



Central Heating Cooker

Natural Gas

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 Redfyr for further information.

IMPORTANT

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 found at the end of the User Sections of these instructions should be completed by the installer.

CONTENTS

COLOUR 00=Cream 02=Blue 03=Black
 13=Forest green 10=Pewter 12=Claret

C | R | E | | | 0 | 0 | 0 | 3 | | | 0

BOILER SIZE 6 = 60K Btu 7 = 80K Btu
 8 = 100K Btu 9 = 120K Btu

FUEL TYPE 1=NG 5 = Oil

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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. The following 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		
GAS CHECK		
1. Gas soundness & let by test		
2. Standing pressure test	mb	
3. Appliance working pressure (on High Setting) NB All other gas appliances must be operating on full	mb	
4. Gas rate	m ³ /h	
5. Does ventilation meet appliance requirements		
6. Are all joints and connections airtight?		
7. Check Burner operation		

DEALER AND INSTALLER INFORMATION

Dealer

.....

.....

Contact No.....

Date of Purchase.....

Model No.....

Serial No.....

Gas Type.....

Installation Company

.....

Engineer

Contact No.....

Gas Safe Reg No.

Date of Installation

This product is guaranteed for 2 years from the date of installation, as set out in the terms and conditions of sale between Redfyre 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 an Gas Safe registered engineer, and a copy of the service visit report is available for inspection by a Redfyre engineer.

USER INSTRUCTIONS

1. DESCRIPTION

- 1.1 Congratulations, you are now the proud owner of the new Redfyre central heating cooker capable of providing full central heating and domestic hot water.

2. GENERAL

In the event of a gas escape or if you can smell gas, please take the following steps:

- Immediately turn off the gas supply at the meter/emergency control valve
- Extinguish all sources of ignition
- Do not smoke
- Do not operate any electrical light or power switches (On or Off)
- Ventilate the building(s) by opening doors and windows
- Ensure access to the premises can be made

Please report the incident immediately to the National Gas Emergency Service Call Centre on 0800 111 999 (England, Scotland and Wales) , 0800 002 001 (N. Ireland) or in the case of LPG, the gas supplier whose details can be found on the bulk storage vessel or cylinder.

The gas supply must not be used until remedial action has been taken to correct the defect and the installation has been recommissioned by a competent person.

- 2.1 Installation and servicing must only be carried out by a competent person whose name appears on the Gas Safe register. To ensure the engineer is registered with Gas Safe they should possess an ID Card carrying the following logo:



- 2.2 In all correspondence, please quote the appliance type and serial number, which can be found on the data badge.
- 2.3 As manufacturers and suppliers of cookers and heating products we take care to ensure these products are designed and constructed to meet all safety requirements when properly used and installed. To this end, our products are thoroughly examined and tested before delivery.
- 2.4 These Instructions explain the features of your new cooker and how you can achieve the best results. They describe cleaning, maintenance, installation and servicing. Please read these instructions with care so you can enjoy cooking and can maintain your cooker to give many years of service.

- 2.5 The cooker must not be altered in any way. 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 The cooker must be operated by adults; children should not play with or near the cooker and a suitable guard used for protection of young children and the infirm.
- 2.7 Parts of the cooker become very hot when in use (e.g. hot plates and ovens) and remain hot for a long period after use. Take great care when using the cooker and use oven gloves whenever appropriate.
- 2.8 This Redfyre cooker is designed for cooking, domestic hot water and central heating and must not be used for other purposes.
- 2.9 Make sure you use stable saucepans and always position handles away from the edge of the hotplate.
- 2.10 Don't place combustible materials onto the hotplate surfaces even when the cooker is off.
- 2.11 Do not spray aerosols in the vicinity of this appliance while it is operating.
- 2.12 Do not cover the outlet on the top rear splash back cover.
- 2.13 Do not allow clothes, furnishings or any combustible material to come into contact with any flue pipe.
- 2.14 This product is guaranteed for 2 years from the date of installation, as set out in the terms and conditions of sale between Gazco and your local Gazco dealer. Please consult with your local Gazco dealer if you have any questions. In all correspondence always quote the Model Number and Serial Number.

3. RUNNING-IN

- 3.1 The new surface coating on your Redfyre cooker "burns off" to create a harmless odour during its first hours of use. This smell disappears after a short period but if it persists ask your installer for advice. You should open windows or doors to keep the room well ventilated until the odour disappears.

4. VENTILATION

- 4.1 Heat and moisture are produced by oil range cookers. Ensure the kitchen is well ventilated.
- 4.2 You may need to open a window or increase mechanical ventilation during prolonged use of the cooker.
- 4.3 Air for combustion is taken in through the cooker's burner door. DO NOT shut off or block this door or any additional air vents fitted by your installer in any compartment or to the outside.

USER INSTRUCTIONS

- 4.4 Any purpose-provided ventilation must be periodically checked to ensure it is free from obstruction.

5. SERVICING & SPARE PARTS

- 5.1 The cooker must be serviced every 12 months by a qualified engineer. In all correspondence, always quote the Model and Serial Number found on the data badge inside the bottom left door.
- 5.2 You must turn off your cooker 12 hours before servicing. Your cooker cannot be serviced while it is hot.
- 5.3 All Redfyre products must be serviced annually by a competent person using approved spare parts available from Redfyre.

6. FROST PROTECTION

- 6.1 During severe cold weather, if the boiler is out of use for a lengthy period, we recommend you drain down the whole system to avoid the risk of freezing, but frequent draining is not recommended, especially in hard water areas where this may lead to a build up of scale inside the boiler.
- 6.2 For short periods of absence, leave the cooker operating at a low thermostat setting.

USER INSTRUCTIONS

COOKER FEATURES AND CONTROLS

The cooker has two ovens to be used as and when you want: the programmable main oven and the baking oven beneath. The main oven works like a conventional oven being controlled by its own thermostat. This thermostat also controls the rest of the appliance. This oven reaches a roasting temperature in approximately 20-25 minutes from cold, or in less time if it has already been in use. The baking oven works by heat conduction.

Two burners give you complete control of the appliance; one for central heating and one for cooking.

1. MAIN OVEN

- 1.1 The main oven operates in similar fashion to a conventional oven, reaching high temperatures in approximately 20-25 minutes from cold. It has its own programmer and a thermostatic control that also serves the rest of the appliance.

Position shelves on runners as follows:

- 1.2 Top Shelf - used to grill meats, vegetables and so on, or brown dishes such as *gratins* under heat radiating from the roof.
- 1.3 Second Shelf down - used for roasting potatoes, baking scones and so on. Covered dishes and hot puddings can be quickly reheated here.
- 1.4 Middle Shelf - used for roasting meats, jacket potatoes, pastry, bread rolls, loaves and pizzas.
- 1.5 Grid Shelf on oven floor - used for large loaves of bread and slower roasts (pork, poultry).
- 1.6 Direct onto oven floor - for pastry, tarts and pies or crisping up the bottom of bread loaves. The frying pan can be heated on the floor before transferring to the hotplates and then transferred back to the oven floor to finish off. This helps to keep the area around the hotplate clean and free.
- 1.7 Spillages inside this oven are automatically burnt off and can be easily removed with a brush.

2. BAKING OVEN

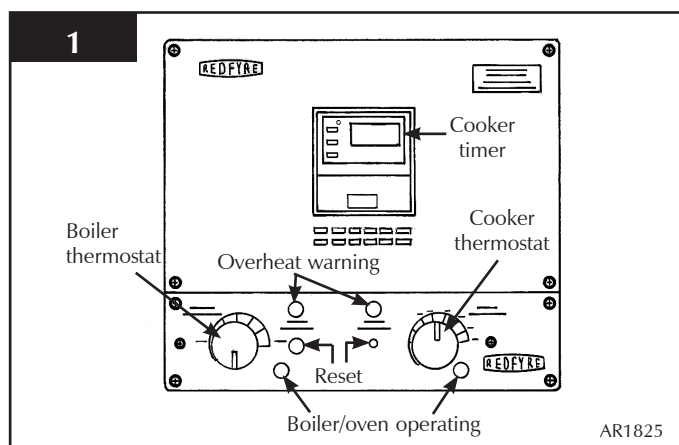
- 2.1 This oven operates at approximately 100°C lower than the main oven. If the main oven is set to 200°C, then the lower oven is simply used as a warming oven.
- 2.2 Use the moderate heat of this oven for baking cakes and biscuits and cooking fish. Slow, long-cooking dishes are often started on one of the hotplates, then transferred to this oven.

3. HOTPLATE

- 3.1 The dog bone hotplate is large enough to support seven various sized saucepans. The heat distribution is graduated across the hotplate, the left side becoming hottest first. The higher the oven temperature setting, the hotter the hotplates.
- 3.2 Two insulated lids conserve heat and should be closed when the hotplate is not in use.
- 3.3 When hot, wear gloves to remove the decorative centre cover.

4. CONTROL PANELS

- 4.1 One control panel is behind the top left door of the cooker.



It has:

- a **Cooker Timer** you must program
- two **Thermostats**:
 - **Boiler Thermostat** (controlling the temperature of the Central Heating water)
 - **Cooker Thermostat** (controlling the temperature of the oven and other cooking surfaces)
- two **Overheat Thermostats** you might need to reset. For safety, there are two manual overheat thermostats for the oven and boiler inside the top left door. Each overheat thermostat has a red neon indicator. If these are lit you must reset each thermostat. The reset buttons spring out if overheating occurs.

For the oven:

Press in the red reset button beneath the red indicator.

For the boiler:

Press in the brown cross-shaped button beneath the red indicator

If frequent resetting is required, contact your distributor; the appliance may need servicing.

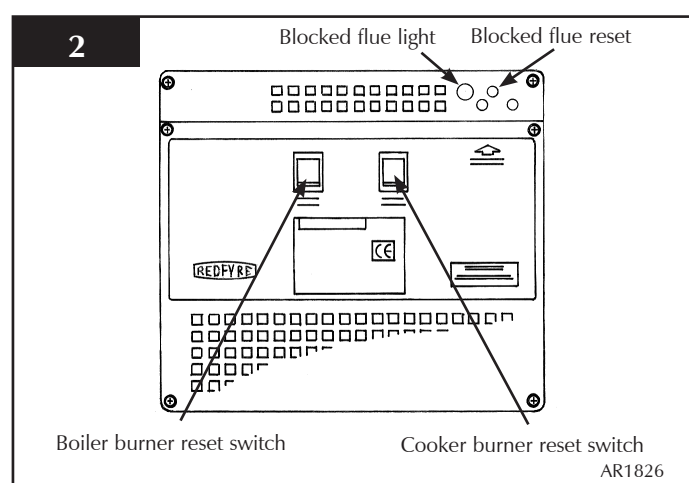
USER INSTRUCTIONS

COOKER FEATURES AND CONTROLS

- 4.2 A further control panel is behind the lower left door. It has:
- a) **Two Reset buttons:** one for the Cooker and one for the Boiler Burner
- These buttons are lit if either the cooker or boiler burners are extinguished by some kind of blockage or restriction.

For either the cooker or boiler:
Press the lit button to re-fire the burner, ensuring the appropriate thermostat is demanding heat.

You must contact your distributor if either of these burners continually needs resetting.



- b) **a Blocked Flue Reset Button and red indicator** at top right corner of panel
- This light is lit if there is a problem with the flue system. It can be reset:
Press the reset button beside the light.
If this happens more than twice, call a service engineer to check the flue for blockages, refer to *Section 9*.

5. LIGHTING THE BURNERS

Oven Burner

- 5.1 Lighting the oven burner is a fully automatic process:
Ensure the programmer is in ON mode and the programmer's neon is lit.
Turn the oven thermostat to the desired temperature.
The oven's orange indicator lights up and remains lit until the correct temperature is reached.

Boiler Burner

- 5.2 Lighting the boiler is a fully automatic process:
Make sure any external controls are ON and demanding heat.
Turn the boiler thermostat to the desired temperature.
The boiler's orange indicator lights up and remains lit until the correct temperature is reached.

6. SWITCHING OFF

- 6.1 If you want to switch off the appliance for short periods:

For the boiler:

Turn all the external controls to OFF and turn the boiler thermostat to OFF.

For the cooker:

Turn the cooker thermostat and programmer to OFF.

- 6.2 To switch off the appliance for longer periods:
Turn all external and internal controls to off and switch off the electricity supply to the appliance.

See the previous section for information on Frost Protection

7. COOKER PROGRAM

The 103E7 Timeswitch can provide 3 ON periods and 3 OFF periods each day and can offer either 7-day control (a different programme for each day of the week) or 5/2 day control (one set of programmes for weekdays and a different set for weekends).

Before setting the Cooker Time the user must decide whether the appliance is required to operate in 7-day mode (factory preset) or weekday/weekend mode.

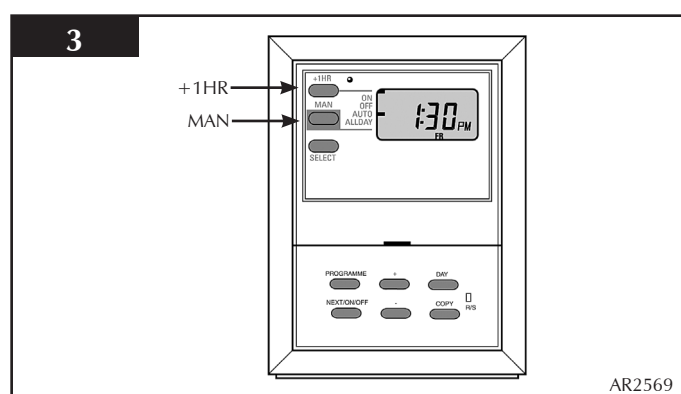
To convert to Weekday/Weekend mode the small two-way connector must be removed from the pins towards the left of the recess on the rear of the module.

Once this is done the button marked R/S under the flap must be pressed to RESET the unit.

Detailed instructions of this operation can be found in Servicing, Section 7.

7.1 Before you start/Making a Full Reset

- 7.1.1 Before setting the Cooker programs it is advised to make a full Reset. To do this:
Open the flap on the front of the unit.
- 7.1.2 Press and hold +1HR and MAN buttons.



USER INSTRUCTIONS

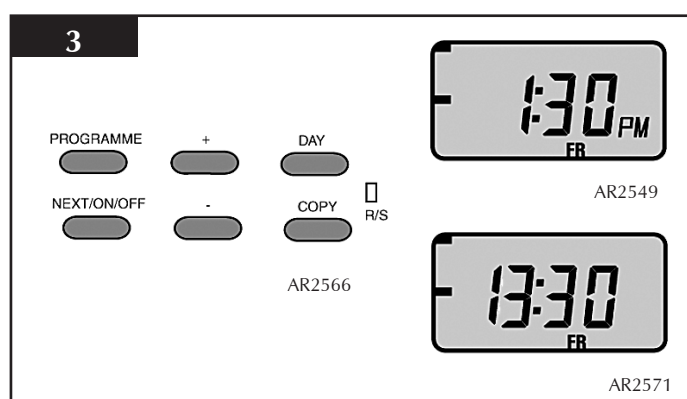
COOKER FEATURES AND CONTROLS

7.1.3 Still holding the +1HR and MAN buttons, press and release the R/S button using a small, non-metallic object (e.g. matchstick, biro tip).

7.1.4 Release +1HR and MAN buttons.
This will reset the unit and reinstate the preset programmes.

7.2 Choice of 24hr or AM/PM display

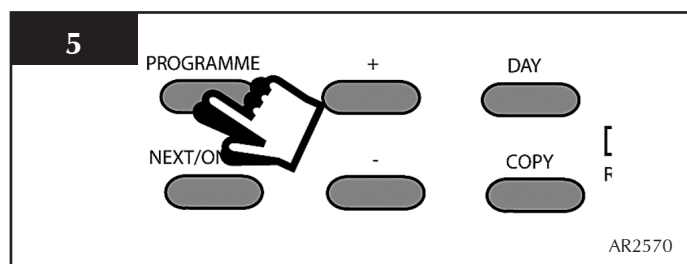
7.2.1 Press and hold DAY and NEXT ON/OFF buttons for 1.5 seconds to toggle between 24hr clock and AM/PM display, as required.



7.3 Setting the Date and Time

Setting the Date

7.3.1 Press and hold PROGRAMME for 5 seconds to display year.



Use the + or - buttons to set the correct year.

Press DAY to display day and month.

Use the + or - buttons to set the correct month (Jan=1, Feb=2 etc.).

Press DAY to display day and month.

Use the + or - buttons to set day of month.

Setting the Time

7.3.2 Press PROG to display the time.
The words SET TIME will appear at the top of the display and the time will flash on and off.
Use the + or - buttons to set the correct time (press and hold to change in 10 minute increments).

Setting the Day

7.3.3 The day of the week is set automatically. Press PROGRAMME to exit into RUN mode.

7.4 Factory Presets

7.4.1 The unit is supplied with the following preset programme which will be active after the unit has been reset:

Period	Setting	Monday -Friday	Saturday - Sunday
1st	ON	6.30am	7.30am
1st	OFF	8.30am	10.00am
2nd	ON	12.00pm	12.00pm
2nd	OFF	12.00pm	12.00pm
3rd	ON	5.00pm	5.00pm
3rd	OFF	10.30pm	10.30pm

Note: 2nd ON and 2nd OFF are set to the same time. These 2 times are ignored by the programme therefore the heating will just come on once in the morning and once in the evening. If you want the heating to come on in the middle of the day set the 2nd ON and 2nd OFF to the times you require.

7.4.2 Accepting the preset times

If you are happy to use the settings above, you don't need to do anything else. To accept the presets press the PROGRAMME button until the colon in the display begins to flash.
Your unit is now in RUN mode.

7.4.3 Changing the preset programmes

Your installer will have set your unit to operate in one of the following modes:

7 day - Different settings for each day of the week (Default setting).

5/2 day - One set of programmes for weekdays and another for weekends.

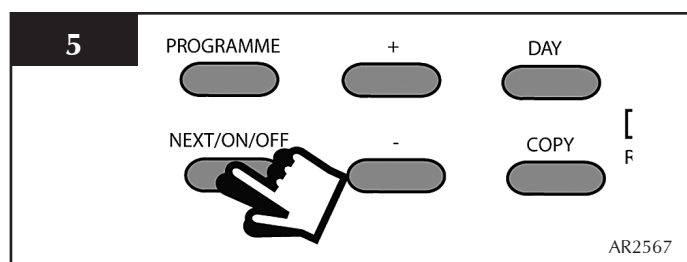
Follow the correct instructions to programme your unit.

