

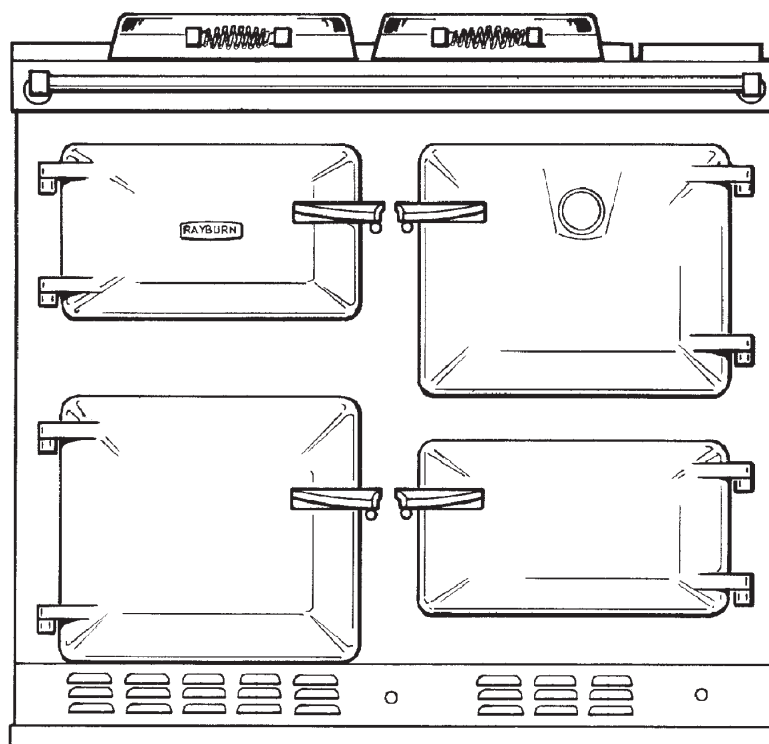


Installation Instructions

from **AGA**

400G/L PX (PF)

For use in GB and IE



DESN 512548 A

Remember, when replacing a part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by AGA.

PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLING THIS APPLIANCE

SECTION	CONTENTS	PAGE
	CONSUMER PROTECTION	3
	HEALTH & SAFETY	3
	TECHNICAL DATA	4
SITE REQUIREMENTS	INTRODUCTION	5
	IMPORTANT	5
	REGULATIONS	5
	GAS SUPPLY	5
	LOCATION	5
	ELECTRICAL SUPPLY	6
	INSTALLATION	7
	FLUE SYSTEM	8-10
	FLUE EXTRACTOR LOCATION	11
	TERMINAL STRIP CONNECTIONS	12
INSTALLATION REQUIREMENTS	CLEARANCES	13
	PRELIMINARY INSTALLATION	13
	SITE LOCATION	14
	SETTING COMBUSTION	14
INSTALLATION INSTRUCTIONS	BURNER ACCESS	15
	ELECTRICAL CONNECTION	15
	BOILER CONTROL	16
	ELECTRICAL CHECK	16
	COMBUSTION DISCHARGE DEVICE	16
	OVERHEAT SAFETY THERMOSTAT	16
	ANCILLARY CONTROLS CHECK	17
	INSTRUCT THE USER	17
WIRING DIAGRAM	WIRING DIAGRAM - APPLIANCE	18
SINGLE CHANNEL PROGRAMMER	SINGLE CHANNEL PROGRAMMER	19

Consumer Protection

As manufacturers and suppliers of cooking and heating products. We take every care to ensure, as far as is reasonably practical, that these products are so designed and constructed as to meet the general safety requirement when properly used and installed. To this end, our products are thoroughly tested and examined before despatch.

IMPORTANT NOTICE: PLEASE READ THE ACCOMPANYING WARRANTY.

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

Health & Safety

This appliance may contain some of the materials that are indicated. It is the Users/Installers responsibility to ensure that the necessary personal protective clothing is worn when handling where applicable, the pertinent parts that contain any of the listed materials that could be interpreted as being injurious to health and safety, see below for information.

Firebricks, Fuel beds, Artificial Fuels

When handling use disposable gloves.

Fire cement

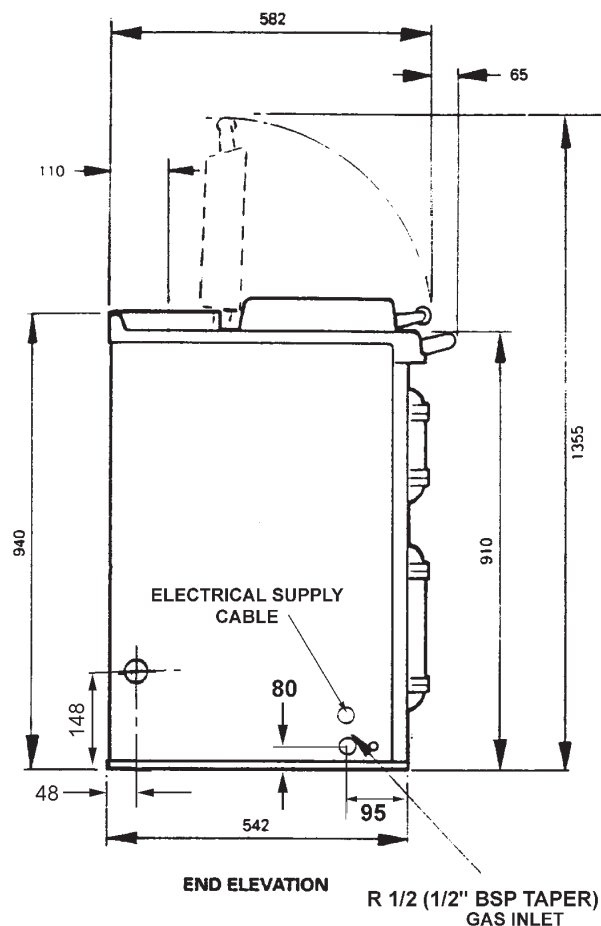
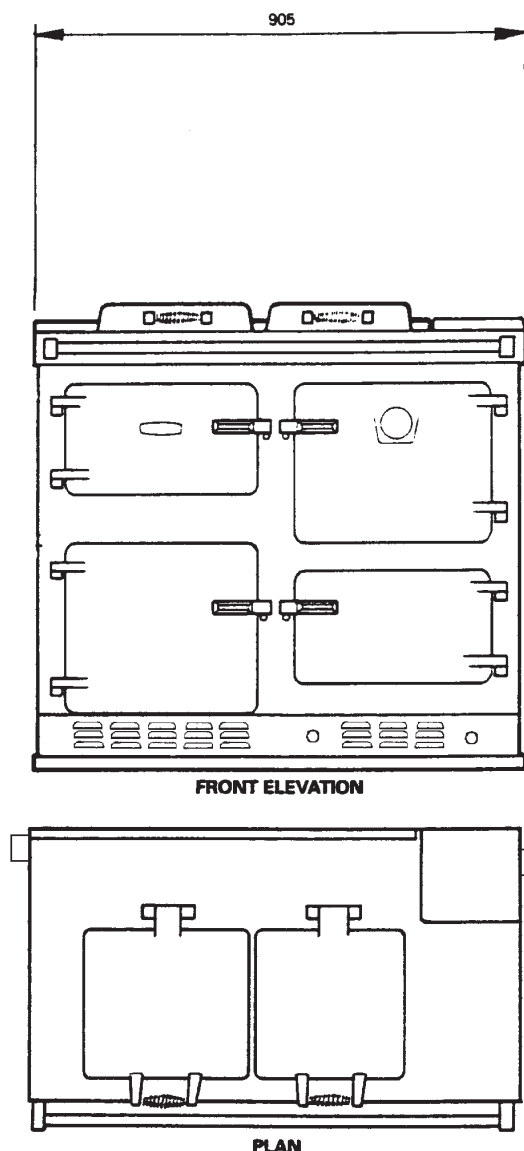
When handling use disposable gloves.

