

# **G1102 and G1112 FORCED CONVECTION OVENS**

## **INSTALLATION and SERVICING INSTRUCTIONS**



**These appliances must be installed and serviced by a competent person as stipulated by the Gas Safety (Installation & Use) Regulations.**

### **IMPORTANT**

The installer must ensure that the installation of the appliance is in conformity with these instructions and National Regulations in force at the time of installation. Particular attention **MUST** be paid to -

#### **BS7671 I.E.E. Wiring Regulations**

#### **Electricity At Work Regulations**

#### **Gas Safety (Installation & Use) Regulations**

#### **Health And Safety At Work etc. Act**

#### **Local and National Building Regulations**

#### **Fire Precautions Act**

**Detailed recommendations are contained in Institute of Gas Engineers published documents :**

**IGE/ UP/ 1, IGE/ UP/ 2, BS6173 and BS5440**

The appliances have been CE-marked on the basis of compliance with the Gas Appliance Directive, EMC and Low Voltage Directive for the Countries, Gas Types, Gas Pressures and voltages as stated on the Data Plate.

### **WARNING - TO PREVENT SHOCKS, ALL APPLIANCE WHETHER MUST BE EARTHED**

On completion of the installation, these instructions should be left with the Engineer-in-Charge for reference during servicing. Further to this, The Users Instructions should be handed over to the User, having had a demonstration of the operation and cleaning of the appliance.

**IT IS MOST IMPORTANT THAT THESE INSTRUCTIONS BE CONSULTED BEFORE INSTALLING AND COMMISSIONING THIS APPLIANCE. FAILURE TO COMPLY WITH THE SPECIFIED PROCEDURES MAY RESULT IN DAMAGE OR THE NEED FOR A SERVICE CALL.**

### **PREVENTATIVE MAINTENANCE CONTRACT**

In order to obtain maximum performance from this unit we would recommend that a Maintenance Contract be arranged with AFE SERVICELINE. Visits may then be made at agreed intervals to carry out adjustments and repairs. A quotation will be given upon request to the contact numbers below.

## **Falcon Foodservice Equipment**

### **HEAD OFFICE AND WORKS**

Wallace View, Hillfoots Road, Stirling. FK9 5PY. Scotland.

### **AFE SERVICE LINE CONTACT -**

PHONE - 01438 363 000 FAX - 01438 369 900

RZZ 150 Ref. 4



FOODSERVICE EQUIPMENT

# SECTION 1 - INSTALLATION

UNLESS OTHERWISE STATED, PARTS WHICH HAVE BEEN PROTECTED BY THE MANUFACTURER ARE NOT TO BE ADJUSTED BY THE INSTALLER

## 1.1 MODEL NUMBERS, NETT WEIGHTS and DIMENSIONS

MODEL	WIDTH mm	DEPTH mm	HEIGHT mm	WEIGHT kg	WEIGHT lbs
G1102 RANGE	900	770	870	221	487
G1112 OVEN ON STAND	900	770	1445	194	428
G1112/2 DOUBLE TIER	900	770	1465	364	803
G1112 OVEN ON LEGS	900	770	870	181	399

### Optional Extras

A splashplate/plateshelf is available for fitting to the G1102 open top range.

### 1.2 SITING

All units, other than G1112 oven on stand or legs, must be installed on a non-combustible floor. All units must be situated on a reasonably level surface, although the unit feet are adjustable and facilitate levelling, the adjustment range is limited.

### Installing Clearances

A clearance of at least 150mm must be allowed from any combustible wall.

If practicable, it is recommended that a space of at least 400mm be allowed from any side wall to provide clearance for adjusting the rear levelling bolts, and to effect the removal of the RH side panel to facilitate servicing. If the appliance is being installed as part of a suite, it is also recommended that it be positioned at the right-hand end to provide unrestricted access for servicing the controls, etc.

A vertical clearance of 900mm minimum must be allowed between the top edge of flue outlet and any other overlying surface.

If the appliance is to be installed in a suite, either central or adjacent to a wall, with a boxed-in void at the rear, it is vitally important that the void be adequately ventilated to ensure a supply of air to the motor cooling fan at the rear of the oven.

