

WARNING

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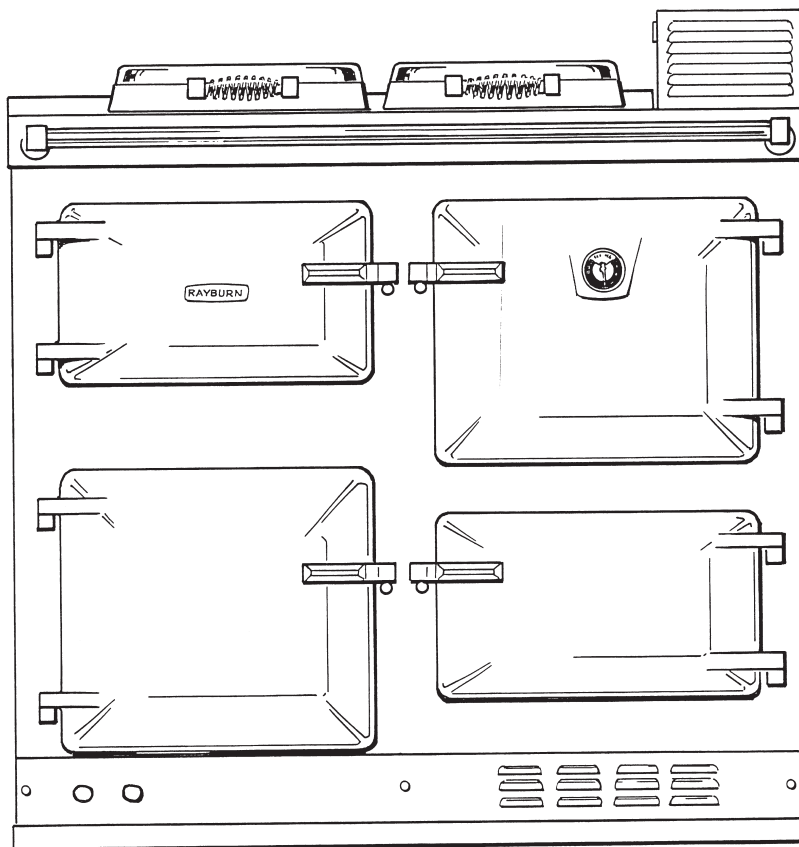


Servicing Instructions

At the Heart of your Home.

Heatranger 480GB

For use in GB and IE



DESN 511653

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

PLEASE READ THESE INSTRUCTIONS BEFORE SERVICING THIS APPLIANCE



10/99 EINS 511382

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

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.

Fire bricks, 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.

INTRODUCTION

To ensure the best performance from your Rayburn, it should be serviced once a year, preferably at the start of the heating season by a registered heat installer.

An additional flueway and combustion chamber clean halfway through the heating season may be necessary in some cases. The appliance cannot be serviced whilst hot, so both oven and boiler thermostats should be turned off on the evening before the service visit.

In your own interest, and that of safety to comply with the law, all gas appliances must be installed/maintained by a competent person, in accordance with the current gas safety (installation and use) regulations.

Failure to install/maintain appliances correctly could lead to prosecution.

On completion, test the gas installation for soundness.

SERVICE SCHEDULE

Annual Service

BURNER REMOVAL - for cleaning and inspection.

CLEANING - Boiler heat exchanger flueways, oven and hotplate flueways together with ceramic fibre burner chambers.

BURNER SERVICING.

RE-COMMISSIONING.

REPLACEMENT PARTS.

Burner Removal

BURNER ACCESS

WARNING: BEFORE REMOVING SERVICE ACCESS COVERS BEFORE ENSURE THAT ALL ELECTRICAL SUPPLIES TO THE APPLIANCE HAVE BEEN ISOLATED.

SEE FIG. 1

1. Open up burner access door. Remove door and put in a safe place.
2. Remove the 4 inner panel securing screws and remove panel.
3. Remove the 3 plinth securing screws and remove plinth.

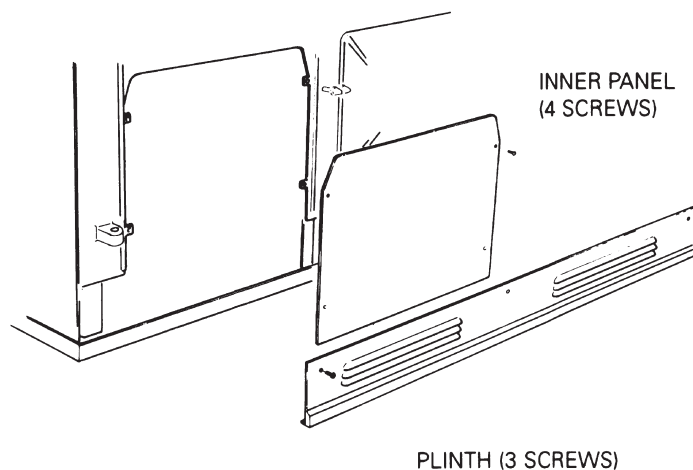


FIG. 1

DESN 511124

BURNER REMOVAL

IMPORTANT: DURING BURNER REMOVAL CARE MUST BE TAKEN NOT TO DAMAGE THE CERAMIC FIBRE INSULATION.

SEE FIG. 2

1. Turn off gas cock.
2. Break gas cock union connection.
3. Disconnect the 5-pin plug underneath the burner.

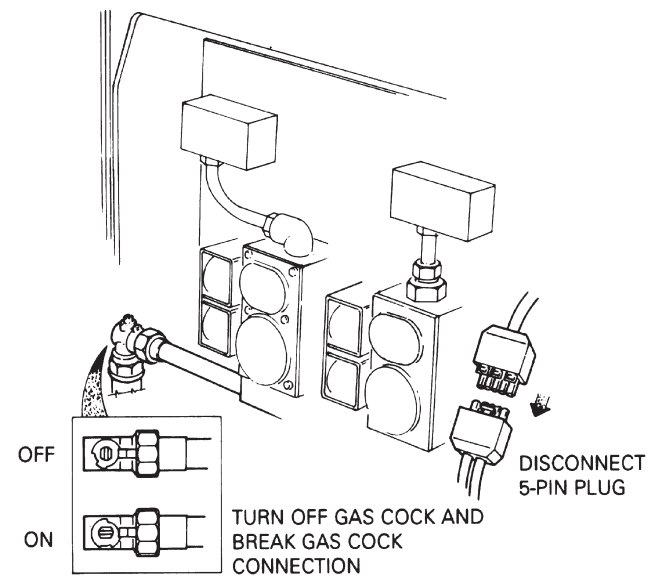


FIG. 2

DESN 511125

SEE FIG. 3

4. Undo the burner central locking nut.
5. Remove (2) fan mounting plate nuts.

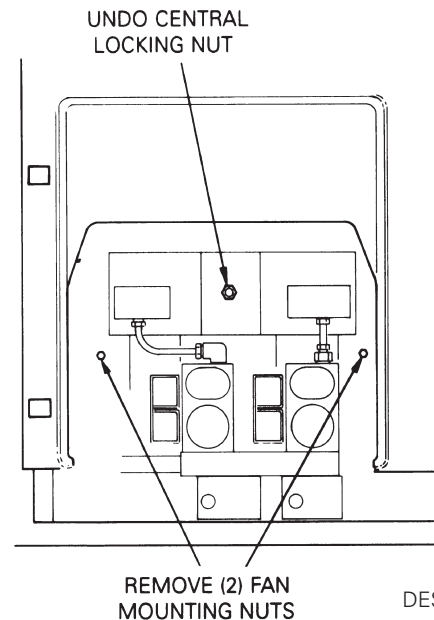


FIG. 3

DESN 511126

SEE FIG. 4

6. Withdraw the burner unit.

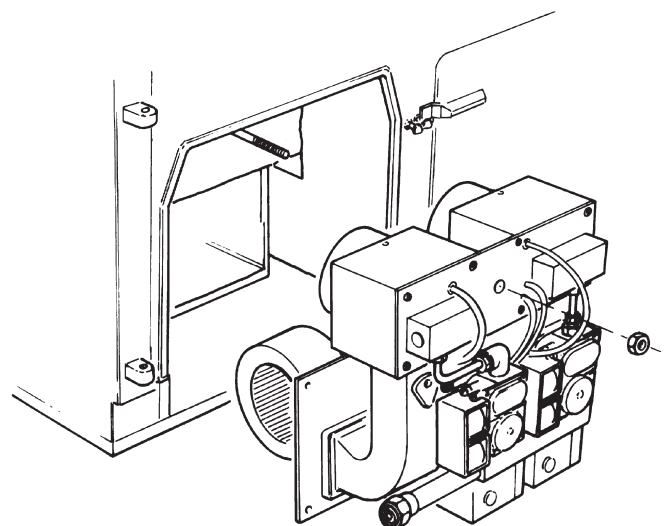


FIG. 4

DESN 511127

Cleaning

HEAT EXCHANGER AND HOTPLATE FLUEWAY CLEANING

IMPORTANT: DURING CLEANING CARE MUST BE TAKEN NOT TO DAMAGE THE CERAMIC FIBRE INSULATION.

SEE FIG. 5

1. Lift insulation covers and remove hotplate using lifting hooks provided.

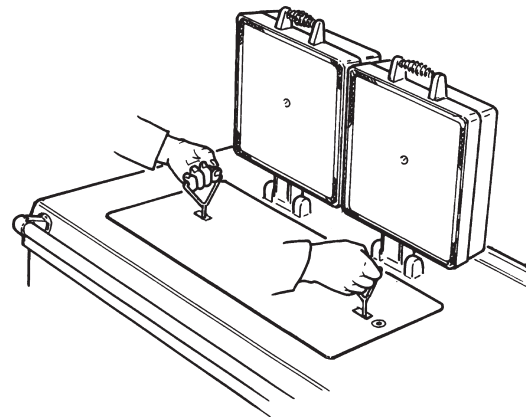


FIG. 5

DESN 510523

SEE FIG. 6

2. Remove insulation pad B, remove the 4 flue cleaning access door securing bolts and remove door.
3. Using the rods provided remove the boiler flueway baffles from between the boiler cross waterways. Lift the front ones first and then pull the rear ones forward and then lift them out.

NOTE: FOR THIS APPLIANCE USE ONLY 6 FLUEWAY BAFFLES.

