure the fins on the boiling plate run parallel with the cooker. Check all seals.

4. OIL VALVE

- 4.1 Isolate the oil supply to the control valve.
- 4.2 Remove and clean the filter. At the same time inspect the gasket and replace if necessary.
- 4.3 Remove the top cover then the metering stem. Clean with a soft cloth and blow gently through the slot. Check the sealing ring and replace if worn.
- 4.4 After reassembly, ensure free operation of the metering stem under the spring tension.
- 4.5 Finally flush the oil supply pipe and ensure there are no air locks in the system.

5. COOKER CHECK

- 5.1 Check the top and bottom oven vents are not blocked
- 5.2 Check the door seals are sound.
- 5.3 Check the hotplate lid seals are sound and seated correctly.

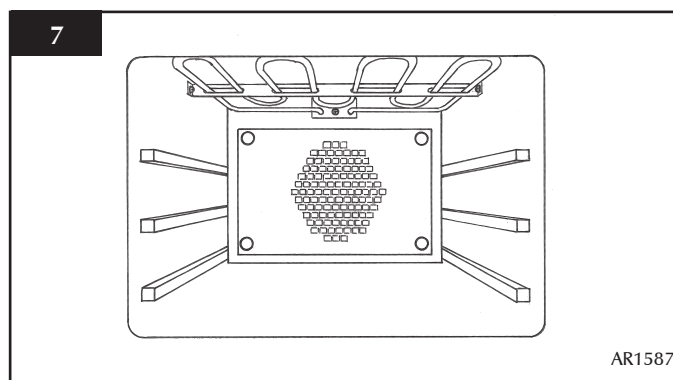
6. RE-COMMISSIONING

- 6.1 Ensure the burner has been correctly assembled. See section 1.
- 6.2 Check and adjust flue pull if necessary.
- 6.3 Instruct the user for continued safe operation and to maintain the guarantee the appliance must be serviced every six months.
- 6.4 Demonstrate the correct operation of the appliance and ensure the customer has a copy of the user instructions.
- 6.5 Advise the customer that under no circumstances attempt to light a hot burner.

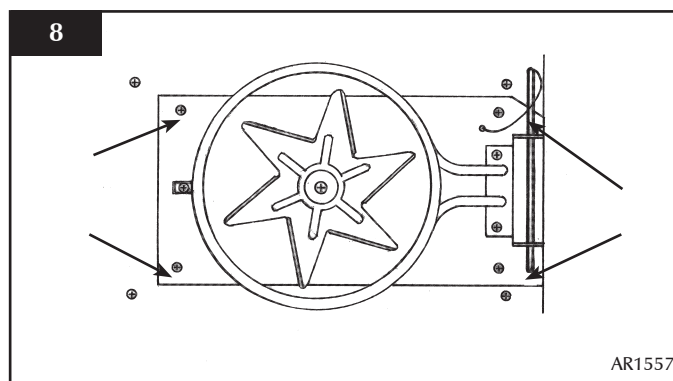
7. OVERHEAT SWITCH

BEFORE PROCEEDING TO CHANGE OR SERVICE ANY ELECTRICAL ITEMS ISOLATE THE MAINS ELECTRIC.

- 7.1 There are two overhear switches located on the rear of the fan oven element panel. Open the top oven door and loosen the four screws holding the fan cover. Lift the fan cover off the screws. See diagram 7.



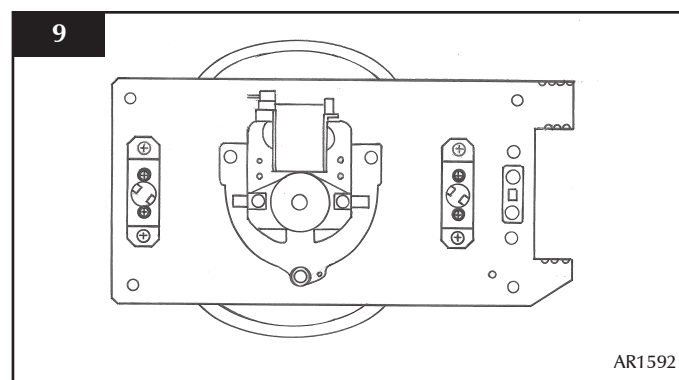
- 7.2 Remove the four screws retaining the fan assembly panel. See diagram 8.



SERVICING INSTRUCTIONS

REPLACING PARTS

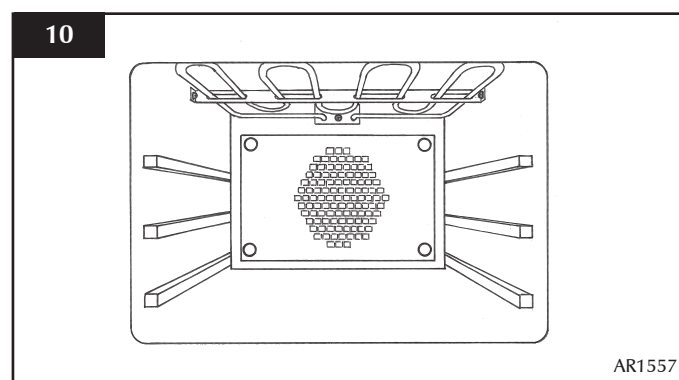
- 7.3 Disconnect the wires from the overheat switch and remove the two fixing screws. See diagram 9.