Please Note:

The unit must be programmed in sequence and ON/OFF times cannot be set out of sequence. If you want to leave a preset time as it is, simply press NEXT ON/OFF to move on to the next setting.

USER INSTRUCTIONS

COOKER FEATURES AND CONTROLS

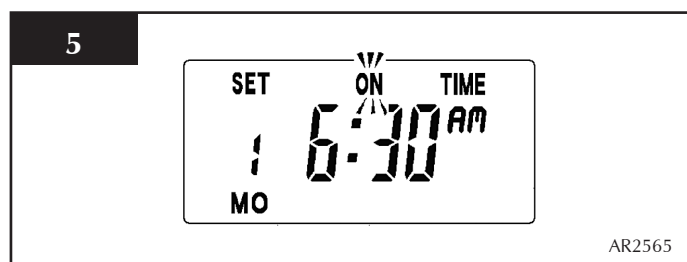


Your clock will allow you to programme 3 ON/OFF settings per day. If you do not wish to use one of the ON/OFF settings, simply programme the ON time to be the same as the OFF time and the setting will not operate.

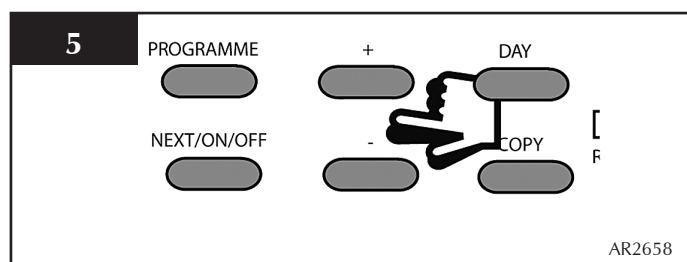
If at any time you get confused and need to reset your timings to the standard preset programme, press the R/S button to return to the preset programmes.

7.5 Programming Cooker in 7-day mode

7.5.1 Press PROGRAMME until SET ON TIME appears at the top of the display and press DAY until **MO** appears at the bottom of the display.

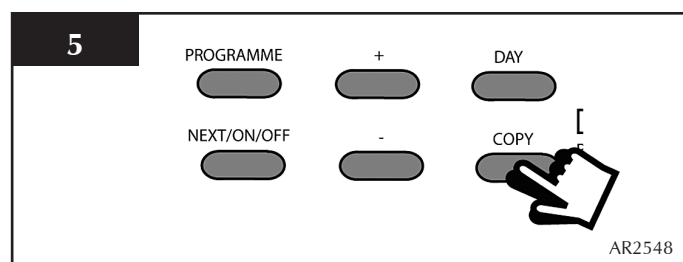


Use the + and - buttons to set the time you want your heating to first come on in the morning (Period 1).



Press NEXT ON/OFF to move to Period 2.

7.5.2 Either press COPY to use the same settings as the day before or continue to programme the central heating ON and OFF times, using the + and - buttons to set the time you want and pressing the NEXT ON/OFF button to move to the next setting.



7.5.3 Press DAY button once only. **TU** will appear at the bottom of the display. Continue programming the rest of the week by pressing:

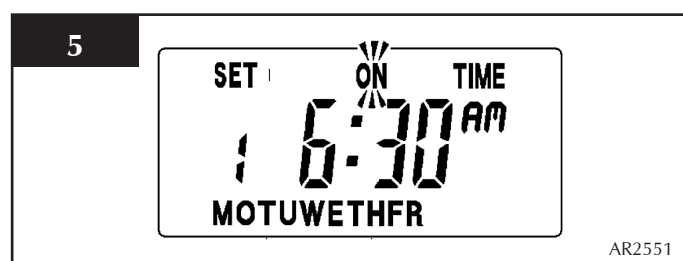
- a) NEXT ON/OFF button to move to the next setting.
- b) + and - buttons to amend the time.
- c) DAY to advance to the next day. Alternatively press COPY to keep the same settings as the day before.

7.5.4 Press the PROGRAMME button to return the unit to RUN mode.

7.5.5 Proceed to Section 7.7.

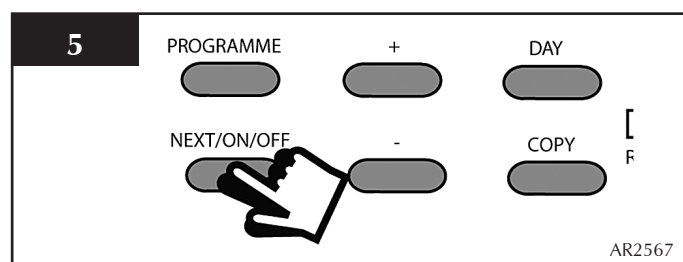
7.6 Programming Cooker in 5/2 day mode

7.6.1 Press PROG until SET ON TIME appears at the top of the display and press DAY until MOTUWETHFR appears at the bottom of the display.



Use the + and - buttons to set the time you would like your heating/hot water to first come on in the morning (Event 1).

7.6.2 Press NEXT ON/OFF once only.



Use the + and - buttons to set the time you want your heating/hot water to go off (Event 2).

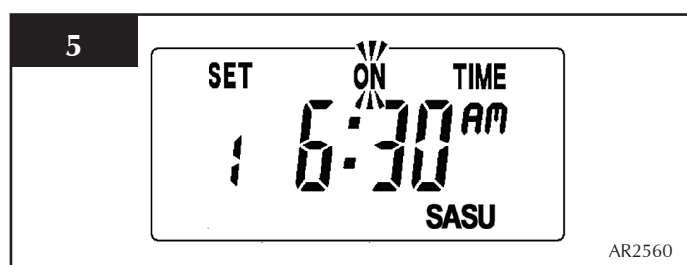
USER INSTRUCTIONS

COOKER FEATURES AND CONTROLS

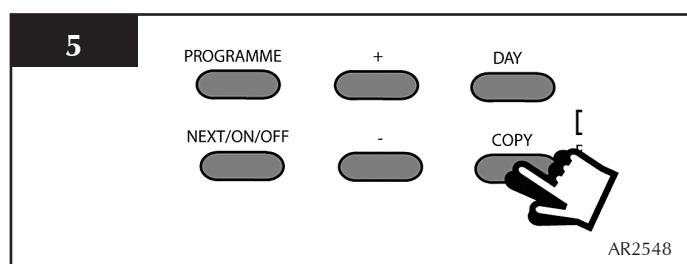
To move to the next setting, i.e. when you would like your heating/hot water to come on again (Event 3) press the NEXT ON/OFF button again.

7.6.3 Continue programming the heating/hot water ON and OFF times for weekday Events 4, 5 & 6 as in Step 7.5.2.

7.6.4 Press the DAY button once and SASU will appear at the bottom of the display.



Either press COPY to keep the same settings for Saturday and Sunday as you have programmed for Monday to Friday.



Alternatively, programme new ON/OFF times by pressing the NEXT ON/OFF button to move to the next setting and using the + and - buttons to set the time you want.

7.6.5 Press the PROG button to return the unit to RUN mode.

7.7 Running a programme

7.7.1 As you press SELECT a bar on the display will move between ON, OFF, ALLDAY and AUTO.

ON = the hot water/heating will remain on constantly.

OFF = the hot water/heating will not come on.

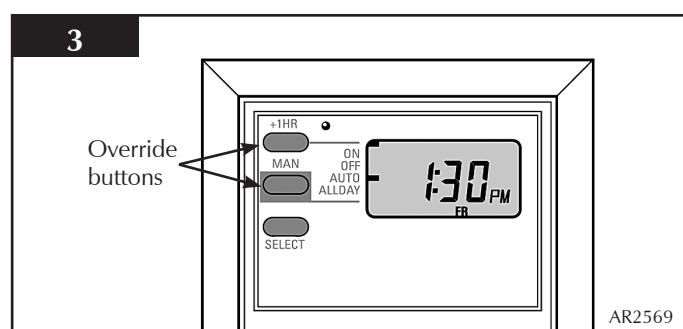
AUTO = the hot water/heating will come on and go off according to programmed times.

ALLDAY = the unit will come on at the first programmed ON and will remain on until the last programmed OFF.

7.8 Temporary User Overrides

Sometimes you may need to change the way you use your heating temporarily, i.e due to unusually cold weather. The 103E7 Timeswitch has two convenient overrides which can be selected without affecting the set programme.

7.8.1 As you press SELECT a bar on the display will move between ON, OFF, ALLDAY and AUTO.



7.8.2 +1HOUR

Press +1HOUR once if you need an extra hour of operation. If the system is off it will come on for an hour. If it is already on it will add an extra hour so the system stays on for an extra hour.

To cancel the override press +1HOUR again. Otherwise the override will self-cancel at the next programmed event.

7.8.3 MAN

Press MAN button once to manually override the programme (only whilst unit is set to AUTO or ALLDAY). If the system is on it will go off. If it is off it will come on. The set programme will resume at the next programmed ON/OFF time.

To cancel the override press MAN again.

7.9 Battery backup

In the event of a power cut, the built-in battery will keep your time and programme settings for up to 2 days. After 2 days without mains power the date and time will be lost. When mains power is restored, the unit should be RESET, by pressing the R/S button beneath the flap, using a small nonmetallic object, i.e. matchstick, biro tip.

Then reprogramme the date and time.

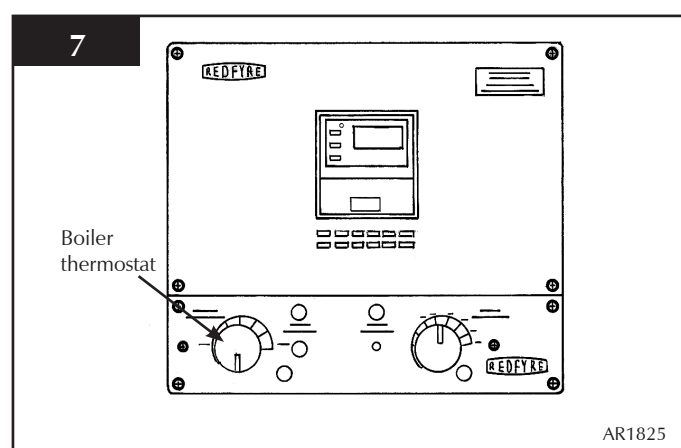
USER INSTRUCTIONS

COOKER FEATURES AND CONTROLS

8. CENTRAL HEATING

- 8.1 The heating or hot water are regulated simply by turning the Boiler thermostat to the temperature you want.

Make sure your external Programmer is ON and asking for heat before adjusting the thermostat.



9. BLOCKED FLUE

- 9.1 This appliance has a blocked flue sensing device. It is an important safety device to prevent the products of combustion entering the room due to a flue problem. Under no circumstances must this device be put out of operation whilst the cooker is in use.
- 9.2 When this device operates it will turn both burners off and the red neon illuminates. It is not possible to relight the appliance for approximately 30 minutes after which time the reset button must be pressed.
- 9.3 In the event of repeated activation of the blocked flue device the chimney / flue problem must be investigated and corrective action taken immediately.
- 9.4 Access to the reset button is achieved by opening the control lower left-hand door and pressing the red reset button.

USER INSTRUCTIONS

OVEN COOKING GUIDE

Heat storage cookers have a reputation for producing very fine cooking but if you are new to cooking on this type of stove you need to understand the difference between this cooker and a conventional cooker. Once the cooker has reached a desired temperature, there is no quick way of reducing the heat; you cannot simply turn a knob to lower the temperature.

To keep dishes from boiling over or over-cooking, you must move your dish from one position on a hotplate (or in an oven) to another. If you have not used this type of cooker before you may need to think about your approach to cooking. This section gives you some typical examples and guidelines to help you adjust.

From cold, your top right oven should reach a Roasting Temperature in approximately half an hour.

1. MEAT

- 1.1 Roast meat cooked inside this type of heat storage cooker retains its size and shape and rarely needs extra cooking fat.

There are two methods:
Quick Roast at 200°C for superior cuts.
Slow Roast at 170°C for coarser cuts.

We recommend searing or sealing an inferior cut at high temperature for 20/30 minutes before reducing the heat. You can rest the meat for a few minutes at the end of cooking by putting it in the lower oven to settle the juices and allow for easy carving.

- 1.2 To calculate cooking times, always consider the shape of a joint as well as its weight. A narrow joint cooks faster than a solid, even-shaped joint.
- 1.3 The oven settings and cooking times below are given as a guide only. Individual tastes may require you to adjust the settings or reposition the dish being cooked. (If temperatures seem to vary hugely to those listed, then the oven thermostat may be faulty and may need replacing.

**Note: The tables below are for guidance only.
Each cooker installation varies slightly.**

	Setting	Shelf	Approx Time
Beef with bone	Slow 170°C	3	20-25 mins per 500g + 20-25 mins
	Quick 200°C		15-20 mins per 500g + 15-20 mins
Beef boneless	Slow 170°C	3	30-35 mins per 500g + 30-35 mins
	Quick 200°C		20-25 mins per 500g + 20-25 mins
Lamb	Slow 170°C	3	30-35 mins per 500g + 35 mins
	Quick 200°C		20-25 mins per 500g + 20-25 mins
Pork or Veal	Slow 170°C	3	35-40 mins per 500g + 35-40 mins
	Quick 200°C		25-30 mins per 500g + 25-30 mins

2. POULTRY

- 2.1 Cook Poultry or Game on a trivet in a roasting tin to prevent the meat stewing in its own juice. Add on time where there is stuffing.

	Setting	Shelf	Approx Time
Chicken	Slow 170°C	3	20-25 mins per 500g + 20-25 mins
Turkey (Under 4.5kg)	Slow 170°C	3	20-25 mins per 500g + 20-25 mins
	Quick 200°C		15-20 mins per 500g + 15-20 mins
Turkey (Over 4.5kg)	Slow 170°C	3	30-35 mins per 500g + 35 mins
	Quick 200°C		20-25 mins per 500g + 20-25 mins
Pork or Veal	Slow 170°C	3	35-40 mins per 500g + 35-40 mins
	Quick 200°C		25-30 mins per 500g + 25-30 mins

USER INSTRUCTIONS

OVEN COOKING GUIDE

3. CASSEROLES

- 3.1 Sear or seal meat over a high heat before adding to a casserole and bring liquid to boil if required for the casserole.

	Setting	Shelf	Approx Time
Top Oven	140-150°C	3	Hours according to recipe
Oven baked fish	180°C	3	According to size cut, preparation and recipe

4. CAKES

	Setting	Shelf	Approx Time
Rich Fruit cake	140-150°C	4	Approximately 45 per 500g of mixture (7"-8") 2-3 Hours
Victoria Sandwich	180°C	3	
Queens cakes (2 Trays)	180-190°C	2 3	15-25mins
Scones	200°C	2	10-15 mins

5. PASTRIES

	Setting	Shelf	Approx Time
Short Crust	200°C	4	According to recipe
Flaky	220°C	2	According to recipe
Rough Puff	220°C	2	According to recipe
Puff Pastry	220°C	2	According to recipe