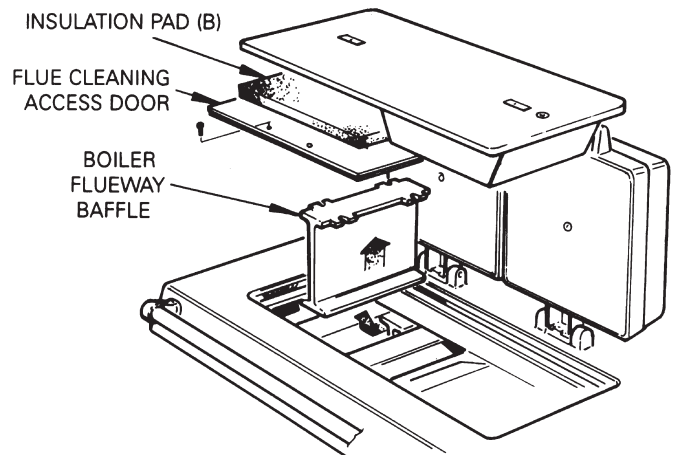


FIG. 6

DESN 510524

SEE FIG. 7

1. Brush and clean in between hotplate ribs on underside.
2. Examine soft rope seal located around hotplate aperture in top plate. Replace if frayed or damaged.
3. Replace hotplate ensuring the underside ribs lie over the oven, and that it seals to the top plate.
4. Lift top plate enamelled cover panel (behind the L.H. insulating cover) remove insulation pad A and sealing plate.
5. Inspect and clean the boiler outlet flueway.
6. Thoroughly clean boiler heat exchanger flueway.
7. Carefully vacuum any debris that has fallen down into the burner chamber.
8. Clean boiler flueway baffles.
9. Re-assemble in reverse order ensuring that the hotplate seals around the edges.

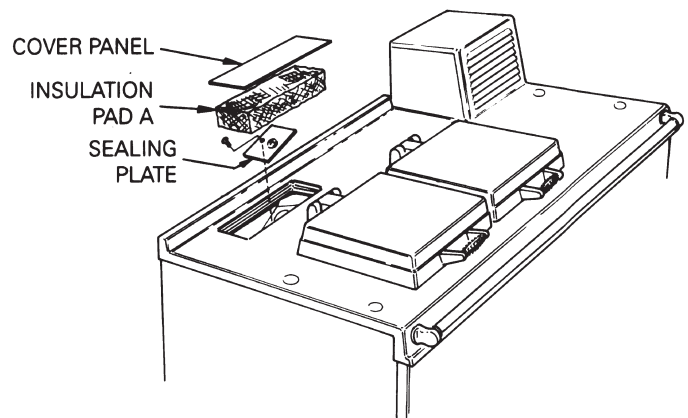


FIG. 7

DESN511258

INTRODUCTION

It is recommended that each burner is serviced individually so as not to get the components from the two burners mixed up.

BURNER HEAD CLEANING

1. Clean heads with soft brush and inspect for damage or wear.

FAN CLEANING

1. Clean between the blades of the fan impeller with a small brush and tip upside down to remove any residue.
2. Spin the motor to make sure that it turns easily.

Re-commissioning

TEST BURNERS ON DRY RUN (NO GAS)

SEE FIG. 8

Switch on electricity supply

BOILER BURNER

Set boiler burner clock to continuous and turn the boiler thermostat to max. allowing the burner to start, the burner should go to lockout after the expiry of the ignition safety time. Lockout is indicated by illumination of the control box reset button. **IN THE EVENT OF LOCKOUT WAIT AT LEAST ONE MINUTE** then press the reset button.

COOKER BURNER

Follow procedure as above for boiler burner.

BOILER BURNER

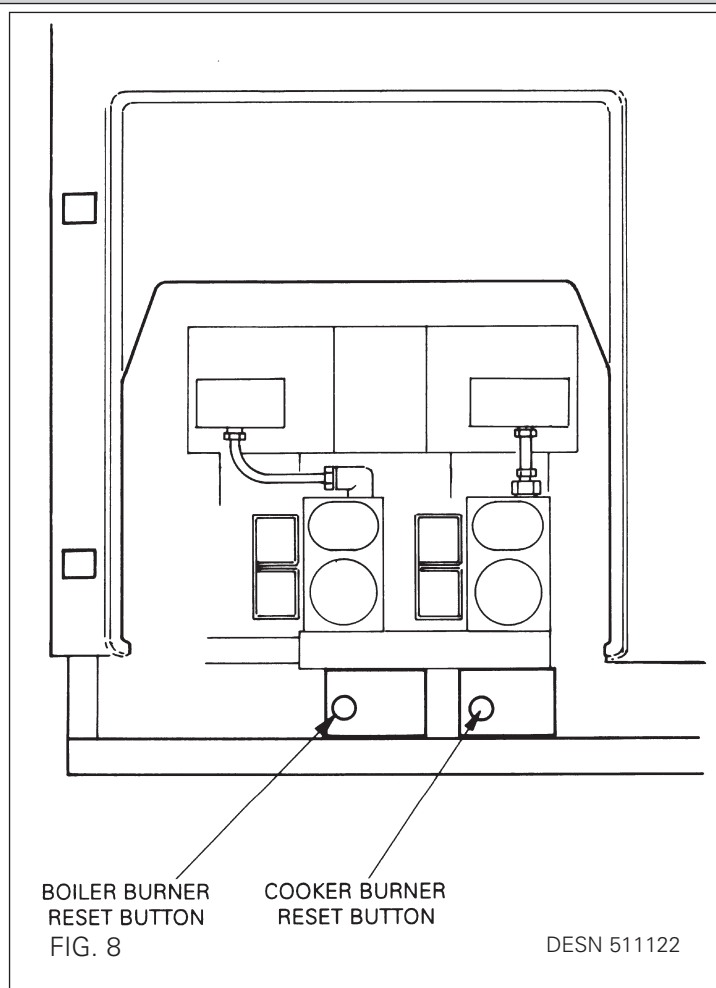
Reset the control box, open the gas inlet cock, allowing the burner to restart.

When the burner is in 'run' condition close the inlet gas cock. When the flame is extinguished the gas valves solenoids on the burner should be de-energised almost immediately.

The control will then allow one restart attempt and should go to lockout after the expiry of the safety time.

COOKER BURNER

Repeat procedure as above for the boiler burner.



SET COMBUSTION AIR

SEE FIG. 9

Turn on the boiler burner. After 15 minutes of the boiler burner running remove the enamelled top cover panel and the insulation pad.

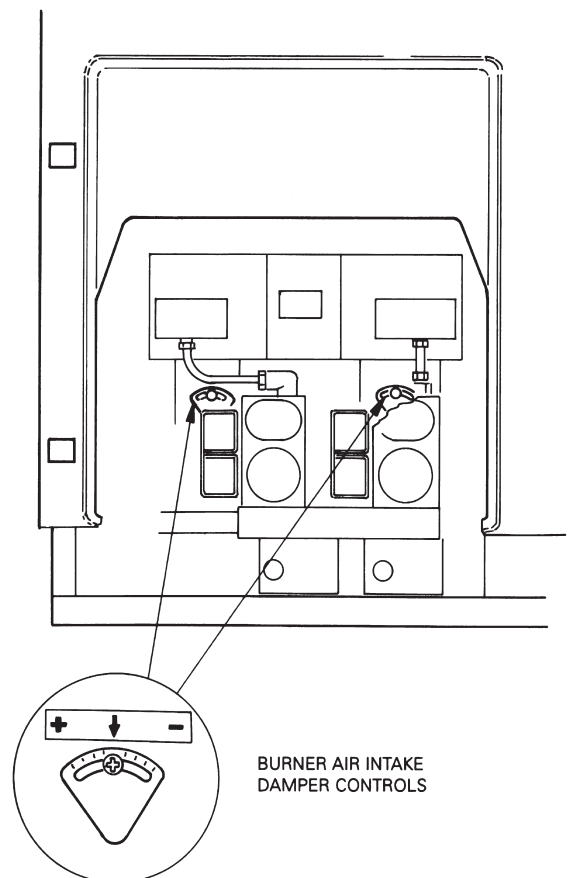
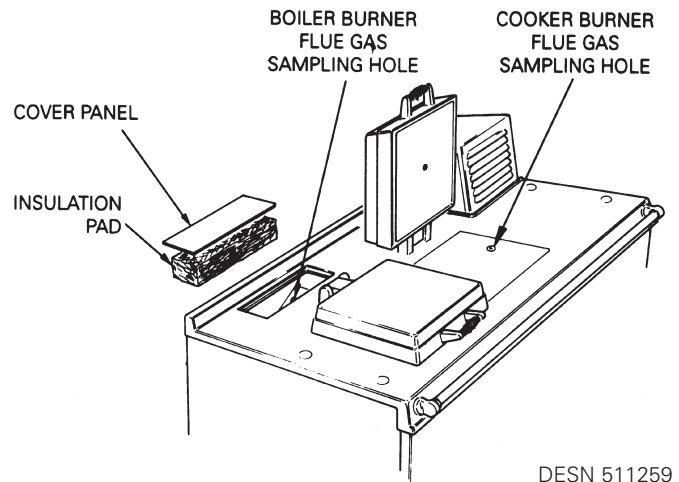
Remove the plugging screw and insert the sensing end of a portable indicator to check the CO₂ (Carbon Dioxide) level. Adjust the boiler burner air intake until the CO₂/CO are as specified.

CO% **93 ppm (MAX)**

CO₂% **8.5 - 9.0**

Cooker Burner

Switch off the boiler burner and repeat the above procedure with the cooker burner. To sample the flue gases from the cooker burner lift up the R.H. insulating cover and remove the countersunk headed screw in the hotplate. The cooker burner should be set as specified above. Replace the countersunk headed screw on completion ensuring that it will not interfere with any pots and pans placed on the hotplate.



IMPORTANT: ALWAYS LOCK IN POSITION AFTER SETTING

FIG. 9

DESN 511123

Replacement of parts (Burner)

FAN MOTOR

SEE FIG. 10

Follow instructions in sections BURNER ACCESS, Steps 1 to 3 and BURNER REMOVAL, Steps 1 to 5.

COOKER FAN

1. Carefully remove 2 push on connectors (noting terminals) and earth connection.
2. Remove 4 securing screws.
3. Re-assemble in reverse order.

BOILER FAN

1. Unplug ribbon strip in boiler fan motor.
2. Remove 4 securing screws.
3. Re-assemble in reverse order.

REMOVE (4) FAN
SECURING SCREWS

REMOVE (2) PUSH-ON
CONNECTIONS
(NOTE TERMINALS)

UNPLUG RIBBON
STRIP

FIG. 10

DESN 511128 A

DISMANTLE BURNERS

SEE FIG. 11

Follow instructions in sections BURNER ACCESS, Steps 1 to 3 and BURNER REMOVAL, Steps 1 to 6.

1. Remove 8 burner head securing screws.
2. Disconnect plug on fan mounting plate.

REMOVE (8)
BURNER HEAD
SECURING
SCREWS

DISCONNECT
PLUG

**NOTE: PUSH IN CLIP TO
REMOVE PLUG**

FIG. 11

DESN 511129

AIR PRESSURE SWITCH

SEE FIG. 12

Follow instructions in sections BURNER ACCESS, Steps 1 to 3, BURNER REMOVAL, Steps 1 to 6 and DISMANTLE BURNERS, Steps 1 to 2.