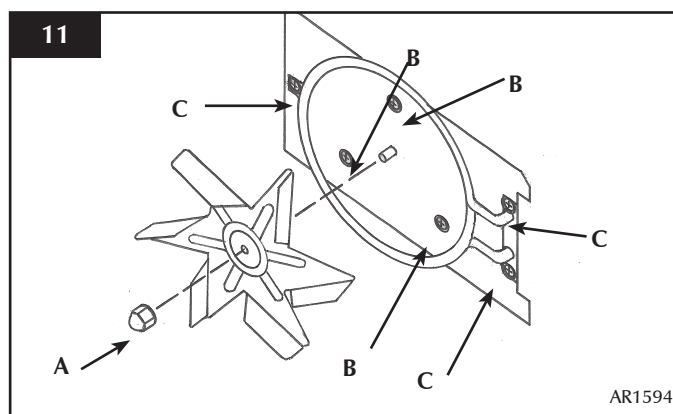
- 7.4 Replace the overheat switch and reassemble in reverse order ensuring no wires are trapped when replacing the fan.
- 7.5 There is also an overheat switch on the conventional oven element. To access this follow section 18.4

8. FAN UNIT

- 8.1 Open the top oven door and loosen the four screws holding the fan cover. See diagram 10, Arrow A.



- 8.2 Remove the thermostat phial lifting vertically from its brackets. Take care not to damage the fine capillary tube.
- 8.3 Remove the four screws retaining the fan assembly panel. See diagram 8.
- 8.4 Noting their positions, remove the wires from the overheat switches, fan unit and element.
- 8.5 Remove the central nut (left-hand thread) and separate the impellor from the fan motor. See diagram 11, Arrow A.



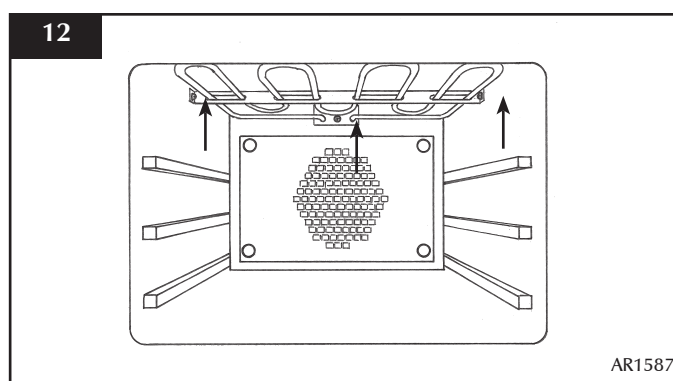
- 8.6 Remove the three screws and the fan motor from the panel. See diagram 11, Arrow B.
- 8.7 Replace the fan and reassemble in reverse order.

9. FAN OVEN ELEMENT

- 9.1 Follow steps 11.1 and 11.2 in Section 11, Fan Unit.
- 9.2 Remove the three screws retaining the oven element and carefully pull forward the element to expose the connections. See diagram 11, Arrow C.
- 9.3 Disconnect the wires making sure they do not fall behind the oven.
- 9.4 Replace the element and reassemble in reverse order.

10. GRILL ELEMENT

- 10.1 Remove the single screw from the rear of the element and the two screws retaining the support bracket. See diagram 12.



- 10.2 Carefully pull the element forward to expose the connections and disconnect the wires making sure they do not fall behind the oven.
- 10.3 Replace the element and reassemble in reverse order.

SERVICING INSTRUCTIONS

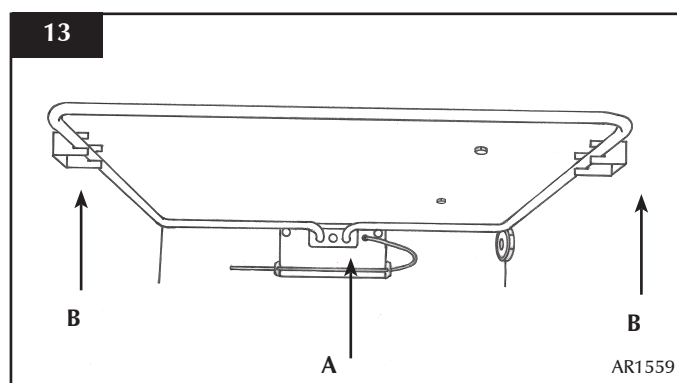
REPLACING PARTS

11. CONVENTIONAL OVEN ELEMENT

11.1 There are two elements in the conventional oven:

- One in the top of the oven
- One under the loose plate of the bottom

11.2 To change the top element, remove the single fixing screw and carefully pull forward the element to expose the connections. See diagram 13, Arrow A.