CARE OF THE COOKER

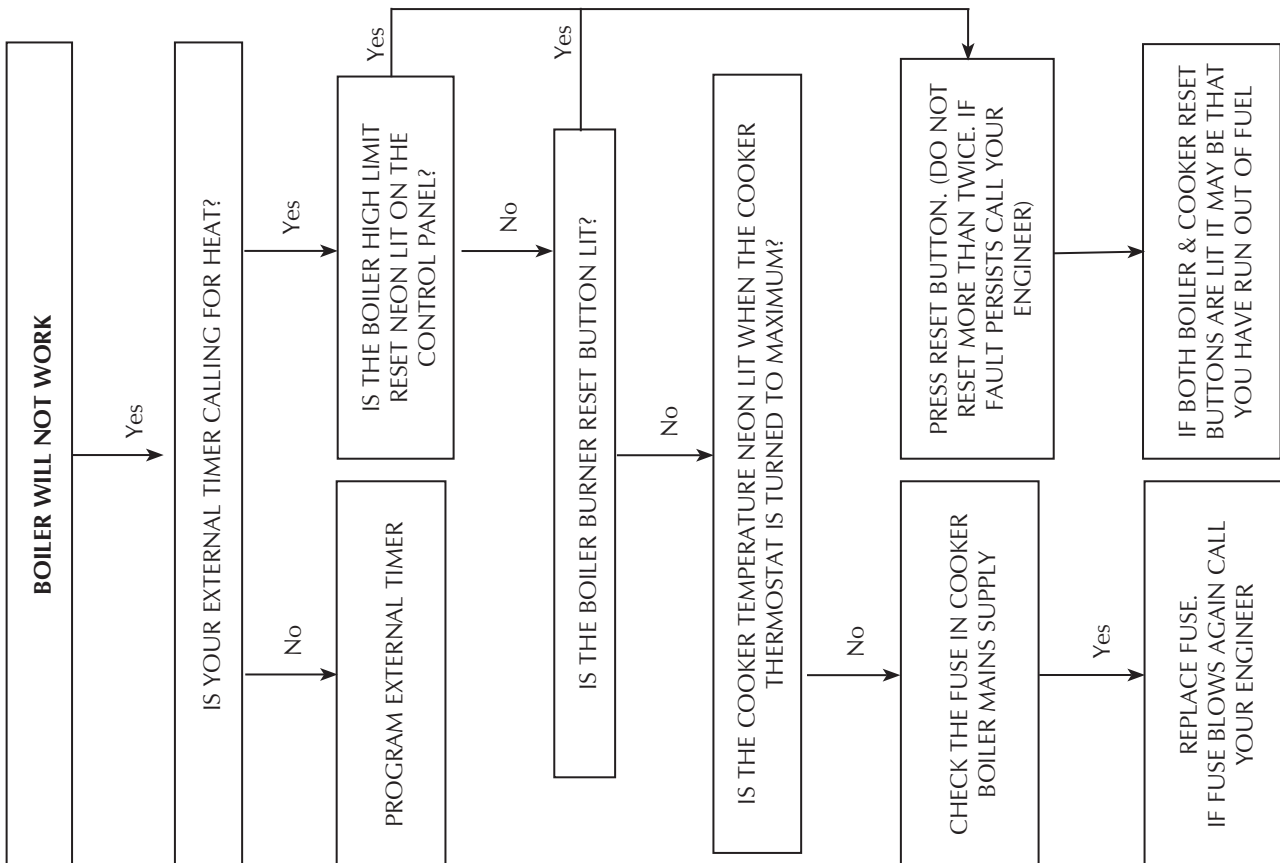
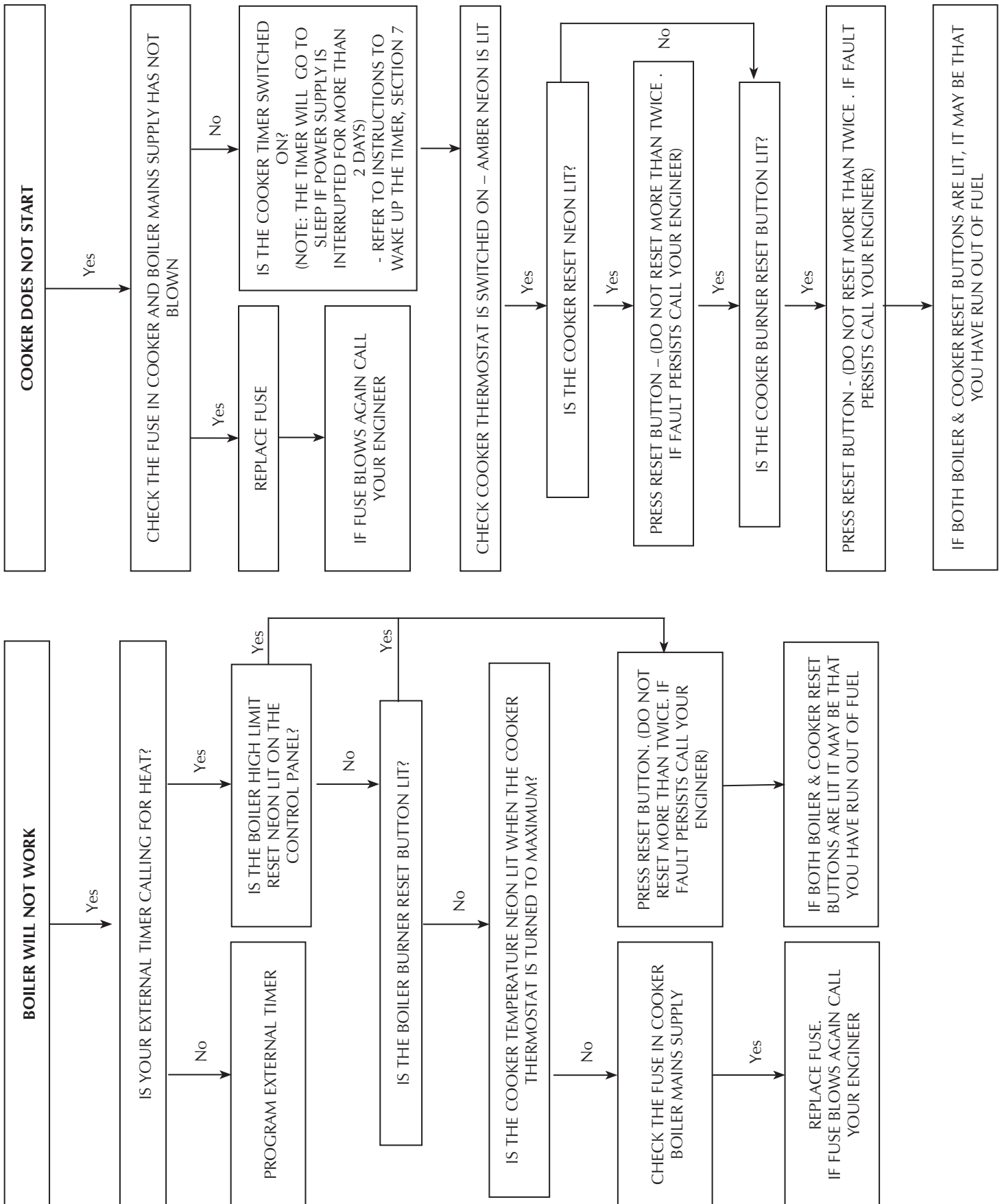
IMPORTANT:

- Never use caustic, citric or abrasive cleaners as these will scratch or damage the surface.
- Always try to wipe up any spillages as they happen.
- A more satisfactory result is achieved if the cooker is cool when cleaning.
- Use hot soapy water and a cloth for the enamel, drying off with a soft cloth to avoid streaking.
- To clean inside ovens, wire brush carbon stains and vacuum up deposits. The wire brush scratches the internal oven surface but this does not damage its natural surface. Ensure the natural surface is dry after cleaning to prevent oxidation.

	Hot Water & Soap	Wire Brush	Cream Cleaner VE Approved	Nylon Brush
Top Plate	✓		✓	
Hot Plate Dome Chrome	✓			
Hot Plates		✓		✓
Oven		✓		
Chrome Shelves	✓	✓	✓	
Oven Door	✓			
Door Liner	✓		✓	
Seal	✓			
Colour Parts	✓			
Front	✓			
Sides	✓			
Doors	✓			
Chrome Handles	✓			
Tower Rail	✓			

USER INSTRUCTIONS

COOKER FAULT FINDING



USER INSTRUCTIONS

AFTER SALES SERVICE INFORMATION

1. GUIDE TO REPORTING A FAULT

1.1 A qualified Field Service Engineer is available to attend breakdown or manufacturing faults whilst this appliance is under guarantee.

1.2 A charge is made where:
Our Field Service Engineer finds no fault with the appliance.

The cause of a breakdown is outside the appliance, being part of the plumbing or heating system, including oil line or oil deficiency or other equipment not supplied by Redfyre.

Where the appliance falls outside the guarantee period (see Terms and Conditions).

The appliance has not been correctly installed, commissioned or serviced as recommended (see Commissioning, Installation and Servicing Instructions).

The breakdown occurs immediately after an annual service visit. In this instance, your appointed Service Agent must check all his work before requesting Redfyre to attend.

1.3 Over 50% of all service calls are found to have no appliance fault.

1.4 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 his work before requesting a service visit from Redfyre.

Step 2: If your appliance has developed an in-guarantee fault, your installer should contact Redfyre Service Centre for assistance.

What happens if my installer/engineer is not available?

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

Note: Unauthorised invoices for attendance and repair work to this appliance by any third party are not accepted by Redfyre.

2. THE COOKER ENAMEL

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

IMPORTANT CUSTOMER NOTICE

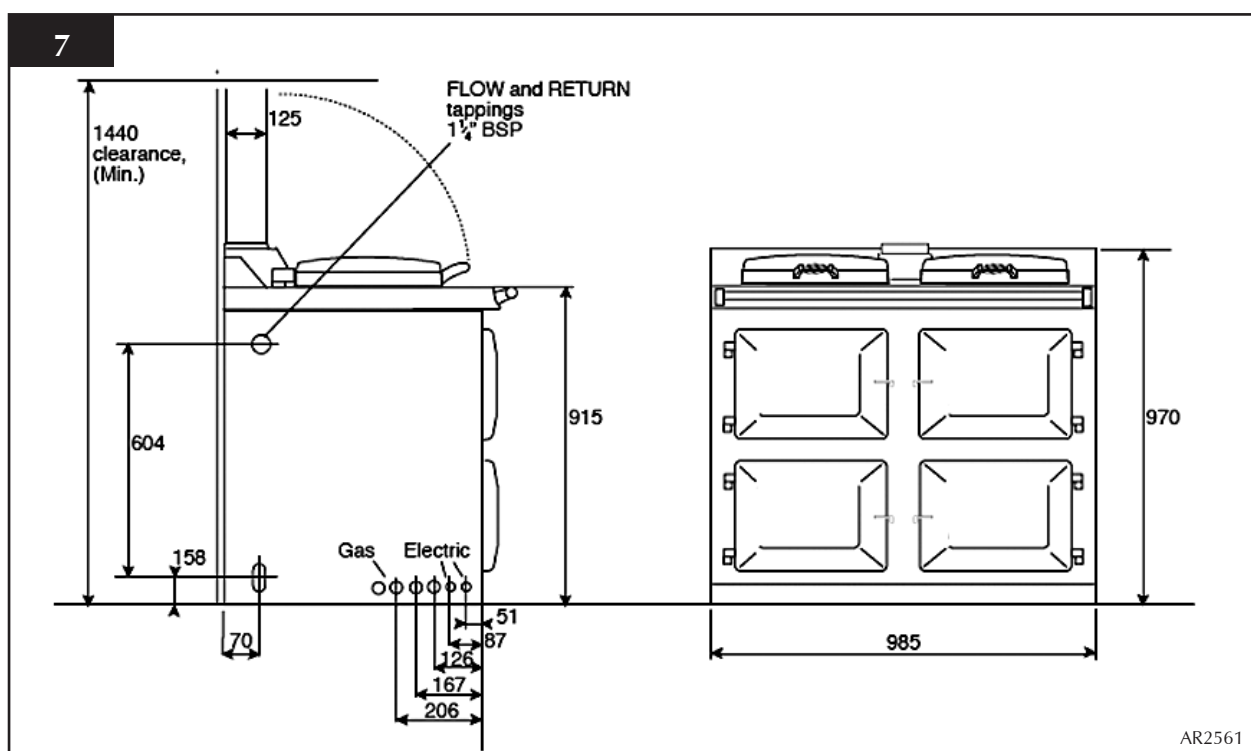
Cosmetic damage, stains and scratches produced by cooking and cleaning are NOT covered by the statutory guarantee. The user **MUST** be aware of this before the cooker is installed and commissioned.

Refer to the *Appliance Commissioning Checklist* on page 3 of these Instructions for the product guarantee.

INSTALLATION INSTRUCTIONS

TECHNICAL DETAILS

Model	Cooker	60	80	100	120
Rated input kW (gross)	17.6	22.2	29.7	37.3	45.5
Rated output kW (gross)	-	17.6	23.4	29.3	35.2
Burner	Cooker	Boiler - 60k	Boiler - 80k	Boiler - 100k	Boiler - 120k
Gas Volume m³/yr	1.68	2.11	2.84	3.56	4.34
Co2%	8.5 - 9.0	7.0 - 8.0	8.0 - 8.5	8.5 - 9.0	8.5 - 9.0
Starting current - Amp	0.422	0.422	0.8	0.8	0.83
Running current - Amp	0.33	0.33	0.48	0.48	0.74
Flow and Return tapplings	n/a	22mm	28mm	35mm	35mm
Electrical power consumption	230v 50Hz 95 watts				
Gas Type	Natural Gas 20 mbar G20				
Gas Cat	I _{2H} for use in GB, IE (Great Britain and Eire)				
Weight - dry kg	512kg				
Water content - Litre	38				
Max Operating Pressure (PMS)	n/a	3.0 bar			
Operating Temperature Range	n/a	60 - 80°C			
Conventional Flue Operating Range	0.05 +/- 0.02" WG 12.45 +/- 4.98 Pa				
Water side resistance - mbar	n/a n/a	26 8.3			
10oC difference					
20oC difference					
Flue sockets - Dia 145mm		Inside Flue Diameter 125mm (5")			

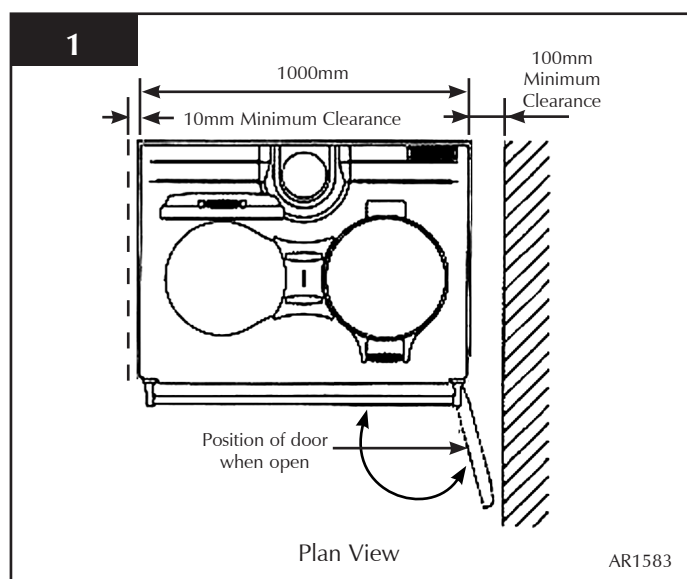


INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

1. COOKER CLEARANCE

- 1.1 The cooker fits in a 1000mm space with 10mm clearance each side.
- 1.2 If the right-hand side of the cooker is to be positioned next to a wall, an extra 100mm is required at the right-hand side to remove oven shelves.
- 1.3 A clearance of 550mm is required above the cooker to raise the dome lids.
- 1.4 If a cooker hood is to be fitted, it should be installed to the manufacturer's instruction.
- 1.5 We recommend you allocate 1000mm in front of the cooker for adequate room to cook and service.
- 1.6 Where the cooker stands in a recess or against a tiled wall, under no circumstances must the tiles overlap the black enamel top plate.



2. SOUND LEVELS

- 2.2 While sound levels for this appliance are low, consider the following before installation:
 - (a) The flue pipe from the appliance can be cast iron to reduce noise
 - (b) Ask the householder if anyone is particularly sensitive to low noise levels.
 - (c) Small rooms can amplify noise particularly where the walls are hollow or tiled.
 - (d) A chimney passing through a bedroom can sometimes transmit noise.

3. HEARTH

- 3.1 The appliance must be fitted on a non-combustible base.
- 3.2 The floor must be level and capable of supporting the installed weight of the appliance and its water content.

4. CONVENTIONAL CHIMNEY

- 4.1 The chimney should rise as vertically as possible and terminate at a point not subject to down draughts or wind eddies. See Flue Systems, Section 5. It should rise 600mm off the top of the cooker before any bend and have a 3m effective flue height.
- 4.2 Brick and masonry chimneys must be lined with a moisture and acid resistant liner of the same diameter as the boiler flue outlet.
- 4.3 A factory made insulated chimney complying with BS 4543 Part 3 may be considered as an alternative to a structural chimney both for new and existing buildings.
- 4.4 The use of a flexible stainless steel liner is a convenient method of lining an existing chimney and this should be back filled with 'vermiculite' or similar insulating material to retain heat. A flexible liner should also be used in chimneys fitted with large diameter clay liners to reduce the flue bore and improve the thermal insulation.
- 4.5 The use of a draught-stabiliser should not be necessary nor is it desirable since it allows flue noises to be emitted into the room. See Flue Systems, Diagram 1.

Notes:

- (a) **In view of the appliance's high thermal efficiency it is important that a liner is fitted, otherwise condensation problems could result.**
- (b) **Before fitting a liner, the chimney must be thoroughly cleaned free from all traces of soot and scale.**

5. GAS SUPPLY

- 1.1 The supply pipe is $\frac{3}{4}$ " BSP threaded male. An isolating gas valve must be fitted adjacent to the cooker and the gas installation pipe work must be installed, inspected, tested for soundness and purged in accordance with BS 6891.
- | | |
|--|--------|
| Nominal inlet gas pressure | 20mbar |
| Maximum gas pressure | 25mbar |
| Minimum gas pressure with both burners running | 17mbar |

INSTALLATION INSTRUCTIONS

SITE REQUIREMENTS

6. MAINS ELECTRIC SUPPLY

Note: THIS APPLIANCE MUST BE EARTHED.

- 6.1 All electrical wiring must be carried out by a qualified electrician in accordance with current I.E.E. Regulations and any Local Regulations that may apply. The 230v - 50Hz electrical supply to the unit and auxiliary controls must be fused by a double pole switch with a contact separation of at least 3mm in both poles and shuttered socket (both complying with the requirements of BS 1363) adjacent to the boiler.

7. WATER SYSTEMS

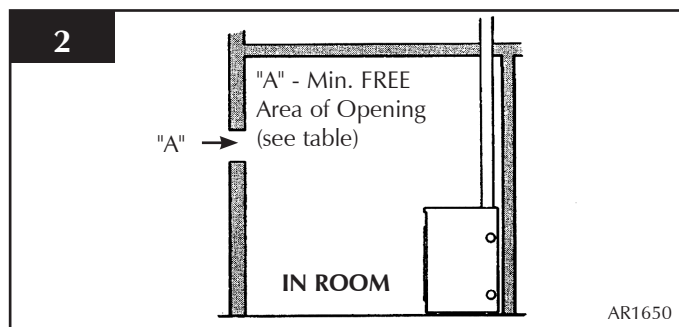
- 7.1 The appliance is suitable for fully pumped open vent & sealed systems only and the installation must comply with the requirements of BS 6798 and BS 5449. Fit a drain off cock in the lowest part of the system. Where the boiler is also to be used for providing domestic hot water, a double feed indirect cylinder to BS 1566 Part must be used. Flush out the system to remove any swarf or residues before fitting the circulating pump

Note: Where the boiler is installed on a gravity type system ensure its high efficiency is considered alongside the gravitational flow. Failure may result in a temperature build-up within the boiler causing noisy operation.

8. COMBUSTION AIR

- 8.1 Adequate supply of combustion air is essential for the efficient and safe operation of the appliance.
- 8.2 The air opening should be positioned where it causes the least draught to the house occupants and is not liable to be accidentally blocked.
- 8.3 British Standard Code of Practice BS 5440 Part 2, requires a permanent air inlet opening of 5cm² per kW above 7kW Net input. See below for the required ventilation for each model.

9. AIR SUPPLY AND VENTILATION



Model	Minimum FREE Area opening "A"
60	166 cm ² (15 in ²)
80	198 cm ² (19.5 in ²)
100	230 cm ² (24.5 in ²)
120	262 cm ² (30 in ²)

10. EXTRACTOR FAN

- 10.1 The combustion performance of the appliance must not be affected when the kitchen's extractor fan is running and all doors and windows are closed. A flue gas check on the CO₂ % and smoke number should be carried out.