### 1.3 VENTILATION

Recommendations for Ventilation of Catering Appliances are given in BS5440 : 2. Furthermore, to ensure sufficient room ventilation, guidance on the volume of ventilation air required for different types of catering equipment is provided in the table above. For multiple installations the requirements for individual appliances should be added together. Installation should be made in accordance with local and/ or national regulations applying at the time. A competent installer MUST be employed.

EQUIPMENT	Ventilation Rate Required	
	m <sup>3</sup> /min	ft <sup>3</sup> /min
Range, Unit Type	17	600
Pastry Oven	17	600
Fryer	26	900
Grill	17	600
Steak Grill	26	900
Boiling Pan	17	600
Steamer	17	600
Sterilizing Sink	14	500
Bains Marie	11	400
Tea/ Coffee Machine	8.5 - 14	300 - 500

The appliance flue discharges vertically through the grill at the rear of the hob and there must be no direct connection of the flue to any mechanical extraction system or the outside air. Siting the appliance under a canopy is the ideal arrangement.

### 1.4 GAS SUPPLY

The incoming service must be of sufficient size to supply full rate without excessive pressure drop. A gas meter is connected to the service pipe by the Gas Supplier. Any existing meter should be checked by the Gas Supplier to ensure the meter is of adequate capacity to pass the required rate of gas.

Installation pipe work should be fitted in accordance with IGE/UP/2. The pipe should not be smaller than the gas inlet connection as follows:

G1102 Range:

Rc<sup>3</sup>/<sub>4</sub> ( 3/4" BSP female)

On the G1112 oven variants it is:

Rc<sup>1</sup>/<sub>2</sub> ( 1/2" BSP female)

An isolating cock must be located close to the appliance to allow shut-down during an emergency or servicing. The installation must be tested for gas soundness and purged as specified in IGE/UP/1.

### Note

The G1112 open top range is supplied complete with the necessary pipework for linking oven and boiling burner sections. The governor necessary for boiling burners is incorporated in this pipework for Natural Gas operation, and an extra governor must not be fitted to any of these appliances.

## 1.5 ELECTRICAL SUPPLY

Each oven is equipped with a length of 3-core flexible cord for connecting to an electrical supply. A standard 13 amp socket outlet can be used, in which case the plug-top must be fitted with a 3 amp fuse. If the supply is through a distribution fuse box, it must be via a fuse having a maximum rating of 5 amp.

## 1.6 WATER SUPPLY

Not applicable to these appliances.

## 1.7 TOTAL GAS RATES - Natural and Propane Gas

Model	NATURAL		PROPANE	
	kW	Btu/hr	kW	Btu/hr
G1102	44.8	153,000	44.8	153,000
G1112	19	64,830	19	64,830
G1112/2	38	129,700	38	129,700

### 1.7.1 Individual Burner Ratings - Natural and Propane Gas

Model	NATURAL		PROPANE	
	kW	Btu/hr	kW	Btu/hr
Open Top (x 6)	4.3	14,700	4.3	14,700
Oven	19	64,830	19	64,830

## 1.8 INJECTOR DIAMETERS - Natural & Propane Gas

	NATURAL	PROPANE
	Open Top	6 x ø1.75mm
Oven	1 x ø3.4mm	1 x ø2.2mm
Pilot	G29.2	G24.1

## 1.9 GAS PRESSURE

NATURAL	PROPANE
15mbar	37mbar
6 in. w.g.	14.8 in. w.g.

## 1.10 BURNER ADJUSTMENTS

### 1.10.1 Burner Aeration

All burners have fixed aeration, and no modifications to the size of air-entry should be attempted.

### 1.10.2 Open Top - Bypass Screw Diameters

The minimum flow to burner is governed by the size of the fixed hole in bypass screw as follows -

NATURAL	PROPANE
0.84mm	0.5mm

## 1.11 FAN UNIT

This unit has been specially developed for use in forced convection ovens. It has two fans, directly mounted on the motor shaft. The larger fan is inside oven, its purpose being to circulate air over the heat-exchangers and around the cooking space, whilst the smaller, externally mounted fan serves to cool the motor and control gear compartment.

