

Our policy is one of continual improvement in design and development, therefore strict accuracy of illustrations and descriptions cannot be guaranteed.

# CE

This appliance conforms to the following EEC Directives:

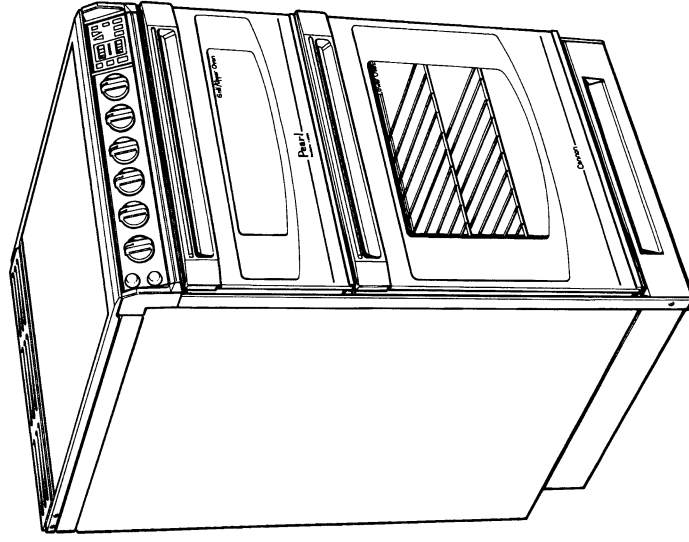
Gas Appliances  
90/396/EEC

Low Voltage Equipment  
73/23/EEC  
93/68/EEC

Electromagnetic Compatibility  
89/336/EEC  
92/31/EEC  
93/68/EEC

# Cannon

## PEARL



## Installation and Maintenance Instructions

**NOTE:** Only a registered installer, e.g. CORGI, can install or service the appliance.

Data Badge is located below oven base, serial number reference is also located on frame behind lower oven door.

G.C. Appliance Nos. 11 132 80 (White)  
11 132 81 (Black)

A Natural Gas Appliance.

Leave these instructions with the User.

# Cannon

THE FIRST NAME IN GAS

*Creda Limited,  
PO Box 5, Grindley Lane, Blythe Bridge,  
Stoke-on-Trent ST11 9LJ.*



# SHORT SPARES

CANNON PEARL  
BLACK MODEL 11 132 81

Key No.	G.C. No.	Part No.	Description	Qty.
30	044 343	30219	Vertical Side Trim L.H.	1
31	044 349	30218	Vertical Side Trim R.H.	1
32	044 359	29840	Upper Oven Door Handle	1
33	044 355	30056	Upper Door Glass	1
34	044 360	29891	Door Glass trim	2
35	044 353	30205	Upper Door Inner Panel	1
36	043 032	22654	Inner Door Glass	1
37	044 357	29842	Lower Oven Door Handle	1
38	044 362	30058	Lower Door Glass	1
39	044 366	30206	Lower Door Inner Panel	1
40	043 315	24045	Upper Oven Door Seal	1
41	043 314	24044	Lower Oven Door Seal	1
42	386 844	24129	Lower Oven Light Switch	1
43	044 062	29246	Oven Light Bulb	1
44	043 308	23753	Plinth Front Panel	1
45	384 810	14664	Grill Electrode	1
46	393 472	11745	Oven Electrode	2
47	397 876	25075	Upper Oven F.S.D./Solenoid	1
48	397 876	25075	Lower Oven F.S.D./Solenoid	1
48	378 304	27117	Lower Oven Alternative F.S.D./Solenoid	1
49	378 927	6600940	Spark Generator	1
50	043 292	24089	Grill Flap Control Lever	1
51	043 291	24090	Bezel	1
52	043 293	24092	Grill Flap Seal (Rear)	1
53	044 332	29673	Grill Flap Seal (Front)	1

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## INSTALLATION INSTRUCTIONS

This appliance has been tested and certified to British Standard BS5386 Part 3, 1980 and carries the British Standard Kitemark.

The appliance is set to burn NATURAL GAS ONLY and cannot be used on any other gas. The appliance must be installed in accordance with the manufacturer's instructions and thereafter regularly serviced and maintained to ensure its continued safe and efficient operation.

The appliance must also be installed, serviced and repaired in accordance with the following legislation.

The Gas Safety (Installation and Use) Regulations 1984 and the Gas Safety (Installation and Use) (Amendment) Regulations 1990.

These regulations specify as a mandatory requirement, that only competent persons shall carry out such work. Such a competent person must be a member of the registration body for gas installers i.e. CORGI which is approved by the Health and Safety Executive. British Gas is a member of CORGI.

The Health and Safety Electricity at Work Regulations 1989: These regulations similarly specify that only competent persons shall be engaged in the electrical installation, servicing or repair of the appliance.

The Gas Cooking Appliances (Safety) Regulations 1989.

The Building Regulations 1985.

The Building Standards (Scotland) Regulations 1981.

The appliance must also be installed according to BS6172: 1980 – Specification for Installation of Domestic Gas Cooking Appliances (1st, 2nd & 3rd family gases) from which the following information is extracted. However, the installer must comply with ALL the requirements of BS6172.

The Electrical installation must comply with the Regulations for Electrical Installations (The Wiring Regulations) available from the Institution of Electrical Engineers.

Ventilation for the room containing the appliance shall comply with BS5440: Part 2: 1989.

The room containing the appliance must contain an openable window or an acceptable alternative such as an adjustable louvre or hinged panel opening direct to outside air. If the room containing the appliance has a volume less than 5m<sup>3</sup> it must have an air vent having a minimum permanent opening free area of 100cm<sup>2</sup>. If the room containing the appliance has a volume between 5m<sup>3</sup> and 10m<sup>3</sup> it must have an air vent having a minimum permanent opening free area of 50cm<sup>2</sup>, but if the room contains a door which opens directly to outside, no permanent opening is required in this case.

## SHORT SPARES

CANNON PEARL  
BLACK MODEL 11 132 81

Key No.	G.C. No.	Part No.	Description	Qty.
1	044 406	30208	Lid Glass	1
2	044 368	29901	Hotplate	1
3	044 373	30010	Hotplate Side Trim, L.H.	1
4	044 375	30013	Hotplate Side Trim, R.H.	1
5	044 369	30199	Pan Support	4
6	044 484	6600207	Burner Cap (small)	2
7	044 485	6600208	Burner Cap (large)	2
8	378 448	22940	Hotplate Electrode	4
9	043 320	23853	Side Panel	2
10	044 339	30215	Flue Grille	1
11	044 512	910209300	Fascia Upper Trim	1
12	044 390	30030	Fascia Glass	1
13	379 953	6600828	Timer	1
14	044 397	30007	Lower Fascia Trim	1
16	044 391	30096	Fascia End Cap L.H.	1
17	044 392	30097	Fascia End Cap R.H.	1
18	381 929	20535	Ignition Switch	1
19	044 402	29877	Control Knobs	6
20	044 385	30019	Hotplate Tap (rapide)	2
21	044 386	30020	Hotplate Tap (semi-rapide)	2
22	386 847	22897	Upper Oven/Grill Tap	1
23	379 118	30021	Thermostat	1
24	041 360	14215	'O' Ring Seal	5
25	043 365	23802	'O' Ring Seal	1
26	044 418	30089	Ignition/light switch buttons	2
27	381 928	20536	Light Switch	1
28	044 400	29980	P.C.B. Assy.	1
29	044 416	30105	Oven Tap Springs	2

## SHORT SPARES

CANNON PEARL  
WHITE MODEL 11 132 80

Key No.	G.C. No.	Part No.	Description	Qty.
30	043 306	24184	Vertical Side Trim L.H.	1
31	043 307	24185	Vertical Side Trim R.H.	1
32	044 358	29839	Upper Oven Door Handle	1
33	044 354	30055	Upper Door Glass	1
34	043 806	28381	Door Glass trim	2
35	043 348	23816	Upper Door Inner Panel	1
36	043 032	22654	Inner Door Glass	1
37	044 356	29841	Lower Oven Door Handle	1
38	044 361	30057	Lower Door Glass	1
39	043 732	26896	Lower Door Inner Panel	1
40	043 315	24045	Upper Oven Door Seal	1
41	043 314	24044	Lower Oven Door Seal	1
42	386 844	24129	Lower Oven Light Switch	1
43	044 062	29246	Oven Light Bulb	1
44	043 308	23753	Plinth Front Panel	1
45	384 810	14664	Grill Electrode	1
46	393 472	11745	Oven Electrode	2
47	397 876	25075	Upper Oven F.S.D./Solenoid	1
48	397 876	25075	Lower Oven F.S.D./Solenoid	1
48	378 304	27117	Lower Oven Alternative F.S.D./Solenoid	1
49	386 845	24193	Spark Generator	1
50	043 292	24089	Grill Flap Control Lever	1
51	043 291	24090	Bezel	1
52	043 293	24092	Grill Flap Seal (Rear)	1
53	044 332	29673	Grill Flap Seal (Front)	1

## INSTALLATION INSTRUCTIONS

If the room containing the appliance has a volume greater than 11m<sup>3</sup>, no permanent opening is required.

If the room contains more than one gas appliance, or if additional mechanical ventilation such as an extractor fan is fitted, the appropriate requirements of BS6172 and of the Building Regulations should be referred to.

The appliance must not be installed in a bathroom or shower room.

The appliance must not be installed in a bed sitting room of volume less than 20m<sup>3</sup>.

Gas installation pipework up to the termination point at the appliance location must comply with BS6891, and the connection of the appliance to the termination point should be by means of an appliance flexible connector for use with a self sealing plug-in device, complying with BS669. Alternatively a rigid pipe connection may be used but a means of disconnection and isolation tap should be provided.

The appliance must be used in conjunction with a suitable stability device firmly fixed to the fabric of the building to prevent the appliance from tipping forwards if wrongly used.

The appliance must be sited on a stable base with an adequate level surface in front of the appliance to allow it to be moved forward sufficiently for disconnection, and the appliance levelled with the adjustments provided so that the oven shelves are level.

The connection to the electricity supply must be by a properly earthed 13A plug complying with BS1363, fitted with a 3A fuse, and via a properly earthed readily accessible wall socket adjacent to and not more than 1.5m away from the appliance and capable of electrical isolation. An unswitched socket is recommended to encourage removal of the plug during servicing, and the flexible mains lead, plug and socket must not be directly exposed to flue products or be in contact with hot surfaces.