INSTALLATION INSTRUCTIONS

1. GENERAL

- 1.1 This appliance has been designed to conform to European Directive/Standards BED 92/42 EEC LVD EN 60335-1 EMC 89/336/EEC
- 1.2 The Redfyre is supplied suitably equipped for connection to a conventional chimney.
- 1.3 The cooker has two independent matched premix gas burners which are exceptionally quiet in operation. One heats the cooker and the other the central heating and are controlled via thermostats with the cooker being controlled by an electronic programmer within the unit.
- 1.4 The central heating boiler has been designed for use on open vent or sealed systems. If it is to be used on a sealed water system up to a maximum working pressure of 3bar, additional safety devices are required.
- 1.5 A flow and return socket is provided to facilitate connection to the heating/hot water system.
- 1.6 Because of the high efficiency of this range of boilers, it is recommended they are fitted on a fully pumped system.
- 1.7 All servicing can be carried out from the front and top of the appliance. This allows the cooker to be fitted between kitchen units. The front mounted flue-cover permits easy access for the removal of the flue baffles and cleaning of heating surfaces.
- 1.8 The boiler is fully automatic in operation and incorporates all the necessary safety controls to ensure safe and reliable operation.
- 1.9 The cooker is suitable for use on natural gas only and must be connected to a conventional flue.

The person(s) who installs this appliance, commissions, services or carries out any remedial work, i.e. electrical fault finding, must have suitable engineering qualifications.

2. REGULATIONS

- 2.1 Installation of the appliance must comply with the following British Standards and Regulations:
 - BS 5449 – Force Circulation Hot Water Central Heating Systems.
 - The Building Regulations
 - Part 'J' (England and Wales)
 - Part 'F' Section 111 (Scotland)
 - Part 'L' (Northern Ireland)
 - Current I.E.E. Regulations
 - Local Water Undertakings By-laws
 - BS 5440 Pts 1 x 2
 - Current Gas Safe best practice guidelines

3. HEALTH & SAFETY AT WORK ACT

- 3.1 The installer should be aware of his responsibilities under the Act and provide, where necessary, appropriate protection for persons carrying out the installation.
- 3.2 In the interest of safety, the cooker should be installed and commissioned by a competent engineer, preferably OFTEC trained and registered.
- 3.3 This appliance is heavy and care must be taken when installing.

HEALTH & SAFETY INFORMATION FOR THE INSTALLER AND SERVICE ENGINEERS

- 3.4 Under the Consumer Protection Act 1987 and the Health & Safety at Work Act 1974, it is a requirement to provide information on substances hazardous to health (COSHH Regulations 1988).
- 3.5 The Company takes every reasonable care to ensure these products are designed and constructed to meet these general safety requirements, when properly used and installed.
- 3.6 To fulfil this requirement, products are comprehensively tested and examined before despatch.
- 3.7 When working on the appliance, it is the Users/Engineers responsibility to ensure that any necessary personal protective clothing or equipment is worn appropriate to parts that could be considered as being hazardous to health and safety.
- 3.8 This appliance may contain some of the items below.

INSULATION AND SEALS

- 3.9 Glass Rope, Mineral Wool, Insulation Pads, Ceramic Fibre, Glass Insulation:
 - May be harmful if inhaled
 - May be irritating to the skin, eyes, nose or throatWhen handling, avoid inhalation and contact with eyes. Use (disposable) gloves, face masks and eye protection.

After handling:
Wash hands and other exposed parts.

When disposing of these products:
Reduce dust with water spray and ensure parts are securely wrapped.

Full Material Safety Data Sheets are available from Gazco IF required.

GLUES, SEALANTS & PAINT

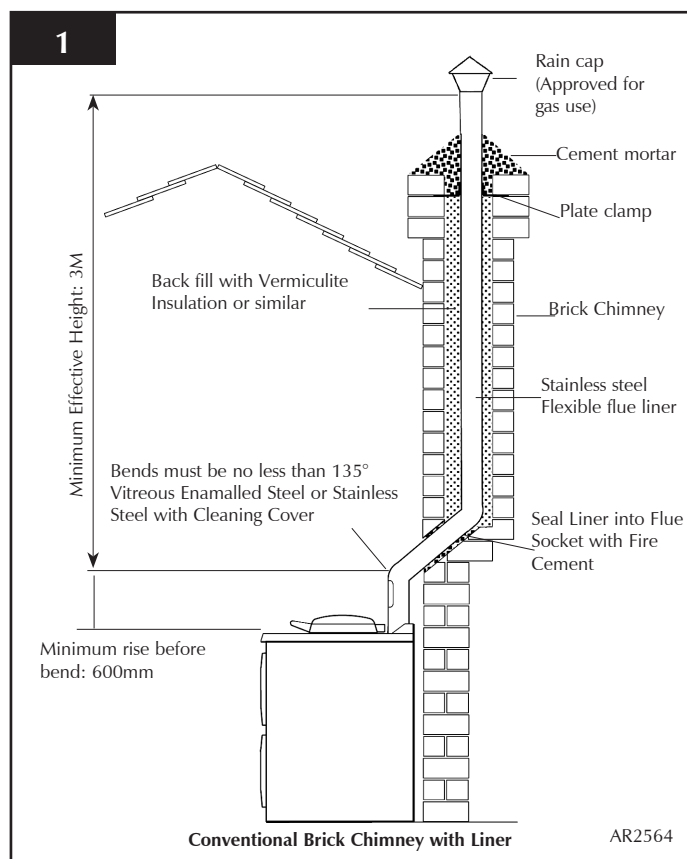
- 3.10 Glues, Sealants and Paints are used in the product and present no known hazards when used in the manner for which they are intended.

INSTALLATION INSTRUCTIONS

FLUE SYSTEMS

1. GENERAL

To evacuate the products of combustion safely and thoroughly, the cooker must have an efficient flue system. Reference should also be made to BS 5410 Part 1 if further information is required on conventional chimneys.



2. FLUE PIPES

- 2.1 These should only be used to connect the cooker to a suitable chimney. Any flue type must be kept clear of any combustible materials including any materials likely to be located near the installation by the householder. The minimum air gap clearance that must be maintained is 25mm (1").

Flue pipes may be constructed from the following materials: Sheet metal as described in BS 715 stainless steel flue pipe, cast iron flue pipe as described in BS 41, any flue pipe material described in the Building Regulations relating to flue pipes suitable for solid fuel and oil burning appliances. All flue pipes should be constructed such that any condensation is retained by the flue pipe system. Systems with spigot and socket joints must be fitted with the sockets uppermost.

3. LINING OF EXISTING CHIMNEYS

- 3.1 Before using any existing chimney, it is vital to check that the chimney is safe. Oversized, leaking or rough chimneys can be inefficient and dangerous.
- 3.2 It is vital the chimney is swept and thoroughly cleaned before installing a liner and all previous combustion deposits removed to avoid potential to damage the liner.
- 3.3 There are two basic existing types of chimney re-lining product suitable for use with gas appliances:
1. Flexible Stainless Steel
- 3.4 Recommended where any existing chimney is to be used. Flexible stainless steel liners must be certified to BS 715. When replacing an existing appliance connected to a chimney lined with a metallic liner, the liner should be replaced.
2. Rigid Stainless Steel Flue Pipe
- 3.5 Type 316 or 304 stainless steel, not less than 0.55mm thick.

4. TERMINATION

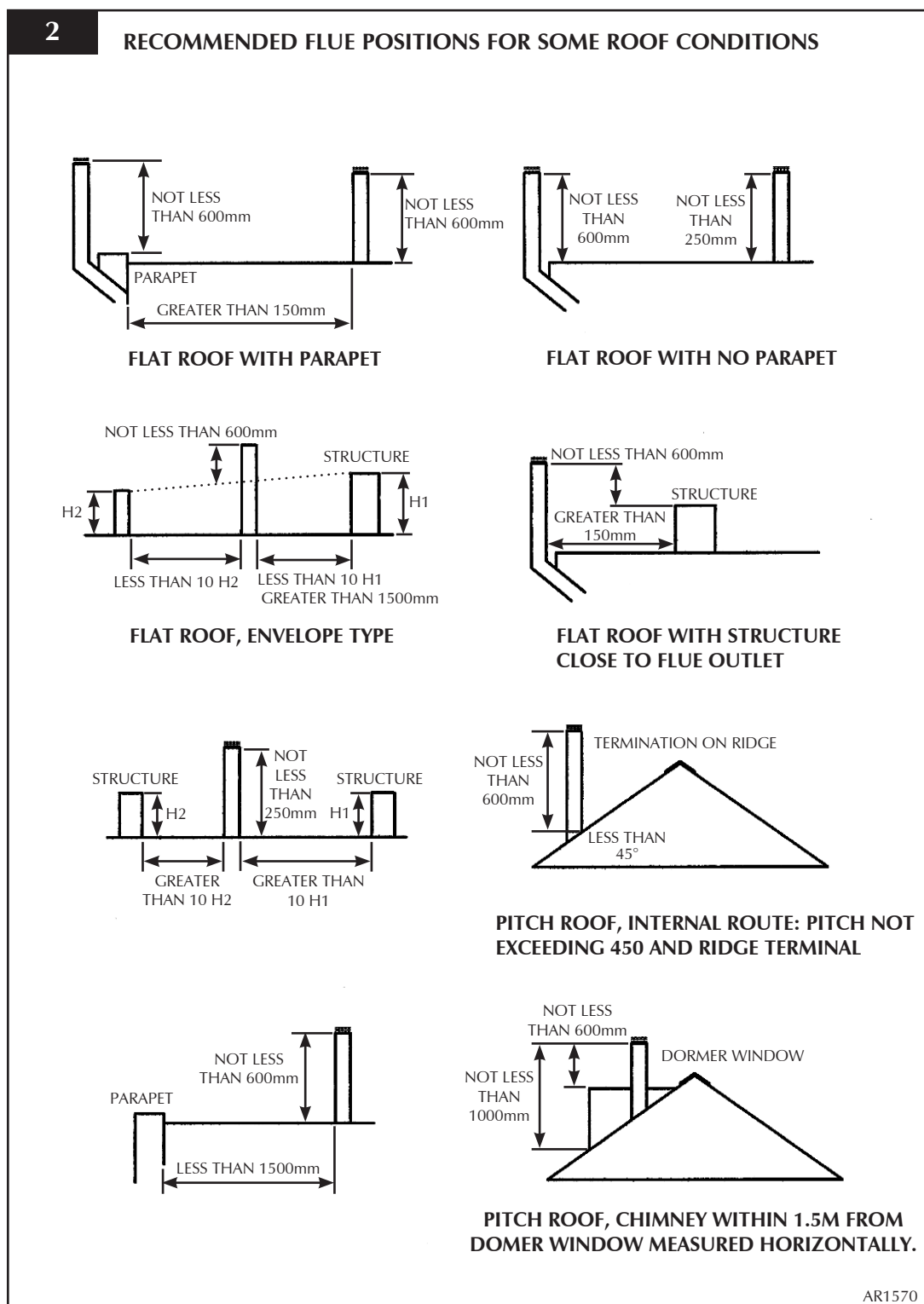
- 4.1 It is very important to fit a terminal which is free flowing. Experience has shown that GC1 and similar construction terminals can prove too restrictive and cause operational problems such as cutting out in use.
- 4.1 We would recommend the use of a suitably approved anti-down draught cowl.

INSTALLATION INSTRUCTIONS

FLUE SYSTEMS

5. ROOF TYPES

The following are some of the recommended flue positions.



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INSTALLATION INSTRUCTIONS

WATER SYSTEMS

1. GENERAL

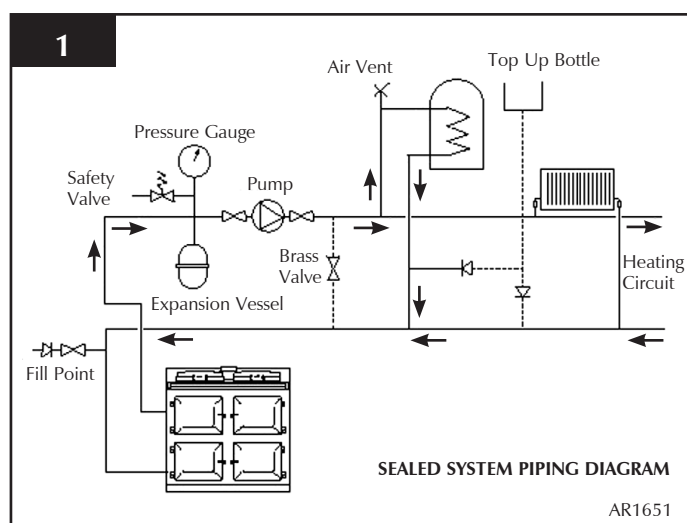
- 1.1 The appliance is suitable for fully pumped open vent & sealed systems only and the installation must comply with the requirements of BS 6798 and BS 5449. Fit a drain off cock in the lowest part of the system. Where the boiler is also to be used for providing domestic hot water, a double feed indirect cylinder to BS 1566 Part must be used.
- 1.2 An adjustable bypass valve must be fitted between the flow and return and it must be adjusted so that the return temperature to the boiler is always above 60°C. After setting this, the bypass should then be fixed. This increases the life of the heat exchanger and failure to fit a correctly adjusted bypass can invalidate the warranty.
- 1.3 Flush out the system to remove any swarf or residues before fitting the circulating pump.

2. SYSTEM CONTROLS

- 2.1 Operation of the system under control of the boiler thermostat alone does not produce the optimum efficiency. The heating system should include a control system. This should have at least a single channel programmer or thermostatic radiator valves (TRV). In the case of the boiler being used for central heating and domestic hot water, a 2-channel programmer should be used.

3. SEALED SYSTEMS

- 3.1 The appliance is suitable for connection to a sealed system and the installer needs to fit an expansion vessel of the correct size, pressure relief valve, pressure gauge, pump and automatic air vents and provide for filling. See diagram 1 for schematic piping diagram.



4. EXPANSION VESSEL REQUIREMENTS

Vessel Charge & Initial System Pressure	Bar	0.5	1	1.5
	psi	7.31	4.5	21.8
To calculate the expansion vessel required, multiply the total system volume (including 38L for boiler) by the following factor		0.08	0.11	21.8

Note: If the system pressure gauge indicates 2.6 bar or higher with the appliance at maximum temperature and all radiators in circulation, an additional vessel is required.

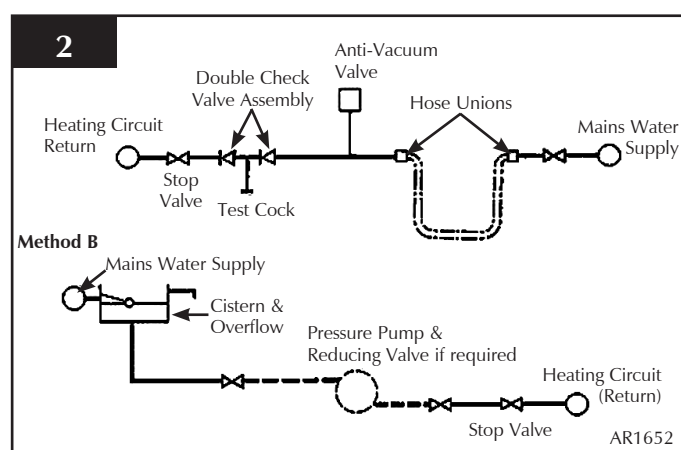
Total water content of boiler is 38 litres.

5. SYSTEM FILLING

- 5.1 A sealed system must only be filled by a competent person using one of the approved methods shown in diagram 2. The system should incorporate the connections appropriate to one of these methods. It is recommended that a suitable inhibitor is added to the system after the final hot flushing.

Method of Makeup:

- 5.2 Water loss from the system should be replaced from a makeup vessel connected to the system through a non return valve on the return side of the heating circuit. This vessel should be higher than the top of the system.

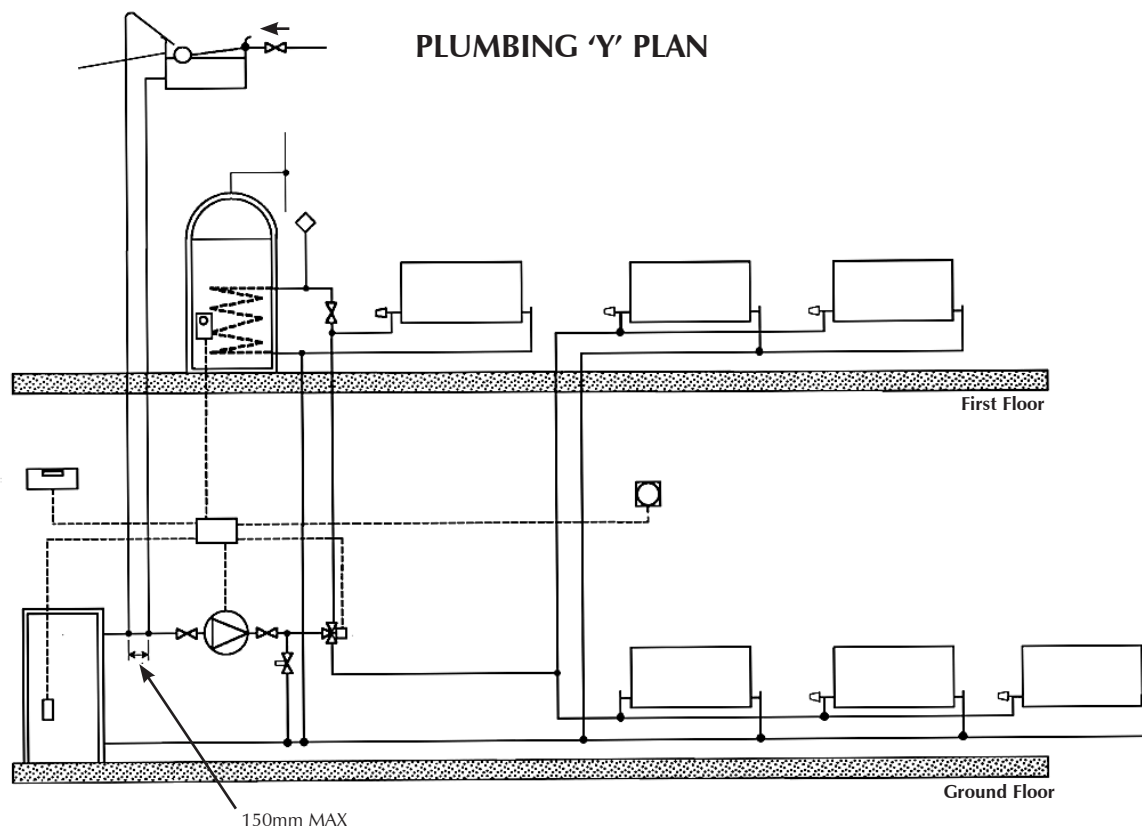


- 5.3 Alternatively provision can be made by pre pressurisation of the system via a temporary hose connection and through a double check valve (non return) and stop valve.