## SECTION 2 - ASSEMBLY and COMMISSIONING

### 2. 1 ASSEMBLY

#### 2.1.1 G1102 Open Top Range

- Unpack unit, open oven doors and remove inter-connecting pipework (and governor on natural gas appliances) from inside.
- Fit interconnecting pipework, leaving incoming pipe entry facing in desired direction to suit service pipe.
- Place unit into desired location and if necessary adjust levelling bolts. Access to these, at front, is gained upon removing burner grille below oven doors. The rear bolts are accessible via openings in outer back panel. Do not raise unit more than is absolutely necessary to effect levelling.
- Connect to gas supply and test for gas soundness, using soap solution or leak detection fluid.
- Connect to electrical supply ensuring that flexible cord does not come into contact with flue or other hot areas.

The wires of flexible cord must be connected to supply as follows:

**Brown to Live**

**Blue to Neutral**

**Green/Yellow to Earth**

**This appliance MUST be earthed.**

#### 2.1.2 G1112 Oven on Legs

Installation procedure is as Section 2.1.1, but omit (b) and for (c) it is not necessary to remove the lower front panel. Levelling is now effected by turning lower parts of the feet.

#### 2.1.3 G1112 Oven on Stand

Installation procedure is as follows:

- Unpack oven and stand which is packed separately in a dismantled state.
- Assemble stand (see Figure 1) using the following procedure:
  - Fix legs to upper frame, using M6 x 20mm hex screws, M6 hex nuts and washers.
  - Fix lower shelf between legs, using M5 x 10mm hex screws and washers.

- c) Lift oven upon stand carefully aligning front edge of oven base with edge of stand. From below, secure oven to stand, using M6 x 35mm hex screws and plain washers (2 off at front) and M5 x 16mm hexagon screws and plain washers (2 off at rear).
- d) Manoeuvre the oven and stand into its required location, and level the assembly by turning the adjustable feet in the stand.
- e) Connect to gas and electricity supplies as detailed in sections 1.4 and 1.5.

**Note**

In addition to the above, the feet can be screwed to the floor if considered desirable, using the holes provided in the feet.

**Figure 1**

**Figure 2**

**Figure 3**

**2.1.4. G1112/2 Two Tier Oven**

(See Figure 2)

These units are marked as TOP and BOTTOM ovens before leaving the factory. Notwithstanding this, the top unit is identified by having a worktop on top.

Proceed as follows:

- a) Place the lower oven in approximately its final location.
- b) Remove the bottom grille on the upper oven. To effect removal, slacken the two screws in the grille, beneath the oven doors. Remove the bottom left hand screws in the black control panel, and the two screws in the bottom of the grille.
- c) Lift the top unit onto the bottom one taking care not to damage the upturned flange at the rear of the bottom unit. Align back edge of base of top unit carefully against this back flange.
- d) Fix the top unit to the bottom one, using the M6 x 50mm hexagon screws provided. (Two at the front corners of the base, and two at the back, through the rectangular openings in the lower corners of the outer back panel.
- e) Fit the pipework supplied for interconnecting the two individual gas inlets.
- f) Manoeuvre the double unit into its final position, and carefully level by adjusting the levelling bolts in the base of the bottom oven. Do not adjust more than is necessary to effect a true level.
- g) Connect to gas and electrical supplies as detailed in sections 1.4 and 1.5.

**2.1.5 Assembly of Splashplate and Plate Shelf**

These may be supplied as optional extras, and to assemble proceed as follows:

- a) Drop the standards into the square holes at each end of the flue outlet. On even-only appliances secure standards at rear with screws provided.
- b) Offer the splash plate up to the standards, with the locating brackets locating over the flue outlet (see Figure 3).
- c) Ensure the two small brackets are fitted to the plate shelf. Place the plate shelf over the projecting arms of the standards and push it back to trap the splash plate against the vertical standards.
- d) Fix the plateshelf, using the two M5 Pozidriv screws provided. If necessary, adjust the two locating brackets to ensure the splashplate is firmly held against the standards.

## 2.2 CONNECTION TO A GAS SUPPLY

The gas supply piping and connection to the appliance must be installed in accordance with the various regulations listed on the front page of this document.

## 2.3 CONNECTION TO AN ELECTRICAL SUPPLY

The electrical connections must comply with the relevant standards listed on the front page of this document.