Glues and Sealants

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

Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre

May be harmful if inhaled. May be irritating to skin, eyes, nose and throat. When handling avoid contact with skin or eyes. Use disposable gloves, face-masks and eye protection. After handling wash hands and other exposed parts. When disposing of the product, reduce dust with water spray, ensure that parts are securely wrapped.



PLEASE NOTE: IT IS ADVISABLE TO CHECK THE ACTUAL SIZE/WIDTH OF YOUR APPLIANCE BEFORE FINALLY FIXING ANY KITCHEN UNITS, SINCE ENAMELLED CAST IRON CAN VARY IN SIZE

DIMENSIONS IN MM

DESN 512551 A

TECHNICAL DATA

Fuel - Natural Gas (G20) I_{2H}

Gas Inlet R 1/2 (1/2" BSP TAPER)

Electrical Supply 230V ~ 50Hz 3 amp Fused

Power Flue to left or right 54mm St/St Pipe

Burner Inlet Pressure 20mbar

CO 0 - 50 ppm

CO₂% 8.2% - 9.9%

Heat Input 14.6 kW

Unpacked Appliance Weight - 326Kg

Flue Terminal Dimensions

Width - 500 mm **Height -** 210 mm

Depth - 180 mm

Fuel - Propane (G31) I_{3P}

Gas Inlet R 1/2 (1/2" BSP TAPER)

Electrical Supply 230V ~ 50Hz 3 amp Fused

Power Flue to left or right 54mm St/St Pipe

Burner Inlet Pressure 37mbar

CO 0 - 50 ppm

CO₂% 9.4% - 10.8%

Heat Input 14.6 kW

Unpacked Appliance Weight - 326Kg

Flue Terminal Dimensions

Width - 500 mm **Height -** 210 mm

Depth - 180 mm

Site requirements

INTRODUCTION

The Rayburn is a floor standing cooker, fired by a gas burner.

IMPORTANT

The burner fitted to this appliance has been designed and constructed exclusively for use with the Rayburn 400 Series Cooker and MUST not be used on any other appliances or any other uses.

REGULATIONS

In the interests of safety all gas appliances should be installed by competent persons in accordance with the regulations in force.

GAS SUPPLY

Installation Pipes

Pipework from the meter to the appliance must be of adequate size. It is recommended that a minimum of $\varnothing 22$ mm copper tubing is used to within 1m of the appliance. A reduction to $\varnothing 15$ mm is permissible over the last metre of the appliance. Do not use pipes of a smaller size than the appliance gas connection. To avoid undue stress on pipework and burner, adequate support should be used when connecting and disconnecting union. The complete installation must be tested for soundness and purged in accordance with the regulations in force.

FLUE SAFETY DEVICE

For safety purposes a flue safety device is fitted. This will only operate in adverse or blocked flue conditions. If the switch has operated, it should be pushed in, to reset. If this problem persists it is necessary to determine and rectify the cause. If it is found necessary to reset more than once this may indicate a flue blockage.

LOCATION

The appliance is floor mounted and must be installed on a solid floor or base of non-combustible material which is capable of supporting the total weight.

The location chosen for the appliance must permit the installation and the provision of a satisfactory flue and an adequate air supply. The location must also provide adequate space for servicing and for air circulation around the appliance. See "Installation of the Appliance".

The space in which the appliance is to be fitted must have the following minimum dimensions.

Between wall or unit and LH side of appliance - 10mm top plate

Between wall or unit and RH side of appliance - 10mm top plate

SHOULD THE WALL PROJECT BEYOND THE FRONT OF THE APPLIANCE, IT MUST BE INCREASED TO 50mm (SEE FIG. 1). To allow door to open enough to change oven and shelf position.

Above the raised insulating cover handle - 60mm

In addition, adequate clearance must be available at the front of the appliance to enable it to be operated and serviced. Flue pipes and fittings must not be closer than 10mm to combustible materials and where passing through a combustible partition such as ceiling or roof, must be enclosed in a non-combustible sleeve providing an air space of at least 10mm.

Spaces around flue pipes passing through walls or floors should be sealed against the passage of smoke and flame.

Where the cooker is to stand in a recess or against a wall which is to be tiled, in no circumstances should the tiles overlap the cooker top plate.

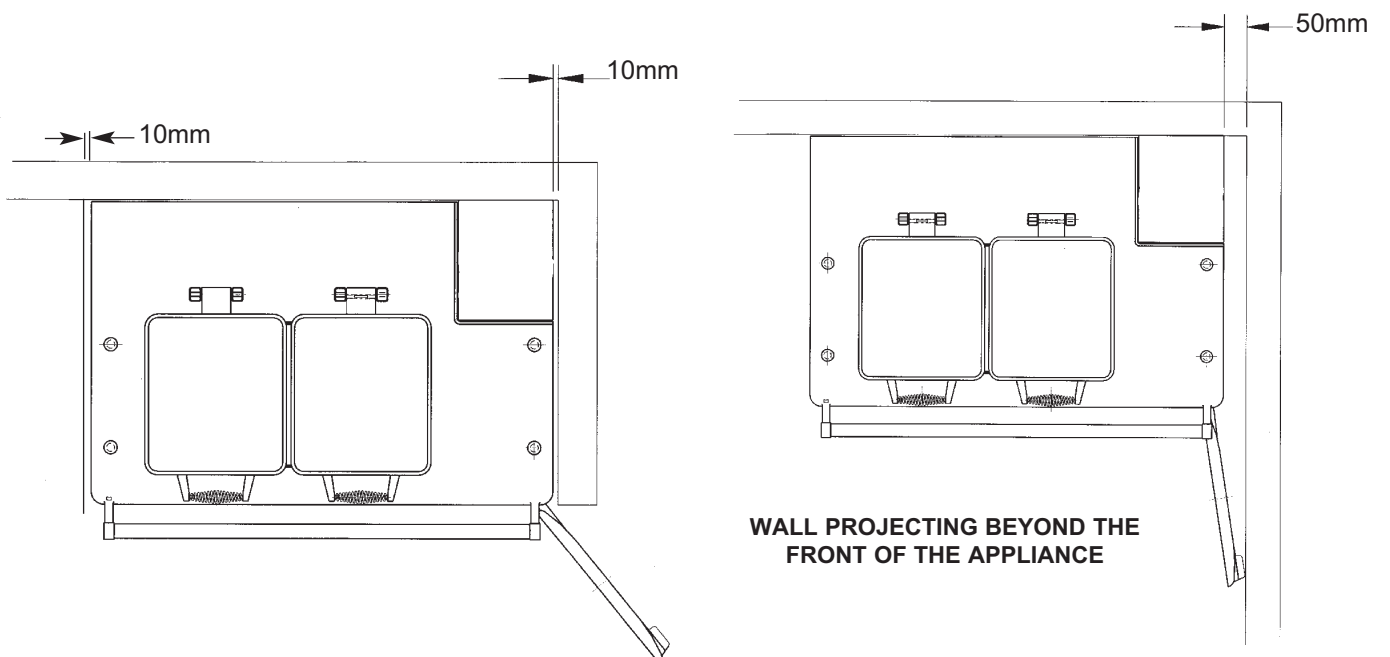


FIG. 1

ELECTRICAL SUPPLY

Wiring external to the appliance must be installed in accordance with current National Wiring Regulations and local regulations which apply. The appliance is supplied for 230 Volt ~ 50 Hz and a fuse rating of 3 amps. The method of connection to the mains supply should facilitate complete electrical isolation of the appliance, by the use of a fused double pole switch having a contact separation of at least 3mm serving only the appliance.