INSTALLATION INSTRUCTIONS

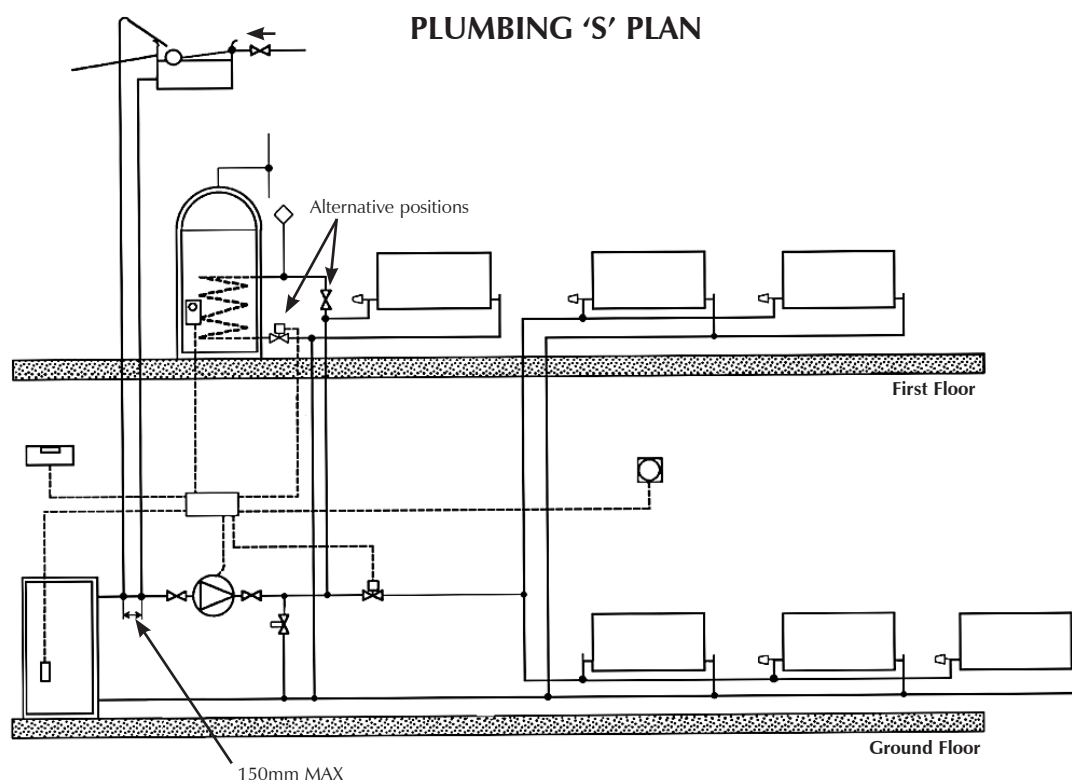
OPEN SYSTEMS

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AR1630

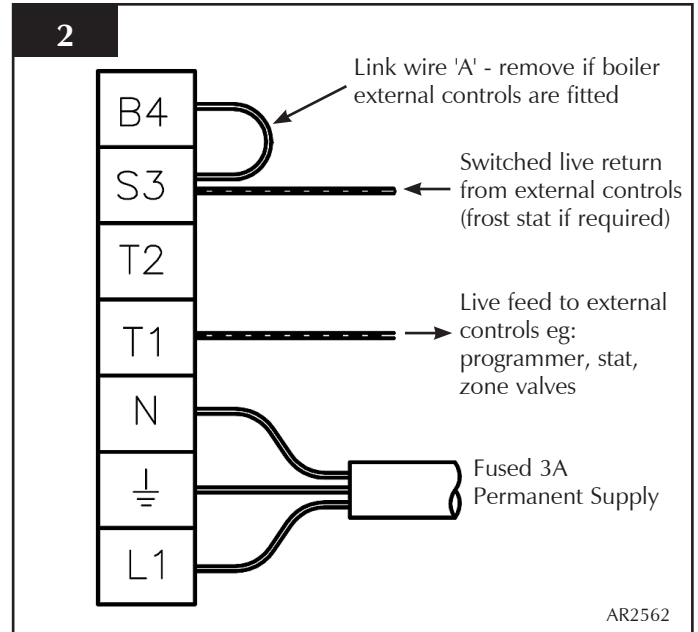
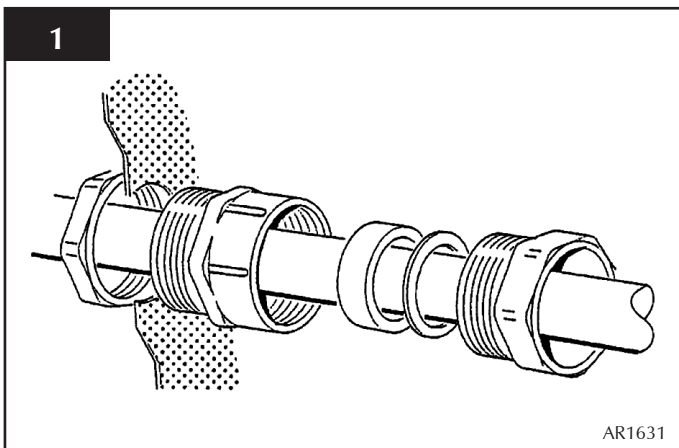
INSTALLATION INSTRUCTIONS

ELECTRICAL SYSTEMS

1. ELECTRICITY SUPPLY

Note: THIS APPLIANCE MUST BE EARTHED

- 1.1 All electrical wiring must be carried out by a qualified electrician in accordance with current IEE Regulations and any Local Regulations that may apply. The 230v - 50Hz electrical supply to the unit and auxiliary controls must be fused by a double pole switch with a contact separation of at least 3mm in both poles and shuttered socket (both complying with the requirements of BS 1363) adjacent to the boiler. Fuse supply at 3 amp. The minimum requirement for the power supply cable should be a PVC sheathed flexible cord, at least 0.75mm² (24x0.2mm) (code designation H05 VV-F or H05 VVH2-F) as specified in table 16 of BS 6500. The appliance **MUST** be earthed and the electrical supply earth cable must be of a greater length than the current carrying conductor cables (i.e. live and neutral supply cables). All external cables entering the appliance must be secured in position by strain relief bushes supplied (see diagram on how to secure cable below). Terminal connections are also provided in the control panel for ancillary controls. See wiring diagram 2.



This appliance incorporates a safety device designed to prevent the appliance from operating if the flue is blocked.

It is important that the live supply to auxiliary control (programs, thermostats etc) is taken from terminal T1 on the appliance, following the circuit diagrams in this booklet.

Failure to do so would result in this safety device being bypassed.

3

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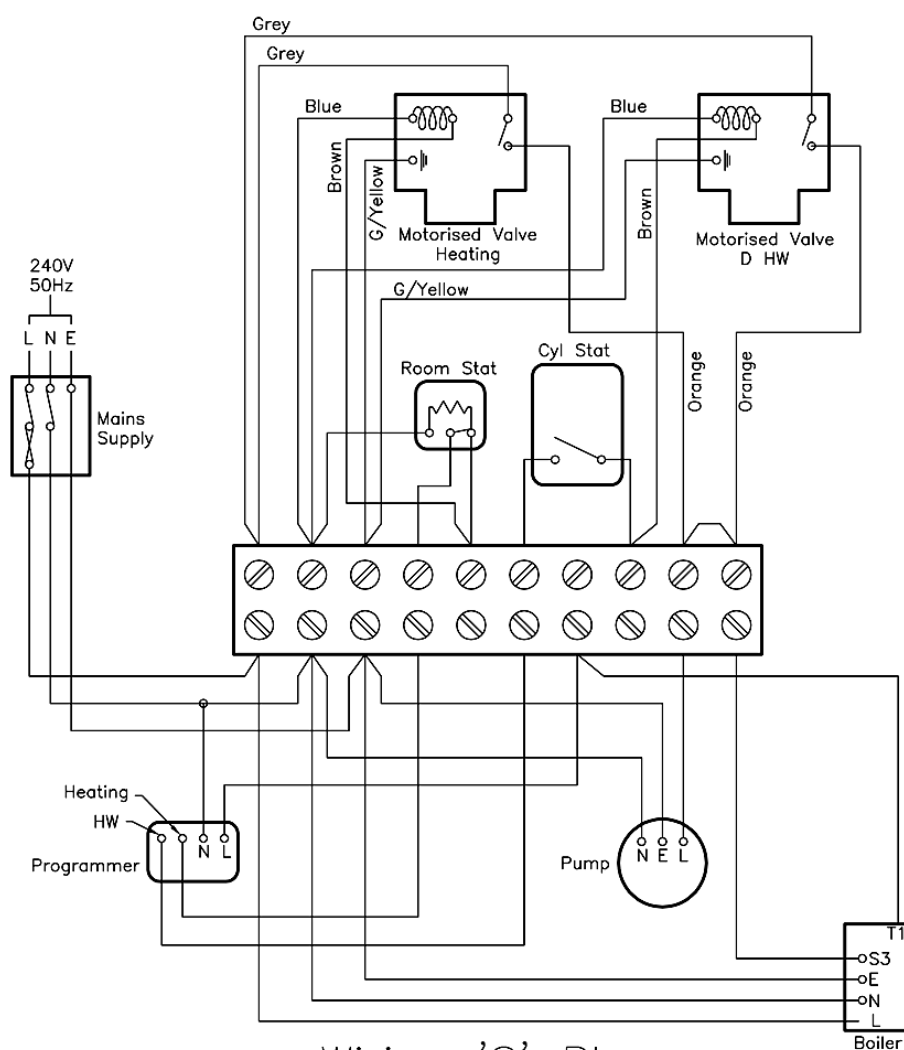
INSTALLATION INSTRUCTIONS

WIRING 'S' PLAN

- 1.1 Independent control of space and water heating circulation in a fully pumped system with two motorised valves (see System Diagram below).
- 1.2 This scheme provides the optimum degree of control over a fully pumped installation. Separate two-port motorised valves are fitted in the space heating and water heating circuits controlled by room and cylinder thermostats respectively.

- 1.3 It operates when the room or the cylinder thermostats call for heat, and open the motorised valve controlling their circuit. The auxiliary switch in the valve switches on both pump and boiler. When either thermostat is satisfied, its motors shut and the auxiliary ceases to provide power for the pump and boiler. When thermostats are satisfied, both valves are closed and the pump and boiler cannot run because their auxiliary switches have opened.

4



Wiring 'S' Plan

AR2572

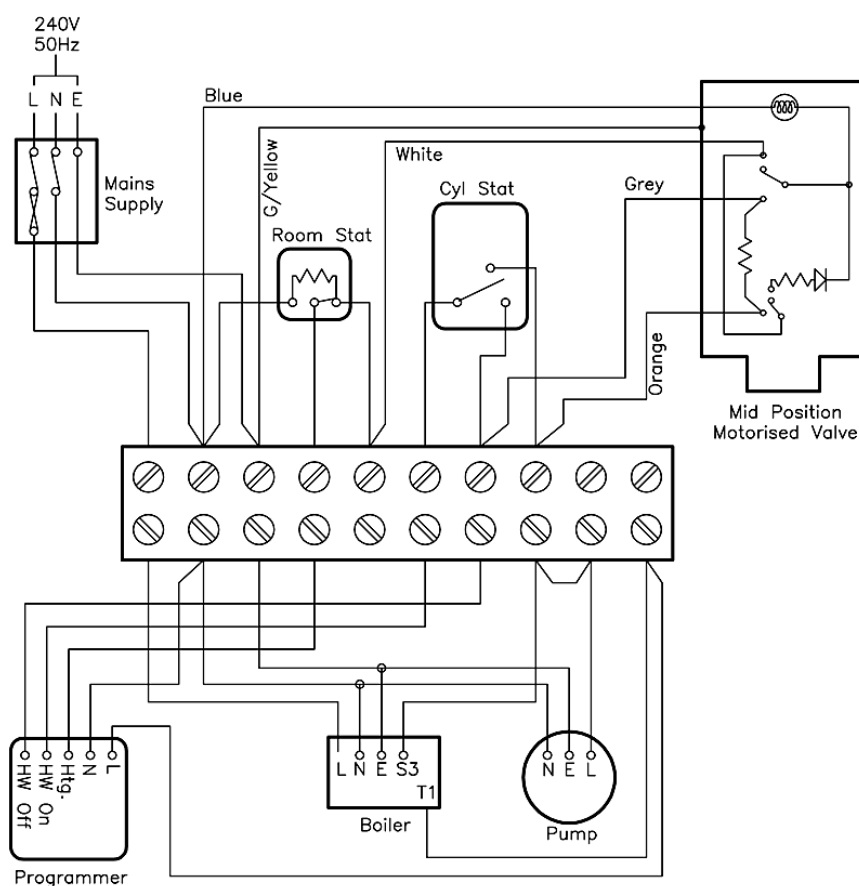
INSTALLATION INSTRUCTIONS

WIRING 'Y' PLAN

- 1.1 Independent control of space and water heating circulation in a fully pumped system with one motorised diverting valve (See System Diagram below).
- 1.2 This scheme provides control over a fully pumped installation by means of a single motorised diverting valve. This provides flow to the space heating circuit or to the water heating circuit. The valve also has a mid position to enable circulating water to flow to both circuits simultaneously. Control is via room and cylinder thermostats.

- 1.3 The method of operation is that when the room thermostat calls for heat, the valve motors over so that the port serving the space heating circuit is opened and the pump and boiler are both switched on. If the cylinder thermostat calls for heat, the valve motors over to open its domestic hot water port only, and again to switch on the pump and boiler. If both thermostats are calling for heat, the valve motors to open both of its ports and to switch on both pump and boiler. When both thermostats are satisfied, the valve motors to the closed position and the pump and boiler are switched off.

5



Wiring 'Y' Plan

AR2573

SERVICING

To maintain the appliances high thermal efficiency and reliable operation, it must be serviced annually which is also a requirement of the appliances guarantee. If the boiler is used to provide central heating and hot water, we recommend that the appliance's annual service is carried out just before the start of the heating season.

NOTE: THE PERSON(S) WHO SERVICES OR CARRIES OUT ANY REMEDIAL WORK, i.e. ELECTRICAL FAULT FINDING, MUST BE OFTEC APPROVED.

IMPORTANT: ISOLATE ELECTRICAL SUPPLY TO THE APPLIANCE BEFORE CARRYING OUT ANY WORK

1. REPLACEMENT OF PARTS

- 1.1 Replacement of parts must only be carried out by a competent person e.g. a Gas Safe registered engineer.
- 1.2 Before commencing the replacement of any components:

**ISOLATE THE ELECTRICITY SUPPLY TO THE APPLIANCE
ISOLATE THE GAS SUPPLY TO THE APPLIANCE BY
TURNING OFF AT THE GAS SERVICE VALVE (ACCESSIBLE
BY REMOVING THE LOWER PANEL BEHIND THE
LOWER LH DOOR).**

Remove the two lower pozi screws and washers.

Remove the two screws at top of this panel only (there is no need to remove the smaller top panel which contains the Blocked flue device).

2. BOILER BURNER REMOVAL

- 2.1 Remove the lower panel as detailed in Section 1.

Disconnect the burner 6 way plug from the lower support bracket.

Disconnect the ignition lead and ionisation lead from the control box.
- 2.2 The boiler burner is connected to the solid supply pipe: Undo the connection and retain the sealing washer, see Diagram 1.
Replace if necessary.

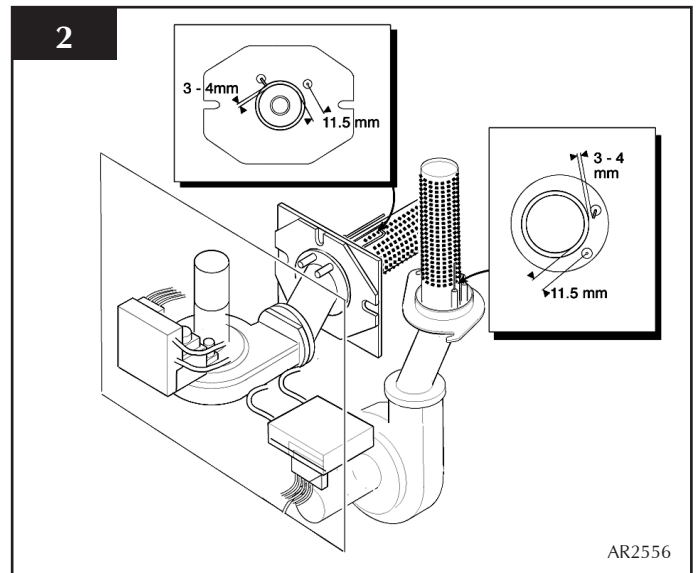
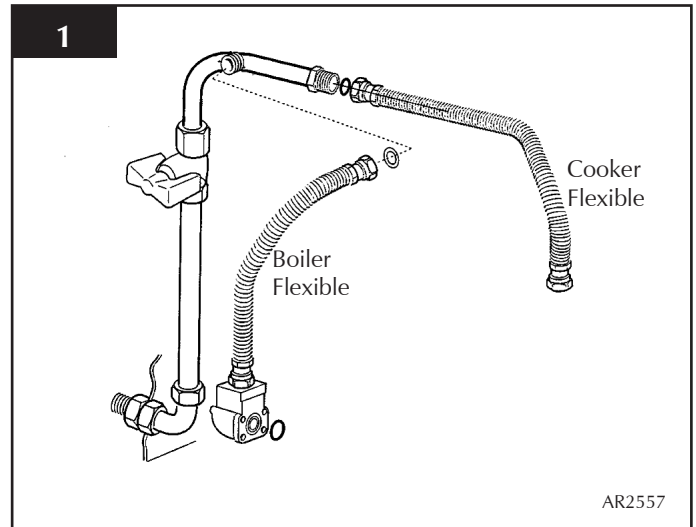
Undo the two flange nuts (13mm) on either side of the burner mounting flange and withdraw burner from combustion chamber.

Check condition of gasket and replace if necessary.

Remove the ignition control box by unscrewing the single retaining screw.

Fit to the new burner assembly refit both ignition & Ionisation probe lead, see Diagram 2.