1. Carefully remove 2 push on connectors on pressure switch.
2. Carefully remove 2 air tubes.
3. Remove 2 air pressure switch securing screws and nuts.
4. Fit new switch, re-assemble in reverse order.

PLEASE NOTE: CORRECT POSITIONS.

REMOVE (2)
AIR TUBES

REMOVE (2)
P. SWITCH
SECURING
SCREWS

REMOVE (2) PUSH-ON
CONNECTORS

FIG. 12

DESN 511130

Replacement of parts (Burner)

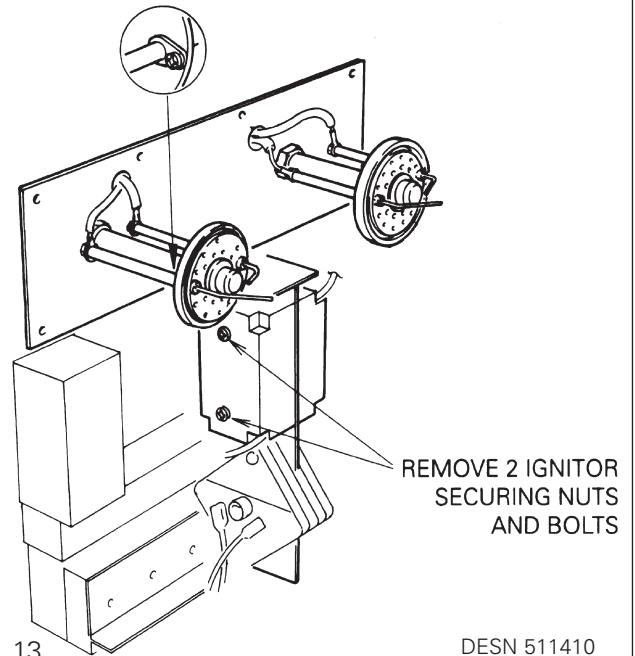
IGNITOR ELECTRODE

SEE FIG 13 & 15

Follow instructions in sections BURNER ACCESS, Steps 1 to 3, BURNER REMOVAL, Steps 1 to 6 and DISMANTLE BURNERS, Steps 1 to 2.

1. Remove securing nut and disconnect H.T. lead from ignition electrode.
2. Slacken nut and bolt on electrode clamp.
3. Slide electrode forward and away from clamp.
4. Fit new electrode in reverse order, set gap and position (See Fig. 14).

NOTE: DO NOT OVER TIGHTEN ELECTRODE CLAMP.



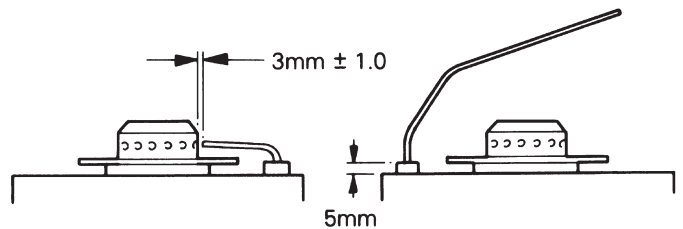
FLAME SENSING PROBE

SEE FIG. 13

Follow instructions in sections BURNER ACCESS, Steps 1 to 3, BURNER REMOVAL, Steps 1 to 6 and DISMANTLE BURNERS Steps 1 to 2.

1. Remove securing nut and disconnect H.T. lead from flame sensing probe.
2. Remove fixing screw.
3. Slide sensing probe forward and away from clamp.
4. Fit new sensing probe in reverse order, set gap and position (See Fig. 14).

NOTE: DO NOT OVER TIGHTEN SENSING PROBE CLAMP



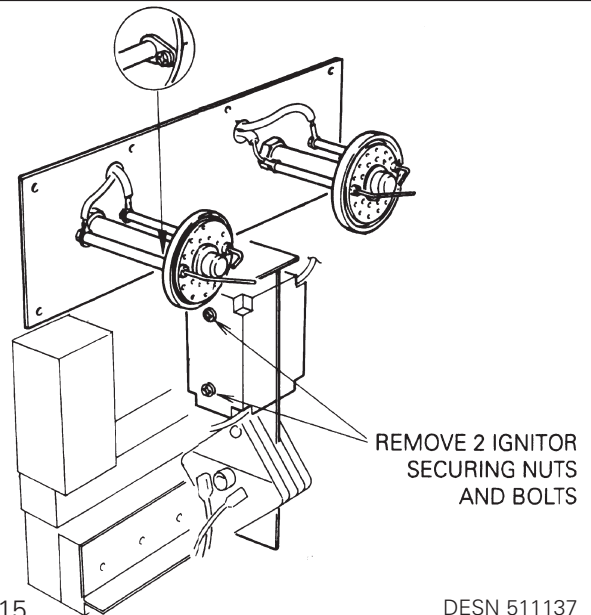
Replacement of parts (Burner)

IGNITOR

SEE FIG. 15

Follow instructions in sections BURNER ACCESS, Steps 1 to 3, BURNER REMOVAL, Steps 1 to 6 and DISMANTLE BURNERS, Steps 1 to 2.

1. Remove securing nut and disconnect H.T. lead from ignition electrode.
2. Remove control box, by inserting screwdriver as directed on control box.
3. Disconnect live wiring to terminal 7.
4. Disconnect neutral wiring.
5. Disconnect earth wiring.
6. Remove 2 ignitor securing nuts and bolts in reverse order.
7. Remove ignitor.
8. Fit new ignitor, re-assemble in reverse order.

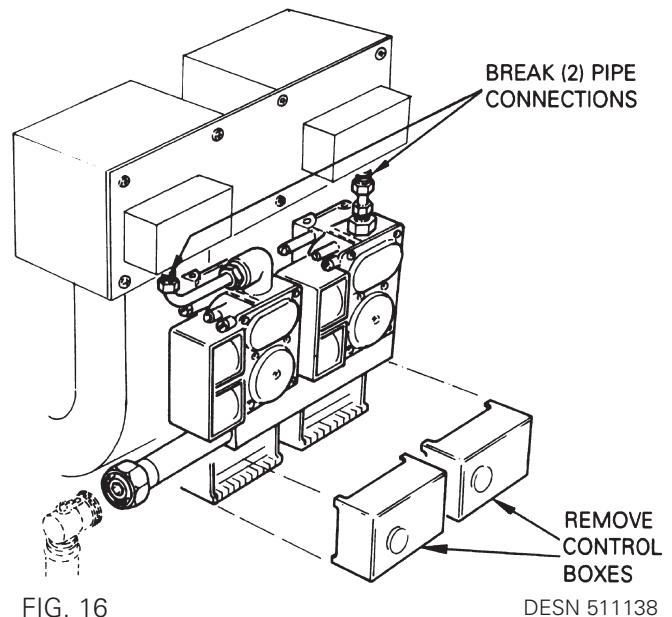


GAS VALVE ACCESS

SEE FIG. 16

Follow instructions in sections BURNER ACCESS, Steps 1 to 3 and BURNER REMOVAL, Steps 1 to 3.

1. Remove control boxes.
2. Break 2 gas pipe connections.
3. Lower gas valve assembly forward.

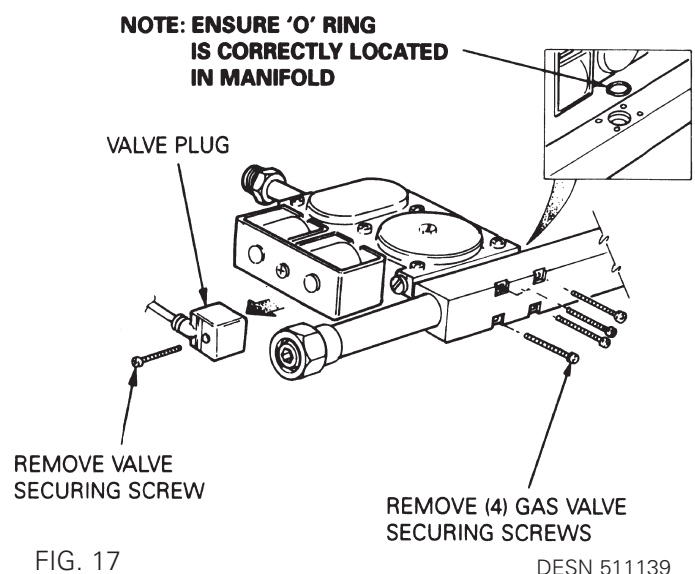


GAS VALVE REPLACEMENT

SEE FIG. 17

1. Remove 4 gas valve securing screws (gas valve to manifold).
2. Remove valve plug, 1 screw.
3. Remove appropriate pipework from valve. Fit to new valve.
4. Re-assemble gas valve in reverse order.

NOTE: ENSURE 'O' RING IS LOCATED CORRECTLY IN MANIFOLD.



Replacement of parts (Electrical)

ELECTRICAL COMPONENT ACCESS

BEFORE REMOVING SERVICE ACCESS COVERS ENSURE THAT ALL ELECTRICAL SUPPLIES TO THE APPLIANCE HAVE BEEN TURNED OFF (SWITCH OFF AND REMOVE PLUG).

SEE FIG. 18

1. Remove the controls door and place in a safe position.
2. Remove both thermostat control knobs.
3. Remove the 2 cover panel fixing screws.
4. Remove cover panel. It will be necessary to disconnect the push on tags from the selector switch.

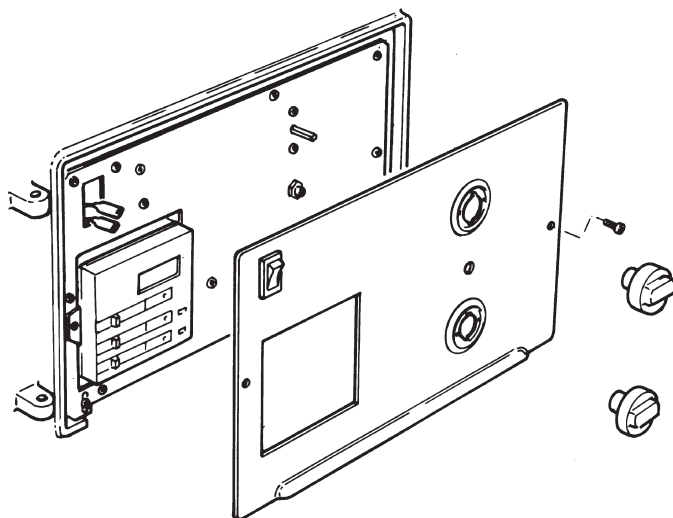


FIG. 18

DESN 510543 B

SEE FIG. 19

5. Remove the four control panel fixing screws.
6. Tilt the chassis forward from the top and lift out. To fully access the rear of the control chassis, the thermostat capillaries should be removed from their pockets.