The point of connection to the mains should be readily accessible and adjacent to the appliance. The installation should be protected by a 30mA Residual Current Circuit Breaker (RCCB).

The minimum requirement for the power cable is that it should be a 3 core PVC sheathed flexible cord (85°C min) at least 0.75mm² (24 x 0.2mm) to the relevant standard.

WARNING: THIS APPLIANCE MUST BE EARTHED.

In the event of an electrical fault after installation of the appliance, preliminary electrical system checks must be carried out i.e. earth continuity, short circuit, polarity and resistance to earth.

Site requirements

FLUE SYSTEM

The flue can be to the left or right of the appliance. The cooker is supplied with the flue pipe to the left, this can be adjusted to suit the installation.

FLUE DIRECTION - EXIT TO THE LEFT

1. Remove lower back panel (7 screws).
2. Unscrew the two fixing brackets and remove. (See Fig. 2).
3. Slacken the jubilee clip, fixing flexible pipe to horizontal pipe (A). (See Fig. 2).
4. If the flue pipe is to be routed as per factory set, remove bend from manifold and pipe A. Smear sealant on the end of the manifold, and replace bend onto the manifold, ensuring it is fully on and sweeps under the burner chamber.
5. Smear sealant over the surface of the 28mm branch on pipe 'A'. Push the flexible pipe 30-40mm on to the branch and tighten the jubilee clip.
6. Smear sealant on the first end of pipe 'A' and fit to bend ensuring the branch pipe is slightly above centre.
7. Replace fixing brackets (4 screws).
8. Replace back panel (7 screws) and position cooker.

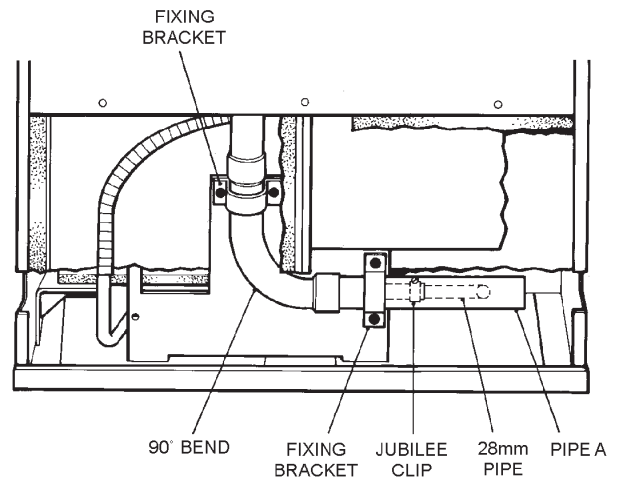


FIG. 2

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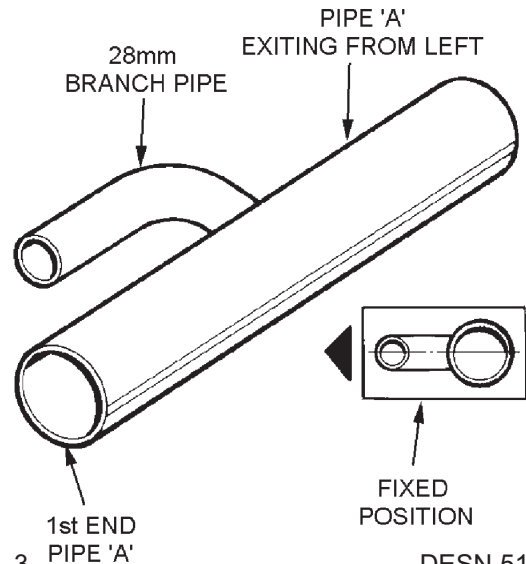


FIG. 3

DESN 512770

FLUE DIRECTION - EXIT TO THE RIGHT

Follow previous instructions in FLUE SYSTEM (Page 7), Steps 1 to 3.

4. Reposition the flexible tube from the oven vent down the back of the oven.
5. Smear sealant on the end of the manifold and replace the bend.
6. Smear sealant on the first end of pipe 'A' and the surface of the 28mm branch (towards the bend). Slide the flexible pipe completely over the branch (pipe should point towards burner chamber).
7. Push the first end of pipe 'A' onto the bend, the branch should be above the pipe. Tighten the jubilee clip ensuring the flexible pipe covers all of the branch pipe.
8. Replace brackets (4 screws).
9. Replace back panel (7 screws).

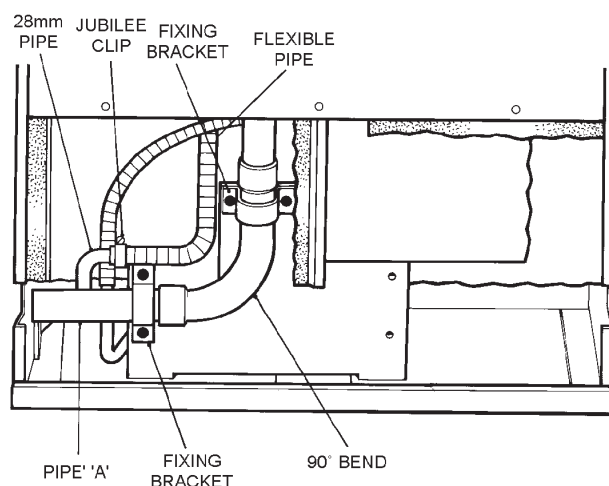


FIG. 4

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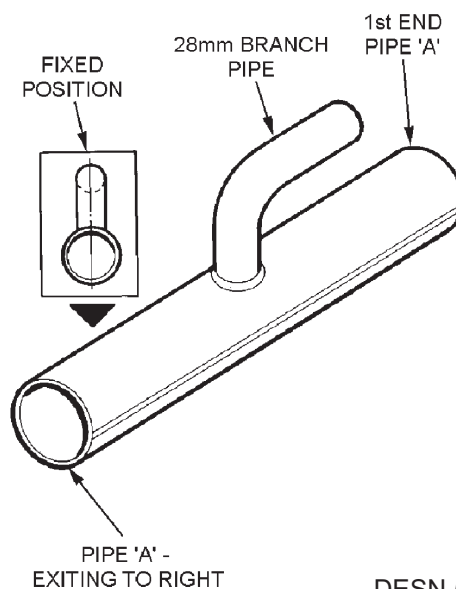


FIG. 5

DESN 512779

Site requirements

FLUE SYSTEM

The flue system used on this appliance must be provided by AGA and must be installed in accordance with the instructions and standards.

A maximum flue of 5 metres and 5 bends can be used (including horizontal length on the terminal).