The appliance must be sited and installed in accordance with the manufacturer's instructions with particular regard to clearances specified for adjacent or overhead cabinets or surfaces. The proximity of the appliance to combustible furnishings such as curtains and in areas susceptible to draughts should be avoided.

The appliance installation must be checked for leaks and the appliance operated to ensure all burners and controls function correctly, as given in the User's instructions.

Remember it is the law that gas appliances are installed only by competent persons. Failure to install appliances correctly could invalidate the warranty, liability claims, and could lead to prosecution. It is in your own interest, and especially that of safety, to ensure that the law is complied with.

## TECHNICAL DATA

Pressure Setting  
Pressure Test Point  
Gas Rate Adjustment  
Aeration Adjustment  
Ignition

20 mbar  
Grill Injector  
Fixed  
Fixed  
Spark Generator  
Turnright GL398

### HOTPLATE

Burners

4 aluminium alloy die-cast burner bodies with removable aluminium burner rings and enamelled discs

LH Front & RH Rear – 2.9kW (9,895 Btu/h)  
RH Front & LH Rear – 1.6kW (5,460 Btu/h)  
LH Front & RH Rear – 145  
RH Front & LH Rear – 105  
LH Front & RH Rear – 1.2–2.3mm  
RH Front & LH Rear – 1.4–2.5mm  
LH Front & RH Rear – Concentric MTA 400  
RH Front & LH Rear – Concentric MTA 405

Heat Input

Injector Sizes

Spark Gap

Tap

### UPPER OVEN/GRILL

Burner (Grill)

Mixing tube and burner body formed from two steel pressings.

Burner (Oven)

Mixing tube and burner body formed from two steel pressings, multi hole flame strip

Injector (Grill)

Injector (Oven)

Heat Input (Grill)

Heat Input (Oven)

Electrode (Grill)

Electrode (Oven)

Flame Supervision Device (Oven)

Diamond H GSD 200

### LOWER OVEN

Burner

Mixing tube and burner body formed from two steel pressings, multi hole flame strip

Injector

Heat Input

Electrode

Flame Supervision Device

Diamond H GSD 200

Teddington FFD ZED 131N

Fixed

Diamond H ID 1100 106 BI

FSD Bypass

Thermostat

Thermostat By-pass

## SHORT SPARES

CANNON PEARL  
WHITE MODEL 11 132 80

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6	044 484	6600207	Burner Cap (small)	2
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8	378 448	22940	Hotplate Electrode	4
9	043 320	23853	Side Panel	2
10	044 338	30214	Flue Grille	1
11	044 513	910209200	Fascia Upper Trim	1
12	044 389	30029	Fascia Glass	1
13	379 952	6600827	Timer	1
14	044 396	30213	Lower Fascia Trim	1
16	043 821	28298	Fascia End Cap L.H.	1
17	043 819	28299	Fascia End Cap R.H.	1
18	381 929	20535	Ignition Switch	1
19	044 401	29876	Control Knobs	6
20	044 385	30019	Hotplate Tap (rapide)	2
21	044 386	30020	Hotplate Tap (semi-rapide)	2
22	386 847	22897	Upper Oven/Grill Tap	1
23	379 118	30021	Thermostat	1
24	041 360	14215	'O' Ring Seal	5
25	043 365	23802	'O' Ring Seal	1
26	044 417	30088	Ignition/light switch buttons	2
27	381 928	20536	Light Switch	1
28	044 400	29980	P.C.B. Assy.	1
29	044 416	30105	Oven Tap Springs	2

## TIMER REAR CONNECTIONS TABLE

COLOUR OF WIRE OR WIRES	CONNECTION POINT	FUNCTION
GREEN	E	EARTH
BLUE	N	NEUTRAL
BROWN	L	240V ac
WHITE	U/SOL	UPPER OVEN SOLENOID
BLACK	L/SOL	LOWER OVEN SOLENOID
BLACK & WHITE	PL2	UPPER OVEN FOOD PROBE SOCKET
RED & BLACK	PL4	LOWER OVEN FOOD PROBE SOCKET
RED	PL5	5V dc SUPPLY TO OVEN SWITCHES
PINK & YELLOW	PL6	PINK – UPPER OVEN SWITCH RETURN – YELLOW LOWER OVEN SWITCH RETURN

## TECHNICAL DATA

### CONNECTIONS

Gas

Electric

Rp  $\frac{1}{2}$ " ( $\frac{1}{2}$ " BSP)

Flexible cord at rear (right hand side)

Heat resisting PVC 85°C, 0.75mm<sup>2</sup>

24 strands 0.2mm dia. Outside dia.

6.6 – 7.6mm

240V 50Hz 3A fuse

## SPACE FOR FITTING

### APPLIANCE DIMENSIONS

Height 900mm. Width 597mm. Depth 606mm.

**PLEASE NOTE:** For all installations ensure that:—

1. The appliance is level.
2. Kitchen furniture and cupboard units do not foul the appliance lid and oven doors when opened.

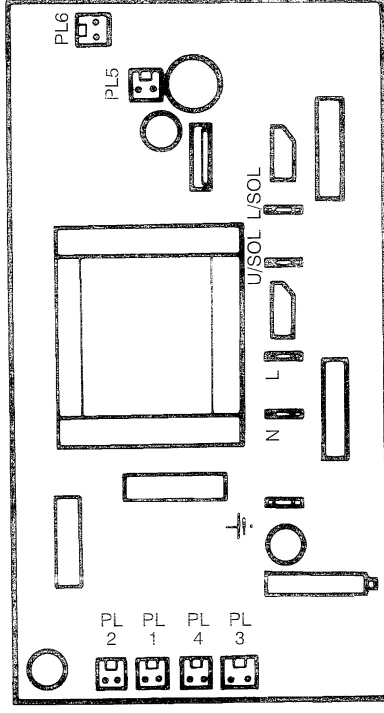
### SPACE FOR FIXING

The appliance can be close fitted below hotplate level. This requires a minimum distance of 600mm between cupboard units of hotplate height.

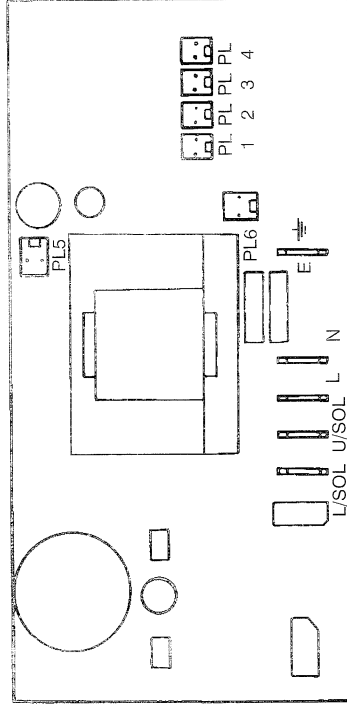
- \* When installing next to a tall cupboard, partition or wall, for a minimum distance of 400mm above hotplate level, allow a side clearance of at least 65mm.
- \* When installing overhead cupboards or other surfaces above the appliance, allow a minimum clearance of 900mm above hotplate level. Increase the side clearance from any tall cupboard, partition or wall to 100mm.
- \* If a cooker hood is to be installed then refer to the cooker hood manufacturers instructions for fixing height.

## TIMER REAR CONNECTIONS

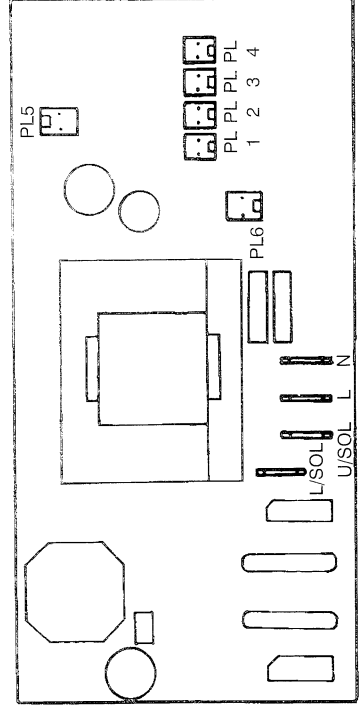
R.V.  
VERSION



I.C.C.  
EARLY  
VERSION



I.C.C.  
LATER  
VERSION





## TIMER TEST ROUTINES

### Test 2 – FUNCTIONS

Having completed Test 1, the following should be performed.

Press the keys on the keypad in the following order.

12/24

CLOCK

CANCEL



UPPER OVEN

LOWER OVEN

MINUTE TIMER

COOK TIME

END TIME

The keys must be pressed in the above order and after each key pressed a bleep should be heard.

If some of the keys do not result in a bleep being heard then this indicates a fault with the timer.

Switch off power at mains supply and then on again to return to normal operation.

If both these tests are satisfactory then it is likely that the timer is working correctly and that the fault may be elsewhere in the timer circuit, such as the oven switches, solenoid valves etc. (see timer fault finding chart).

Should confusion arise during either of the above tests then switch off the mains supply and start test again.

## UNPACKING AND FITTING

### UNPACKING

After removing the outer carton, carefully break down the sides of the base tray. We recommend that you use gloves or hand protection when handling the cooker. Remove polystyrene supports from either side of the cooker base.

Carefully unpack the components from inside the ovens, check that the following parts are present.

Pan Supports	4 off
Meat Tin	1 off
Cake Tray	1 off
Grill pan, Handle and Grid	1 off each
Lower Oven Shelves	3 off (1 extended cranked shelf)
Upper Oven/Grill Shelf	1 off
Upper Oven Shelf Shield	1 off
Large enamelled discs	2 off
Large burner port rings	2 off
Small enamelled discs	2 off
Small burner port rings	2 off
Literature Pack	1 off
Oven Temperature Probe	1 off

### COOKER MOBILITY AND LEVELLING

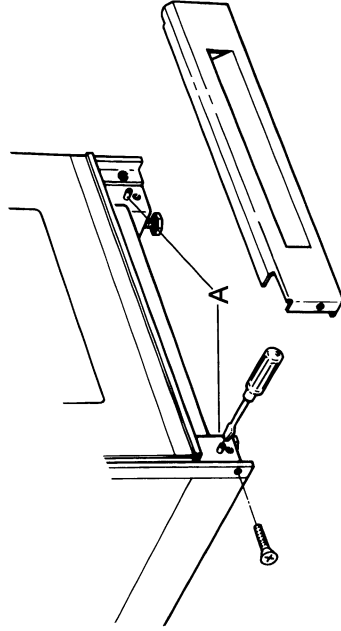
**CAUTION:** Some soft floor coverings may sustain damage if appliance is not moved carefully.