## 2.4 CONNECTION TO A WATER SUPPLY

Not applicable to these appliances.

## 2.5 PRE-COMMISSIONING CHECK

Ensure that all open-top burners (where applicable) and oven linings are properly located, and that oven grid-shelves slide in and out easily. Check that all packing material has been removed.

It is necessary for the gas pressure to be checked before the unit is commissioned, and a suitable pressure gauge must be connected to the pressure test point(s) as follows:

### Open Top Burners (where applicable).

Pull off the gas tap knobs, and remove the control panel, thus revealing the test-point.

### Ovens

#### FIRST ENSURE ELECTRICITY SUPPLY IS OFF

Remove the three Pozidriv screws securing the black control panel, and draw the panel forward on its slides. Remove the burner grille (4 Pozidriv screws).

Connect a pressure gauge to the outlet test point immediately below the multifunctional gas control.

Note that inlet and outlet points are provided on the control also.

The gas pressure to the open-top burners is adjusted by means of the external governor mounted at the rear of the appliance, whilst the oven pressure is controlled by adjusting the appropriate screw on the gas control-valve.

When adjusting the pressure on a range (i.e. G1102) it is recommended that the oven, and two of the open top burners be lit during the operation.

### 2.5.2 Adjusting The Oven Burner Pressure

Proceed as follows:

- a) If possible, purge the supply lines of air. On G1102 ranges, this is simply effected by opening one or two of the open top burner taps and applying a light to the burner. On oven units, it may be necessary to slacken off a joint in the incoming supply pipe, taking care to re-tighten.
- b) Light the oven, as described in the accompanying User's Instructions. At this stage, take care not to touch live connections which are now exposed behind the withdrawn oven control panel.

- c) Check all connections for gas-soundness, using soap and water solution.
- d) With the pressure gauge connected to the outlet pressure test point adjust the pressure, which should be 15 mbar (6 in w.g.), by turning the screw in the regulator screw on the gas control. This is situated under the white plastic cover, which must be pulled off. To increase the pressure, turn the screw clockwise, and vice-versa.
- e) Adjust the open-top burner pressure by turning the screw in the governor turret. Replace the protective cap afterwards.
- f) Switch off the appliance by depressing the OFF button on the gas control valve, and turn off the electricity supply at the mains. Replace test point screws, control panels etc.

### 2.5.3 Checking The Performance Of The Controls

#### Oven

- a) Light the oven as detailed in the User's Instructions, set the thermostat at 250° C and allow the oven to heat up, ensuring that the fan is operating and turning anti-clockwise when viewed from the front.
- b) Turn the thermostat down to its lowest setting, and check that the oven burner goes out, but leaving the pilot burner lit.
- c) Turn the thermostat knob to a high setting, whereupon the oven burner should re-light smoothly and with little or no delay.
- d) Check that the fan stops, and the oven burner goes out, when the oven doors are opened.
- e) Check the operation of the power switch. When OFF the fan should stop, and the main burner be extinguished. The pilot burner, however, remains lit.
- f) Check to timer. This does not turn off the gas to the oven, but simply provides the user with an audible sign that a pre-set time has elapsed.
- g) Depress the oven light button and check that the light is operational.

#### Open Top

Light the open top as detailed in the User's Instructions. Check that the ignition is smooth and without delay. Repeat this operation several times.

### 2.5.4 Multifunctional Control

Access to the control is gained upon withdrawal of the control panel. See section 3.2.1.

The control is an SIT Electrosit 0.810.156 and contains a number of features for effecting adjustments. Refer to Figure 4.

- a) Two pressure test points are provided, for measuring inlet and outlet pressures. These are G & H on Figure 4. For convenience, a further outlet pressure test point is provided in outlet immediately below the control valve.
- b) Pressure adjusting screw (REG.ADJ)
- c) Pilot adjusting screw (PILOT ADJ). This screw is provided on control for adjusting flow of gas to pilot burner. The appliance is designed to operate on full gas flow to pilot. Therefore, to ensure that full flow is available, turn screw fully clockwise then back 2 complete turns.
- d) A screw marked NO PR. This is for rendering inbuilt governor (i.e. pressure regulator) inoperative, and is turned when propane is being used. This screw must not be tampered with as its required position will have been determined at works.
- e) A screw marked 1 STEP ADJ.