PLEASE NOTE CORRECT POSITIONS

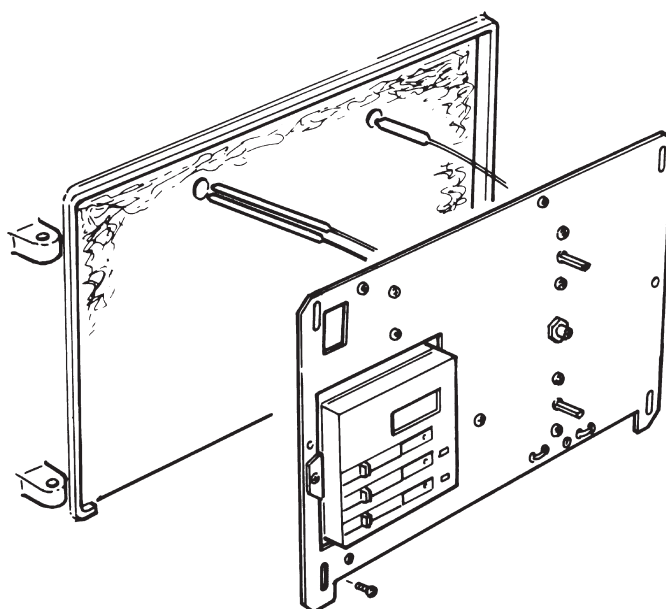


FIG. 19

DESN 510544 A

Replacement of parts (Electrical)

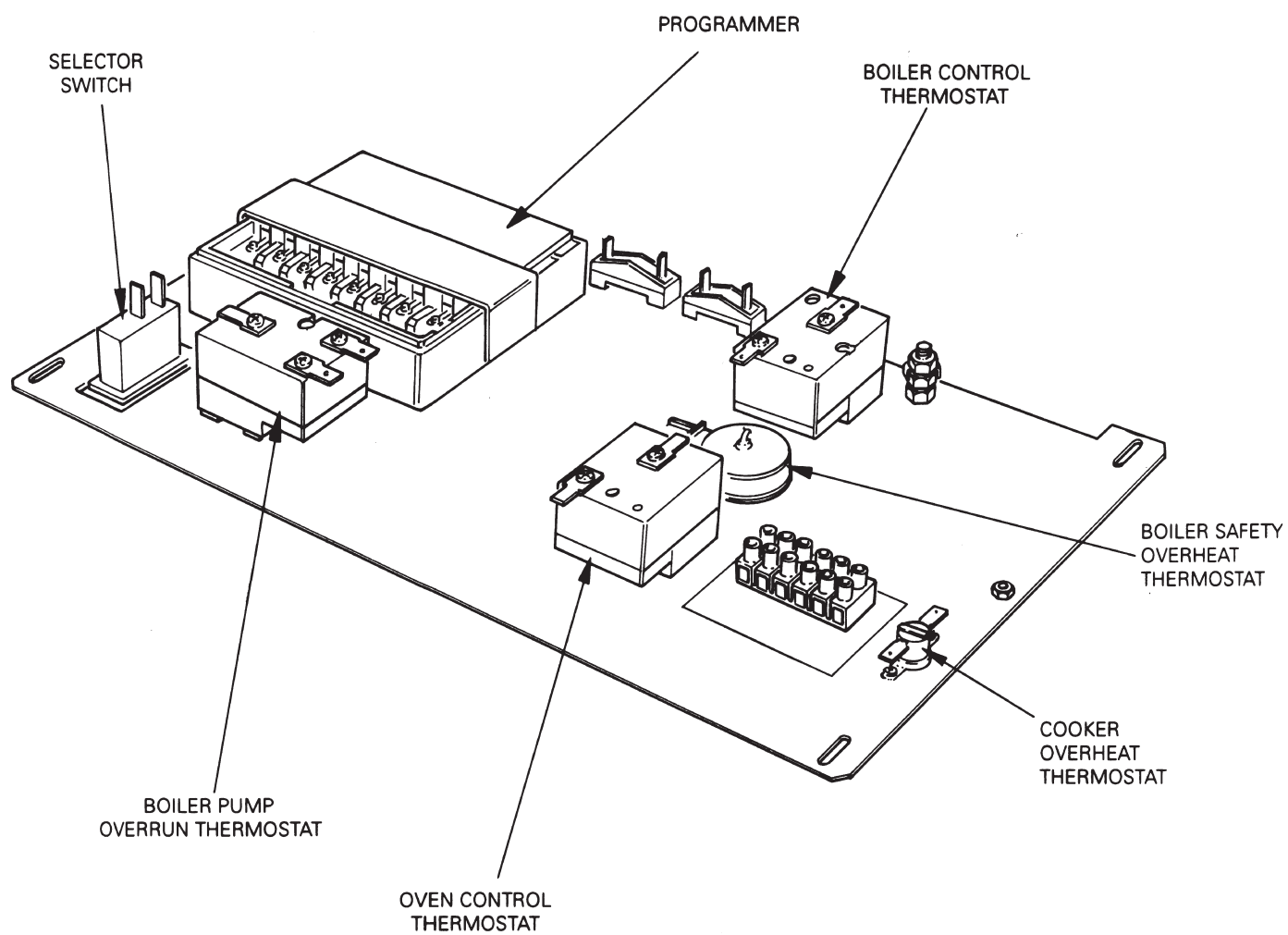


FIG. 20

DESN 511140

Replacement of parts (Electrical)

TO FIT NEW BOILER CONTROL THERMOSTAT

SEE FIG. 21

Follow instructions in section ELECTRICAL COMPONENT ACCESS, Steps 1 to 6.

1. Undo the two screws on the front of the chassis which hold the thermostat in place.
2. Remove the two push on connectors from back of thermostat.
3. Replace thermostat. Take care to push thermostat phial correctly into the pocket provided. The thermostat should be mounted with tag P at the bottom.
4. Re-connect push on connector wires. The RED wire to P and BLACK wire to 2.

To complete follow instructions in section RE-ASSEMBLE Steps 1 to 6.

TO FIT NEW BOILER PUMP OVERRUN THERMOSTAT

Follow instructions in section ELECTRICAL COMPONENT ACCESS, Steps 1 to 6.

1. Undo the two screws on the front of the chassis which hold the thermostat in place.
2. Remove the three push on connectors from back of thermostat.
3. Replace thermostat. The thermostat should be mounted with tag P at the right hand side (looking from back). Take care to push thermostat phial correctly into the pocket provided.
4. Re-connect push on connector wires. The white wire from the pump PL to P, the other WHITE wire to 2 and the RED to 1.

To complete follow instructions in section RE-ASSEMBLE Steps 1 to 6.

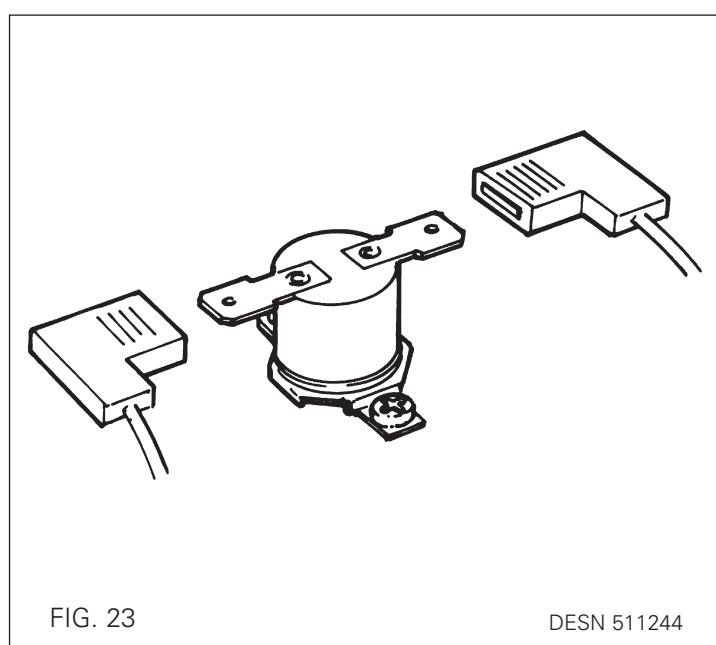
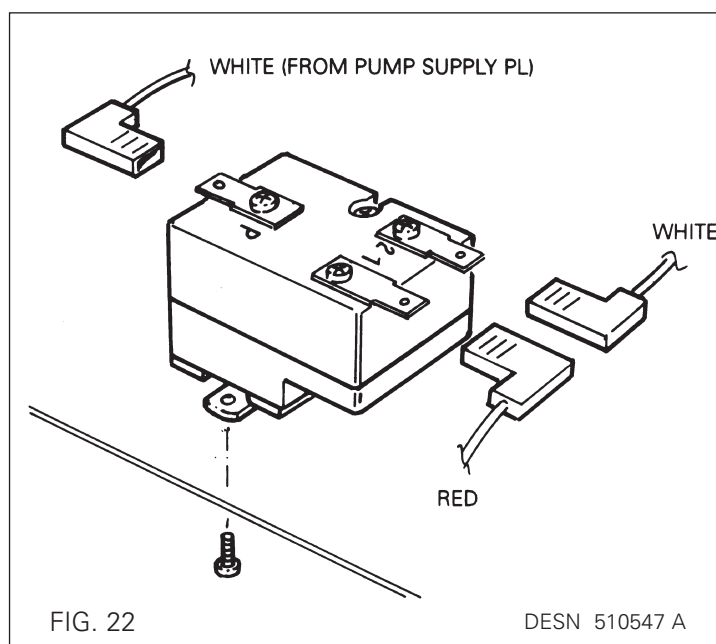
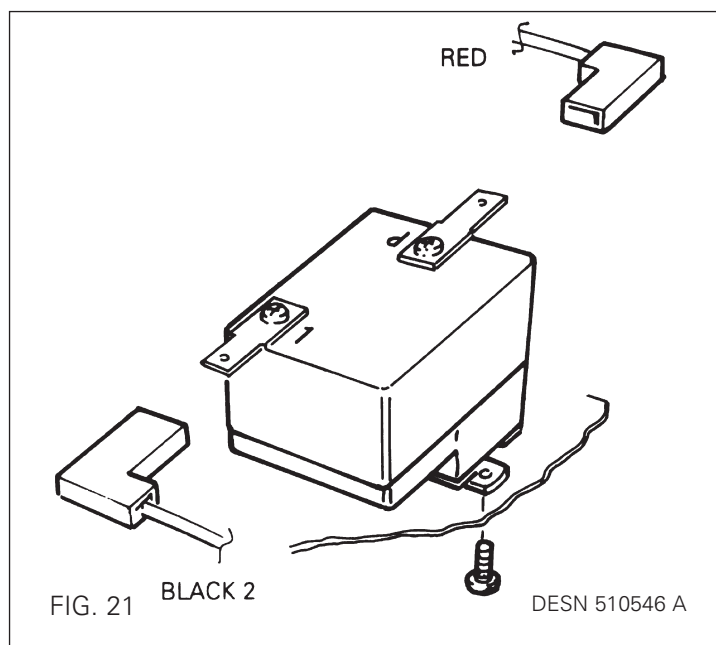
TO FIT NEW COOKER SAFETY OVERHEAT THERMOSTAT

SEE FIG. 23

Follow instructions in section ELECTRICAL COMPONENT ACCESS, Steps 1 to 6.