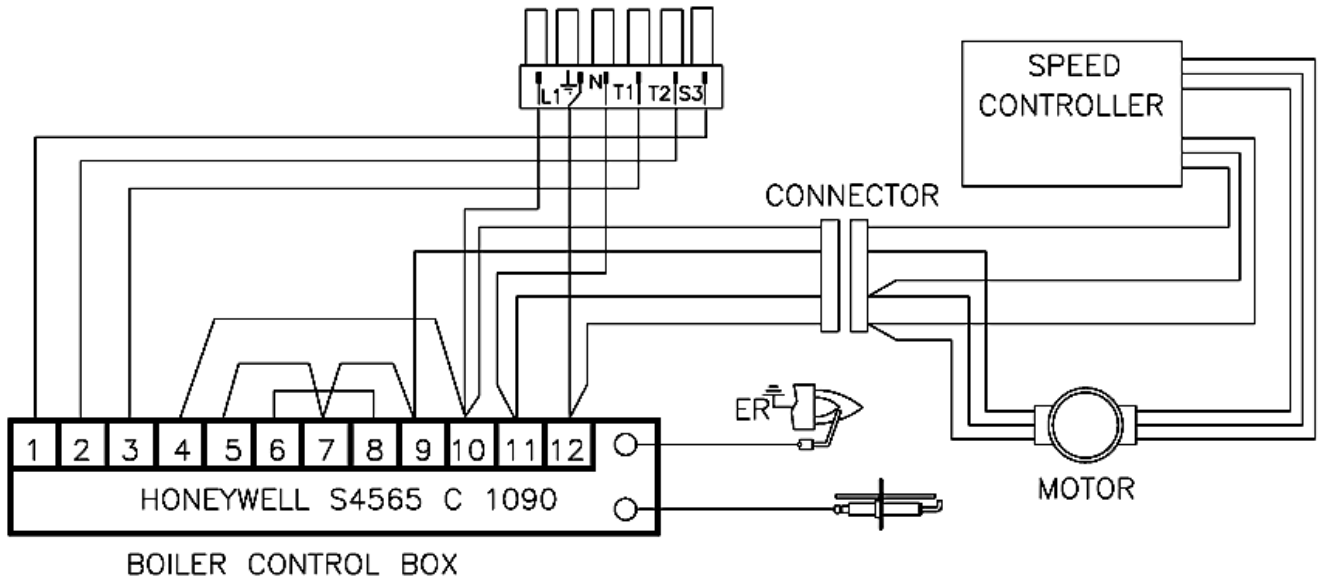
Fit the new burner ensuring it is the direct replacement and reassemble in reverse order



NOTE: The 120,000 BTU burner has different wiring and speed control box.

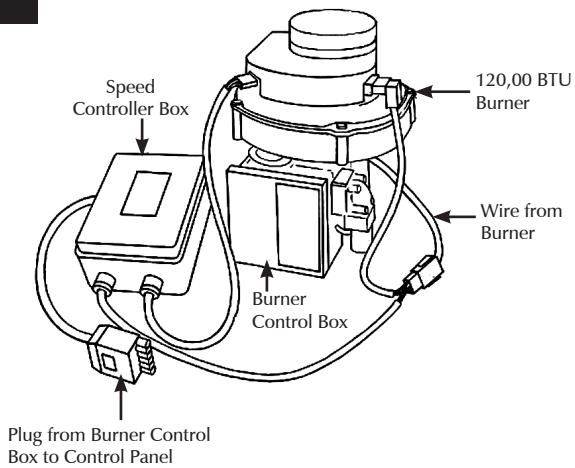
SERVICING 120,000 BTU BOILER BURNER

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AR2559

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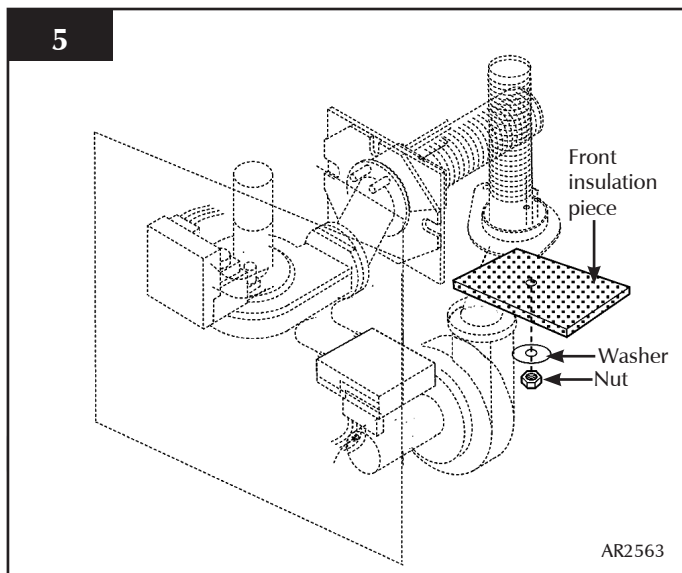


AR1761

SERVICING

3. COOKER BURNER

- 3.1 To remove the cooker burner, the boiler burner needs to be removed. Follow Section 2 - *Boiler Burner Removal*.
- 3.2 Disconnect the cooker burner 6 way plug, the ignition lead, and the ionisation lead from the control box.
- 3.3 The burner is connected to the gas supply pipe via a connector. This has a sealing washer which needs to be undone.
Retain the washer or replace if necessary. See Diagram 1, Section 2 - *Boiler Burner Removal*.
- 3.4 Remove the Front Insulation piece from the underside of the cooker Combustion Chamber.
Undo the nut and washer. See Diagram 5.



Access to the securing nuts is then possible.

- 3.5 The cooker burner is fixed to the cooker by a bayonet type flange:
Undo the two flange nuts (13mm) and whilst supporting the burner rotate the burner clockwise.
Gently lower the burner out of the chamber.
- 3.6 Remove the ignition control box by unscrewing the single retaining screw and fit to the new burner assembly.

Refit both ignition & Ionisation probe leads.
- 3.7 Fit the new burner, ensuring it is the direct replacement and reassemble in reverse order.
Ensure that the front insulation piece shown in Diagram 5 is replaced and is in good condition. Failure to fit this insulation could cause the ignition box to melt.

4. IGNITION & IONISATION ELECTRODES

Ignition Electrode Removal

- 4.1 Remove the burners as described in the previous sections.
- 4.2 Disconnect the HT leads from the ignition control box and electrode (push fit).
Remove the single retaining screws and remove the electrode.
- 4.3 Fit replacement and check electrode to burner head gap is 3mm.
- 4.4 Refit in reverse order.

Ionisation Electrode Removal

- 4.5 Remove the burners as described in the previous sections.
- 4.6 Disconnect the white lead from the ignition control box. The lead is permanently attached to the electrode and is replaced at the same time.
- 4.7 Undo the single retaining screw and carefully remove the electrode .
- 4.8 Fit replacement and check electrode to burner gap is 3mm.
- 4.9 Refit parts in reverse order.

5. BOILER FLUE WAYS

- 5.1 The boiler access door is behind the Upper Timing Panel. Carefully remove the panel by removing the fixing screws. Disconnect the electrical plug.
- 5.2 Remove the boiler access door by unscrewing the 4 nuts, check seal and replace if necessary.
- 5.3 Remove the baffles in order - noting the orientation as shown in Baffle Arrangements under the next section: Boiler Heat Exchanger.
- 5.4 Brush and remove all deposits from the inner surface of the heat exchanger and clean baffles if necessary.
- 5.5 Remove flue deposits from the chamber using a vacuum cleaner.
- 5.6 Replace baffles in the correct order.

SERVICING

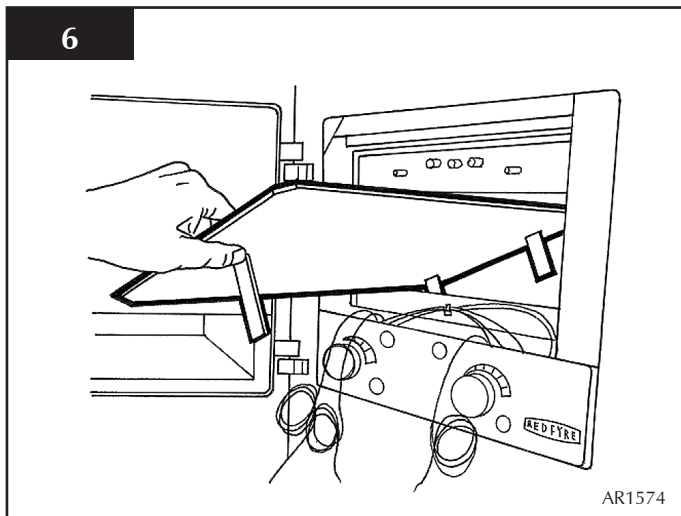
BOILER HEAT EXCHANGER

Reassembly of the Baffles

- 5.7 Diagram 6 shows the first metal baffle being inserted at the correct angle to start the build.

NOTE: You must tilt the baffle to insert it, keeping the metal legs towards the floor of the cooker.

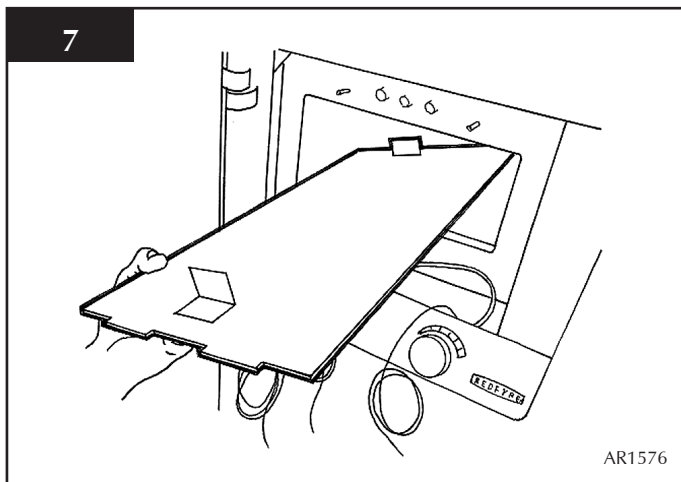
The end of the baffle with two legs is inserted into the cooker first.



Second Metal Baffle

- 5.8 Insert the second metal baffle on top of the ceramic baffle with lugs uppermost, see Diagram 7.

NOTE: Ensure the uneven edge of the metal baffle is towards the front.



Final Metal Baffle

- 5.9 Insert the last metal baffle on top of the second ceramic baffle to complete the assembly, See Diagram 8.
NOTE: The uneven edge of this metal baffle is now positioned towards the rear of the cooker.

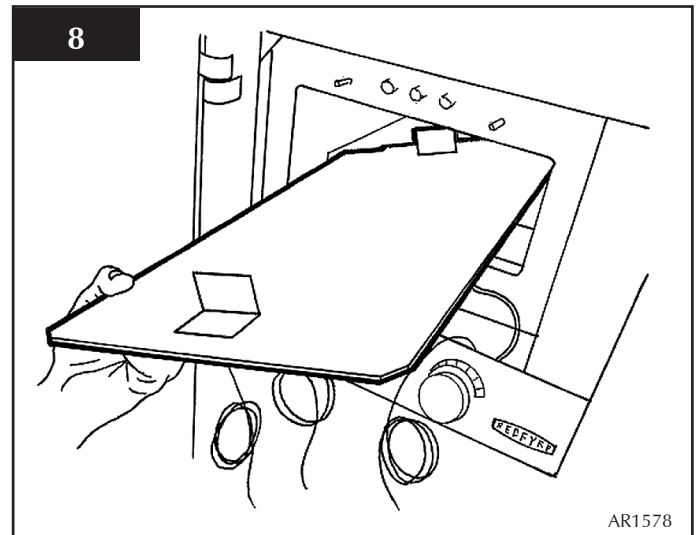
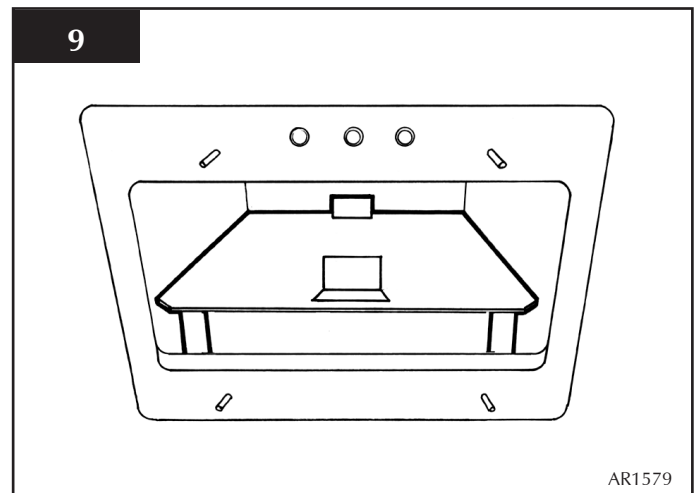


Diagram 9 shows the completed baffle assembly.



- 5.10 Replace boiler access door ensuring that the seal makes a gas tight seal

DO NOT FIT THE BOILER BURNER UNTIL THE COOKER BURNER HAS BEEN FITTED

SERVICING

6. COOKER FLUE WAYS

Removal and Replacement of Top for Servicing

- 6.1 To service the combustion chamber or reach the access panel to the flue ways, you need to carefully:

Remove the cast iron hot plate and the enamel top plate.

6.2 **Hotplate:**

Use an Allen key to unscrew the 4 countersunk screws and remove the two dummy screws that fix handles at each end of the hotplate, see Diagram 10.



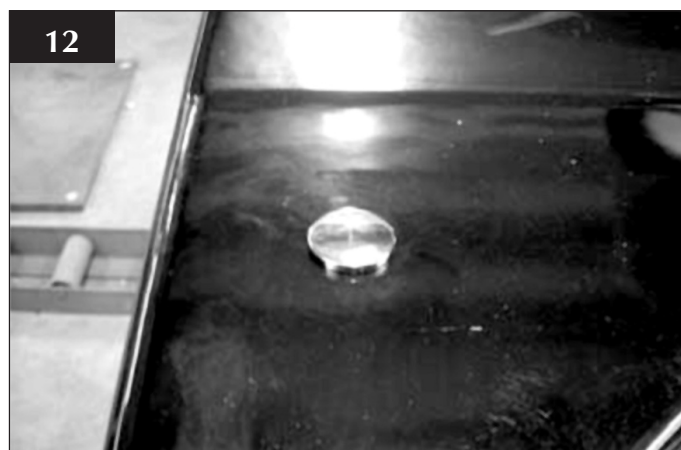
Fit carrying handles to the hotplate and lift the plate clear of the cooker, see Diagram 11.



WARNING: THE HOTPLATE IS VERY HEAVY AND IT MAY TAKE TWO PEOPLE TO LIFT OUT – CARE MUST BE TAKEN NOT TO DAMAGE THE BLACK VITREOUS ENAMEL SURROUND.

6.3 **Top Plate**

Loosen the M8 nuts under the left and right front edges of the cooker and remove the chrome caps from the left and right rear fixings, see Diagram 12.



Unscrew these two rear fixings.

Remove the top plate washer at centre back of cooker, see Diagram 13.



Lift the top plate clear of the cooker.

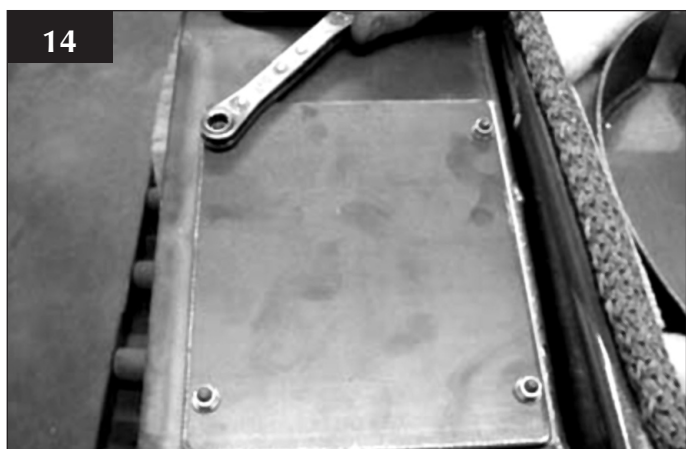
Without the hotplate and top plate the flue way and combustion chambers can be accessed for inspection and cleaning.

6.4 **Inspection of Flue Ways**

At the back left and right of the cooker there are two service hatches.

Unscrew the nuts on the access panel, see Diagram 14.

SERVICING



Carefully remove each washer and replace gasket if necessary.

Inspect and clean the interior chamber.

6.5 Inspection of Combustion Chamber

Remove bolt by lifting it out, see Diagram 15.



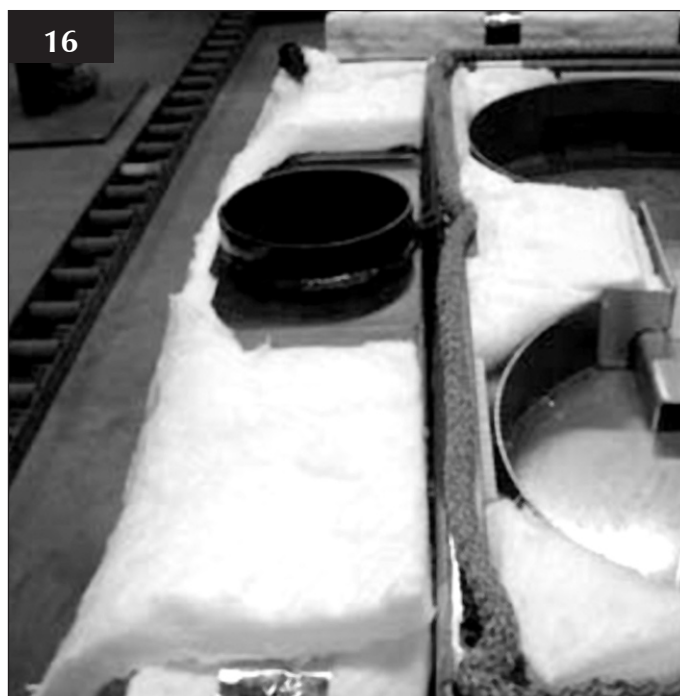
Slide cover clear and inspect the interior chamber. Clean if necessary.