Remove plinth front panel (2 screws).

Lift the front of the cooker and roll the appliance into position. Place a spirit level across the oven base and set the level by adjusting the front levelling feet and the rear wheels accordingly.

The rear wheels are adjusted by means of the levelling screws 'A' (Fig. 2).

Fig. 2



## FITTING STABILITY BRACKET

A stability bracket must be fitted to your appliance. The back of the cooker has been designed to accept a bracket for this purpose. The stability bracket can be obtained, at extra cost, from the Appliance Supplier and the leaflet included with the bracket should be read in conjunction with the following instructions.

Push the cooker in its intended position.

Draw pencil lines on the floor, one level with the plinth, (Fig. 3) and one along the L.H. side of the cooker.

Remove the cooker.

Mark off dimensions 'F' and 'G' (Fig. 3) to locate centre and front edge of the lower bracket and secure to floor.

Measure height from floor level to the bottom of the slot in the back of the cooker, add 23mm to this dimension and assemble the stability bracket to this height (ie. from floor level to the underside of top member) (Fig. 4).

Fig. 3

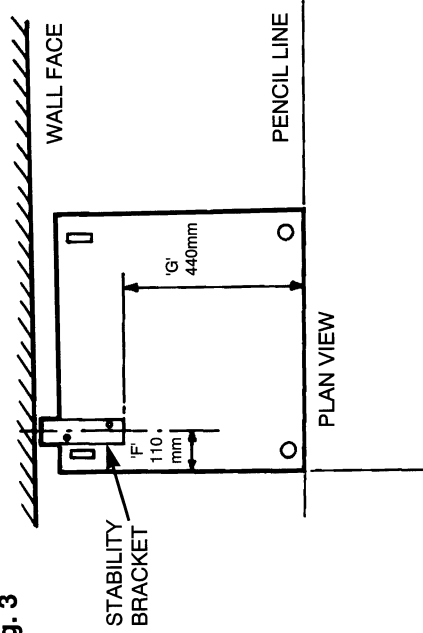
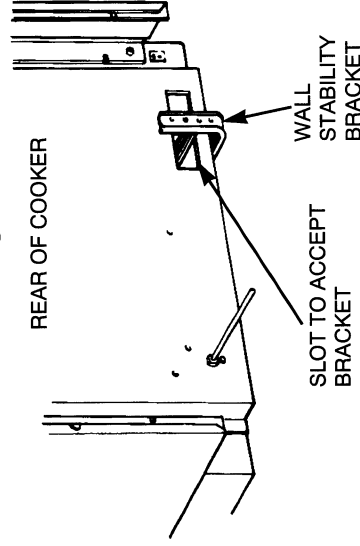


Fig. 4



## TIMER TEST ROUTINES

### TIMER TEST ROUTINES

Where either obvious display or oven operation problems make the timer suspect, the following Test Routines, in addition to the timer fault finding chart, should be used to establish the exact cause of the problem. Check that all connectors are fitted to the correct points on the timer (pages 42 & 43).

The test should be performed with the control in place in the cooker and all the connectors fitted to the correct points on the control.

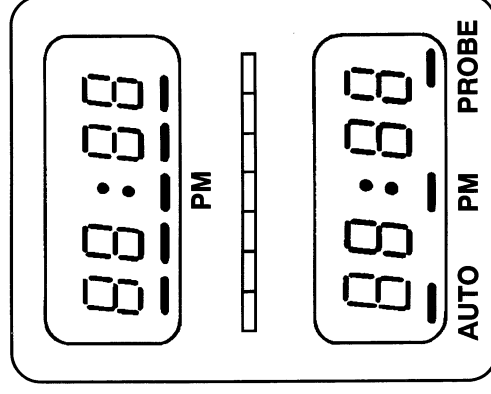
### Test 1 – DISPLAYS

Switch off power at mains supply – wait 5 secs.

Switch on power at mains supply.

Press CANCEL and whilst keeping finger on cancel key press MINUTE TIMER.

Upper and lower displays should show full 8s in all positions and all the bar indicators should be illuminated with the exception of the two in the lower display between AUTO & PM and PM & PROBE, see below:—



The whole of the Food Probe bar graph display should be illuminated and also each of the neons behind the switches: COOK TIME, END TIME, MINUTE TIMER, UPPER OVEN, LOWER OVEN.

Failure of any of the above indicates a fault with the timer.

If none of the display is illuminated, switch off the mains supply, check the timer fuse, replace the fuse if necessary and start test again.

## FAULT FINDING

COMPONENT	RESISTANCE	COMMENTS
FOOD PROBE	Approx. 62K ohms @ 20°C	N.T.C. Thermistor, resistance falls with temperature.
FOOD PROBE SOCKET	Infinity	Measured across any terminal combination.
FUSE	Zero = Good Infinity = Faulty	200 mA / 240V 20mm, FAST.
SUPPRESSION CAPACITOR	Infinity	On 20 M ohms range will charge to infinity, either polarity.
6 LAMP P.C.B.	Approx. 600 ohm	Six 100 ohms bulbs in series.

**KEY:** W.R.T. – With respect to

**NOTE:** If using an analogue multimeter the polarity of the internal battery may be reversed at the meter terminals.

**NOTE:** Measurements can only be a guide as to the serviceability of parts. Tolerance of components and internal circuitry must be allowed for.

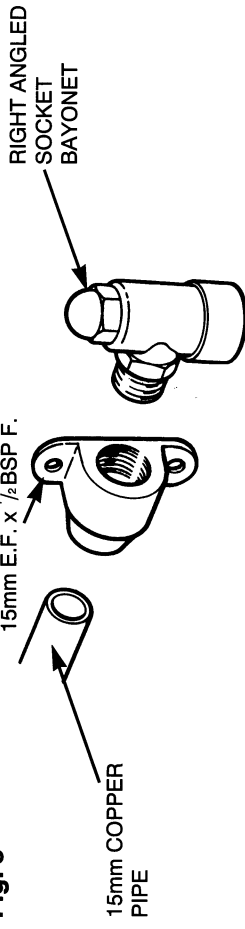
## GAS CONNECTION

### CONNECTION TO GAS SUPPLY

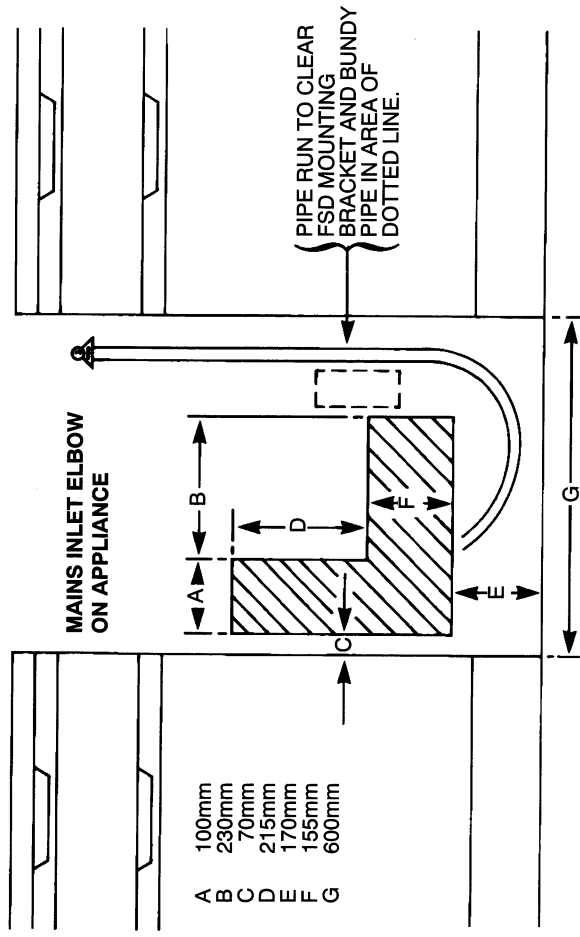
Connection to the appliance should be made with an approved appliance flexible connection to BS669. A length of 900mm is recommended.

This cooker is designed to match the depth of standard 600mm worktops. An adaptor backplate (Fig. 5) should, therefore, be fitted within the shaded area (shown in Fig. 6) to allow the cooker to be pushed fully to the wall.

**Fig. 5**



**Fig. 6**



The temperature rise of areas at the rear of the cooker which are likely to come into contact with the flexible hose do not exceed 70°C. A standard hose as specified above is therefore acceptable.

After installation check for soundness.

Gas pressure can be checked at the grill injector. See maintenance instructions for removal of grill burner.

## ELECTRICAL CONNECTION

**WARNING – THIS APPLIANCE MUST BE EARTHED. REFER TO RATING PLATE FOR VOLTAGE AND CHECK THAT THE APPLIANCE VOLTAGE CORRESPONDS WITH THE SUPPLY VOLTAGE.**

The flexible mains lead is supplied connected to a B.S. 1363 fused plug having a fuse of 3 amp capacity and should this plug not fit the socket outlet in your home, it should be cut off and replaced with a suitable plug as outlined below.

**NOTE:** Such a plug cannot be used for any other appliance and should therefore be properly disposed of and not left where children might find it and plug it into a supply socket – with the obvious consequent danger of electrocution.

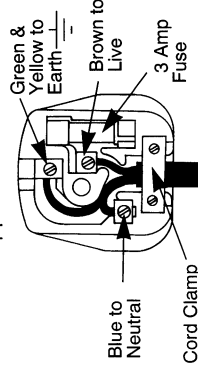
### APPLICABLE ONLY IF THE MOULDED PLUG IS REMOVED

The flexible mains lead must be correctly connected as below to a three pin plug of not less than 13 amp capacity. If a B.S. 1363 fused plug is used, it must be fitted with a 3 amp fuse which is approved to B.S. 1362.

We recommend the use of good quality plugs and wall sockets that can be switched off when the cooker is serviced or cleaned.