This is a device enabling the gas supply to the burner to flow at reduced rate initially, automatically increasing to full rate after a brief time interval. This assists in effecting smooth ignition of the gas.

This adjustment has been correctly set at works but should further adjustment be considered necessary, proceed as follows:

**Figure 4**

### 2.5.5 Natural Gas Models Only

- a) Adjust pressure regulator to give correct outlet pressure of 15mbar.
- b) Light oven and allow to heat up to about 150°C. Then turn thermostat knob to a low setting, shutting off burner.
- c) Remove plastic cover over 1 step adjuster screw and turn screw fully clockwise.
- d) Tentatively turn screw anti-clockwise and check ignition performance by moving thermostat knob to a high setting.
- e) Once minimum flow which ensures slow and smooth ignition has been determined, replace plastic cover over adjusting screw.

### 2.5.6 Propane Models Only

- a) Remove plastic cap and turn screw NO PR fully clockwise.

- b) Adjust pressure regulator until a pressure of about 12mbar is obtained on outlet.
- c) Repeat (b) to (d) as above.
- d) Turn to NO PR screw fully anti-clockwise.
- e) Adjust pilot adjustment screw if necessary.

#### **Note**

On no account must the NO PR screw be in an intermediate position, i.e. it must be fully clockwise for natural gas, or fully anti-clockwise for Propane.

## 2.6 INSTRUCTION TO USER

### **Important**

After installing and commissioning appliance, hand User Instructions to user or purchaser and ensure the instructions for lighting, turning off, correct use and cleaning are properly understood. The location of gas isolating cock and electrical supply switch should be made known to user and the procedure for that operation in an emergency demonstrated.

## SECTION 3 - SERVICING and CONVERSION

### **Important**

BEFORE ATTEMPTING ANY SERVICING ENSURE THAT THE ISOLATING COCK IS TURNED OFF AND THAT IT CANNOT BE INADVERTENTLY TURNED BACK ON.

AFTER ANY MAINTENANCE TASK, CHECK THE APPLIANCE TO ENSURE THAT IT PERFORMS CORRECTLY AND CARRY OUT ANY NECESSARY ADJUSTMENTS AS DETAILED IN SECTION 1

After carrying out any servicing or exchange of gas carrying components -

**ALWAYS CHECK FOR GAS SOUNDNESS!**

### 3.1 GAS CONVERSION CHECK LIST

For conversion to NATURAL GAS, add the correct governor and set the burner pressure.

For conversion to PROPANE GAS, replace the NATURAL burner with a PROPANE burner. Remove the governor from the gas circuit.

Other considerations -

CHANGE INJECTORS

CHANGE BYPASS SCREW AND SET LOW RATE

CHANGE DATA PLATE

### 3.2 REMOVAL OF PANELS and COMPONENTS

#### 3.2.1 Oven Control Panel

Access to various electrical controls, terminals etc, also piezo igniter, is gained upon withdrawal of the panel. Remove the fixings which secure the panel and draw it forward.

The various controls are removed and replaced as follows.

#### **Note**

When replacing connections, refer to wiring diagram in this manual. It can be seen that all wires are numbered.

#### **3.2.2 Pilot Lamps**

Pull off push-on connectors at back and remove hex nut which secures lamp to panel then withdraw lamp from front.

Replace in reverse order.

#### **3.2.3 Oven Light Push-Button**

Remove push-on connectors at rear. Hold aluminium front ring and turn switch body slightly anti-clockwise, thus enabling ring to be fully unscrewed until free of its thread. Grasp ring and pull it together with black plastic button, away from switch body.

Replace in reverse order, positioning hex nut so that the black push-button is approximately flush with aluminium ring.

#### **3.2.4 Oven Thermostat**

Pull off connections at rear, also control knob. Remove hex nut securing thermostat to panel.

Open oven doors and remove grid shelves.

Remove screws in bottom of oven back panel. Ease bottom of panel forward slightly and pull down to release top location thus enabling panel to be withdrawn from oven.

Ease rear back of RH panel slightly toward centre, then remove it backward to release front location.

Remove panel from oven thus revealing thermostat phial. Remove clips securing phial, also slacken clip retaining capillary tube to inside wall of control gear compartment.

