

# **G2962, G2994**

## **Manual-tilt Bratt Pans**

# **INSTALLATION and SERVICING INSTRUCTIONS**



These appliances must be installed and serviced by a qualified 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 -

#### **I.E.E Regulations for Electrical Installations**

#### **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**

These appliances have been UKCA/CE-marked based on compliance with the Gas Appliance Regulations/ Product Safety and Metrology Regulations for the Countries, Gas Types and Pressures as stated on the data plate.

**WARNING - TO PREVENT SHOCKS, ALL APPLIANCES WHETHER GAS OR ELECTRIC 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**

To obtain maximum performance from this unit regular servicing of the appliance should be undertaken to ensure correct operation, it is functioning as intended, and safe to use. We recommend servicing in accordance with SFG20 Maintenance Schedules and as a minimum, after 2,500 hours of use, or annually, whichever comes first and that a maintenance contract be arranged with an appointed service contact. Visits may then be made at agreed intervals to carry out adjustments and repairs.



#### **WEEE Directive Registration No. WEE/DC0059TT/PRO**

At end of appliance life, dispose of appliance and any replacement parts in a safe manner, via a licensed waste handler.

Appliances are designed to be dismantled easily and recycling of all material is encouraged whenever practicable.

## **Falcon Foodservice Equipment**

### **HEAD OFFICE AND WORKS**

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

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**T100723 Ref. 7**

## Electrical Safety and Advice Regarding Supplementary Electrical Protection

Commercial kitchens and foodservice areas are environments where electrical appliances may be located close to liquids, or operate in and around damp conditions, or where restricted movement for installation and service is evident.

The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician; and connected to the correct power supply suitable for load as stipulated by the appliance data label.

The electrical installation and connections should meet the necessary requirements to local electrical wiring regulations and electrical safety guidelines.

### We recommend:-

- Supplementary electrical protection with use of a type A residual current device (RCD).
- Fixed wiring appliances incorporate a locally situated switch disconnector to connect to, which is easily accessible for switching off and safe isolation purposes. The switch disconnector must meet the specification requirements of IEC 60947.

## 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
G2962	600	770	870	120	265
G2994	900	770	870	165	364

### 1.2 SITING

The appliance should be installed on a level, fireproof surface, in a well lit and draught free position within a suitably ventilated room. If floor is constructed of combustible material then local fire requirements should be checked to ensure compliance. A clear space of 150mm should be left between appliance rear and any combustible wall. A minimum vertical clearance of 900mm above top edge of appliance is required.

#### Important

If appliance is to be installed in a suite formation with matching appliances then instructions for all models should be consulted in order to determine necessary clearances to any combustible rear wall or overlying surface(s). Some appliances require greater clearances than others. The largest figure quoted in the individual instructions will therefore determine clearance of the complete suite adjoining appliances.

Flue discharges vertically along top rear of appliance.

**THERE MUST BE NO DIRECT CONNECTION OF THE FLUE TO THE OUTSIDE AIR OR TO A MECHANICAL EXTRACTION SYSTEM.**

See Section 1.3 for ventilation details.

After appliance position has been established, it is recommended that the feet (on an appliance fitted with feet) be secured to floor using holes provided.

### 1.3 VENTILATION

This appliance must be installed in a suitably ventilated room in accordance with the regulations in force.

Sufficient ventilation, natural or mechanical, must be provided to supply adequate fresh air for proper combustion.

It should also prevent occurrence of unacceptable concentrations of substances harmful to health in the location where equipment is installed. It is also required to be able to remove any such products that may occur, safely and efficiently.

Recommendations for Ventilation of Catering Appliances are provided in BS5440: 2. For multiple installations, requirements for individual appliances should be added together. Installation should be made in accordance with local and/or national regulations which apply at the time.

A qualified installer **MUST** be employed.

### 1.4 GAS SUPPLY

The incoming service must be of sufficient size to supply full rate without excessive pressure drop. The gas meter should be checked, preferably by the gas supplier to ensure meter is adequate to deal with rate of gas supply required for the appliance in addition to any other gas equipment installed.

Installation pipes should be fitted in accordance with IGE/UP/2. The size of pipework from meter to appliance must not be less than appliance inlet connection Rp1/2" (1/2" BSP female). An isolating cock that is easily accessible to user must be located close to appliance to allow shut down during any emergency or routine servicing. The installation must be tested for gas tightness. Details are given in IGE/UP/1.

Position of isolating cock should be shown to responsible person(s).

The gas supply tubing or hose must comply with national requirements in force and require to be periodically examined and replaced as necessary.

Flexible hose length must not exceed 1.5M.

### 1.5 ELECTRICAL SUPPLY

These appliances are designed for operation on a 230V~ 50Hz 3A electrical supply.

As mains lead wire colours may not correspond with the markings which identify plug terminals, proceed as follows:

The wire coloured GREEN and YELLOW must be connected to plug terminal which is marked with the letter E or the earth symbol or coloured GREEN or GREEN and YELLOW.

The wire coloured BLUE must be connected to terminal marked with letter N or coloured BLACK.

The wire coloured BROWN must be connected to terminal marked with letter L or coloured RED.

### 1.6 WATER SUPPLY

Not applicable to these appliances.