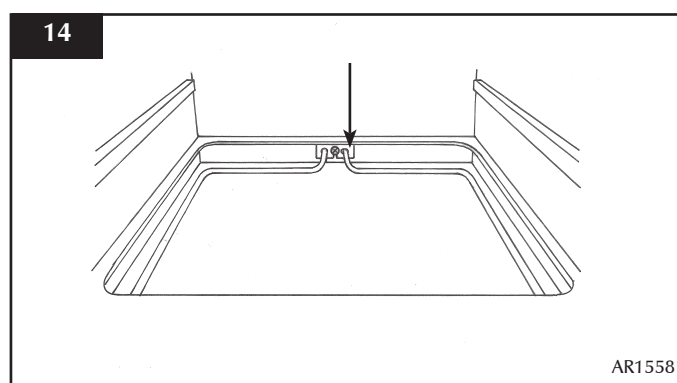


11.3 Remove the two wires and draw the element forward to clear the two support brackets. See diagram 13, Arrow B.

11.4 Replace the element and reassemble in reverse order.

11.5 The bottom element is situated under a loose plate in the bottom of the oven. Remove the plate to expose the element.

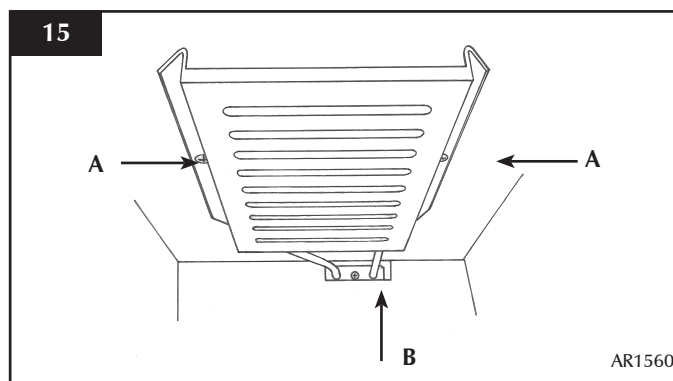
11.6 Remove the single fixing screw and carefully pull the element forward to expose the connections. See diagram 14.



11.7 Remove the wires, replace the element and reassemble in reverse order.

12. BOOSTING ELEMENT

12.1 The boost oven element is situated in the lower right-hand oven. To remove the element, undo the two screws holding the support bracket. See diagram 15, Arrow A.

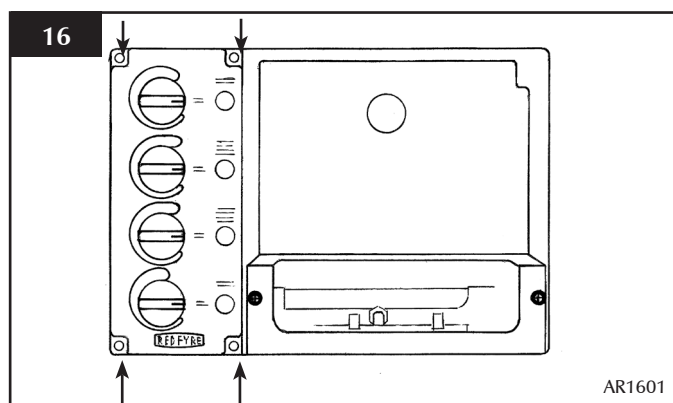


12.2 Remove the single fixing screw holding the element and carefully pull it forward. See diagram 15, Arrow B.

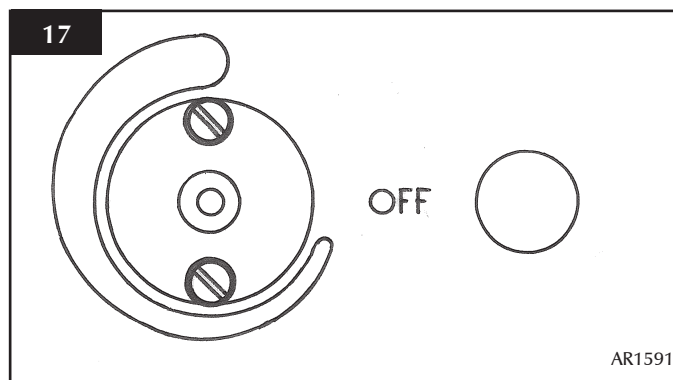
12.3 Remove the two wires and replace the element. Reassemble in reverse order.

13. GRILL CONTROL

13.1 Pull the control knob off the spindle. Remove the four screws retaining the front panel. See diagram 16.



13.2 Remove the two screws securing the control to the panel. See diagram 17.



SERVICING INSTRUCTIONS

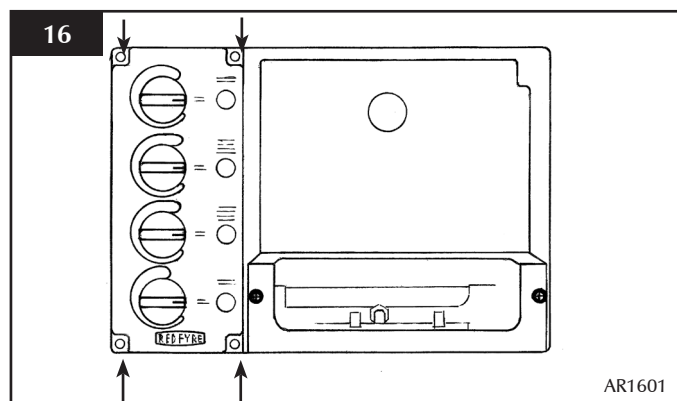
REPLACING PARTS

13.3 Note the positions of all the wires and disconnect the control. Alternatively, transfer each wire to the new control individually.