**IMPORTANT:** The wires in the mains lead fitted to this appliance are coloured in accordance with the following code:

GREEN AND YELLOW – EARTH  
 BLUE – NEUTRAL  
 BROWN – LIVE



As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:– The wire which is coloured green and yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol  $\equiv$  or coloured green or green and yellow. The wire which is coloured blue must be connected to the terminal which is marked with the N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. When wiring the plug, ensure that all strands of wire are securely retained in each terminal. Do not forget to tighten the mains lead clamp on the plug. As the appliance must be earthed, **do not use** 2-pin sockets outlets, **if you are in doubt, consult a qualified electrician.**

Should the mains lead ever require replacement, it is essential that this operation be carried out by a qualified electrician and should only be replaced with a flexible cord of the same size i.e. 0.75mm<sup>2</sup> cross sectional area. **The plug and socket must be accessible after installation.**

### APPLICABLE ONLY IF MOULDED PLUG HAS NOT BEEN REPLACED

After replacement of a fuse in the plug, the fuse cover must be refitted. If the fuse cover is lost, the plug must not be used until a replacement cover is obtained. The colour of the correct replacement fuse cover is that of the coloured insert in the base of the plug of the colour that is embossed in words in the base of the fuse recess or elsewhere on the plug. Always state this colour when ordering a replacement fuse cover. (Available from the Cannon Service Organisation). Only 3 amp replacement fuses which are ASTA approved to B.S. 1362 should be fitted.

The flexible mains lead, plug and socket must not be directly exposed to the flue products or be in contact with hot surfaces, e.g. flue grille, hotplate. The lead must not be trapped or pulled taut when the appliance is pushed into position.

## FAULT FINDING

### COMPONENT RESISTANCE TABLE

This resistance table is provided to facilitate testing of components when the supply current is disconnected. All measurements taken with a Fluke 8024b Multimeter and each component totally isolated from the circuit.

COMPONENT	RESISTANCE	COMMENTS
240V Oven Lamp 40W	Approx. 110 ohms	Would fail to open circuit.
240V Oven Lamp 15W	Approx. 350 ohms	
SWITCHES		
Lower Oven	OFF	Rotary ON/OFF 5 Vdc
Upper Oven	Infinity	Rotary ON/OFF 5 Vdc
Ignition	Infinity	Momentary Push Action 240 Vac
Oven Lamp	Zero	Momentary Push Action 240 Vac
Fascia Light	Zero	ON/OFF Push Action 240 Vac
SPARK GENERATOR		
Turnright GL378	Approx. 500 ohms.	Terminals are diagonally opposite. Measure coil side of gap on re-ignition terminals. The measurement is taken on the secondary of a step up transformer therefore does not prove the primary.
H.T. Coils		
REIG 1 W.R.T. N	Approx. 140 Kohms	Resistance looking into a complex circuit.
REIG 2 W.R.T. N	Approx. 140 Kohms	
IGN W.R.T. N	Approx. 2M ohms	
SOLENOID F.S.D.	Approx. 5 – 6 M ohms	Full wave rectified coil. Resistance value represents looking into a bridge rectifier and coil circuit. Very low resistance across bridge or any one side of bridge to earth would signify a fault. A measurement of infinity would point to an open circuit.
TIMER		
ICC		
L W.R.T. N	Approx. 780 ohms	Transformer primary.
L W.R.T. U/SOL	Greater than 20 M ohms	Triac outputs. A low resistance would indicate a faulty device.
L W.R.T. U/SOL	Greater than 20 M ohms	
RV		
L W.R.T. N	Approx. 1050 ohms	Transformer primary.
L W.R.T. U/SOL	AS ICC	AS ICC
L W.R.T. L/SOL	AS ICC	AS ICC

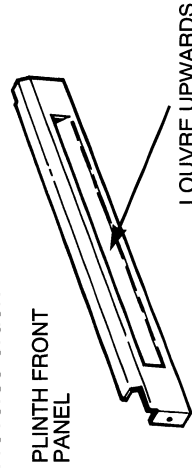


## MAINTENANCE INSTRUCTIONS

- BEFORE:** Disconnect mains electricity by pulling out the plug from the socket.
- BEFORE:** Servicing any gas carrying component, disconnect the gas supply to the appliance.
- AFTER:** Maintenance or disconnection of gas carrying components **ALWAYS** check for gas soundness.
- ALWAYS:** Wear protective hand covering when handling sheet metal panels etc.
- ALWAYS:** Carry out installation resistance tests after maintenance.
- ALWAYS:** Replace 'O' rings and injector sealing washers once disturbed for servicing. If pipe joints within the appliance are disturbed during maintenance **NO JOINTING COMPOUND OR PTFE TAPE** should be used as it may affect the appliance earthing.
- NOTE:** Some floor covering can be damaged by sliding cooker over them.
- NOTE:** If any of the oven/oven door insulation is touched or disturbed wash hands thoroughly.
- NOTE:** Left hand and right hand components are those components that are on the left or right when the appliance is viewed from the front.

## SIDE PANELS

- SIDE PANELS**
  - Remove plinth front panel (2 screws).
  - Remove front vertical side trims (3 screws and washers – 2 viewed when upper oven/grill door is open and the other viewed below the lower oven door). Holding the side panel in position remove one rear screw. Swing the bottom of the panel outwards and lower the panel sufficiently to free the front upper corner from the fascia end cap. Reassemble in reverse order.



**Fig. 8**

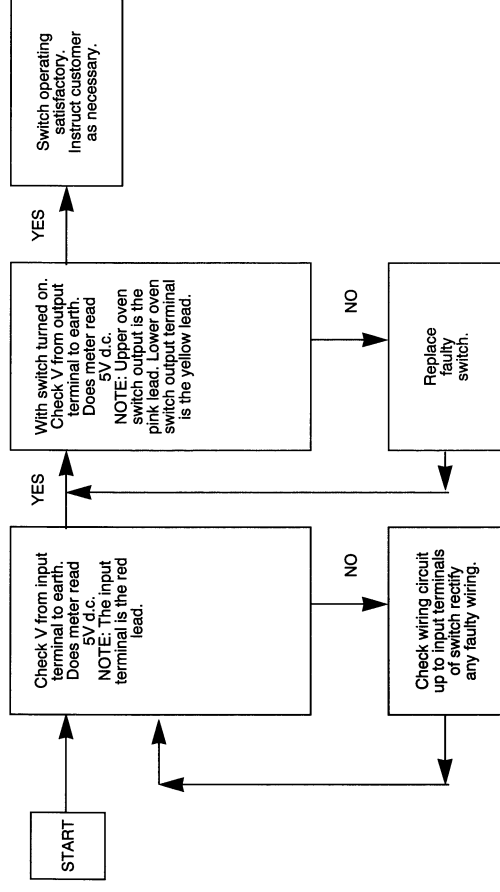
- HOTPLATE**

**NOTE:** The hotplate when released will spring upwards due to the design of the burner mounting.

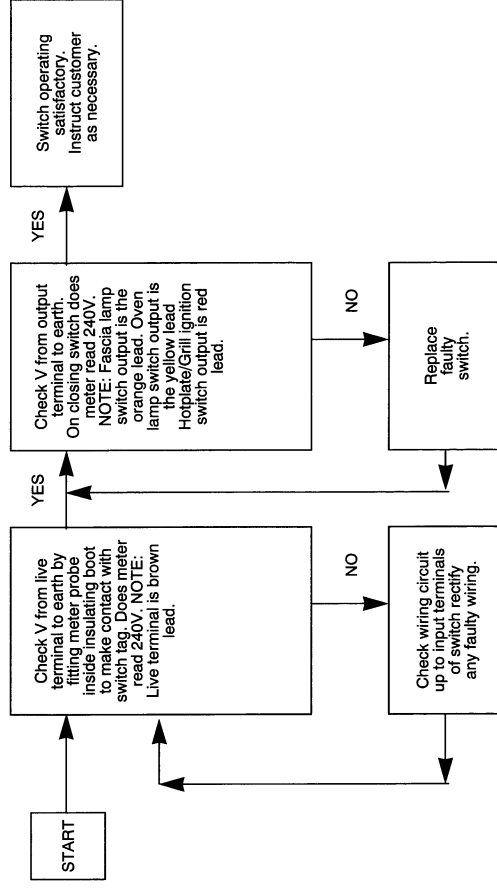
  - Remove pan supports, port rings and enamelled discs.
  - With the glass lid closed remove the rear flue grill (2 screws and washers to the rear of the flue grill).

## FAULT FINDING

### SWITCHES – Lower Oven Thermostat and Upper Oven Tap

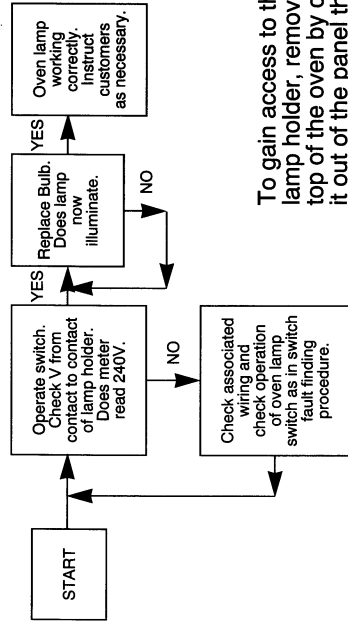


### SWITCHES – Fascia Lamp, Oven Lamp and Hotplate/Grill Ignition



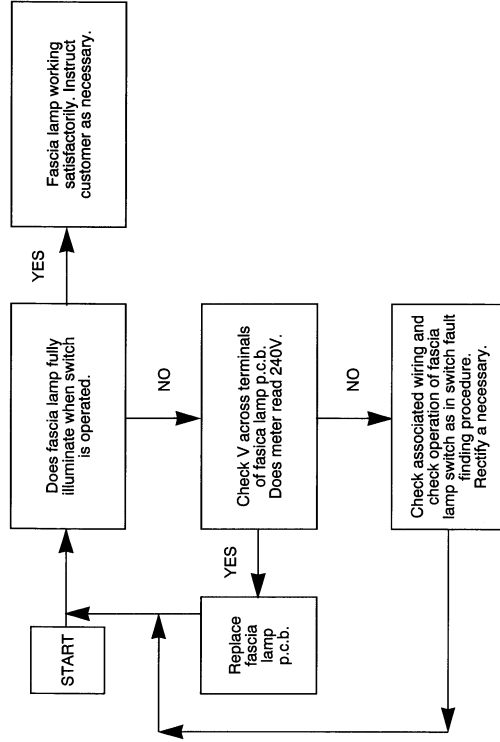
# FAULT FINDING

## OVEN LAMP



To gain access to the inside of the lamp holder, remove lens from the top of the oven by carefully unscrewing it out of the panel then remove lamp.

## FASCIA LAMP



# HOTPLATE AND FASCIA GLASS

3. Lift glass lid and remove hotplate side trims (one rear top screw and fibre washer each trim).
4. Remove fascia panel end caps. (2 screws and one vertical screw below each cap).
5. Remove the fascia upper trim noting the position of the rubber infill strip and allow to hang over grill door.
6. Remove the four retaining screws (one screw near each corner of hotplate) and allow the hotplate to rise against spring pressure.
7. Carefully lift the hotplate away from the burners and replace any damaged burner gaskets.
8. Re-assemble in reverse order.