Any upwards vertical runs must be immediate to the appliance to a maximum of 3 metres. (See Fig. 6)

Downwards vertical runs must be no more than 0.5 metres. (See Fig. 7)

Flue can be positioned to the rear or front of appliance via 1 bend. (See Fig. 8).

Horizontal runs must be as level as possible.

Care must be taken on mounting the terminal and routing the flue:-

- Damage to damp proof course
- Height above ground
- General terminal locations (See Fig. 9)

Where the flue passes through combustible material a minimum of 10mm clearance must be maintained around the flue pipe and insulation sleeve.

General Requirements

The flue pipe must be adequately supported using the brackets specified.

The flue pipe must be insulated (supplied).

All joints should be sealed using the sealant provided.

AIR REQUIREMENTS

The appliance can only be installed in a room which meets the ventilation regulations in force. But, in any event the room must have a permanent vent with a minimum free air area, see below.

MODEL	MIN. AIR REQUIREMENT
400G/L	35 cm ²

IMPORTANT: THE LOUVERED AIR INTAKE AT THE BOTTOM FRONT OF THIS APPLIANCE MUST BE KEPT CLEAR OF ANY OBSTRUCTIONS.

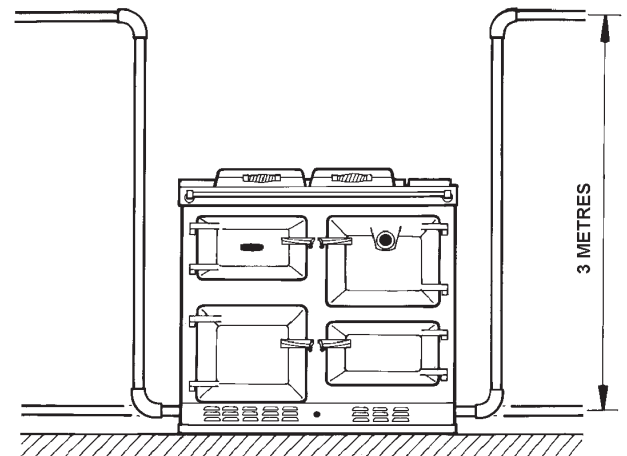


FIG. 6

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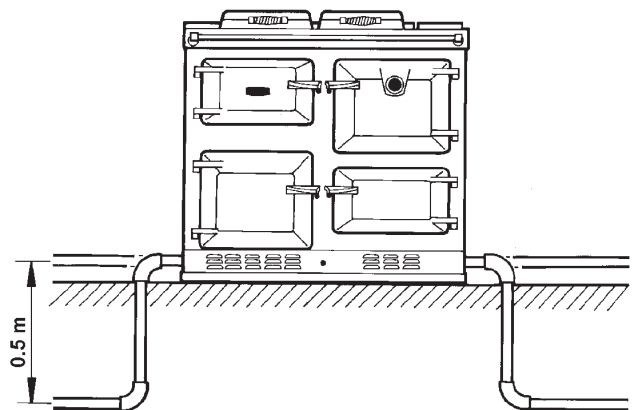