6.6 Re-assembling the Top Plate after Servicing

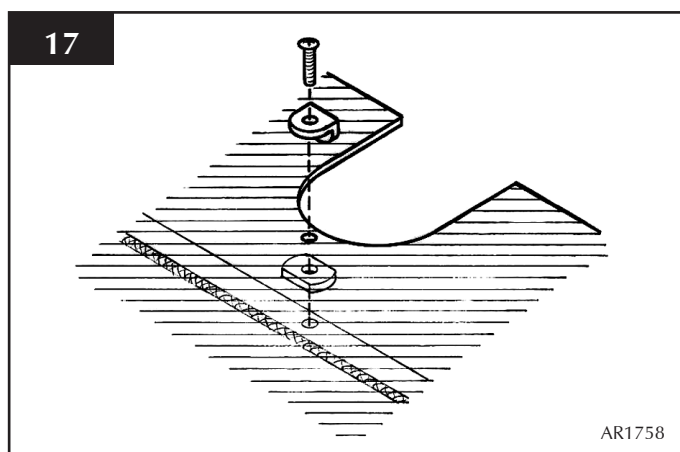
IT IS IMPORTANT TO PUT A SPACER BETWEEN THE COOKER TOP PLATE AND THE FOLDED CENTRE WASHER AT THE CENTRE REAR OF THE COOKER TOP WHEN SERVICING OR REPLACING PARTS.

Refit the access panel covers over both flue way service hatches ensuring the washers are used.

Refit the cover over the combustion chamber and restore the insulation on the right and left side of the rear manifold.



Rest the spacer over the fixing hole for the centre washer., see Diagram 17. (It can be difficult to do this once the top plate is in place)



Lift the top plate back onto the cooker.

Catch the threads on the right and left rear fixings and fit the centre washer with a gasket.

MAKE SURE THE FIBRE WASHER SITS UNDER THE FOLDED CENTRE WASHER AT THIS POINT.

Catch the thread on the bolt fixing.

Tighten the M8 nuts and grub screws on the front of the top plate ensuring washers are correctly seated.

Tighten the right and left rear fixings down and replace the chrome caps.

SERVICING

Tighten the bolt fixing.

6.7 Refitting the Hot Plate

WARNING: THE HOTPLATE IS VERY HEAVY AND IT MAY TAKE TWO PEOPLE TO LIFT OUT – CARE MUST BE TAKEN NOT TO DAMAGE THE BLACK VITREOUS ENAMEL SURROUND.

Use the carrying handles to move the hotplate back into position.

Refit the four fixings into the cast iron hotplate and through the lugs of the top plate beneath.

Use a suitable high temperature lubricant to ensure these four fixings do not seize.

Refit the dummy screws into the holes where the handles locate.

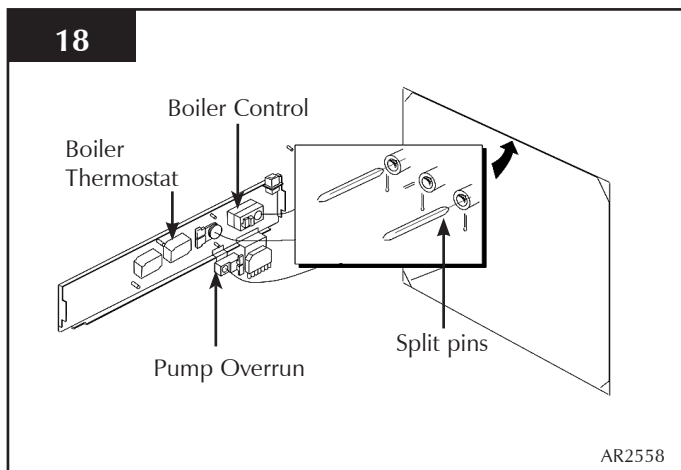
The hotplate should be slightly proud of the top plate.

Rest a two-pence piece coin on the enamel surface. The hotplate surface should be level with the surface of the coin.

Ensure that a gas tight seal is achieved around the hotplate. Tighten as necessary.

7. BOILER THERMOSTATS

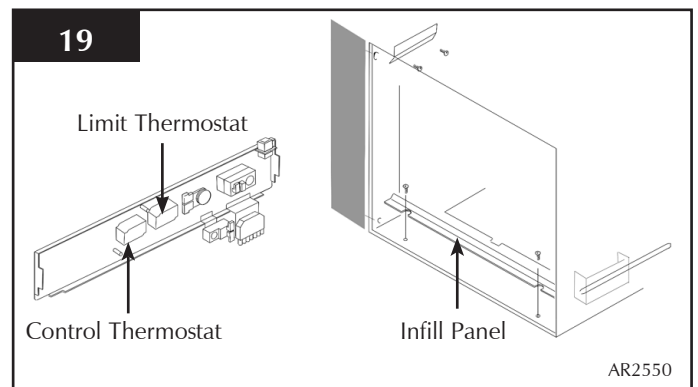
- 7.1 Take off the Upper Timing panel by removing the four screws and washers at the corners of the panel.
- 7.2 Supporting the panel ease forward and release the wiring loom by removing 6 way plug. Carefully put panel at one side.
- 7.3 Remove the panel below and unclip the 7 way plug from the control panel.
- 7.4 The Cooker Thermostat is located on the top panel, see Diagram 18.



- 7.6 Remove the heat shield from the control panel. Remove faulty thermostat. Removing knob and retaining screws if appropriate.
- 7.7 Replace in reverse order.

8. COOKER THERMOSTATS

- 8.1 Take off the Upper Timing panel by removing the four screws and washers at the corners of the panel.
- 8.2 Supporting the panel ease forward and release the wiring loom by removing 6 way plug. Carefully put panel at one side.
- 8.3 Remove the panel below and unclip the 7 way plug from the control panel.
- 8.4 The two cooker control thermostats are located in the top oven. The Control thermostat is located at the bottom RHS of the oven, the Limit thermostat is on the top LHS of the oven.



Control Thermostat

- 8.6 Remove the infill panel at the bottom front of the oven, remove the Thermostat from the clip and pull through insulation at side of oven.
- 8.7 Remove the two screws from the front that secure the Control knob and Thermostat.
- 8.8 Replace in reverse order ensure that the Thermostat is in the correct position and the capillary not kinked.

Cooker Limit Thermostat

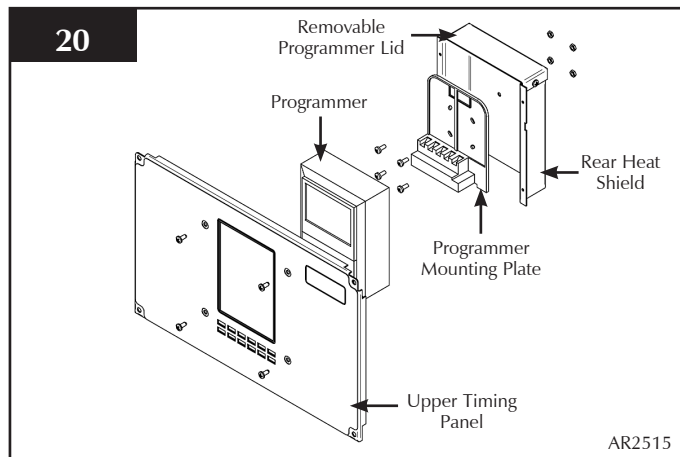
- 8.10 Remove the two securing bracket screws.
- 8.11 Pull the Thermostat through insulation at side of oven.
- 8.12 Remove the two screws from the front that secure the Limit knob and Thermostat.
- 8.13 Replace in reverse order ensuring that phial is in correct position and capillary not kinked.

SERVICING

9. COOKER TIMER

Removing the Timer

- 9.1 Remove the upper Timer retaining panel, (secured by four screws and washers at four corners of panel) see Diagram 20.

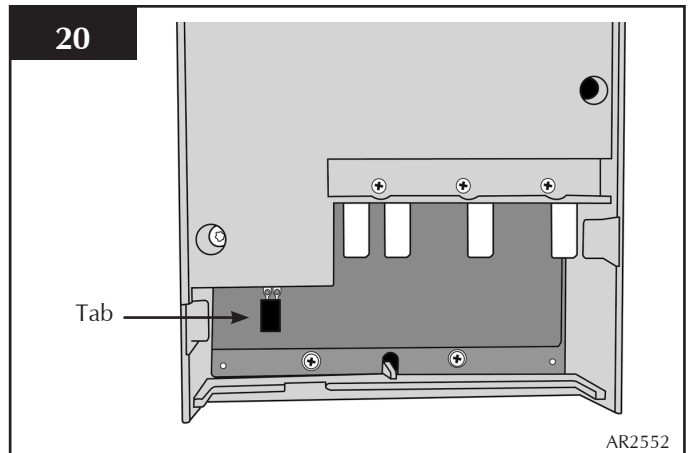


- 9.2 While supporting the panel, ease forward and release 6 way plug on the wiring loom (not shown on diagram).
- 9.3 Remove the Rear Heat Shield. This is held onto the Programmer Mounting Panel by 4 screws.
- 9.4 Holding the Rear Heat Shield unscrew the top two screws and take off the Removable Programmer Lid.
- 9.5 Pulling the Programmer forward and at the same time sliding upwards will disconnect the Programmer from the Mounting Panel.
- 9.5 Undo the 4 retaining bolts and nuts which will release the wall plate and electrics from the Rear Heat Shield.
- 9.6 Remove the wiring loom and record the wiring positions.
- 9.7 Replace in reverse order ensure heat shield large opening is at the top of the panel.
- 9.8 Reset the programmer to the current time and program to customer requirements.

Programming the Timer

- 9.9 Follow the above steps to remove and gain access to the Programmer.
- 9.10 On the back of the Programmer is a tab which allows the user to switch between either 7-day control (a different programme for each day of the week) or 5/2 day control (one set of programmes for weekdays and a different set for weekends), see Diagram 20.

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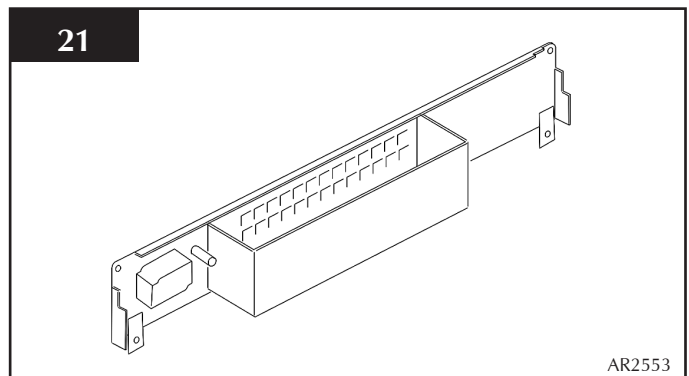


- 9.11 Leave the tab in place on the pins keeps the settings as the factory preset 7-day control. Removing the tab switches the control to the 5/2 day control.
- 9.12 See User Instructions Section 7, Cooker Program for detailed instructions on how to program the settings.

10. BLOCKED FLUE OVERHEAT THERMOSTAT

- 10.1 Remove the lower control panel and undo the 2 screws securing the smaller Blocked Flue Thermostat panel.
- 10.2 Remove the Thermostat retaining clip and release the Thermostat by removing the 2 screws.
- 10.3 Replace wires in line with wiring diagram.
- 10.4 Refit in reverse order ensuring thermostat phial is fitted correctly in the pocket.

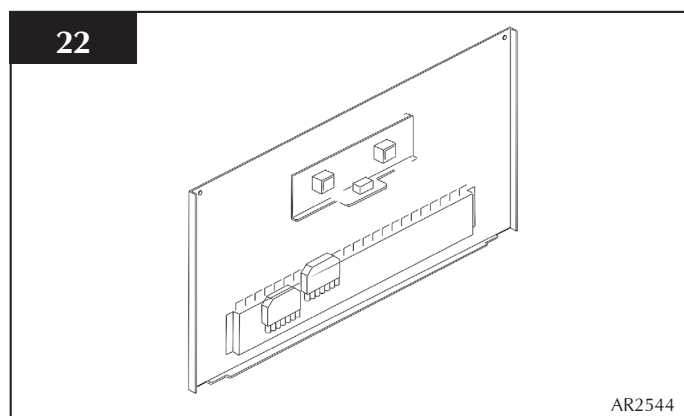
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SERVICING

11. BURNER RESET SWITCHES

- 11.1 Remove the lower control panel.
- 11.2 Disconnect the thermostat control panel 7 way plug and remove both boiler burner and cooker burner 6 way plugs from the panel.
- 11.3 Undo the two way central reset switch securing bracket bolts.
- 11.4 Remove electrical connections from switch.
- 11.5 Squeeze together switch retaining clips and release switch.
- 11.6 Refit new switch into bracket, refit electrical connections, ensure switch is correctly fitted.
- 11.7 Refit in reverse order.

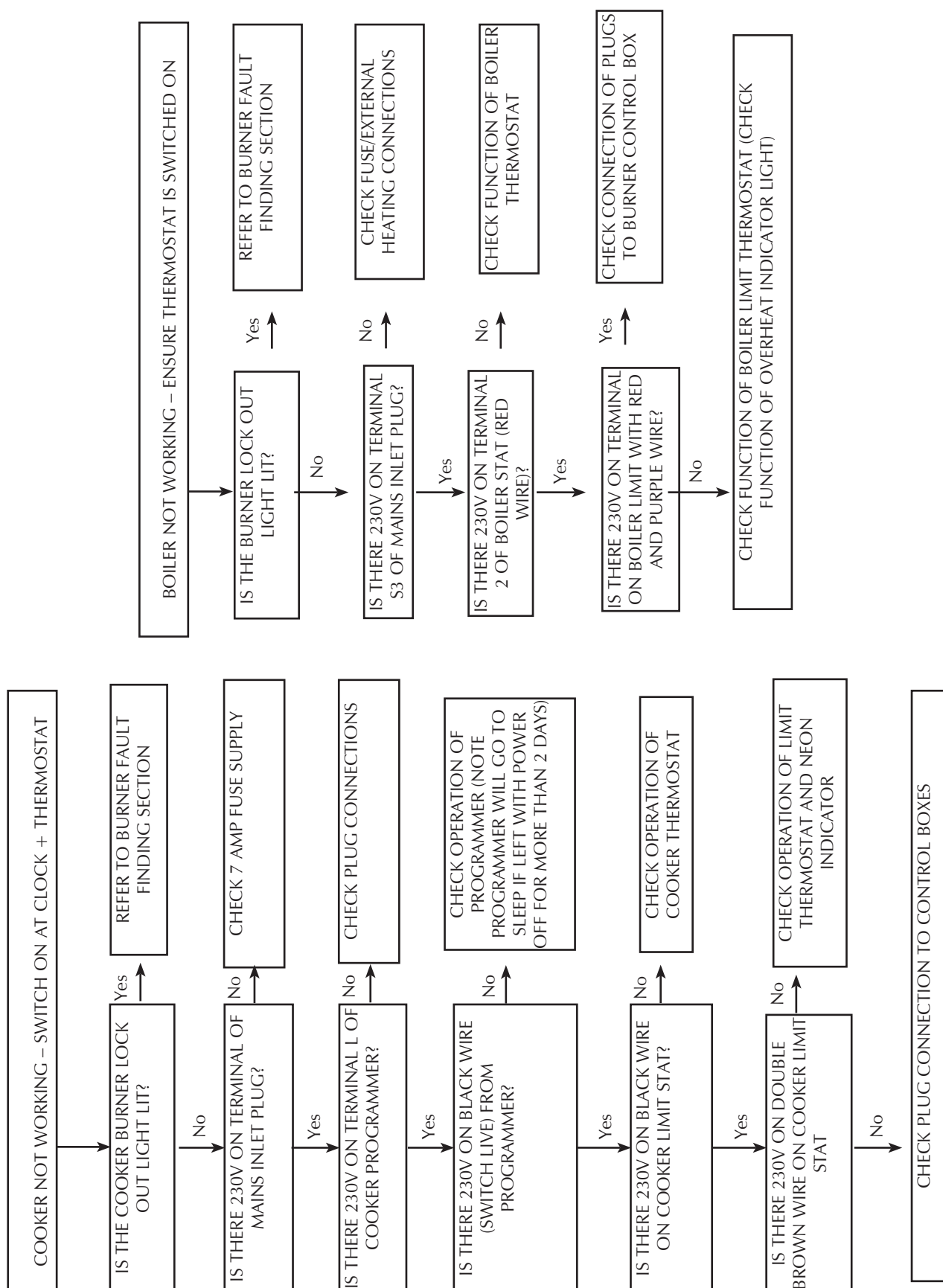


12. SERVICE PROCEDURES FOR BURNERS

- 12.1 Remove the Venturi filter and remove any lint or other build-up.
- 12.2 Check condition of combustion head and electrodes. Replace any cracked/damaged electrodes.
- 12.3 Reset, if necessary, electrode and ionisation probe gaps to 3mm and 11.5mm respectively.
- 12.4 Check condition of clear sensing tubing and replace if necessary.
- 12.5 Check and replace as necessary any gasket seals.
- 12.6 Check and ensure tight fit of both ignition lead and ionisation probes.
- 12.7 Refit burners replace all seals, carry out soundness check - fit cooker burner prior to boiler burner.
- 12.8 Restart the burners and check combustion values.