Ensure that the electrodes are not fouled as the hotplate is re-positioned over the burners.

## 2A. HOTPLATE BURNER BODY

1. Remove Hotplate (2).
2. Disconnect the electrode lead and tie loosely to a bundy pipe to prevent lead from dropping down the side of the appliance.
3. Unscrew the hexagon nut securing the bundy supply pipe to the burner body taking care not to distort the shape of the pipe, and lift burner body away from the support bridge.
4. Re-assemble in reverse order ensuring the following:
  - a) the location pins on the underside of the burner have entered the guide holes on the support bridge.
  - b) the bundy supply pipe nut is gas tight with the burner body and check for gas soundness.
  - c) Ensure that the electrodes are not fouled as the hotplate is re-positioned over the burners.

## 3. HOTPLATE FASCIA GLASS

1. Follow points 2 to 5 HOTPLATE (2).
2. Remove control knobs ignition and panel light buttons. Slide out the plastic moulding between the timer and fascia glass. (Fig. 9)
3. Pull top edge of glass forward, easing it over the tap spindles and lift away from lower trim. Take care not to lose the springs fitted to the two oven tap spindles.
4. Transfer grommets to new fascia glass with lipped face to the front and re-assemble in reverse order.

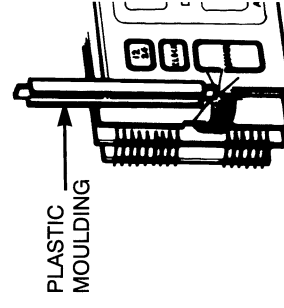


Fig. 9

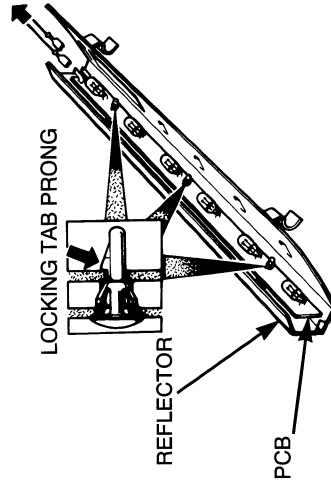
# TIMER AND ILLUMINATION PANEL

4. **DEFLECTOR PLATE AND FASCIA LOWER TRIM**
  1. Remove deflector plate (3 vertical screws).
  2. Remove hotplate fascia glass (3).
  3. Remove fascia lower trim (2 screws) and allow timer to hang by its wires.
  4. Refit in reverse order, taking care not to trap any wires behind the assembly. Position timer into fascia lower trim before fully tightening the pan head screws.
5. **TIMER**
  1. Follow points 2 to 5 Hotplate (2).
  2. Loosen deflector plate/fascia lower trim assy. (one pan head screw each end.)
  3. Slide out the plastic moulding, lift timer out of fascia lower trim and carefully pull forward to give access to wiring.
  4. Disconnect timer connections.
  5. Re-assemble in reverse order, re-connecting wires in accordance with wiring diagram and timer rear connections as shown on pages 42 & 43.
6. **PANEL ILLUMINATION AND REFLECTOR**
  1. Remove hotplate (2) and fascia glass (3).
  2. Remove reflector/PCB assembly from the gas rail (2 screws at rear) disconnect spade connectors.
  3. The PCB is retained by the three plastic support posts. Gently press in the locking tab prong with, for example a small screwdriver while lifting the PCB away from the reflector. Fig. 10

**NOTE:** The bulbs form part of the PCB assembly and can not be replaced separately.

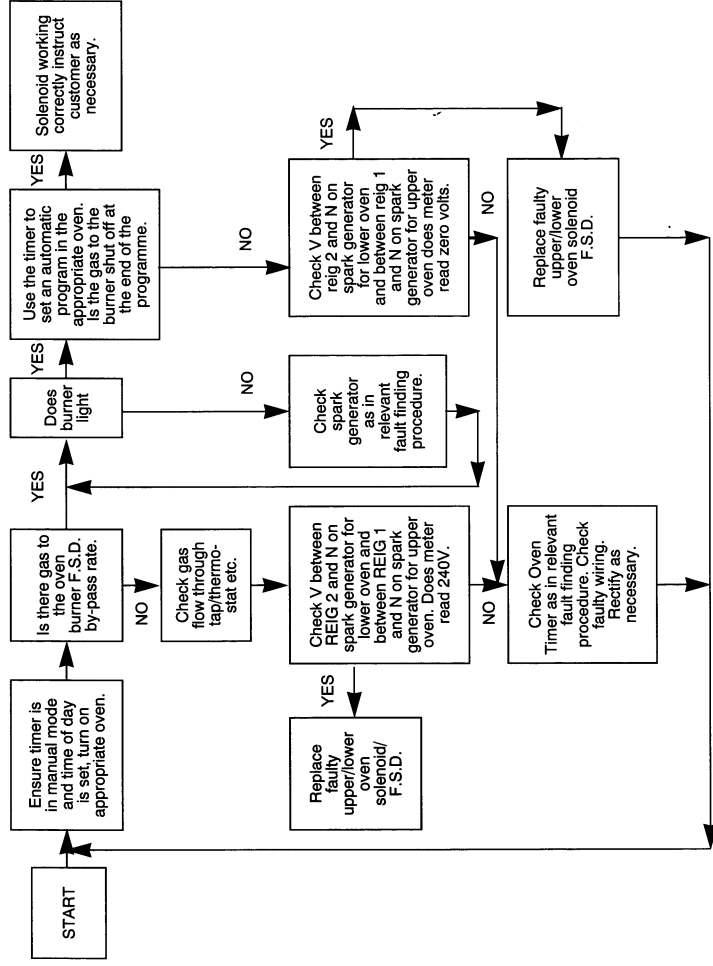
4. Place the new PCB over the support posts and push home.
5. Reassemble in reverse order taking care not to trap any wiring.

Fig. 10



# FAULT FINDING

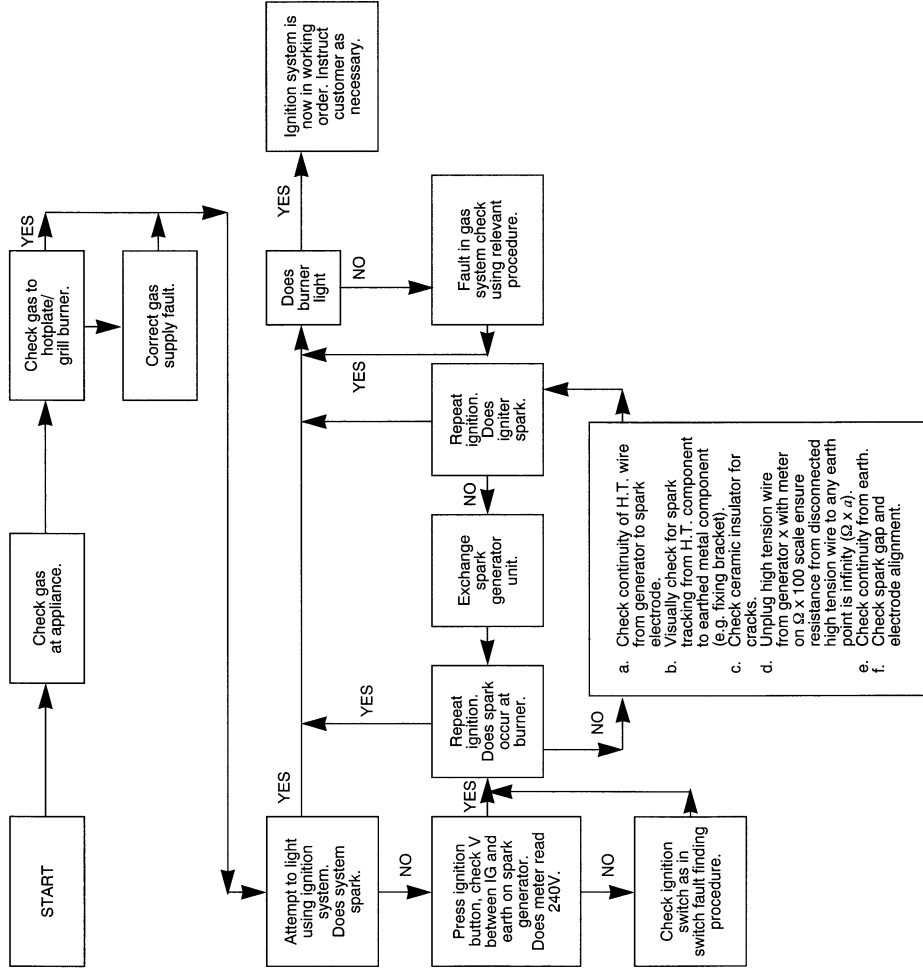
## SOLENOID/FSD





# FAULT FINDING

## HOTPLATE/GRILL IGNITION



# LOWER OVEN THERMOSTAT UPPER OVEN & GRILL TAPS

## 7. LOWER OVEN THERMOSTAT

1. Remove RH side panel (1), remove hotplate (2) and remove reflector (6).
2. Remove phial from clips in oven roof (Top RH side) and carefully withdraw phial through oven side.
3. Slide spring and switch off thermostat spindle. Disconnect gas pipe and remove 2 screws securing thermostat. Manoeuvre thermostat and capillary free of appliance.
4. Fit new thermostat, ensuring a new 'O' ring is correctly seated and the phial tip is positioned against the location stop. Refit switch ensuring it is located correctly on spindle and locating pin. Refit spring.
5. Reassemble in reverse order.

## 8. LOWER OVEN THERMOSTAT BY-PASS SCREW

1. Remove hotplate (2), remove reflector (6), slide spring and switch off thermostat spindle.
2. Disconnect gas pipe and remove 2 screws securing thermostat. Ease thermostat backwards sufficiently to expose the by-pass screw on the RH side of the body.
3. Replace screw and washer.
4. Re-assemble in reverse order.

## 9. LOWER OVEN THERMOSTAT SWITCH

1. Remove Hotplate Fascia glass (3).
2. Slide spring and switch off thermostat spindle and disconnect leads.
3. Reassemble in reverse order ensuring switch is located on locating pin.