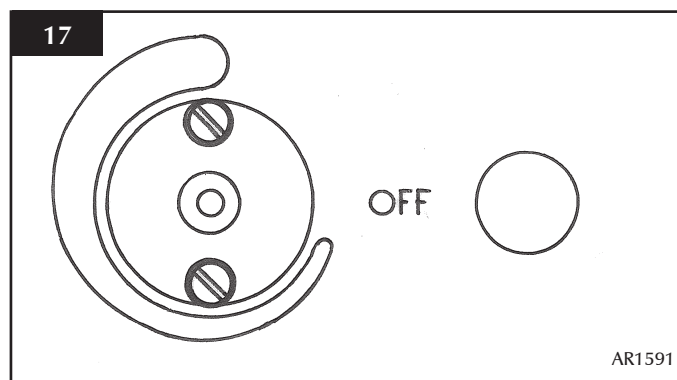
13.4 Reassemble in reverse order.

14. FAN OVEN THERMOSTAT

14.1 Pull the control knob off the spindle. Remove the four screws retaining the front panel. See diagram 18, Arrow B.

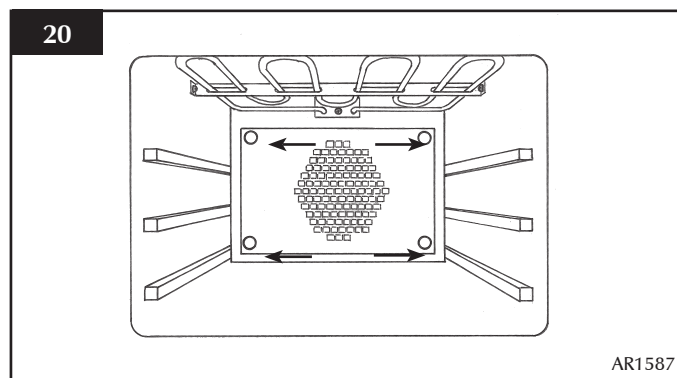


14.2 Remove the two screws securing the control to the panel. See diagram 19.

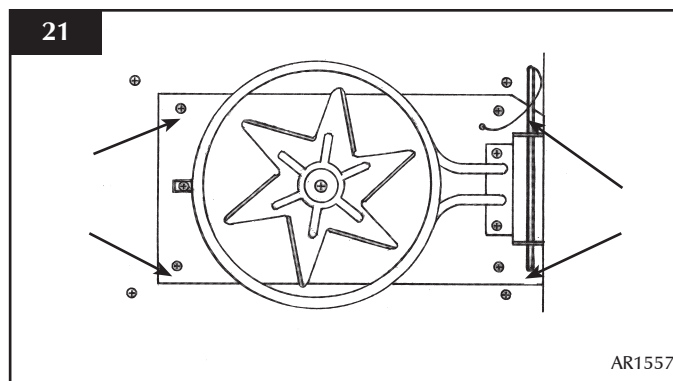


14.3 Note the positions of all the wires and disconnect the control. Alternatively, transfer each wire to the new control individually.

14.4 Loosen the four screws fixing the fan cover and lift the cover off. See diagram 20.



14.5 Remove the phial from the bracket and remove the four fixing screws from the fan assembly panel and push the phial through the access hole in the panel. See diagram 21.



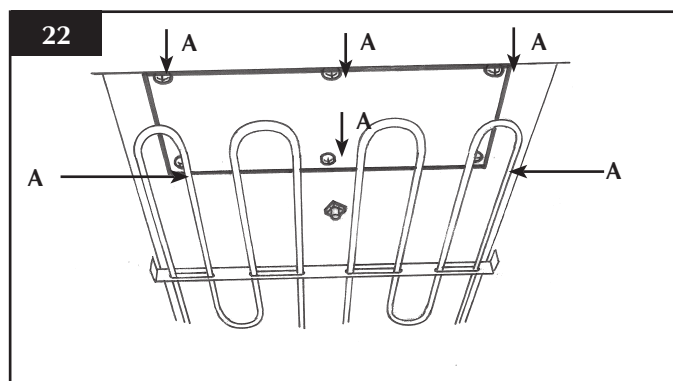
14.6 To gain access to the thermostat phial it is necessary to remove either the warming plate, electric or gas hob.