FIG. 7

DESN 512575 A

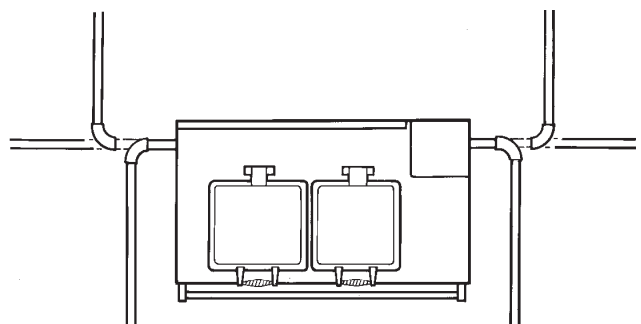


FIG. 8

DESN 512573

Site requirements - Flue terminal location

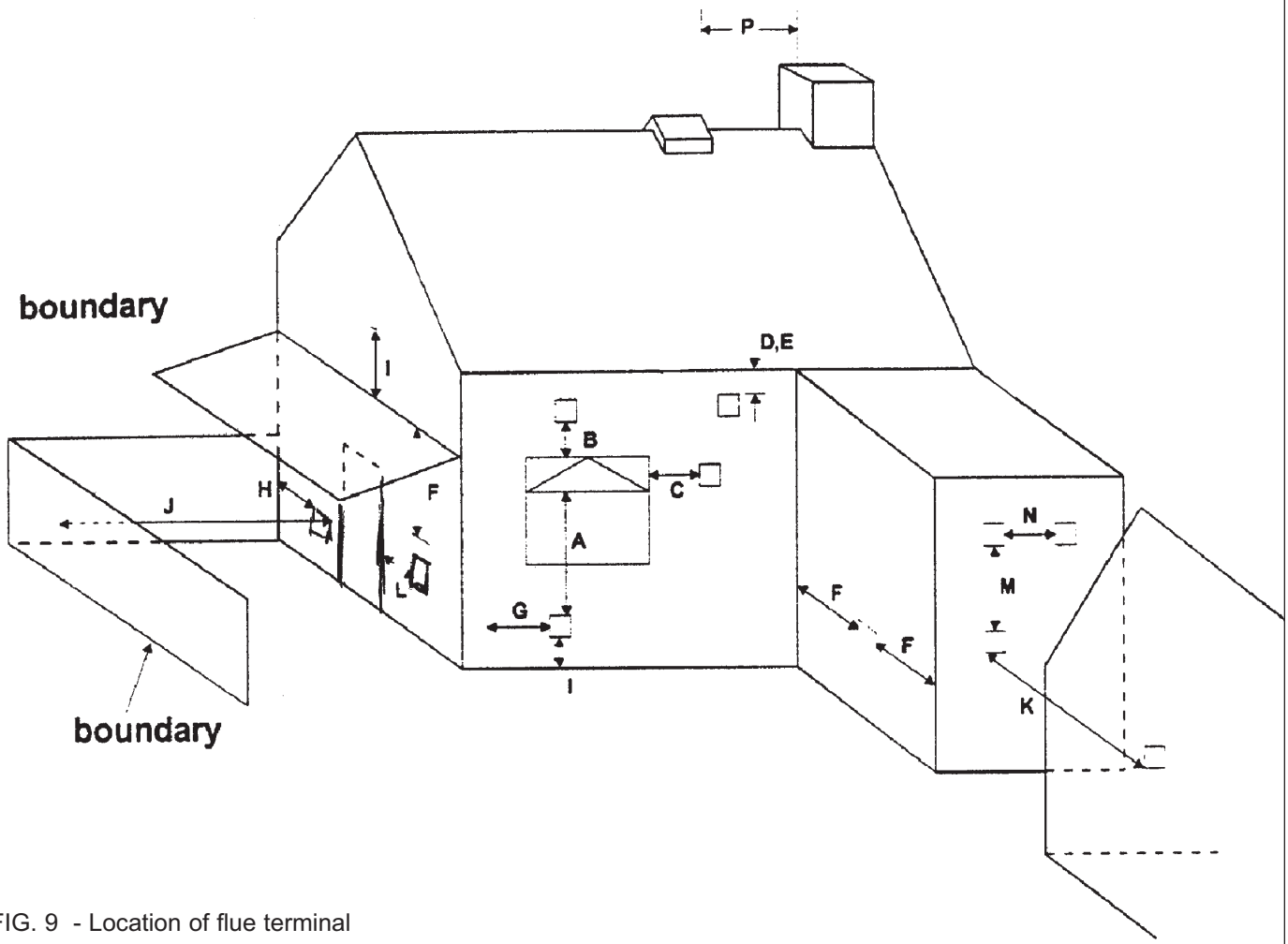


FIG. 9 - Location of flue terminal

DISTANCES STATED HERE ARE MINIMUM ALLOWABLE REQUIREMENTS

A BELOW AN OPENING	300mm	K FROM A TERMINAL FACING THE TERMINAL	1200mm
B ABOVE AN OPENING	300mm	L FROM AN OPENING IN THE CAR PORT INTO THE BUILDING	1200mm
C HORIZONTALLY TO AN OPENING	300mm	M VERTICALLY FROM A TERMINAL ON SAME WALL	1200mm
D BELOW GUTTERS, SOIL PIPES OR DRAIN PIPES	75mm	N HORIZONTALLY FROM A TERMINAL ON THE SAME WALL	300mm
E BELOW EAVES	200mm		
F BELOW BALCONY OR CAR PORT ROOF	200mm		
G FROM VERTICAL DRAIN PIPE OR SOIL PIPE	150mm		
H FROM AN INTERNAL OR EXTERNAL CORNER OR TO A BOUNDARY ALONGSIDE THE ENAMEL	200mm		
I ABOVE GROUND, ROOF OR BALCONY LEVEL	300mm		
J FROM A SURFACE OR BOUNDARY FACING THE TERMINAL	600mm		

Site requirements

INSTALLATION

1. Cut out card template from packaging and affix to wall.
2. Cut $\varnothing 60$ mm hole in the wall for the flue pipe. (See Fig. 10).
NOTE: Larger holes are required through combustible material.
3. Drill 4 wall fixing holes through template (1 in each corner). (See Fig. 10).
4. Drill a minimum of a $\varnothing 10$ mm hole through the wall for terminal supply cable.
5. Remove card template and place flue terminal assembly onto the hole. (See Fig. 11)
6. The flue termination pipe may required to be shortened or lengthened depending on wall thickness. (See Fig. 12).
7. Using the large wall fixings, permanently fix back plate to the wall, removing outer cover first.
8. Wire the fan to the supply cable to the terminal block on the back plate. (See Fig. 13).

Using the 3-core cable provided, run cable back to flue extractor circuit control at the bottom right hand side of the appliance.

Red + to Red +
Black - to Black -
Yellow (Signal) to Yellow (Signal)