## 10. UPPER OVEN TAP SWITCH

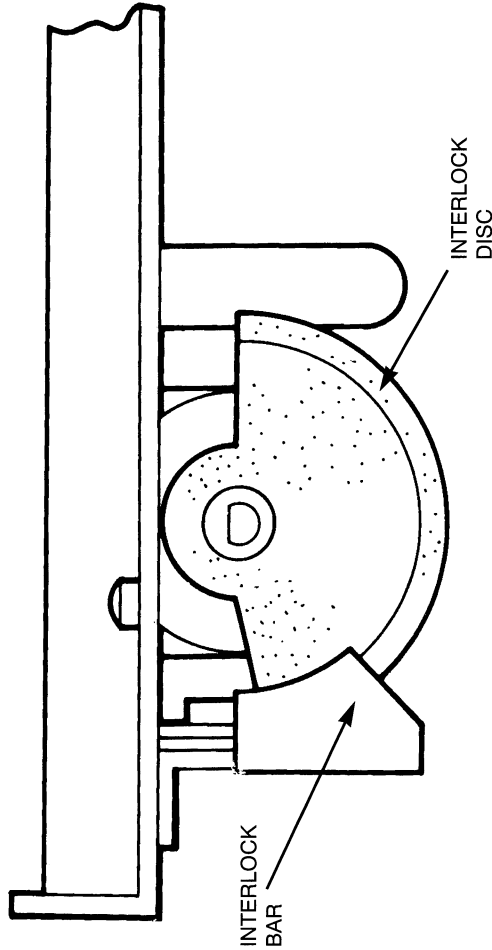
1. Remove Hotplate Fascia Glass (3) and slide spring off tap spindle.
2. Refit control knob and turn anti-clockwise until interlock disc (Fig. 11) is clear of interlock bar. Remove knob and disc, refit knob and return tap to "Off" position, remove knob and switch.
3. Reassemble in reverse order.

## 11. UPPER OVEN/GRILL TAP

1. Remove hotplate (2), remove reflector (6) and slide spring off tap spindle.
2. Refit Control Knob and turn anti-clockwise until interlock disc (Fig. 11) is clear of interlock bar. Remove knob and disc, refit knob and return tap to "Off" position, remove knob and switch.
3. Remove two screws securing interlock bracket to gas rail and disconnect gas pipes. Remove gas tap.
4. Refit tap ensuring a new 'O' ring is correctly seated. Fit switch over spindle and locating pin and re-fit interlock bracket. Transfer plastic interlock disc ensuring that it is positioned behind the interlock bar (Fig. 11).
5. Reconnect supply pipes and reassemble appliance in reverse order.

# HOTPLATE TAP IGNITION AND PANEL SWITCHES

Fig. 11



## 12. HOTPLATE TAP (Removal)

1. Remove hotplate (2) and fascia glass (3).
2. Disconnect gas pipe and remove two screws securing tap.
3. Reassemble in reverse order ensuring 'O' ring is correctly seated.

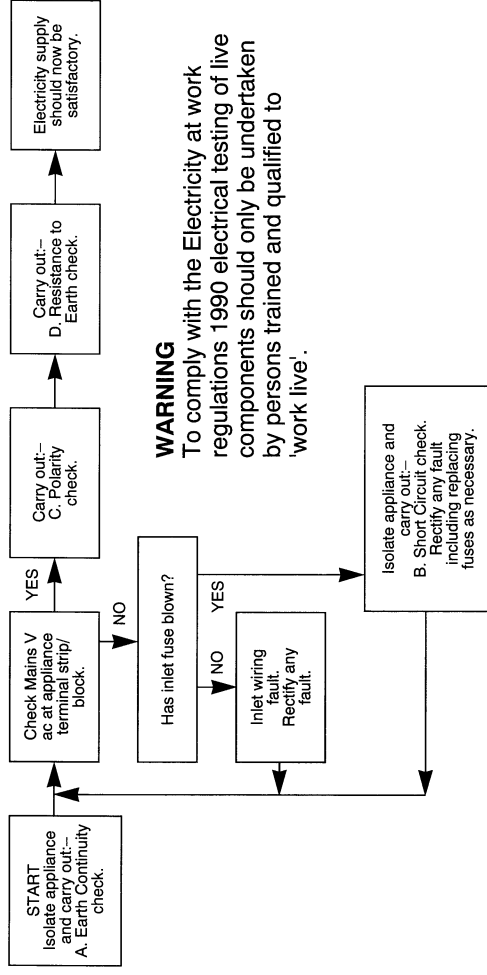
**NOTE:** The 2.9kW burner tap and 1.6kW burner tap are NOT interchangeable, refer to Technical Data (page 4).

## 13. IGNITION AND PANEL LIGHT SWITCHES

1. Remove fascia glass (3).
2. Remove reflector/PCB assembly from gas rail (2 screws at rear) and place upon the hotplate.
3. Remove the single screw retaining the switch bracket and ease the switch bracket forwards until the tongue on the lower edge disengages. Disconnect wiring (Fig. 12).
4. Break and remove the four wing points holding the switch in place and push through hole in bracket (Fig. 12).
5. Fit new switch and reconnect wiring, refer to wiring diagram (page 28).
6. If switches require centralising in fascia holes then slacken adjustment screw and move switch plate accordingly.
7. Reassemble in reverse order.

# FAULT FINDING

## PRELIMINARY ELECTRICAL SYSTEM CHECKS



### WARNING

To comply with the Electricity at work regulations 1990 electrical testing of live components should only be undertaken by persons trained and qualified to 'work live'.

### NOTE:

These diagrams will assist in the diagnosis of electrical faults. The meter referred to should be capable of measuring 240V a.c. and a resistance of 100Ω f.s.d.

A. EARTH CONTINUITY CHECK – appliance must be electrically disconnected – meter set on Ω (ohms) x 1 scale and adjust to zero if necessary.

a) Test leads from any appliance earth point to earth pin on plug – resistance should be less than 1Ω (ohm).

If the resistance is greater than 1Ω (ohm) check all earth wires for continuity and all contacts clean and tight.

If resistance of earth is still greater than 1Ω (ohm) then this should be reported to your supervisor.

B. SHORT CIRCUIT CHECK – appliance electrically disconnected, all switches ON (including stats) –

a) meter set on Ω (ohms) x 1 scale.

Test leads from L to N in appliance terminal strip/block – if meter reads 0 then there is a short circuit.

b) meter set on Ω (ohms) x 100 scale.

Repeat test with leads from L to E. If meter reads less than ∞ (infinity) there is a fault.

NOTE – Should it be found that the fuse has failed but no fault is indicated – a detailed continuity check (i.e. by disconnecting and checking each component) is required to trace the faulty component. It is possible that a fault could occur as a result of local burning/arcing but no fault could be found under the test. However a detailed visual inspection should reveal evidence of burning around the fault.

### C. POLARITY CHECK

Appliance connected to mains supply and meter set on 300 Vac scale. Test at appliance terminal strip:–

a. Test leads from L to N – meter reads approx. 240 Vac

b. Test leads from L to E (∞) – meter reads approx. 240 Vac

c. Test leads from N to E (∞) – meter reads from 0.15 Vac \*

Thus the terminal marked L is the live terminal. If the low\* Vac reading is given on terminals other than N to E (∞) there is an electrical fault.

Repeat the test at the appliance plug/inlet spur to check the wiring system up to the appliance and rectify any fault. If necessary repeat the test at the supply system socket/spur – if the fault also occurs at this stage then there is a house system fault which requires attention by the Electricity Authority. The customer should be warned not to use the appliance until this examination has been carried out.

### D. RESISTANCE TO EARTH CHECK

Appliance must be disconnected from mains supply and meter set on Ω (ohms) x 100 scale. All switches, including stats. ON – Test leads from L to E – if the meter reads other than infinity (∞) there is a fault which should be isolated. A detailed continuity check is required to trace the faulty component.

### IMPORTANT:–

This series of checks are the first electrical checks to be carried out during a fault finding procedure. On completion of the service/fault finding task which has required the breaking and remaking of electrical connections then the checks – A. Earth Continuity, C. Polarity and D. Resistance to Earth – must be repeated.

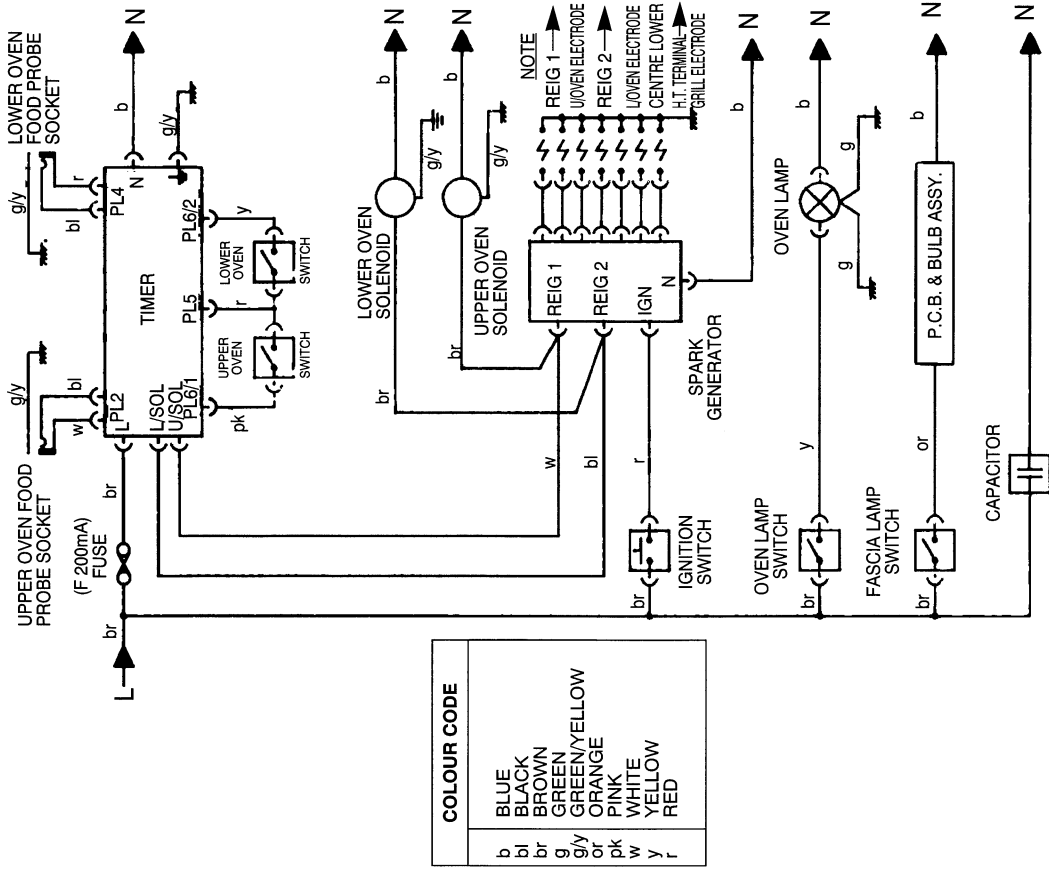
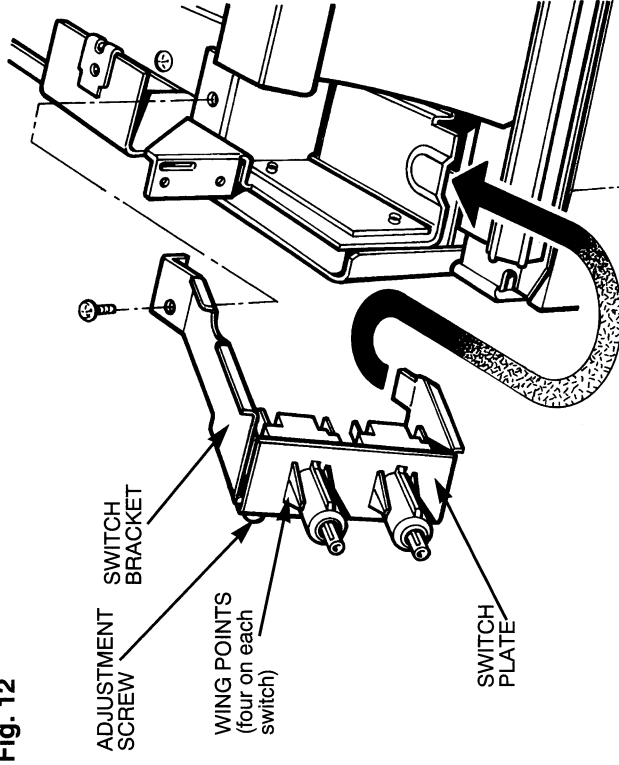