WARMING PLATE:

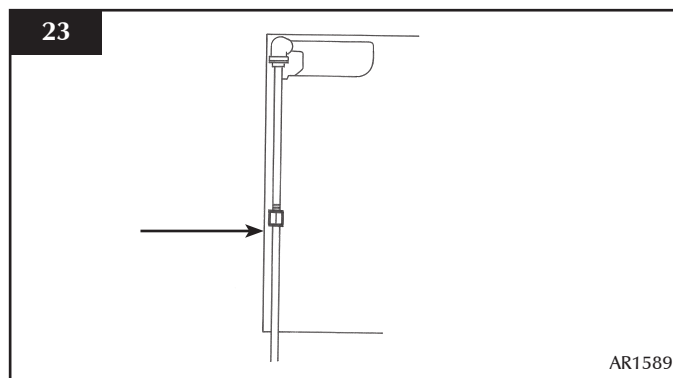
a) Remove the four fixing screws and lift the plate from its recess.

GAS HOB:

a) Isolate the gas supply to the hob.
b) Inside the top left-hand oven, remove the six screws securing the access plate. See diagram 22, Arrow A.



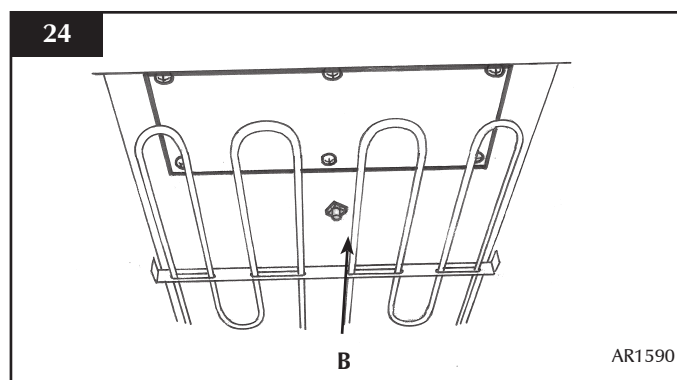
c) Undo the gas connection at the loose joint. See diagram 23.



SERVICING INSTRUCTIONS

REPLACING PARTS

- d) In the top oven is a large retaining nut that secures the hob. Remove the nut and washer. See diagram 23, Arrow B.



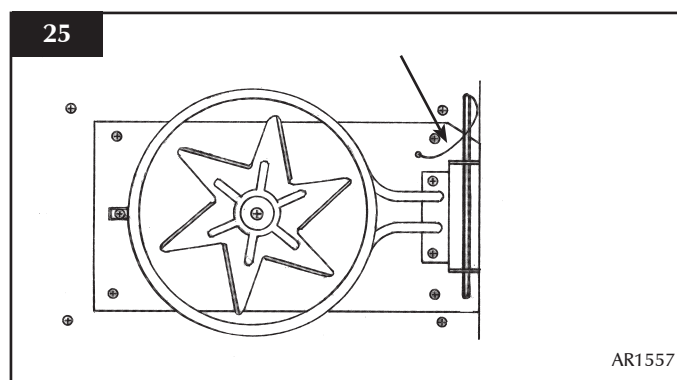
- e) Using a sharp knife, cut the seal around the edges of the hob. Lift the front off the hob and draw it forward approximately 150 mm to gain access to the rear of the ovens.

ELECTRIC HOB

- a) Proceed as with the gas hob sections d & e.

NOTE: WHEN REPLACING THE GAS AND ELECTRIC HOBS, CLEAN THE EDGES OF BOTH THE COOKER TOP AND THE HOBS PRIOR TO APPLYING THE SEALANT.

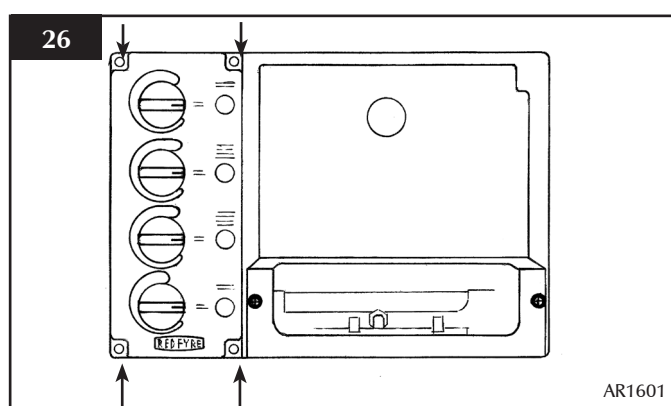
- 14.7 Locate the correct phial and working inside the controls compartment, gently withdraw the phial through the access tube. Retain the vidalex cover from the thermostat. **IT MAY HELP TO ATTACH A LENGTH OF WIRE TO THE PHIAL END WHEN REMOVING THE ITEM. THIS CAN THEN BE ATTACHED TO THE NEW COMPONENT AND DRAWN THROUGH THE TUBE.**
- 14.8 Place one length of Vidalex over the phial. This must be pushed all the way up to the control.
- 14.9 Push the phial into the access tube. As it emerges, place the other length of vidalex over the phial. This must only cover the phial from the end of the access tube to the rear of the oven.
- 14.10 Insert the phial through the location hole in the rear of the fan assembly panel and finally into the retaining brackets. See diagram 25.