SERVICING

GUIDE TO FAULT FINDING

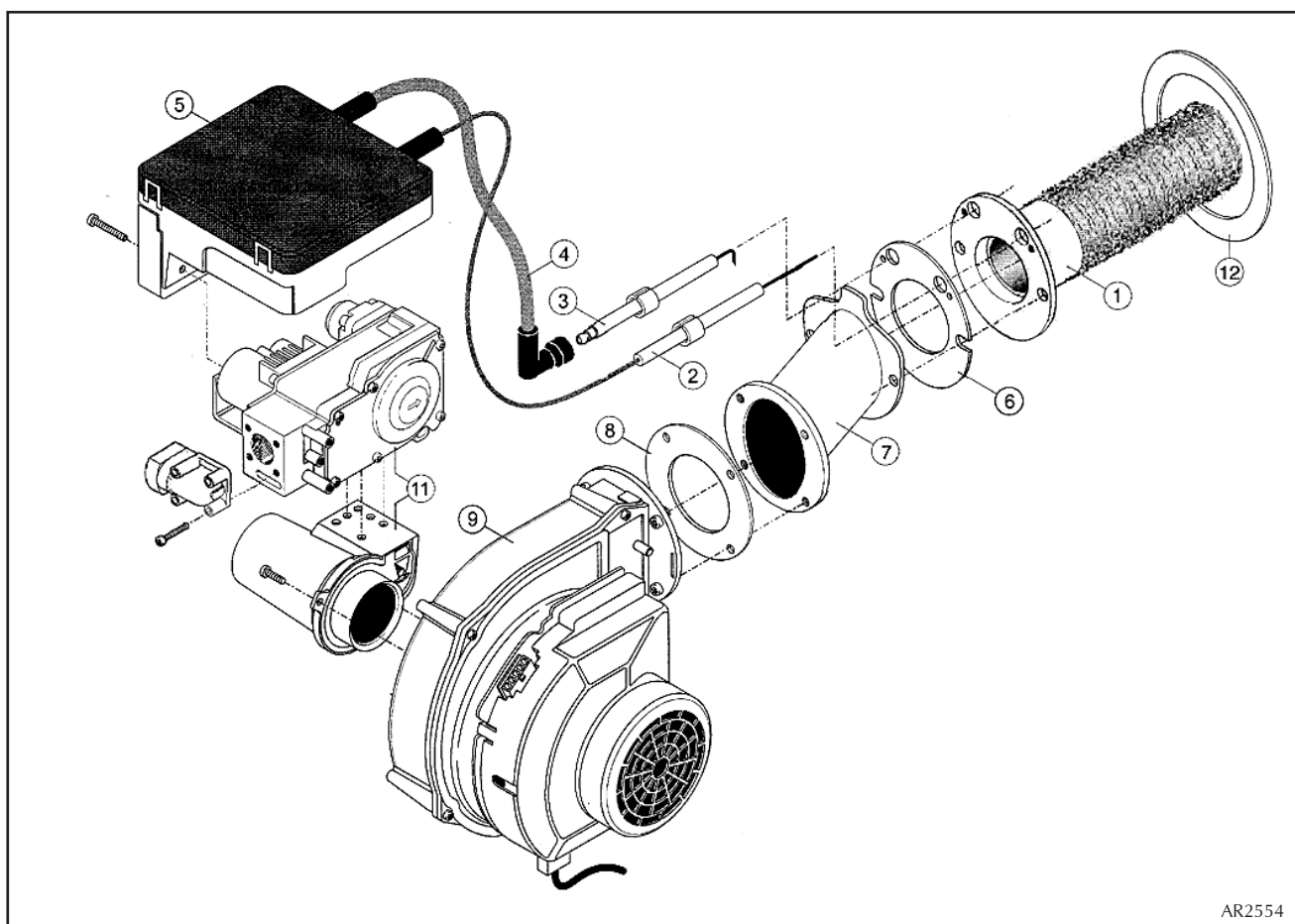


FAULT FINDING

ELECTRICITY SAFETY - Switch off electrical supply to unit before making any electrical tests.

FAULT	POSSIBLE CAUSE	ACTION
BURNER WILL NOT START	Boiler Thermostat or other system controls satisfied	Ensure all controls are calling for heat
	Fuse blown for short circuit in wiring	Fit new 5 amp fuse, if it blows again check
	No gas/pressure low	Ensure all isolation valves are open and minimum gas pressure on inlet is 17/20 mbar.
	Blocked Flue Neon illuminated	Press the reset button on lower control panel. NB Only try twice Ensure flue is not blocked and minimum draught of 0.04"WG Ensure bulb for thermostat is in pocket.
	Poor Earth	Check earth continuity and all earths connected.
FAN DOES NOT RUN NO FAN NOISE	Connections	Check connections and plugs 24DC 230V
	Gas Valve solenoid	Touch coil with non magnetic screwdriver, if not magnetic replace gas valve
BURNER IGNITES MOMENTARILY THEN GOES TO LOCKOUT	Live and neutral reversed	Check polarity
	Ionisation probe incorrect	Adjust gap to that specified
	Ionisation probe damaged	Replace probe
	Ionisation probe lead damaged	Repair/replace
	Poor earth to unit	Check continuity and all earth connections
	Control box wiring faulty	Check control box wiring and wiring into molex
BURNER IGNITES AND THEN GOES OUT AFTER A FEW MINUTES	Venturi throttle setting excessive	Check combustion figures are to spec
	Low/No gas pressure	Check supply pressure
BURNER FAN RUNS BUT DOES NOT IGNITE	Breakdown in ionisation circuit	Check ionisation circuit whilst running is above 0.9 μ a DC
	Damaged ignition electrode	Replace electrode
	Ignition lead not connected /damaged	Reconnect leads/replace
	Ignition spark excessive	Reset spark gap to specified 3mm
	Ignition control not seated on gas valve	Ensure control located correctly and pins not bent
	Ignition control box faulty	Replace

SPARE PARTS: BURNER

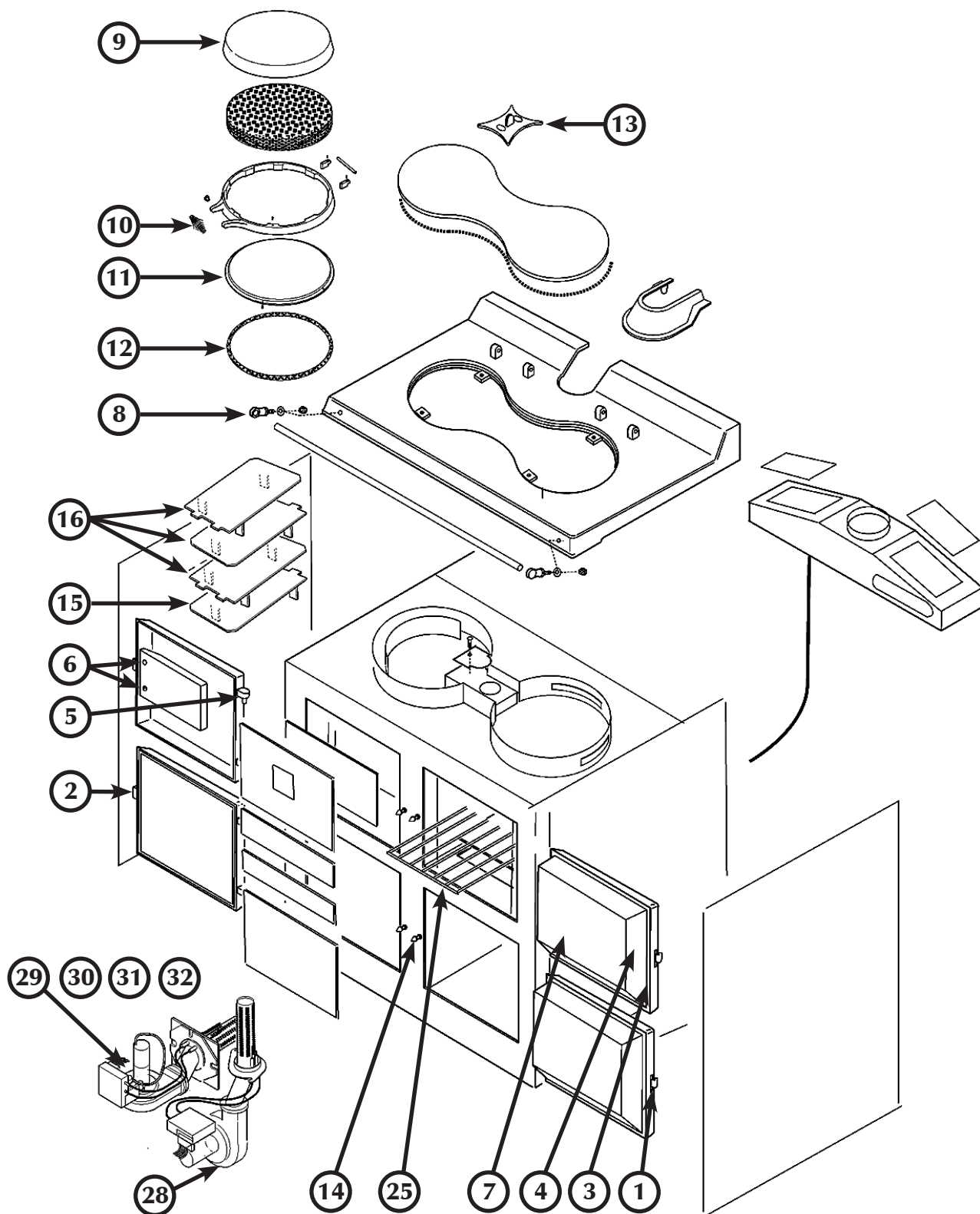


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SPARE PARTS LIST

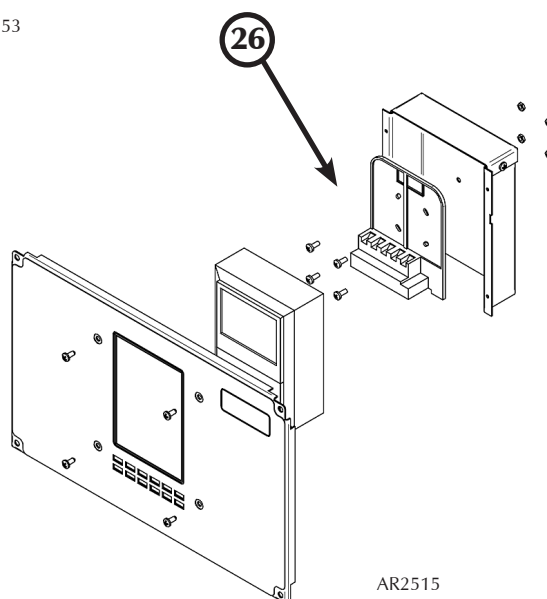
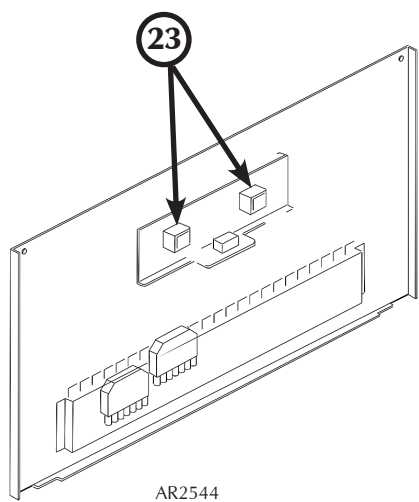
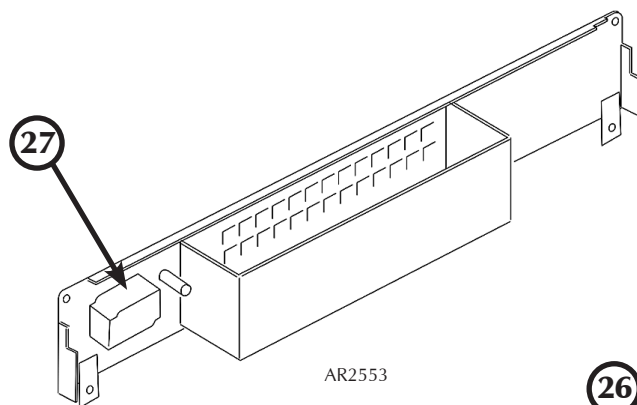
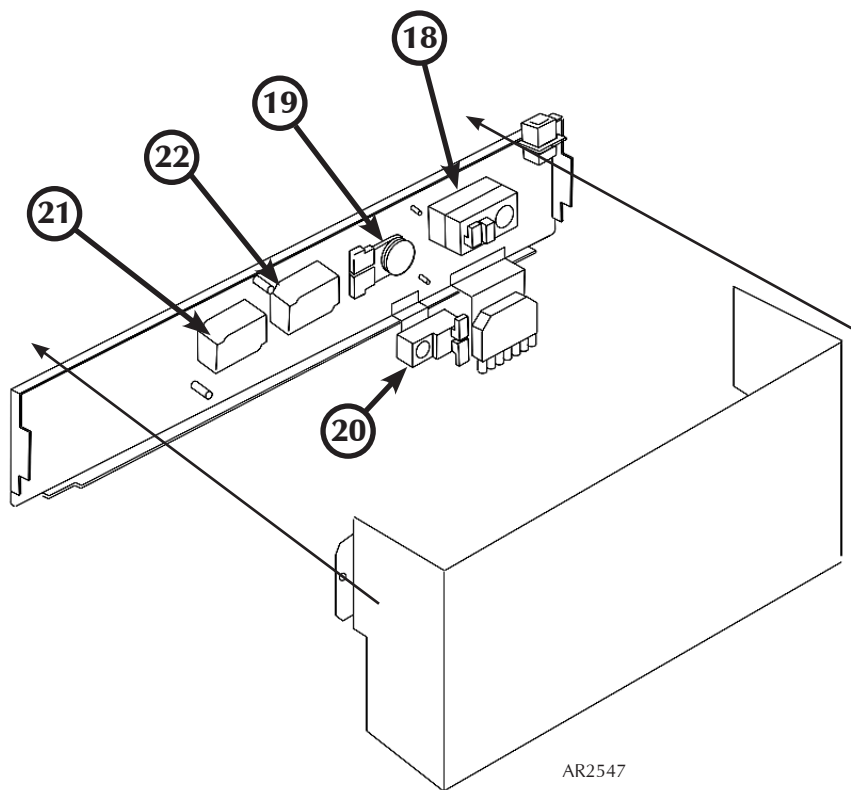
Item	Description	Part No.
1	Door Catch Chrome R/H	602884
2	Door Catch Chrome L/H	602883
3	Door Seal	602911
4	Spring	602088
5	Hinge Pin	33097
6	Buffer	99593
7	Enamelled Door Liner	602912
8	Towel Rail Chrome	600841
9	Chrome Lid	602457
10	Spring Handle	601478
11	Inner Lid	602459
12	Lid Seal	601482
13	Hot Plate Cover Casting	602864
14	Door Catch Pin	601581
15	Bottom Baffle	602825
16	Top Baffle	602831
17	????????????????	??????????????
18	Boiler Thermostat	602685
19	Boiler Limit Thermostat	602686
20	Pump Over Run Thermostat	602687
21	Cooker Thermostat	602906
22	Cooker Limit Thermostat	602905
23	Burner Reset Switch	603350
24	????????????????	??????????????
25	Wire Rack	602862
26	Programmer	602209
27	Blocked Flue (TTB) Device	603351
28	Cooker Burner	603340
29	Boiler Burner 60k	603341
30	Boiler Burner 80k	603342
31	Boiler Burner 100k	603343
32	Boiler Burner 120k	603344
Not Shown	Solid Oven Shelf	600566
Not Shown	Roasting Dish	600808

SPARE PARTS DIAGRAM

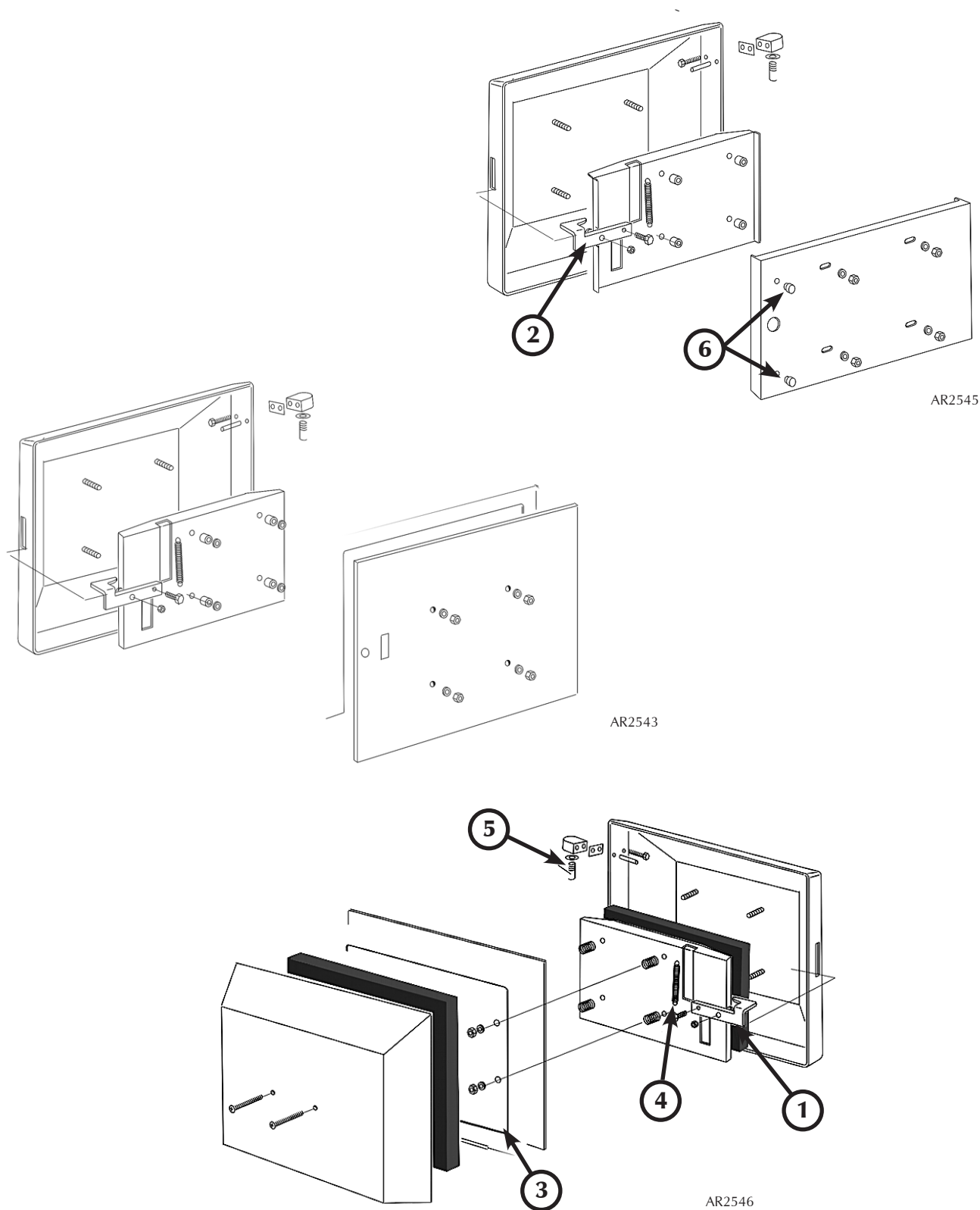


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SPARE PARTS DIAGRAM



SPARE PARTS DIAGRAM



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