1. Remove the two push on connectors from the thermostat.
2. Undo the two screws and nuts which hold the thermostat in place.
3. Replace thermostat. Take care to push thermostat phial correctly into pocket provided.
4. Re-connect push on connector wires.

To complete follow instructions in section RE-ASSEMBLE Steps 1 to 6.



Replacement of parts (Electrical)

TO FIT NEW BOILER SAFETY OVERHEAT THERMOSTAT

SEE FIG. 24

Follow instructions in section ELECTRICAL COMPONENT ACCESS, Steps 1 to 6.

1. Undo the central hexagon nut on the front of the chassis which holds the thermostat in place.
2. Remove the two push on connectors from back of thermostat (noting tags for re-connection).
3. Replace thermostat. Take care to push thermostat phial correctly into the pocket provided.
4. Re-connect push on connector wires.

To complete follow instructions in section RE-ASSEMBLE, Steps 1 to 6.

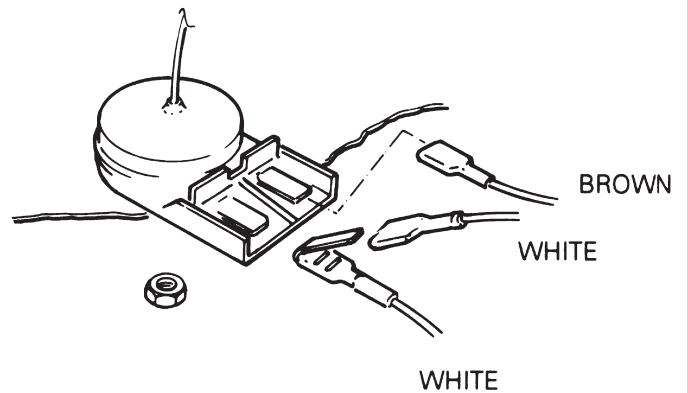


FIG. 24

DESN 511141

TO FIT NEW OVEN CONTROL THERMOSTAT

SEE FIG. 25

Follow instructions in section ELECTRICAL COMPONENT ACCESS, Steps 1 to 6.

1. Undo the two screws on the front of the chassis which holds the thermostat in place.
2. Remove the two push on connectors from back of thermostat.
3. Open Roasting Oven door to access the thermostat phial and capillary which pass into the oven at the top, left hand corner. The thermostat phial is located in a slot at the top front of the oven.
4. Slacken the single screw where the phial passes through the roasting oven side and rotate the cover plate to open up the access door.
5. Slack the two screws in the top of the roasting oven at the front and rotate the two retaining clips.
6. Allow the thermostat phial to drop down and withdraw the thermostat capillary out of the oven.
7. Replace thermostat. The thermostat should be mounted with tag P at the bottom. Reposition the phial in same position as removed. Ensure that the insulation, spacer tubes are correctly fitted.
8. Re-connect push on connector. The ORANGE wire to 1 and BLACK (3) wire to P.

To complete follow instructions in section RE-ASSEMBLE, Steps 1 to 6.

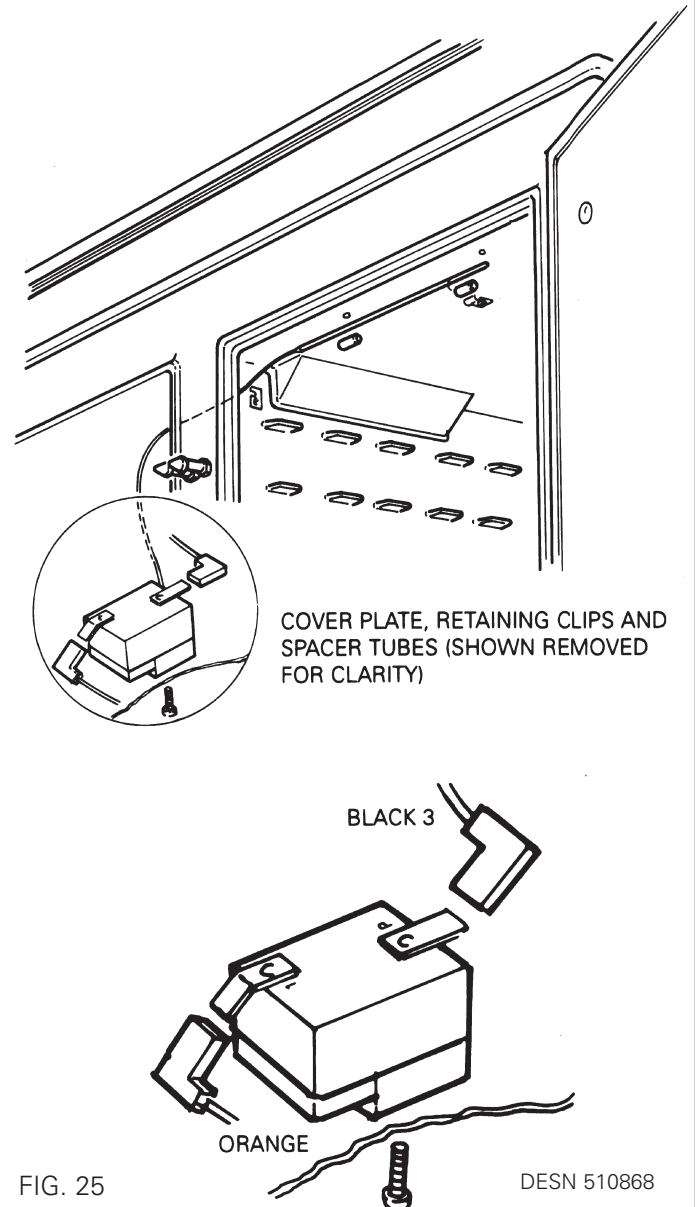


FIG. 25

DESN 510868

Replacement of parts (Electrical)

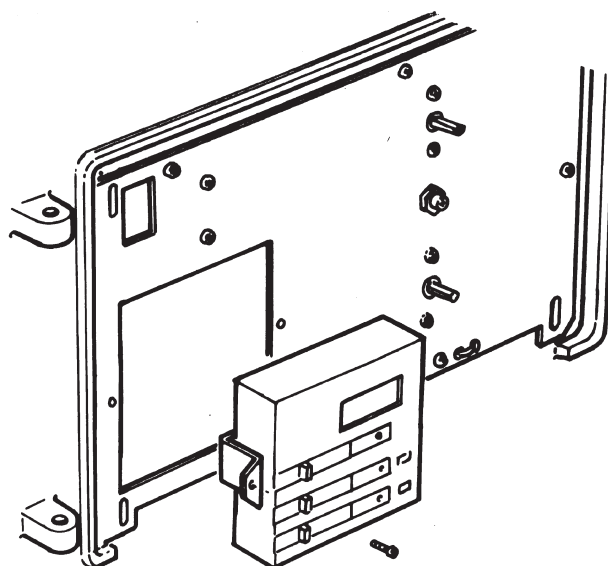
TO FIT NEW PROGRAMMER

SEE FIG. 26

Follow instructions in section ELECTRICAL COMPONENT ACCESS, Steps 1 to 4.

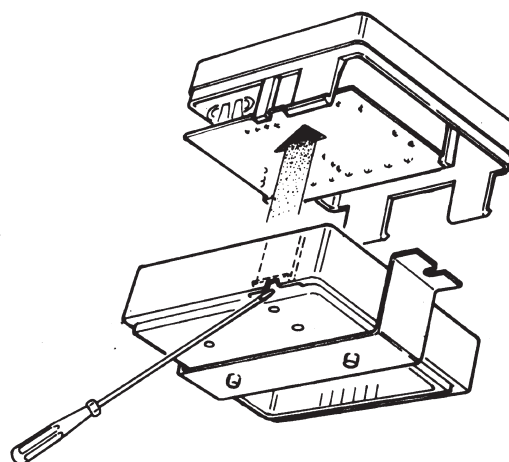
1. Remove the two screws holding the mounting bracket in the control chassis.
2. Pull the programmer forward to access the rear casing.
3. Insert a small screwdriver into cut-out and push against the retaining clip.
4. The programmer can now be pulled away from its base at the bottom. The top retaining clips can now be pulled out freeing the programmer.
5. Replace with the new programmer inserting the top clips first and then locking the programmer inserting the top base with the bottom clip.
6. Refix the mounting brackets to the control chassis.

To complete follow instructions in section RE-ASSEMBLE, Steps 3 to 6.



REMOVE PROGRAMMER/MOUNTING BRACKET (2 SCREWS)

DESN 510552'A'



TO REMOVE PROGRAMMER FROM ITS BASE INSERT A SMALL SCREWDRIVER INTO CUT-OUT AND PUSH AGAINST RETAINING CLIP.

FIG. 26

DESN 510559

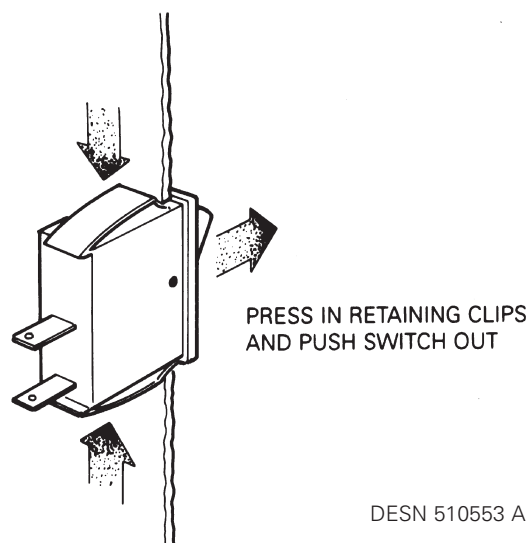
TO FIT NEW SELECTOR SWITCH

SEE FIG. 27

Follow instructions in section ELECTRICAL COMPONENT ACCESS, Steps 1 to 4.

To remove switch of the cover panel press the two toggles, at top and bottom of switch, simultaneously and push switch through panel. Push replacement switch into aperture and click into place. The switch should be fitted with terminal 1 at the top.