Withdraw thermostat, feeding capillary tube and phial through hole in oven wall.

Replace in reverse order, taking care to replace insulating sleeving on the capillary tube, and to coil excess tubing out of the way of live parts.

#### **Note**

Re-calibration of thermostat requires use of a special tool, and therefore, cannot be undertaken other than by qualified personnel.

#### **3.2.5 Power Switch**

Pull off connections at rear. Compress plastic securing tabs inwards, enabling switch to be withdrawn from front.

To replace, simply push switch into hole, ensuring it is the correct way up. The locating tabs automatically spring into position.

#### **3.2.6 Timer**

Remove push-on connections at the rear. Pull off control knob, and undo the screws holding timer to panel. Replace in reverse order.

### **3.3 GAS CONTROLS**

#### **3.3.1 To Remove Gas Control-Valve**

ISOLATE APPLIANCE FROM GAS AND ELECTRICITY SUPPLIES

- a) Withdraw control panel as described in
- b) Remove burner grille (4 x M5 Pozidriv screws)
- c) Remove RH outer side panel. To facilitate this, appliance may have to be temporarily withdrawn from its location.
- d) Undo union nuts securing thermocouple and pilot supply pipe, at rear of piezo ignitor.
- e) Remove the screws holding fixing bracket to the oven wall. Pull off lead from piezo ignitor.
- f) Remove plastic terminal box cover from valve and disconnect wiring.
- g) Undo nuts on compression fittings on both inlet and outlet gas pipes.
- h) Remove screw holding control bracket to front tie and remove control valve complete with piezo ignitor.
- j) Replace in reverse order.

When fitting a replacement control valve, transfer gas fittings and fixing bracket, complete with piezo unit from old control to the new one.

Check adjustment of a replacement valve as described in the beginning of this instruction.

#### **3.3.2 Open Top Gas Taps**

##### **Service**

Remove two screws from tap body front. Withdraw spindle and niting arrangement to allowing plug to be eased out. For details of regreasing procedure, consult section.

Replace in reverse order.

##### **Removal**

Undo brass nut of compression fitting on gas supply pipe at gas tap rear.

Undo 2 x M5 hex head saddle mounting screws and gently remove tap from supply manifold.

Draw tap forward and remove thermocouple connection from FFD section of tap.

Replace in reverse order.

#### **3.3.3 Regreasing**

Clean gas tap plug with a soft rag and regrease using an approved high temperature lubricant. Take care not to over-grease as surplus may cause blockage in the gasways.

Replace parts in correct order and check for gas soundness.

##### **Note**

Plugs and bodies are machined in pairs and are therefore NOT INTERCHANGEABLE. Always clean one tap at a time.

### 3.4 THERMOCOUPLES

#### 3.4.1 Oven Thermocouple

To replace, carry out operations (a), (b) and (c) as detailed in Section 3.3.3. Undo union nuts securing thermocouple at control valve and at pilot. Withdraw through hole in oven wall. When replacing a thermocouple, do not bend to less than 15mm radius, and ensure that connections are soundly made but nevertheless taking care not to overtighten union nuts.

#### 3.4.2 Open Top Thermocouple

Remove fascia panel as detailed in Section 3.2.1.

Remove pan supports from hob then remove burner heads, this allows access to the brass venturi.

Undo brass venturi and remove venturi and aluminium bezel.

The thermocouple can now be seen protruding through drip shed. Undo screws on drip shed (4 x M5 on centre shed) and remove drip shed.

Burner support bracket is directly below burner support bracket. Remove nut securing thermocouple to burner support bracket and pull thermocouple through support bracket from underside.

Undo thermocouple connection at FFD section of gas tap and carefully remove thermocouple from hob. Repeat for all hob burners.

Replace in reverse order.

### 3.5 OVEN FUSE

This is located on withdrawable control panel and is of changing to cartridge re-wirable type. Use 5 amp wire in event of a fuse blowing, investigate cause.

### 3.6 OVEN PIEZO UNIT

This is mounted on top of gas control valve and fixed by two slotted head screws and one nut. Removal and replacement is self-explanatory.