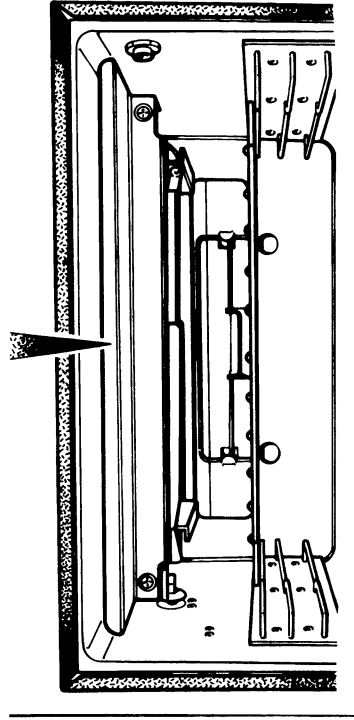
Fig. 12



## 14. GRILL BURNER

1. Remove inner baffle. (2 screws and dish washers)
2. Disconnect ignition lead and slacken, but do not remove, single burner fixing screw in compartment roof. Both on RH side.
3. Pull RH side of burner forward to clear fixing screw and side burner off injector.
4. During reassembly ensure that the burner fixing bracket is pushed fully home onto the fixing screw and screw is fully secured. Also ensure baffle is correctly fitted. (Fig. 13)

Fig. 13





## ELECTRODES

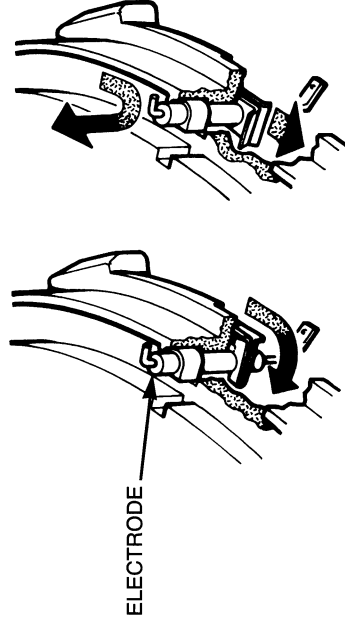
### 35. ELECTRODES

**NOTE:** FOR ELECTRODE SPARK GAP SEE TECHNICAL DATA.

#### HOTPLATE

1. Remove Hotplate (2).
2. Disconnect ignition lead and tie loosely to a bundy pipe to prevent lead from dropping down the side of appliance.
3. Release the electrode retaining clip by turning it  $\frac{1}{4}$  turn. Slide clip off electrode (Fig. 20).
4. Lift electrode, turn it through  $90^\circ$ , tilt and remove.
5. Replace in reverse order.

**Fig. 20**



#### Grill

1. Remove grill burner (14).
2. Remove 2 electrode fixing screws.
3. Replace in reverse order.

#### Upper Oven

1. Follow instruction 1, Small oven burner (16).
2. Remove electrode fixing screw.
3. Replace in reverse order.

#### Lower Oven

1. Follow points 1 to 4 Oven burner (18).
2. Remove electrode fixing screw.
3. Replace in reverse order.

## LOWER OVEN FSD/SOLENOID VALVE

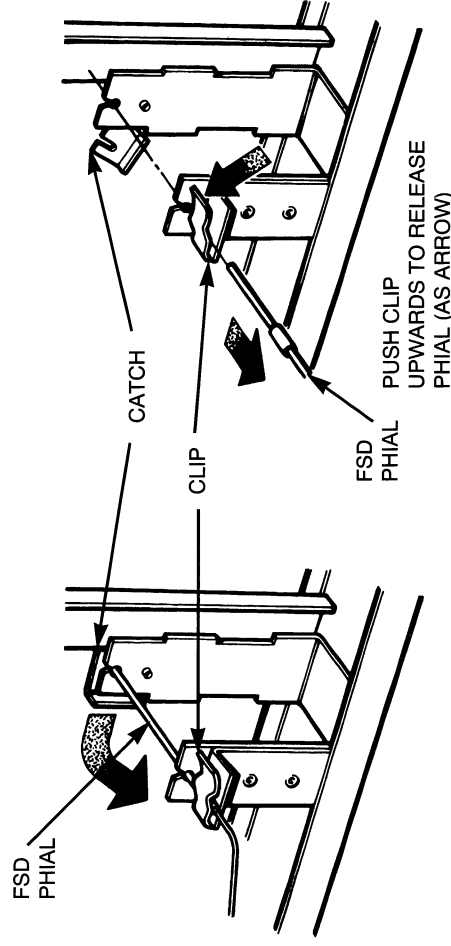
### 19. LOWER OVEN FSD/SOLENOID VALVE

1. Follow 1 to 3 LOWER OVEN BURNER (18).
2. Disconnect FSD supply pipe, leads and ignition lead.
3. Remove two screws securing oven burner bracket to base and withdraw complete assembly, together with FSD heat shield, through oven aperture.
4. Release forward facing screw and swing phial catch to the right to release phial.

**NOTE:** On Teddington type FFD ZED 131N ONLY a clip is used to secure ferrule on capillary end of FSD phial to oven burner bracket (Fig. 14). In this case ease the top of the clip upwards and slide rearwards to remove.

5. Remove locknut from FSD injector adaptor and remove FSD.
6. Transfer adaptor to new FSD.
7. Reassemble in reverse order taking care with the path of the capillary.

**Fig. 14** (Rear View of burner bracket Assembly)



## GLASS LID AND OVEN DOORS

### 20. GLASS LID AND TRIMS

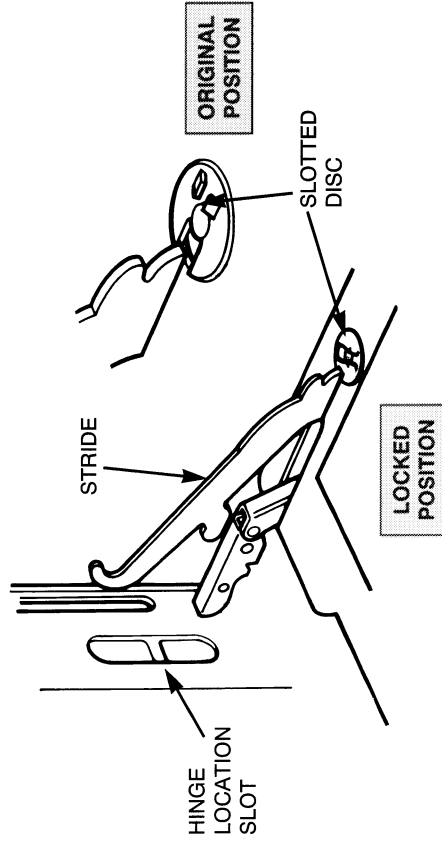
1. Raise lid to vertical position.
2. Remove 2 side screws securing the front trim and lift the trim clear.
3. Carefully slide the glass upwards until clear of side trims.
4. Remove 4 side screws, 2 each side, to detach side trims from hinge.
5. Remove one screw at each end of rear trim to detach from side trims.
6. Reassemble in reverse order ensuring smooth side of glass is facing upwards.

### 21. UPPER OVEN/GRILL DOOR REMOVAL

- To Remove Door
1. Open the door.
  2. Using a two pence coin, turn the locking discs, at each side of the door, quarter turn to the right or left.
  3. Tilt the door upwards and lift off at the hinges.

**TAKE CARE NOT TO TRAP FINGERS IN THE HINGE MECHANISM WHEN REFITTING THE DOOR.**

**Fig. 15**



To Replace The Door:

1. With the door slightly tilted, support the lower arm of the hinge and place both hinge arms into the opening. Lower the door into the open position, taking care not to trap your fingers.
2. Turn the discs back to their original position.

## INJECTORS

### 34. INJECTORS

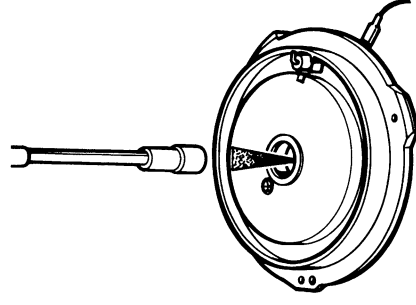
#### HOTPLATE

1. Remove enamelled disc and burner port ring.
2. Place a 7mm box spanner over the injector until a spring resistance is felt.
3. Push spanner firmly down to overcome the spring (Fig. 19) and unscrew injector.
4. Ensure the new injector is of the correct size. (See Appliance Data, page 4).