To complete follow instructions in section RE-ASSEMBLE, Steps 3 to 6.



PRESS IN RETAINING CLIPS AND PUSH SWITCH OUT

FIG. 27

DESN 510553 A

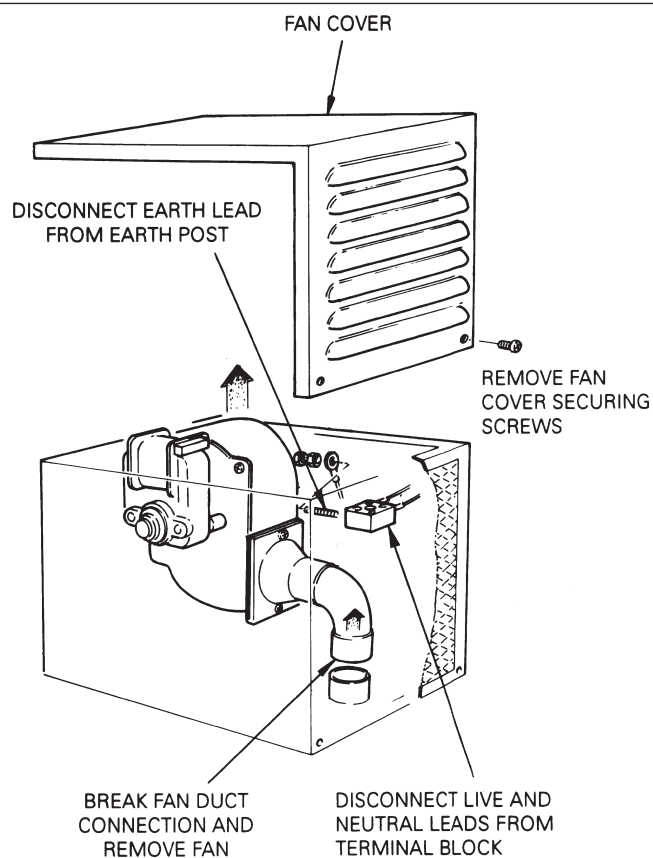
Replacement of parts (Vent Fan)

VENT FAN

BEFORE REMOVING SERVICE ACCESS COVERS ENSURE THAT ALL ELECTRICAL SUPPLIES TO THE APPLIANCE HAVE BEEN TURNED OFF (SWITCH OFF AND REMOVE PLUG).

SEE FIG. 28

1. Remove (2) fan cover securing screws, remove cover.
2. Disconnect green/yellow lead from earth post.
3. Disconnect blue and brown leads from terminal block.
4. Break fan duct connection, remove fan assembly.
5. Remove (2) venturi securing screws.
6. Remove fan venturi assembly and gasket from fan.
7. Fit new fan, re-assemble in reverse order.



DESN511260

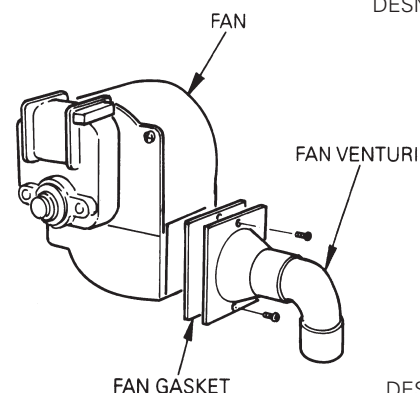


FIG. 28

DESN511261

VENT FAN SWITCH

SEE FIG. 29

1. Remove (2) fan cover securing screws, remove cover.
2. Disconnect push on leads.
3. To remove switch of the cover panel, press the two toggles, at top and bottom of switch, simultaneously and push switch through panel.
4. Push replacement switch into aperture and click into place. The switch should be fitted with terminal 1 at the top.
5. Re-assemble in reverse order.

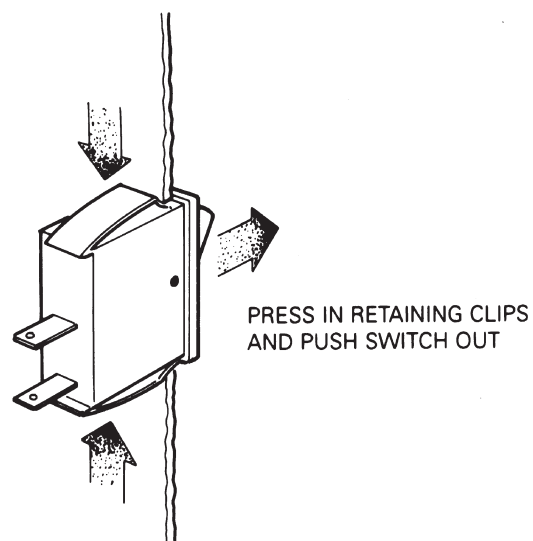


FIG. 29

DESN510533 A

RE-ASSEMBLE

1. Locate thermostat phials into boiler pockets, the pump overrun and boiler stats into the LH pocket and the overheat stat into the RH pocket.
2. Locate the base of the control chassis into the bottom of the doorway aperture, tilt the chassis backwards into position with the four screws.
3. Thread the two wires for the selector switch through the aperture and connect them onto the rear of the selector switch fitted in the outer panel. Connect the YELLOW wire on 1 and the VIOLET wire on 2.
4. Refix the outer panel in position and secure with the 2 screws.
5. Replace the thermostat knobs.
6. Replace the controls door.

Electrical Controls

PUMP OVERRUN FACILITY

When the programmer switches off the BOILER channel then the water circulating pump will be switched off. If during the period shortly after this the residual heat in the appliance causes the water temperature in the boiler to rise above 85°C then the pump overrun thermostat will change-over. This will switch on the circulating pump.

If during a normal programmer COOKER 'ON' period the boiler flow temperature rises above 65°C then the pump overrun thermostat operates and switches on the pump until the overrun thermostat switches back.

OVERHEAT SAFETY THERMOSTATS

BOILER

This thermostat is a safety cut-out device which is intended to operate if the other controls fail. This control will "lock-out" and switches everything off except for the programmer clock and the "Pump Overrun" facility.

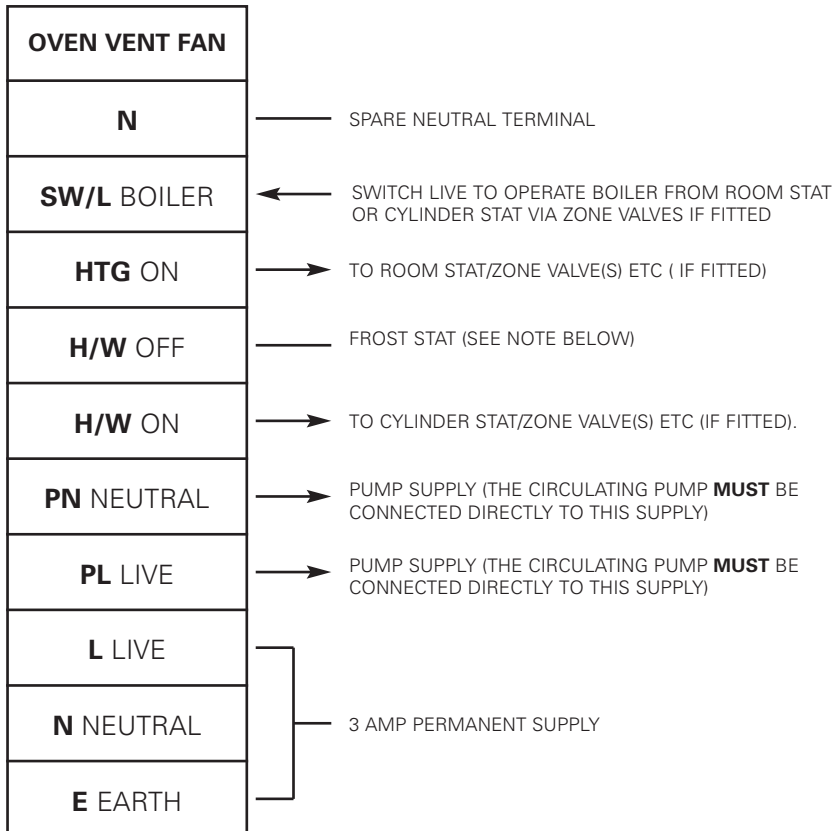
This thermostat has to be manually reset once the temperature has cooled down.

COOKER

This thermostat is a safety cut-out device which operates if the control thermostat fails. This device automatically resets.

CONTROL CIRCUIT-EXTERNAL

TERMINAL STRIP CONNECTIONS



NOTE:

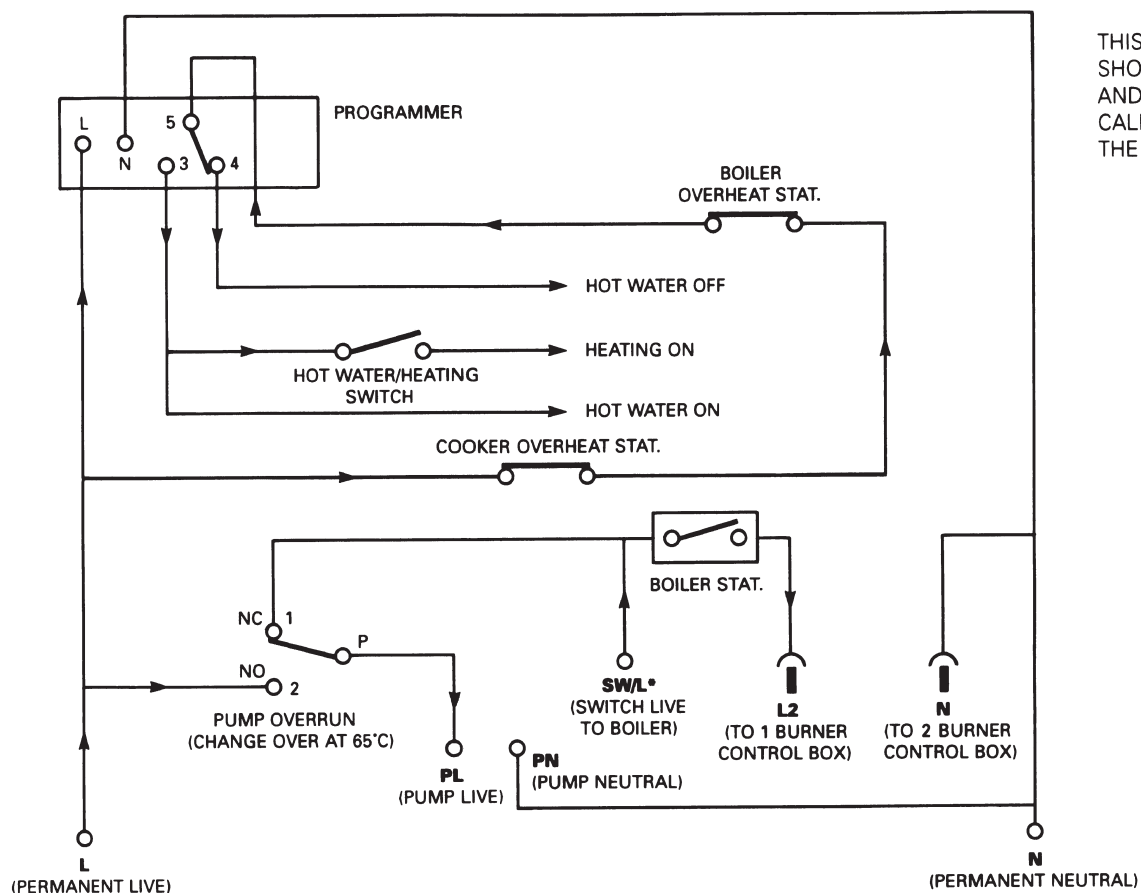
If no Hot Water System Controls are used a link **MUST** be fitted between **H/W ON** and **SW/L BOILER**.