9. No additional flue terminal guard is required to this appliance.

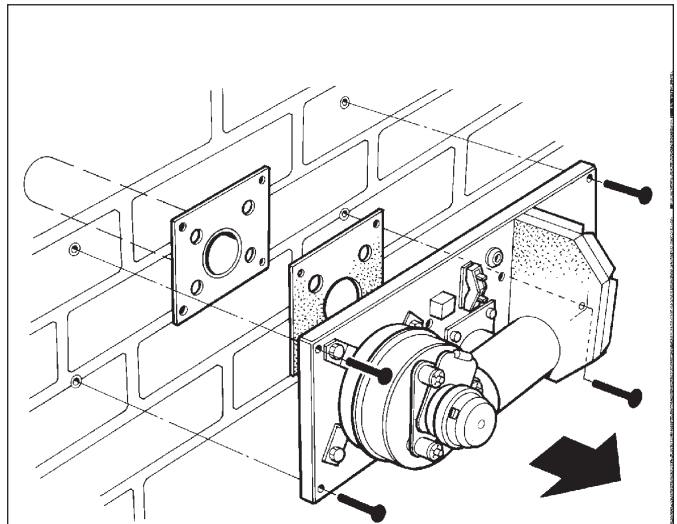


FIG. 11

DESN 513356

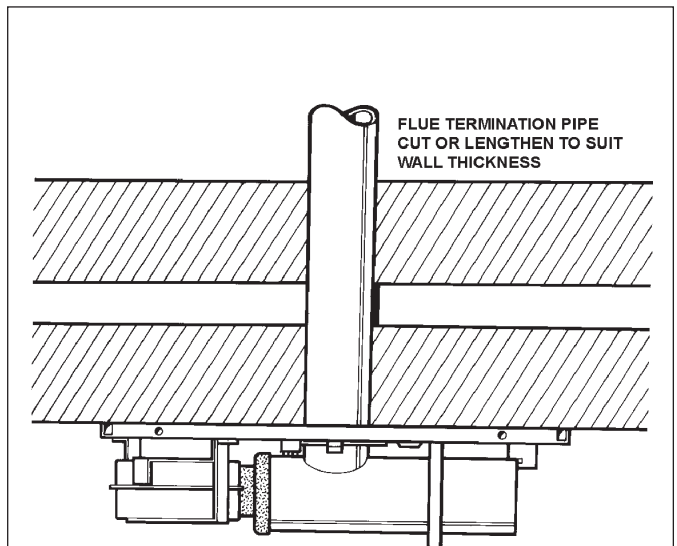


FIG. 12

DESN 512661

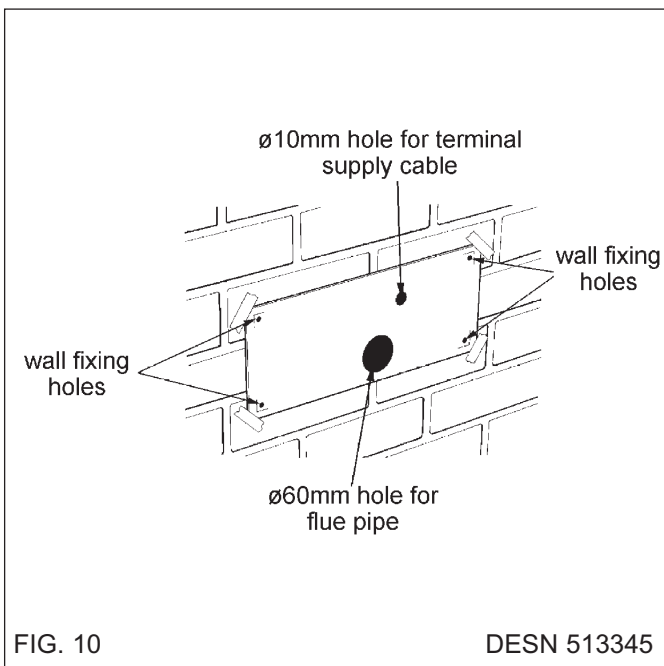


FIG. 10

DESN 513345

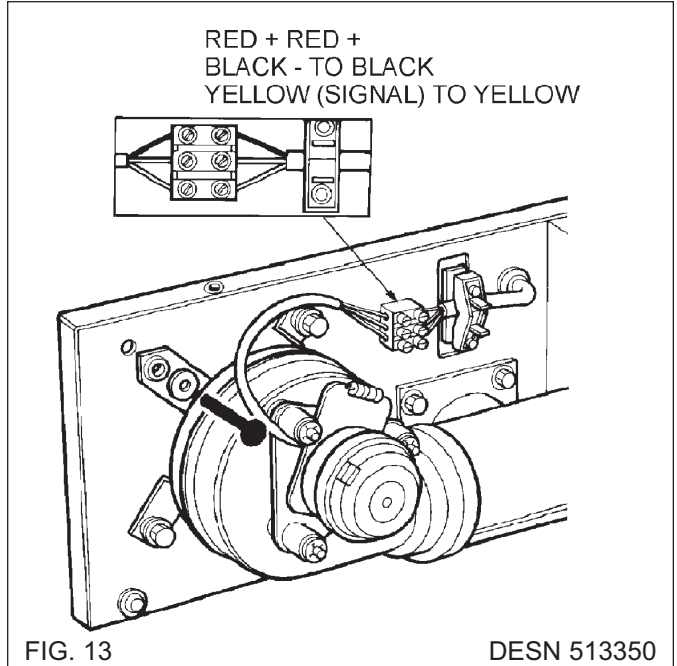
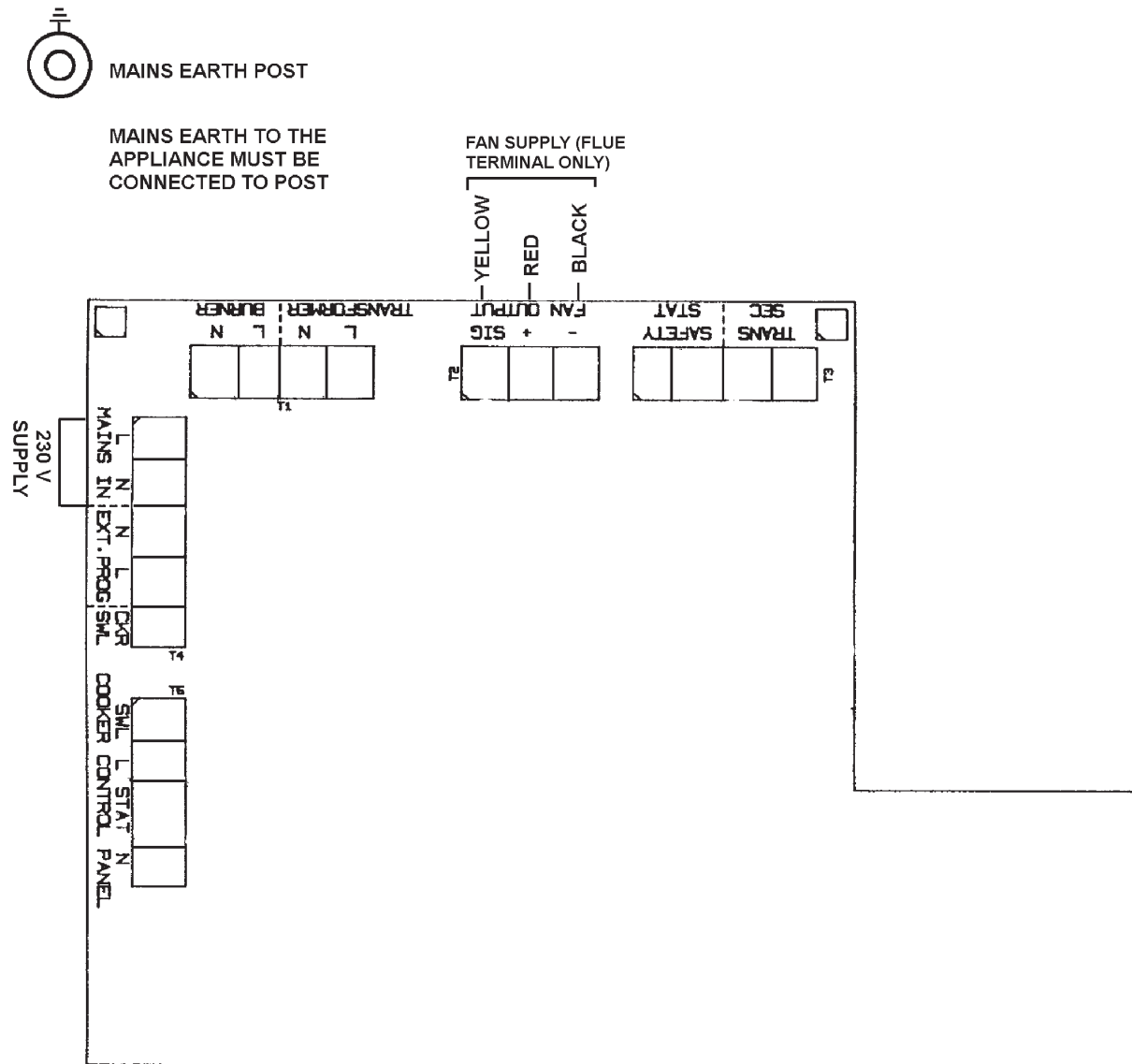


FIG. 13

DESN 513350

PCB CONNECTIONS



EXTERNAL CONNECTIONS: FAN CONNECTIONS - AT TERMINAL
MAINS CONNECTIONS

FIG. 14

Installation requirements

CLEARANCES

The appliance is floor mounted. The space in which the appliance is to be fitted must have the following minimum dimensions.

Between wall or unit and LH side of appliance - 10mm top plate

Between wall or unit and RH side of appliance - 10mm top plate

SHOULD THE WALL PROJECT BEYOND THE FRONT OF THE APPLIANCE, IT MUST BE INCREASED TO 50mm (SEE FIG. 1). To allow door to open enough to change oven and shelf position.

Above the raised insulating cover handle - 60mm

In addition adequate clearance must be available at the front of the appliance to enable it to be operated and serviced.

PRELIMINARY INSTALLATION

The appliance is delivered in a fully assembled condition with the exception of the following items which are supplied separately packed and require assembly:-

The appliance rear distance bracket

The cooker handrail

FLUE PIPE KIT

Flue pipe comprises of:-

3 x 1 metre of flue pipe

3 elbows

3 straight couplers

6 support brackets (saddle and clamps)

1 tube ultra-grey sealant

Pack of fastenings

Appliance rear distance bracket: If the rear wall is of combustible material, there must be an air gap of 25mm between the wall and the rear of the cooker. Fit the rear distance brackets as shown in Fig. 15. Wherever possible it is recommended that the skirting board is removed for the width of the appliance to enable the rear edge of the appliance top plate to make contact with the vertical wall and avoid a rear gap. (Combustible wall excepted).

Where the cooker is to stand in a recess or against a wall which is to be tiled, **UNDER NO CIRCUMSTANCES SHOULD THE TILES OVERLAP THE TOP PLATE.**

The handrail brackets are held on the front edges of the cooker top-plate casting. Remove the travel nuts and replace with the handrail brackets, ensuring the fibre protecting washers are in position. Insert the handrail with fitted end caps into the brackets, positioning them correctly, and tighten the locating bolts. (Fig. 16)