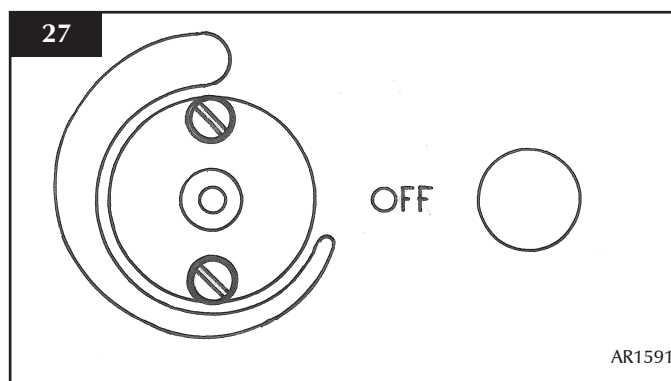
- 14.11 Replace the four fixing screws holding the fan panel and attach the cover.
- 14.12 Ensure no part of the thermostat capillary touches any electrical connections and the insulation is correctly placed around the ovens.
- 14.13 Replace and seal the hob or warming plate and check for gas leaks where necessary.

15. CONVENTIONAL OVEN THERMOSTAT

- 15.1 Pull the control knob off the spindle. Remove the four screws securing the control to the panel. See diagram 26.



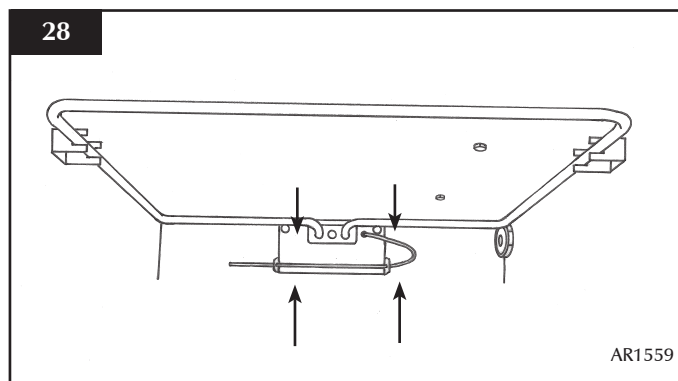
- 15.2 Remove the two screws securing the control to the panel. See diagram 27.



- 15.3 Note the positions of all the wires and disconnect the control. Alternatively, transfer each wire to the new control individually.
- 15.4 Remove the phial from the bracket and remove the four screws securing the element to the oven and gently pull the assembly forward. This will assist when installing the new phial. See diagram 28.

SERVICING INSTRUCTIONS

REPLACING PARTS



15.5 Follow clauses 17.6 to 17.9 in the above section.

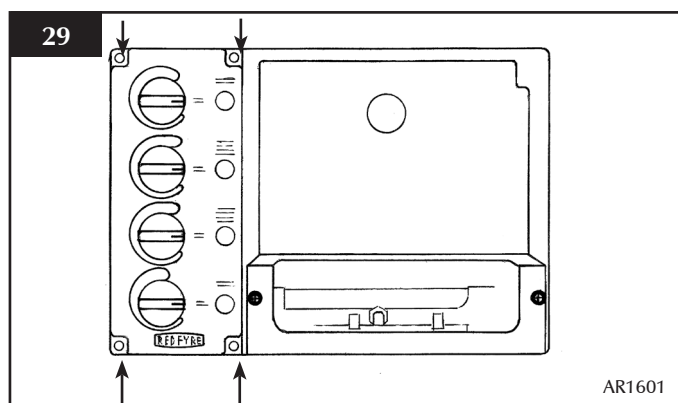
15.6 Insert the phial through the location hole in the rear of the panel and finally into the retaining brackets.

15.7 Ensure no part of the thermostat capillary touches any electrical connections and the insulation is correctly placed around the ovens.

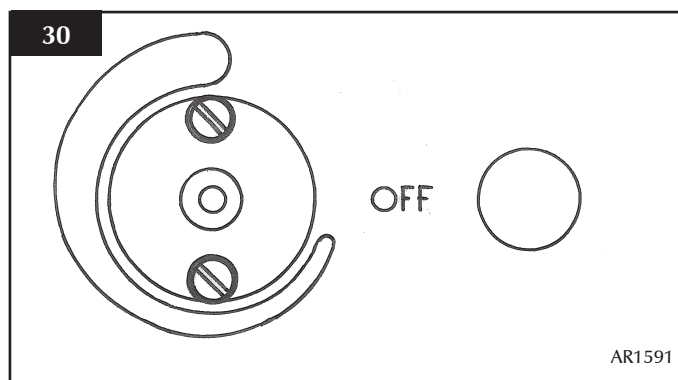
15.8 Replace and seal the hob or warming plate and check for gas leaks where necessary.