If no Central Heating System Controls are used a link **MUST** be fitted between **HTG ON** and **SW/L BOILER**.

If a Frost Thermostat is fitted it **MUST** be connected to **SW/L BOILER** and **H/W OFF**.

Electrical Controls

CONTROL CIRCUIT-BOILER



BOILER CONTROL CIRCUIT (Landis & Gyr)

***NOTE:** SW/L TO OPERATE BOILER FROM ROOM STAT. OR CYLINDER STAT. VIA ZONE VALVES (IF FITTED).

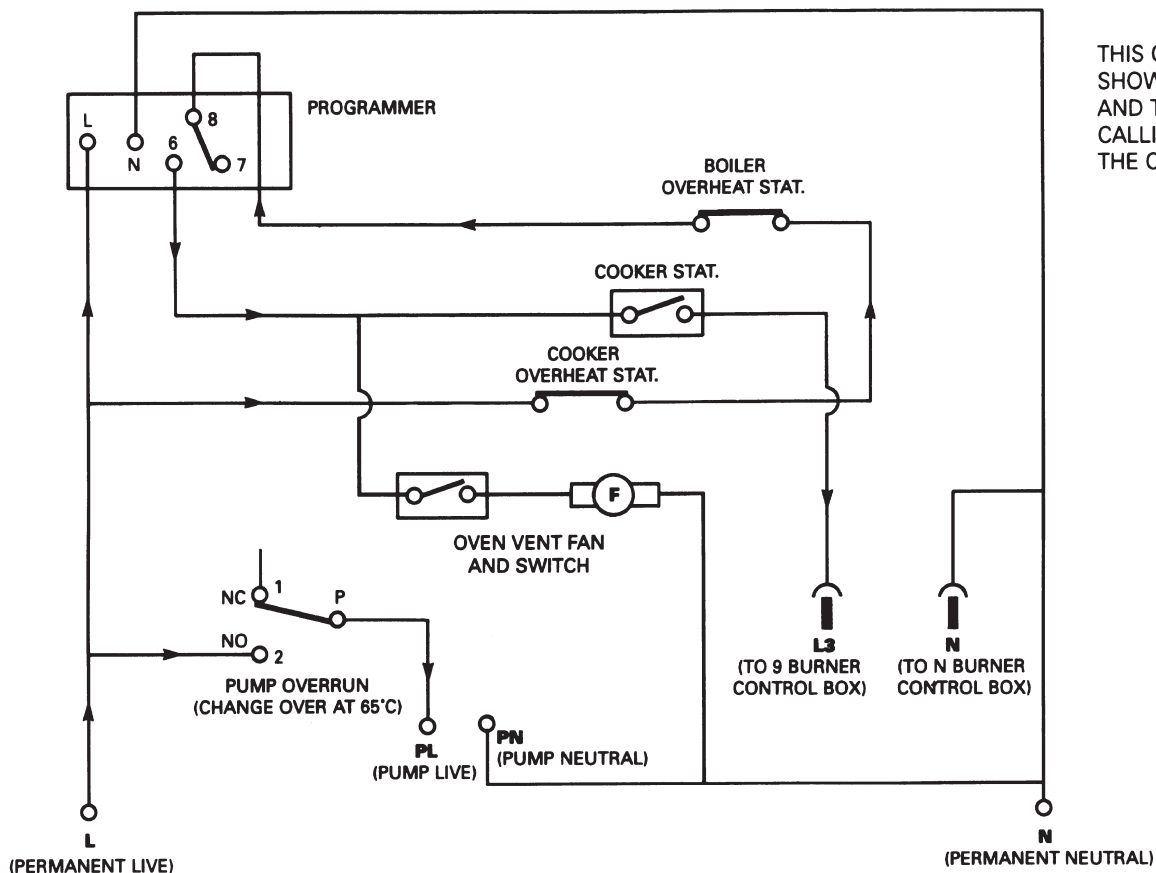
IF NO HOT WATER SYSTEM CONTROLS ARE USED, A LINK MUST BE FITTED BETWEEN H/W AND SW/L BOILER.

IF NO CENTRAL HEATING CONTROLS ARE USED, A LINK MUST BE FITTED BETWEEN HTG ON AND SW/L BOILER.

FIG. 30

CONTROL CIRCUIT-COOKER

COOKER CONTROL CIRCUIT



COOKER CONTROL CIRCUIT (Landis & Gyr)

NOTE: IF WHEN THE COOKER ONLY IS OPERATING AND THE TEMPERATURE OF THE WATER IN THE BOILER REACHES 65°C ABOVE, THE PUMP OVERRUN WILL CUT IN AND SWITCH ON THE PUMP.

FIG. 31

Electrical Controls

WIRING DIAGRAM - BURNER ONLY

KEY - SERIES 400 GAS BURNER (Landis & Gyr Control box)