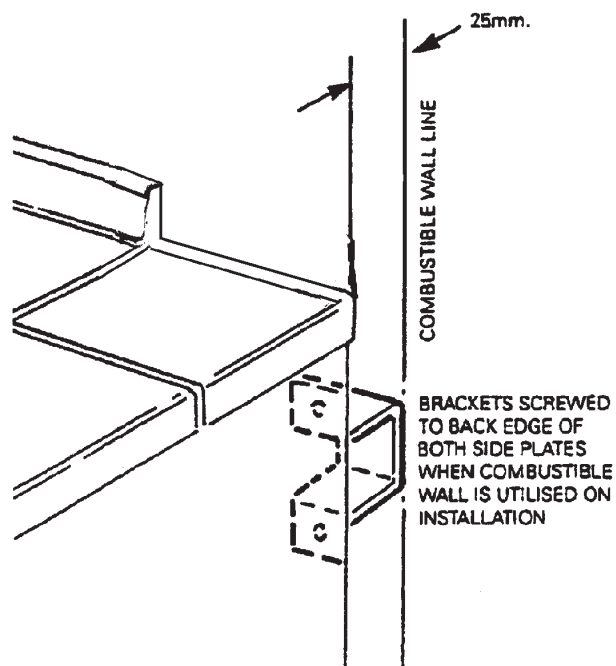


FIG. 15

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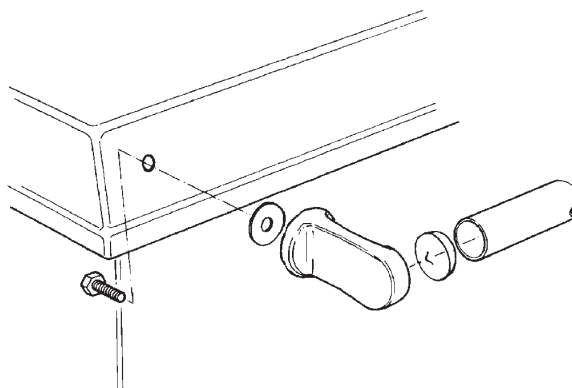


FIG. 16

DESN 510454 'A'

Installation requirements

SITE LOCATION

1. Check that the hearth is level, then remove the appliance from its transit wooden pallet, and position it with its back against the wall and in its intended position for flue connection.
2. Locate and fit flue pipe into socket of flue pipe adaptor.
3. Connect and terminate the flue system in accordance with these instructions.

Connect the relevant services to the appliance:-

1. Gas
2. Electric
3. Flue Pipe

SETTING COMBUSTION

Because this appliance uses a pre-mix burner. No setting up of combustion is required, the burner automatically controls the air to gas rate ratio.

Installation Instructions

BURNER ACCESS

- SEE FIG. 17

1. Open the burner access door.
2. Remove (5) inner panel securing screws and remove panel.
- 3 Remove the (3) plinth securing screws and remove plinth.

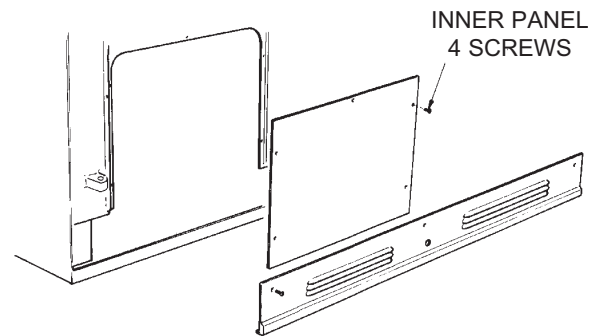


FIG. 17

DESN 511424 A

ELECTRICAL CONNECTION

1. Make electrical connections to terminal strip as wiring diagram (See Fig. 14)

BURNER CONTROL

When the thermostat is calling for heat, 230V is supplied to terminals 10 and 11 on the control box and tab 1 and 2 on the fan. The fan should start straight away.

There will then be a short delay while the control box checks that the fan is running and pre-purges. Providing there is gas to the burner, combustion should be established after approximately 30 seconds.

On first firing after installation or servicing, the burner may go to lock out, until all the air has been purged out of the burner. Wait at least 10 seconds before pressing the reset button. (See Fig. 18).

Check gas cock is in the on position.

Check inlet gas pressure at test point.

ELECTRICAL CHECK

Checks to ensure electrical safety should be carried out by a competent person.

COMBUSTION DISCHARGE SAFETY DEVICE

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

WARNING: The combustion discharge safety device must not be interfered with or rendered inoperative, as this could interfere with the safe operation of the appliance and invalidate the appliance warranty.

OVERHEAT SAFETY THERMOSTAT

IMPORTANT NOTE: This appliance is fitted with an overheat thermostat which has a manual reset button.

If the overheat stat trips, the cooker will not operate, until the button has been pushed-in (reset). The engineer needs to follow 'Fault Finding Guide' to establish why it has tripped. (The overheat thermostat and its sensing phial are located on the controls chassis rear).

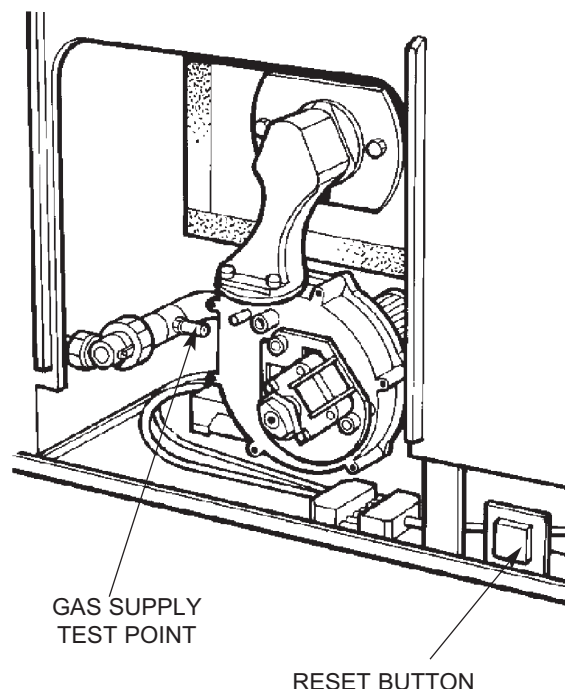


FIG. 18

DESN 512346

Installation Instructions

ANCILLARY CONTROLS CHECK

Before leaving the site, check that the operation of cooker timer and thermostat are capable of controlling the burner correctly. Check the operation of burner control box.

INSTRUCT THE USER

1. Advise the User that, for continued efficient and safe operation of the appliance, it is important that adequate servicing is carried out at regular 12 monthly intervals.
2. Hand the Operating Instructions to the User and demonstrate the correct operation of the appliance and system controls.
3. Leave the Installation and Servicing Instructions with the User.