**Fig. 19**

7mm BOX SPANNER

**NOTE:** NEVER FIT A SEALING WASHER TO THE HOTPLATE INJECTORS.



PUSH SPANNER DOWN FURTHER THAN SPRING RESISTANCE

#### Grill

1. Remove grill burner (14).
2. Remove injector and sealing washer.
3. Replace in reverse order using a new sealing washer.

#### Upper Oven

1. Remove oven burner (16).
2. Remove injector and sealing washer.
3. Replace in reverse order using a new sealing washer.

#### Lower Oven

1. Remove oven burner (18).
2. Remove injector and sealing washer.
3. Replace in reverse order using a new sealing washer.

## ELECTRICAL

### 30. SPARK GENERATOR

1. Follow 1 and 2 lower oven burner (18).
2. Remove electrics cover (remove front screw, loosen rear screw).
3. Remove leads from spark generator.
4. Remove spark generator (2 screws).
5. Refer to wiring diagram when refitting leads and take care not to trap any wiring under electrics cover. Ensure lower oven ignition lead is connected to terminal marked "REIG 2" and upper oven ignition lead is connected to terminal marked "REIG 1".

### 31. OVEN LAMP

1. Carefully unclip lamp lens by pulling and tilting slightly.
2. Unscrew bulb anti-clockwise using a thick dry cloth.
3. Fit new bulb and replace lens.

**NOTE:—** The replacement bulb must be rated 40W (300°C rated).

### 32. ELECTRICITY SUPPLY CABLE

1. Disconnect cooker from mains electricity by pulling out the plug.
2. Remove oven base panel. Utensil stop at rear. Follow lower oven burner (18) points 1 to 3.
3. Disconnect brown and blue wires from terminal block and earth wire at earth post.
4. Remove cable restraint and cable from rear of cooker.
5. Reassemble in reverse order ensuring path of cable is away from oven burner.

### 33. FOOD PROBE SOCKETS

1. Remove RH SIDE PANEL (1).
2. Pull back the insulation sleeve and disconnect the 3 electrical connections. Holding the socket firmly, remove the securing nut and washer from within the oven compartment.
3. Reassemble in reverse order ensuring that the Red or White Wire goes to terminal 'A', the Black to terminal 'B', Green/Yellow to terminal 'C' or  $\equiv$  (Fig. 18).

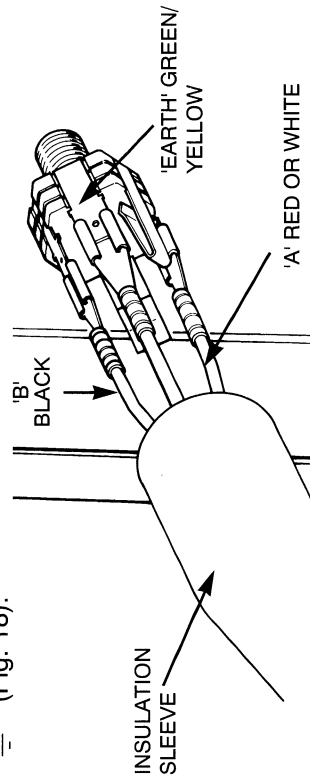


Fig. 18

## OVEN DOORS

### 22. LOWER OVEN INNER DOOR

1. Remove upper oven/grill door (21), lift glass door clear of hinges.
2. Remove hinges, one nut, gasket and bush.
3. Remove handle assembly, 2 hexagon studs, nuts and bushes.
4. Reassemble in reverse order ensuring that the handle and hinge bushes are fitted. Adjust striker pin if necessary to achieve door sealing by compression of rubber seal.

### 23. LOWER OVEN OUTER DOOR REMOVAL

1. Remove upper oven/grill door (21).
2. Lift off inner glass door.
3. Remove top hinge lower screw and slacken upper screw allowing hinge pin location to swing upwards.
4. Lift door off lower hinges.
5. Refit in reverse order.

### 24. DOOR HANDLE AND GLASSES (Fig. 16 & 17)

It is not necessary to remove either door in order to replace the handles or glasses.

Note that the lower edge of the glass is slotted into a channel in the door but the top edge of the glass is retained only by the door handles.

1. Whilst supporting the door handle and glass remove the two screws that retain the handle. These are located on the back face of the door towards the top.
2. Lift the door glass out of its channel with door handle still attached, retrieve the two rubber infill strips from the channel.
3. Loosen the six screws on the rear face of the door handle and slide out the glass.
4. Re-assemble in reverse order.

LOOSEN THESE 6 SCREWS  
TO REMOVE GLASS

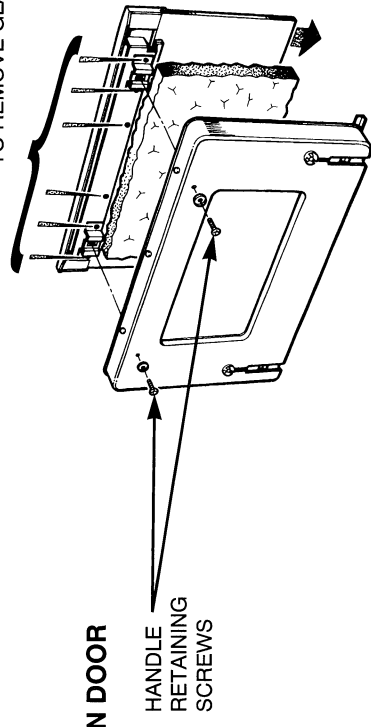


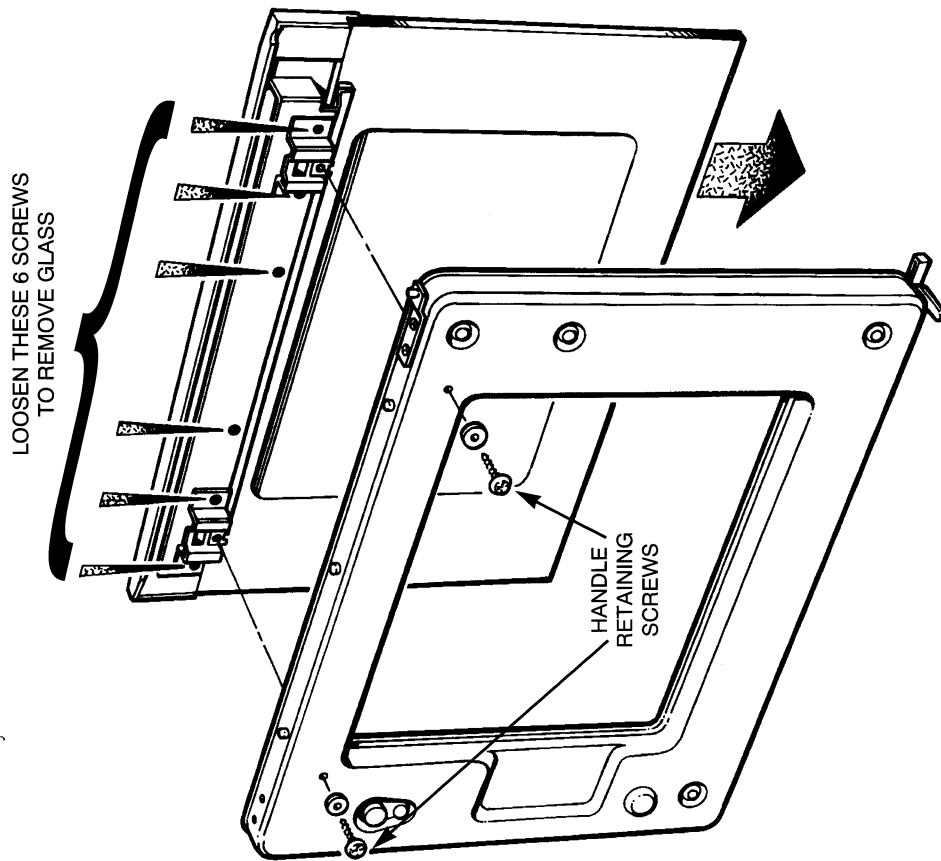
Fig. 16

### UPPER OVEN DOOR

## OVEN DOORS

### LOWER OVEN DOOR

Fig. 17



### 25. INNER DOOR CATCH

1. Remove RH side panel (1).
2. Remove door catch (2 screws).
3. Reassemble in reverse order.

## HOTPLATE CUT-OFF VALVE AND INTERLOCK MECHANISM

### 26. HOTPLATE CUT OFF VALVE

1. Remove hotplate (2).
2. Remove flue back panel (3 screws).
3. Using a suitably sized spanner disconnect both supply pipes to gas rails.
4. Disconnect main supply pipe, remove both cut off valve fixing screws.
5. Refit new valve and reassemble in reverse order.

### 27. INTERLOCK MECHANISM

1. Remove HOTPLATE (2) and FASCIA GLASS (3).
2. Remove one screw (through elongated hole) attaching the mechanism to the grill flap.
3. Remove two screws attaching the mechanism to the gas rail.
4. Ease the mechanism rearwards from under the gas rail and lift away.
5. Reassemble in reverse order ensuring correct operation of interlock mechanism by adjustment at grill flap end.

### 28. GRILL FLAP MECHANISM

1. Pull cooker away from wall sufficiently to gain good access to rear of appliance. Remove flue back panel (3 screws) and flue grille (2 screws and washers).
2. Close grill flap. Remove two screws securing flap swivel bracket and outer split pin from cranked end spindle.
3. Remove grill flap seal retainer (3 screws) and lift out the seal.
4. Remove two rear facing screws adjacent to each end of the grill flap and slide spindle locating brackets sideways to remove.
5. Lift flap using grill flap control lever and slide to the left to remove.
6. Reassemble in reverse order checking that the seals are in good condition. Ensure that the flap opens fully when operated and a sound seal is achieved when closed.

### 29. CONTROL LEVER MECHANISM

1. Pull cooker away from wall to gain good access to rear.
2. Remove LH side panel (1).
3. Release tension spring and remove 2 side facing screws to release lever from plastic thumb piece.
4. Remove cranked lever split pin referred to in point 2 section (28) above and ease vertical lever off spindle.
5. Follow 1 to 3 LOWER OVEN BURNER (18) and unplug hotplate ignition leads from spark generator, pull ignition leads through 'P' clip on control lever mechanism.
6. Remove two screws securing bell crank mechanism to rear of frame. Uncouple linkage and remove mechanism.
7. Reassemble in reverse order remembering to reattach tension spring. Ensure that the flap opens fully when operated and a sound seal is achieved when closed.