PS	PRESSURE SWITCH
IS	IONISATION PROBE
V1, V2	FUEL SUPPLY
ZT	IGNITOR

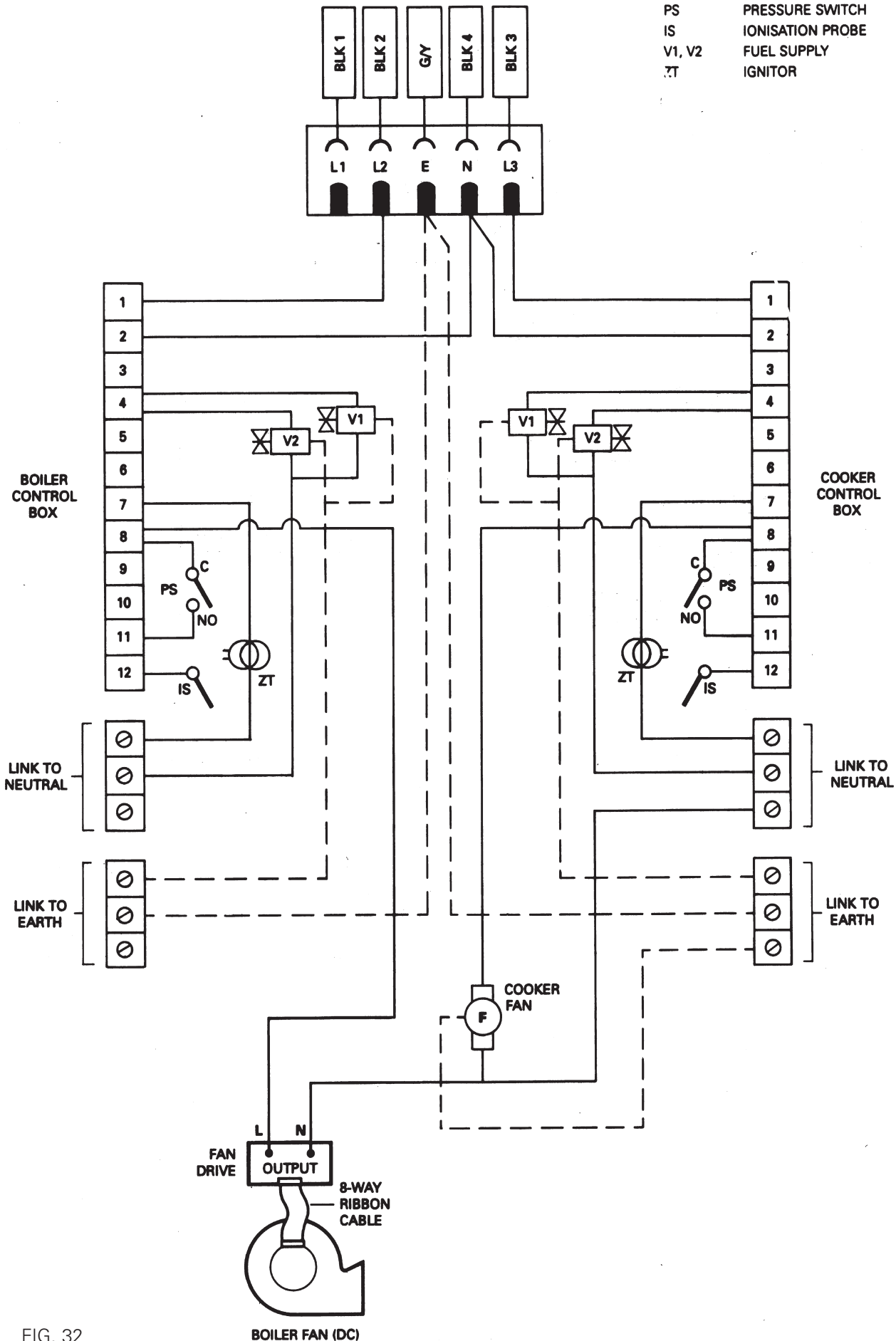


FIG. 32

WIRING DIAGRAM - APPLIANCE

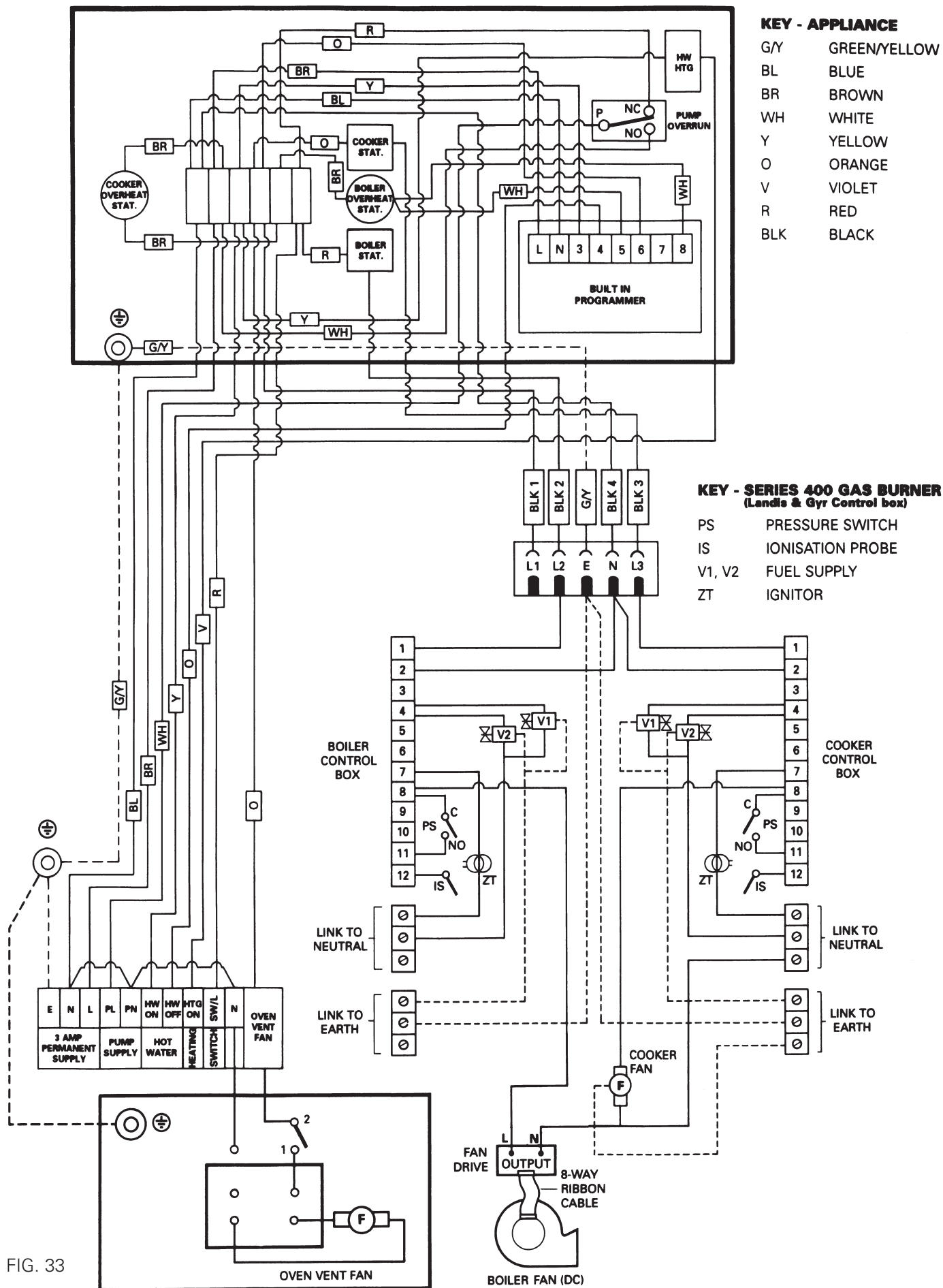


FIG. 33

Fault Finding

BURNER DOES NOT START

Burners

Check that the burners have not gone to lock-out.

Causes of lock-out can be:-

- ☐ No ignition, ignition electrode incorrectly positioned or insulation cracked, spark generator faulty.
- ☐ No gas supply.
- ☐ Poor combustion.
- ☐ Flame probe incorrectly positioned, cracked insulation, flame probe in contact with earth, moisture present on probe affecting insulation.
- ☐ Live and Neutral connections reversed.
- ☐ Inadequate earth contact with flame.
- ☐ Ignition interference to flame signal.
- ☐ Gas valves not properly closed in shutdown position.
- ☐ Faulty control box.

REFER TO FLOW DIAGRAM FOR ELIMINATION PROCEDURES.

General

You can carry out some checks on the controls before you need to access the controls compartment behind the controls door.

If only one of the burners is not running then the fault must be after the safety overheat thermostat.

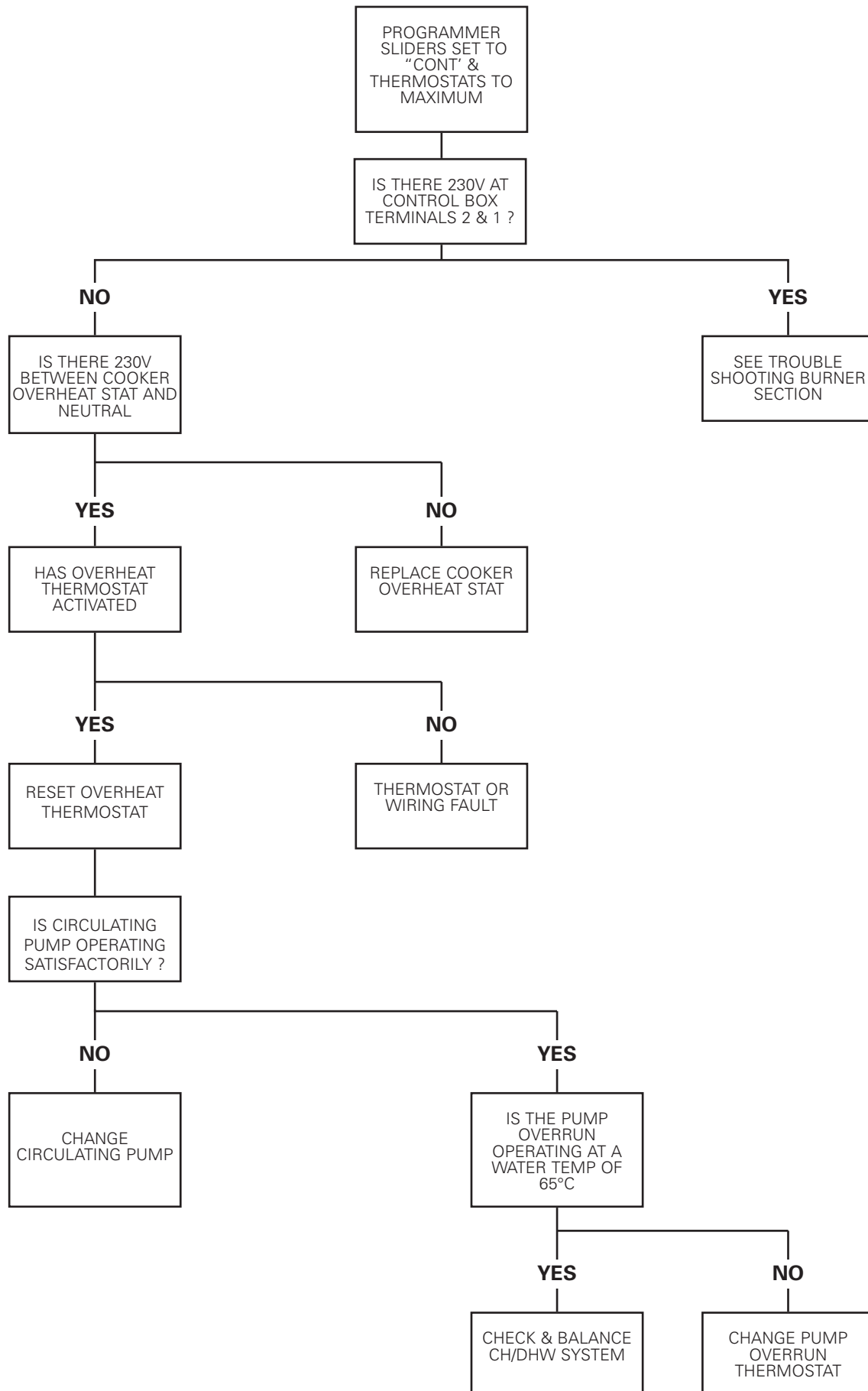
Conversely if both burners are affected then the fault usually lies before the programmer connections.

For access to individual controls refer to the section on Replacement Parts and for wiring continuity checks refer to Figs. 32, 33, 34 and 35 for detailed and schematic wiring layouts.

1. To check out the electrical wiring at the burners you will first have to have access to the burner chamber. Use the following procedure:-
 - Isolate the electrical power supply.
 - Open up the bottom burner access door. Remove door and put in a safe place.
2. Unscrew the 4 screws holding the inner panel in place and remove panel.
3. Unscrew the 3 screws holding the louvered plinth in place and remove plinth.

The external mains connections are made to a terminal block situated in the front left-hand corner of the burner chamber. Re-connect the electrical supply and check that there is a 230V supply available across the mains input connections L & N on the terminal block. If not then check connecting leads, fuse and whether power is available at mains plug.

If power is available across L & N then check whether the overheat cut-out switch has cut-out, if it has then reset by pushing in the centre with a small, round tool i.e. a pencil.



Fault Finding

TROUBLESHOOTING-BURNER

BURNER WILL NOT START

1. Check that external wiring is correct.
2. Check for 230V supply on terminal 1 at control box base, this will also determine if the thermostats are calling for heat.
Check that incoming Neutral conductor is correctly wired onto terminal 2.
3. Press reset button to ensure that the control box has not gone to lockout.
4. Check air pressure switch is in provide air condition and fan is running.
5. If burner still refuses to start, change control box.

BURNER FAN RUNS WITH CONTINUOUS PRE-PURGE

1. Check wiring to air pressure switch across terminal 8 & 11 at control box base.
2. Check air pressure switch.
3. Check fan inlet ducts and fan for blockages.
4. Check plastic air tubes are correctly connected.

BURNER STARTS, FLAME NOT ESTABLISHED, CONTROL BOX GOES TO LOCKOUT, AFTER END OF SAFETY

1. Check gas supply to valves is on.
2. Check ignition is present after end of pre-purge period.
3. Check start gas valve is energised and is opening during safety time.
4. If necessary change control box.

BURNER STARTS FLAME ESTABLISHED, CONTROL BOX GOES TO LOCKOUT

1. Check polarity of wiring for Live and Neutral to control box base. live to terminal 1. Neutral onto terminal 2 at control box base.
2. Check flame detection probe is correctly positioned. Ensure that the probe insulation is sound, free from cracks or moisture.
Check that the probe is not in contact with other metallic parts of the burner.
3. Check the burner is effectively earthed and boned to the incoming earth wire from the mains supply.
4. Check for interference to the flame signal from the ignition spark. This can be determined with a d.c. micro-ammeter (μA). Connect the meter between terminal 12 and the incoming wiring to the flame probe. Correct polarity of the meter connections must be correctly observed, with the positive side of the meter connected onto terminal 12 at the control box wiring base. If flame is established and the meter tends to move in a reverse direction this can be an indication that the ignition is causing interference to the flame signal. It may also be an indication that there is insufficient earth contact with the flame. A correct reading should be approximately 15 - 20 μA .
5. Change control box if necessary.

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

With Aga-Rayburn's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliances described and illustrated at any time.



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