16. BOOST ELEMENT THERMOSTAT

16.1 Pull the control knob off the spindle. Remove the four screws retaining the front panel. See diagram 29, Arrow B.

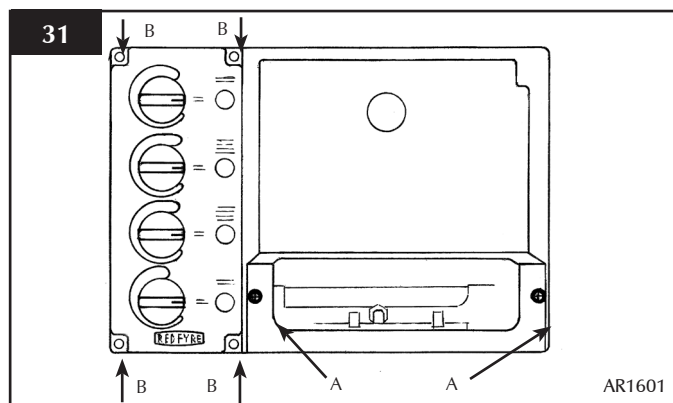


16.2 Remove the two screws securing the control to the panel. See diagram 30.



16.3 Note the positions of all the wires and disconnect the control. Alternatively, transfer each wire to the new control individually.

16.4 Remove the two screws holding the oil valve cover. See diagram 31, Arrow A.



16.5 Remove the phial from the bracket in the top of the oven. Pull the capillary through the access tube. The thermostat can now be removed.

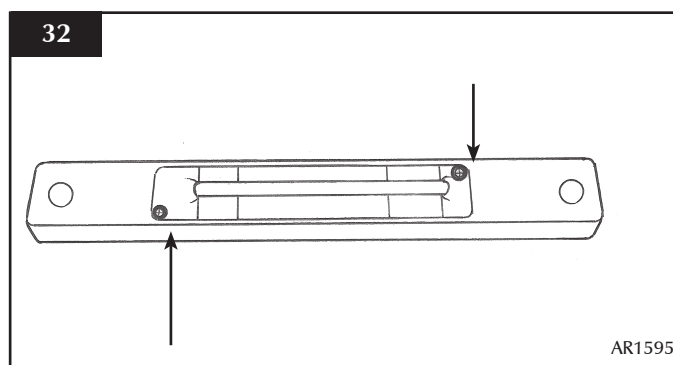
16.6 Reverse the order of the above procedure to reassemble.

17. NEONS

17.1 Remove the four screws securing the control cover. See diagram 40 above, Arrow B.

17.2 Remove the wires from the rear of the neon. Squeeze the sides of the neon to release the clips and push the neon through the panel.

17.3 To change a neon in the temperature indicator, remove the two screws holding the thermometer cover. See diagram 32.



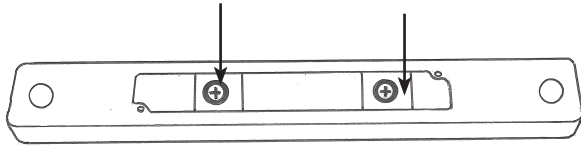
17.4 Pull the thermometer forward to remove it from its holder. Take care as these are fragile. Also remove the thermometer support packing.

17.5 Remove the two screws securing the shroud to the cooker body and disconnect the wires. See diagram 33.

SERVICING INSTRUCTIONS

REPLACING PARTS

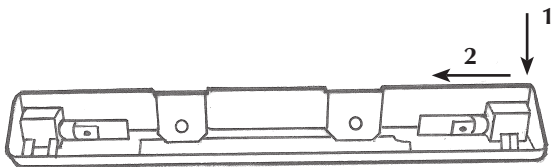
33



AR1596

- 17.6 Gently push down on the rear of the neon body and slide towards the centre of the shroud. This will release the neon in two halves from the shroud. See diagram 34.

34



AR1593

- 17.7 Reverse the order of the above procedure to reassemble.

SERVICING INSTRUCTIONS

FAULT FINDING

EVIDENCE OF FAULT	CAUSE
Trip/Reset lever operates repeatedly	1. Oil level in control too high. 2. Top of tank over 10 feet above oil control unit.
Yellow flame on high fire only	1. High fire screw set too high. 2. Burner out of level
Yellow flame on low fire only	1. Low fire screw set too low. 2. Burner out of level
Yellow flame at all Control Knob positions	1. Too much primary air. 2. Too little secondary air. 3. Vapourising Chamber lid not fully seated. 4. Shells not correctly seated. 5. Burner out of level.
Yellow flame at one point of burner only	1. Wicks incorrectly positioned or upside down. 2. Vapourising Chamber lid not fully seated. 3. Shells not correctly seated. 4. Lighting flap not correctly seated. 5. Burner out of level.
Flame funnelling at centre of burner	1. Wicks incorrectly positioned or upside down.
Flame appears to leave top of burner	1. Too little primary air. 2. Too low a flue pull. 3. Flue partly or fully blocked.
Burner Popping	1. Too little primary air. 2. Too much secondary air. 3. Too low a flue pull. 4. Downdraught in flue. Fit suitable anti-downdraught cowl. 5. Wicks incorrectly positioned or upside down. 6. Oil depth in burner base too deep. 7. Vapourising Chamber lid not fully seated.
Burner surging	1. Variations in flue draught. Fit suitable stabiliser. 2. Fuel inlet overheating. Insulate with fireproof material. 3. Oil depth in burner base too deep.
Impossible to set high fire high enough	1. Too little primary air. 2. Flue partly or fully blocked.