### 3.7 OVEN PILOT BURNER ASSEMBLY

#### To Remove

- a) Remove bottom grille.
- b) Undo union nuts securing pilot supply tube and thermocouple. Pilot injector will be released - take care not to lose it. Also release spark electrode lead.
- c) Remove the screws securing pilot bracket.
- d) Remove pilot burner complete with mounting bracket.
- e) If desired, pilot burner can now be dismantled from bracket by removing two small screws.
- f) Re-assemble in reverse order.

#### Note

Fit injector to groove in brass nut before inserting it into hole in body of pilot assembly.

### 3.8 REMOVAL and CLEANING of BURNERS

#### 3.8.1 Oven Burner

- a) Withdraw control panel and remove burner grille.
- b) Remove pilot burner assembly as detailed in Section 3.7..
- c) From inside burner chamber, release compression fitting nut on burner feed-pipe.
- d) Remove hex screws securing main burner bracket to oven base frame.
- e) Remove burner complete with mounting bracket, slightly left to clear pipe, then remove from front.

#### To Clean Oven Burner

Proceed as follows, remove all accumulated debris from the burner by lightly brushing, afterwards shaking or blowing clean.

#### 3.8.2 Open Top Burner

Remove pan support from hob.

Remove burner head which fits loosely upon aluminium bezel which is fixed to drip tray.

Undo and remove brass venturi and remove aluminium bezel.

Undo screws which secure drip tray to hob and remove drip tray. Burner support bracket is directly below drip tray.

Undo burner body retaining nut and agas supply pipe compression fitting.

Remove burner body.

Replace in reverse order.

### 3.9 INJECTORS

#### 3.9.1 Oven Injector (Natural Gas Units Only)

- a) Remove burner as detailed in Section 3.7 then remove injector by undoing it from burner.
- b) Separate injector from elbow fitting.
- c) If injector requires cleaning, do so with a wooden splinter or similar non-metallic instrument. Do not broach with a drill as this might effectively increase the diameter of injector orifice.

#### 3.9.2 Open Top Injectors

- a) Remove pan support and burner head.
- b) Undo and remove brass venturi and place an extended socket down centre of main burner body.
- c) Undo and carefully remove injector.
- d) Replace in reverse order.

### 3.10 OVEN DOOR SWITCH

To gain access, proceed as follows:

- a) Withdraw control panel.
- b) Remove screws holding microswitch bracket and withdraw switch by moving it down and forward. Note location of the wires (they are numbered) and pull off connectors.
- c) Remove microswitch from bracket.
- d) Replace all parts in reverse order.

## Note

The trip lever bracket holes are slotted to enable switch operation to be adjusted with respect to degree of door opening. Adjust so that fan goes off when centre edge of door is open approx. 100mm. Apply a few drops of oil to trip lever bearing occasionally.

### 3.11 OVEN LIGHT

To replace bulb, proceed as follows:

- a) From inside oven, pull or gently prise off glass complete with plated bezel.
- b) Unscrew bulb, taking care not to let it fall down behind oven back panel.
- c) Fit new bulb and replace glass by pushing it in till spring clips are located.

The correct type of bulb must be used i.e. E14 240 volts, heat resistant type.

### 3.12 OVEN FAN

This is removed from inside oven compartment, as follows:

- a) Remove oven grid shelves and any other loose pieces of equipment.
- b) Undo screws in bottom of oven back panel then withdraw base of panel slightly forward and down to remove the panel.
- c) Remove fixings around periphery of fan back panel insert.
- d) Remove hex nuts from studs around inner periphery.
- e) Using two handles, pull fan assembly forward onto base of oven.
- f) Remove wires from fan motor terminals, previously noting location of numbered wires and withdraw assembly clear of the oven.
- g) Dismantle inner fan from shaft by removing centre fixing screw and pulling fan off.
- h) Remove motor by undoing 4 slotted screws (1 per leg of spider mounting).
- j) Re-fit replacement motor in reverse order.

## Note

Do not fit inner fan from one motor on to another, as so doing will probably result in assembly being imbalanced, causing vibration and excessive noise. When fitting fan to shaft, ensure pin in shaft is engaged in mating slot in fan boss.