WIRING DIAGRAM - APPLIANCE

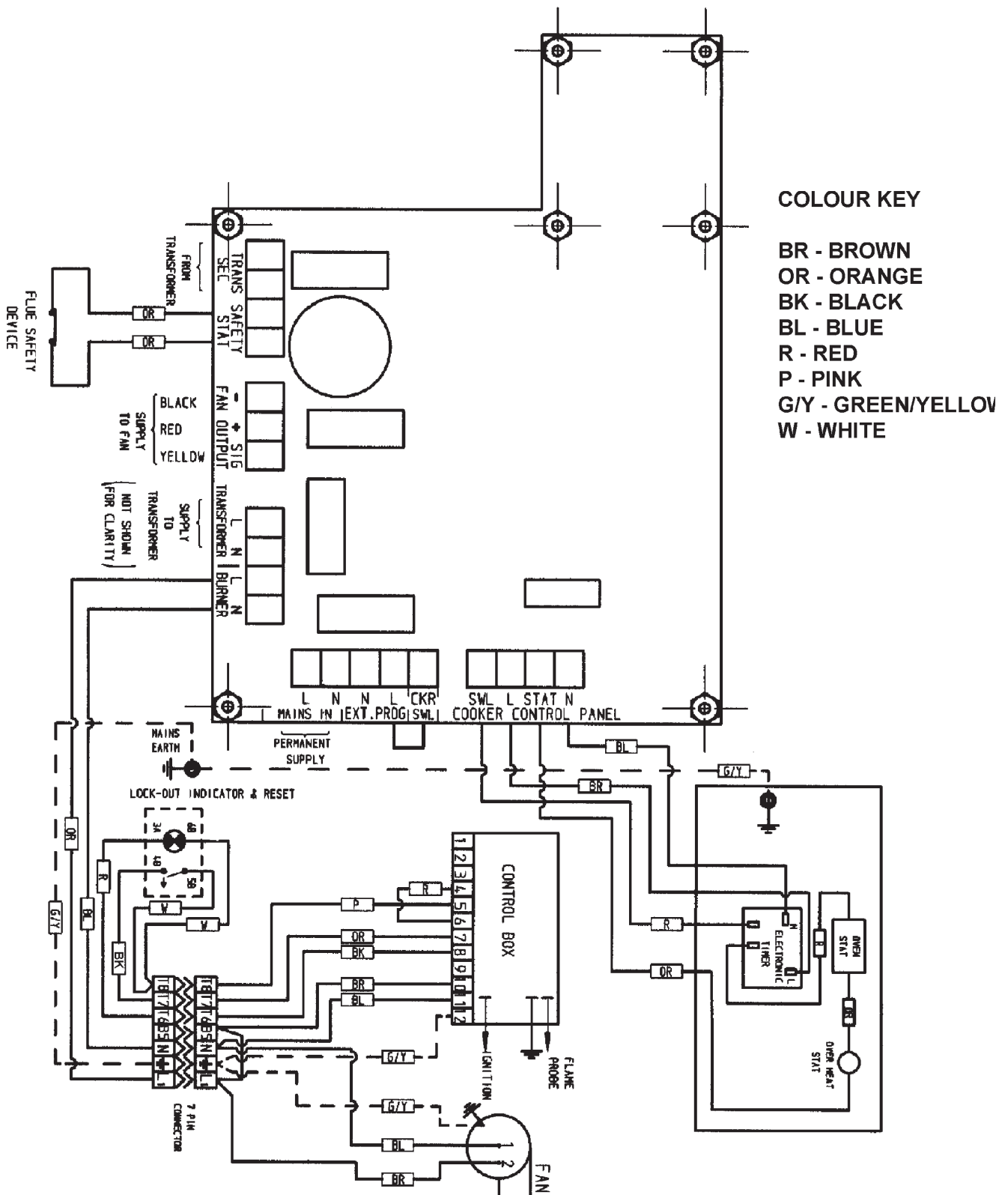


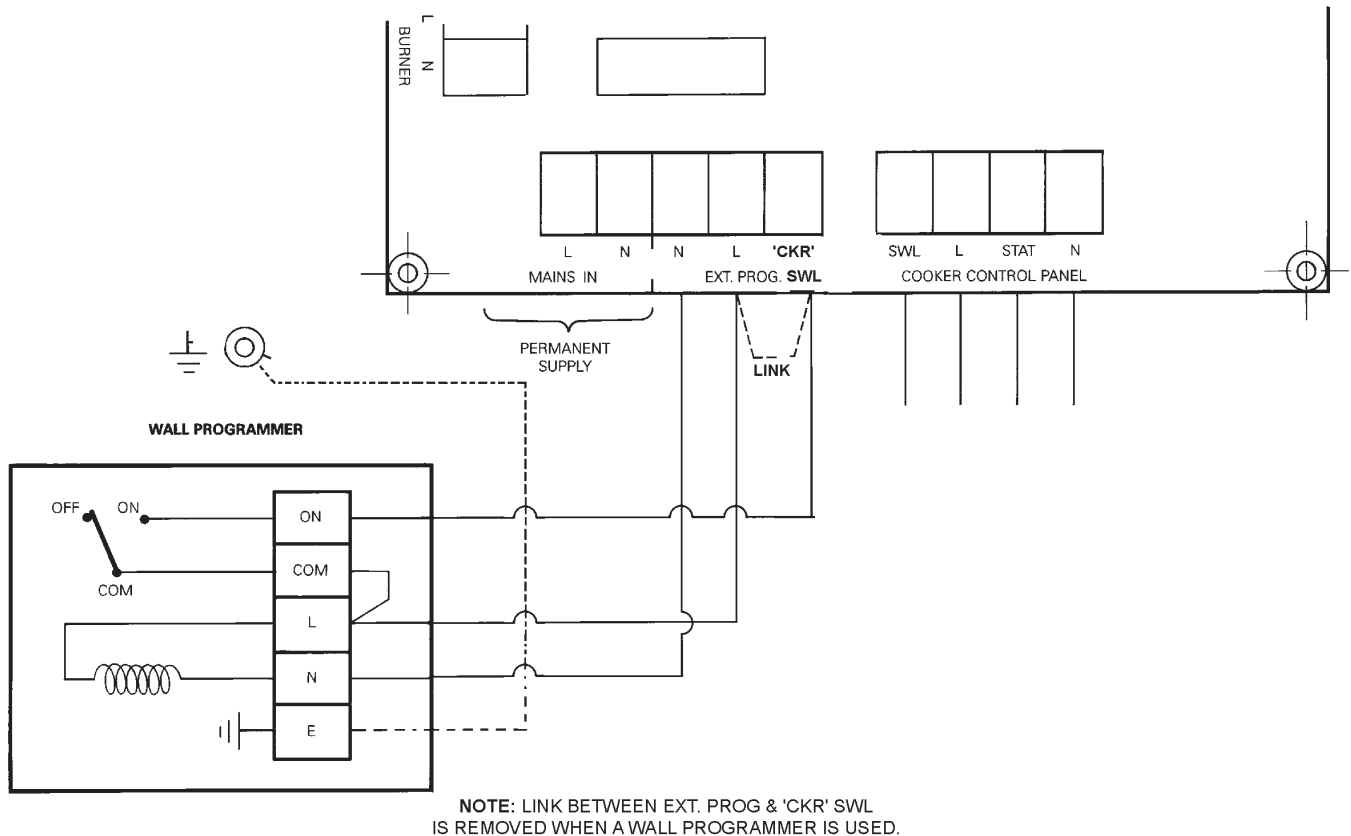
FIG. 19

Single Channel Programmer

USING A SINGLE CHANNEL OPTIONAL PROGRAMMER IN CONJUNCTION WITH THE RAYBURN 400G PX (P/F) ONLY.

1. Always use the same isolating switch for both the cooker and programmer. Ideally: use the supply connections on the appliance.
2. Before carrying out any maintenance work on either the programmer or the cooker ensure the supply is isolated.

PROGRAMMER WIRING



ALL WIRING TO THE IEE WIRING REGULATION BY A QUALIFIED ENGINEER

USERS INSTRUCTIONS FOR PROGRAMMER AND TIMER COMBINATION

1. The "Time of Day" alarm and "Minute Minder" functions can all be used without affecting the external programmer timings.
2. When using Auto Cook Function on the internal timer ensure the external wall programmer is in the continuous 'ON' mode.
3. When using the external wall programmer: ensure it is set correctly i.e. timed. The internal cooker timer should be in Manual Mode.
4. Please read in conjunction with the instructions supplied with your external programmer.

**For further advice or information contact
your local distributor/stockist**

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



from  AGA

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