SERVICING INSTRUCTIONS

REPLACING PARTS

EVIDENCE OF FAULT	CAUSE
Impossible to set high fire low enough	1. Too much primary air.
Impossible to set low fire high enough	1. Too little primary air.
Impossible to set low fire low enough	1. Too much primary air.
Oil smell apparent	1. Too little primary air. 2. Too low a flue pull. 3. Downdraught in flue. Fit suitable anti-downdraught cowl. 4. Flue partly or fully blocked. 5. High fire screw set too high
Black stain around any door	1. Too little primary air. 2. Too low a flue pull. 3. Downdraught in flue. Fit suitable anti-downdraught cowl. 4. Flue partly or fully blocked. 5. High fire screw set too high.
Burner carbons up after short period	1. Low fire screw set too low. 2. Oil Control filter blocked. Remove and clean with boiling water and dry thoroughly before replacing. 3. Incorrect or contaminated fuel. Very little can cause trouble. Clean out tank and refill with new oil.
Unable to light burner	1. Control metering stem slot obstructed. To clear, turn Control Knob from OFF to full ON several times. 2. Oil Control filter blocked. Remove and clean with boiling water and dry thoroughly before replacing. 3. Metering stem in oil control sticking. Replace control. 4. Fuel inlet blocked. Service. 5. Oil depth in burner base too shallow. 6. Oil level in tank too low. 7. Air lock in oil line tank – burner – control. 8. Incorrect or contaminated fuel. Very little can cause trouble. Clean out tank and refill with a new fuel. 9. Electrical supply failed or turned off. Check power supply. If there is a power cut, switch control to manual. See User's Instructions

SERVICING INSTRUCTIONS

REPLACING PARTS

EVIDENCE OF FAULT	CAUSE
Burner goes out after burning 1-2 hours	1. Too little primary air. 2. Downdraught in flue. Fit suitable anti-downdraught cowl. 3. Low fire screw set too low. 4. Control metering stem slot obstructed. To clear, turn Control Knob from OFF to full ON several times. 5. Fuel inlet blocked. Service. 6. Oil depth in burner base too shallow. 7. Oil level in tank too low. 8. Air lock in oil line tank – burner – control. 9. Incorrect or contaminated fuel. Very little can cause trouble. Clean out tank and refill with a new fuel.
Burner goes out for no apparent reason	1. Too little primary air. 2. Downdraught in flue. Fit suitable anti-downdraught cowl. 3. Flue partly or fully blocked. 4. Low fire screw set too low. 5. Control metering stem slot obstructed. To clear, turn. Control Knob from OFF to full ON several times. 6. Trip lever operated. 7. Oil Control filter blocked. Remove and clean with boiling water and dry thoroughly before replacing. 8. Fuel inlet blocked. Service. 9. Oil level in tank too low. 10. Air lock in oil line tank – burner – control. 11. Incorrect or contaminated fuel. Very little can cause trouble. Clean out tank and refill with a new fuel. 12. Electrical supply failed or turned off. Check power supply. If there is a power cut, switch control to manual. See User's Instructions.
Burner soots up	1. Too little primary air. 2. Too low a flue pull. 3. Downdraught in flue. Fit suitable anti-downdraught cowl. 4. Vapourising Chamber lid not fully seated. 5. Shells not correctly seated. 6. Incorrect or contaminated fuel. Very little can cause trouble. Clean out tank and refill with a new fuel.
COOKERS Not reaching required temperature	1. Too little primary air. 2. To high a flue pull. 3. Flue partly or fully blocked. 4. High fire screw set too low.
Overheating	1. Too low a flue pull. 2. Low fire screw set too high.
Variations in temperature	1. Variations in flue draught. Fit suitable stabiliser.

SERVICING INSTRUCTIONS

REPLACING PARTS

22. SPARE PARTS LIST

SPARES	NUMBER
Sets of Wicks	601356
Bundy Tube	99628
Burner Assembly	600812
Elbow	99629
Nipple	600838
Thermometer Tube	600795
Temperature Scale	601029
Top Infill Plate	601485
Oil Control Valve	600884
Control Valve Cover (Black)	600443
90° Teddington Fire Valve	600846
GRILL ELEMENT	EL0298
FAN OVEN ELEMENT	EL0301
BOTTOM OVEN ELEMENT	EL0299
BOOST OVEN ELEMENT	600822
FAN UNIT	EL0300
OVER HEAT SWITCH	EL0314
GRILL CONTROL	EL0309
FAN ELEMENT THERMOSTAT	EL0310
BOTTOM ELEMENT THERMOSTAT	EL0310
BOOST ELEMENT THERMOSTAT - FOUR OVEN VERSION	EL0310
OPTIONAL EXTRAS	
PLINTH - (FOUR OVEN)	C6006

SERVICE RECORDS

1ST SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

3RD SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

5TH SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

7TH SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

9TH SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

2ND SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

4TH SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

6TH SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

8TH SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

10TH SERVICE

Date of Service:

Next Service due:

Signed:

Dealer's Stamp

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