### 3.13 BUZZER

To replace, proceed as follows:

- a) Withdraw control panel (as Section 3.2.1).
- b) Remove buzzer connections.
- c) Remove single screw fixing buzzer to panel.
- d) Replace in reverse order.

### 3.14 CAPACITOR

To replace, proceed as follows:

- a) Withdraw control panel (as Section 3.2.1).
- b) To improve access, it is recommended the RH side panel be removed. To effect this, first remove burner grille then remove fixings which secure side panels (3 at back, 2 at front).
- c) Disconnect capacitor connections at terminal block mounted on panel, first noting the positions.
- d) Remove hex nut at rear of capacitor and remove capacitor.
- e) Replace in reverse order.

### 3.15 OVEN DOOR SEAL

Seal is fixed to door frame with special spring clips. To remove, simply ease clips from holes.

Replacement seals are supplied with clips fixed to seal ready for insertion in holes in frame. The seal ends are inserted into the large holes at the door frame corners. After fitting a replacement seal, check it is closing effectively at all points, although minor gaps and cracks can be tolerated without affecting performance. If necessary, the door fit and ball catch can be adjusted by removal or addition of shims under hinge brackets and ball catch keeper plate.

To gain access to brackets and keeper, it is necessary to remove trim immediately above doors, and the lower grille. Adjust shims as necessary to produce necessary fit, endeavouring to achieve all-round seal contact.

The ball catch keeper must be adjusted by adding or removing shims so the doors are positively held closed, the ball exerting a slight pressure tending to close them.

All shims have slotted holes, therefore it is only necessary to slacken the respective screws in order to remove or replace them.

## SECTION 4 - SPARES

When ordering any spare parts always quote the appliance type and serial number. This information will be found on the data plate attached to the side of the control compartment. A short list of spare parts is included in this manual.

## Oven Electrics

## Fitments

Spares No.	Description
531740010	Worktop
531740030	Top Hinge - RH
531740040	Top Hinge - LH
531740050	Bottom Hinge - RH
531740060	Bottom Hinge - LH
531740070	Door Catch
531740080	Door Glass (Clear Inner)
531740090	Door Glass (Lined Outer)
531740100	Control Panel
531740110	Door Handle Assembly
531740160	Front Vertical Trim
531740170	Adjustable Leg
531740180	Outer Side Panel - RH
531740190	Outer Side Panel - LH
537741000	Hinge Cover
537741010	Burner Grille
537741020	Door Assembly - RH (Glass V.)
537741030	Door Assembly - LH (Glass V.)
537741040	Door Assembly - RH (St. Steel)
537741050	Door Assembly - LH (St. Steel)

## Inner Oven Fitments

Spares No.	Description
531740210	Oven Back Panel
531740220	Oven Side Panel - RH
531740230	Oven Side Panel - LH
531740240	Shelf Runner
531740250	Grid Shelf
531740260	Oven Bottom Panel
531740270	Door Seal Trim (Horizontal)
531740280	Door Seal (Horizontal)
531740290	Door Seal Trim (Vertical)
531740300	Door Seal (Vertical)
531740310	Fan Guard
531743020	Oven Lamp Glass

Spares No.	Description
531740330	Fan Motor
531740340	Lamp
531740350	Control Thermostat
531740360	Knob for Control Thermostat
531740370	Timer
531740380	Knob for Timer
531740390	Bell
531740400	Capacitor
531740410	Transformer
531740420	Terminal Block
531740430	Fuse (5A)
531740440	Indicator Lamp - Amber
531740450	Indicator Lamp - Red
531740460	Power On/Off Switch
531740470	Trip Lever
531740480	Microswitch
531740490	Spring
531740500	Oven Lamp Switch

## Oven Controls (Natural Gas)

Spares No.	Description
531740510	Burner
531740530	Thermocouple
531740550	Pilot Burner
531740580	Pilot Jet
531740600	Gas Control Valve
531740610	Electrode
531740620	Electrode Lead
531740630	Spark Igniter
531740640	Injector
531740650	Mirror

## Oven Controls (Propane Gas)

Spares No.	Description
531740520	Burner
531740540	Thermocouple
531740561	Pilot Burner
531740570	Zeus Jet
531740600	Bottom Hinge - LH
531740610	Electrode
531740620	Electrode Lead
531740630	Spark Igniter

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