### 1.7 TOTAL RATED HEAT INPUTS –

#### NATURAL (I<sub>2</sub>H) and PROPANE (I<sub>3</sub>P) GAS

Model	kW (nett)	Btu/hr (gross)
G2962	9.8	36,800
G2994	15.9	59,700

### 1.8 INJECTOR SIZES -

#### NATURAL (I<sub>2</sub>H) and PROPANE (I<sub>3</sub>P) GAS

G2962	NATURAL	PROPANE
MAIN BURNER RH	Amal 470	Amal 180
MAIN BURNER LH	Amal 400	Amal 180
PILOT BURNER	SIT No. 36	SIT No. 19
CROSS-LIGHTING BURNER	Amal 75	Amal 20

G2994	NATURAL	PROPANE
MAIN BURNER RH	Amal 490	Amal 190
MAIN BURNER CENTRE	Amal 400	Amal 190
MAIN BURNER LH	Amal 430	Amal 190
PILOT BURNER	SIT No. 36	SIT No. 19
CROSS-LIGHTING BURNER - LH	Amal 75	Amal 20
CROSS-LIGHTING BURNER - RH	Amal 85	Amal 20

### 1.9 GAS PRESSURE

The appliance operates at the following pressures -

#### Supply Pressure (All Models)

NATURAL	PROPANE
20 mbar	37 mbar
8 in. w.g.	14.8 in. w.g.

#### Operating Pressure

Model	NATURAL	PROPANE
G2962	15 mbar	35.5 mbar
	6 in. w.g.	14.2 in. w.g.
G2994		35 mbar
		14 in. w.g.

Operating pressure is measured at outlet test point located on front face of multi-functional control – (See Figure 1, Servicing Section 3.8)

### 1.10 BURNER ADJUSTMENT

The only adjustment necessary on main burner is the correct setting of gas pressures as described in Section 1.9.

No aeration adjustment is provided.

Pilot flame should envelop approximately 6mm to 10mm of thermocouple tip. Pilot flame can be adjusted using the Pilot Adjustment screw on front of Multi-functional Control Valve (turn screw clockwise to reduce and anti-clockwise to increase) – (see Figure 1, Servicing Section 3.8).

If any adjustment is required, appliance must be serviced.

## SECTION 2 - ASSEMBLY and COMMISSIONING

### 2.1 ASSEMBLY

Position appliance and level by adjusting leg levelling feet or castors as appropriate. Each foot (on appliances with feet) contains a hole to enable floor fixing to be made.

#### 2.1.1 Appliances on Castors

Refer to addendum T100286 supplied.

In addition, drain contents of pan before attempting to move appliance, pan must also be lowered down fully prior to moving.

### 2.2 CONNECTION TO THE GAS SUPPLY

Inlet connection terminates at bottom RH corner when viewed from rear and is Rp1/2 (1/2" BSP Female). Test for gas tightness.

### 2.3 CONNECTION TO ELECTRICITY SUPPLY

Make electrical connection.

Appliance is designed for connection to a 230V AC supply. A 2 metre long mains lead is fitted as standard. Mains lead wires are coloured in accordance with the following code:

<b>Green and Yellow</b>	<b>Earth</b>
<b>Blue</b>	<b>Neutral</b>
<b>Brown</b>	<b>Live</b>

The wires should be connected to plug as follows:

EARTH to terminal marked E, or coloured GREEN.

NEUTRAL to terminal marked N or coloured BLACK.

LIVE to terminal marked L, or coloured RED.

Appliance must be protected by 3 amp fuse if 13 amp (BS1363) plug is used. Any other type of connection must be protected by 5 amp fuse at distribution board.

### Warning

**THIS APPLIANCE MUST BE EARTHED.**

### 2.4 CONNECTION TO THE WATER SUPPLY

Not applicable to this appliance.

### 2.5 PRE-COMMISSIONING CHECK

#### Important

After installation, the engineer should check that all gas connections are tight and do not leak. Also check that all electrical connections are secure.

The installation engineer should check that the appliance is operating satisfactorily before leaving site.

Particular attention should be given to pressure settings detailed in Section 1.9 and pilot adjustment as detailed in Section 1.10.

### 2.6 INSTRUCTION TO USER

After installing and commissioning appliance, please hand User Instructions to user or purchaser and ensure that person(s) responsible understand the instructions and procedures for lighting, cleaning and correct use of appliance.

It is important to ensure that locations of gas isolating cock and electrical socket or switch are made known to user and procedures for operating these in an emergency are demonstrated.

## SECTION 3 - SERVICING and CONVERSION

### SERVICE INFORMATION

This unit carries an extensive mainland UK warranty. The warranty is in addition to and does not change your statutory or legal rights.

The warranty policy can be found on our website which details the conditions of the warranty and the exclusions.

<https://www.falconfoodservice.com/info-centre/policy>



Service calls to equipment under warranty will be carried out in accordance with the conditions of sale.

Warranty calls can be made between 8:30 am and 5:00 pm weekdays only.

To ensure your warranty enquiry is handled as efficiently as possible, ensure you have the following appliance information prior to calling us:

1. Model number – found on data plate
2. Serial number – found on data plate
3. Brief description of the issue

To contact Falcon for a warranty issue dial (UK only) 01786 455 200 and select Warranty Issues from the menu.

### MAINTENANCE CHECK

Regular servicing of the appliance should be undertaken to ensure correct operation, it is functioning as intended, and safe to use. We recommend servicing after 2,500 hours of use, or annually, whichever comes first. Any maintenance schedule should be carried out in accordance with SFG20 Maintenance Schedules. Should any issues with the integrity of the components be identified these should be replaced. If the appliance is not considered safe the unit should be removed from service and the responsible person advised why the unit is not safe to use and what remedial action is needed. Contents of the maintenance schedule should be agreed with the maintenance provider.

### Important

BEFORE ATTEMPTING ANY SERVICING, SWITCH APPLIANCE OFF AT MAIN GAS AND ELECTRICITY SUPPLY ISOLATORS. CARE MUST BE TAKEN TO ENSURE THESE ARE NOT INADVERTENTLY SWITCHED ON DURING TASK.

### General Note

AFTER ANY MAINTENANCE TASK, CHECK APPLIANCE TO ENSURE IT PERFORMS CORRECTLY. CARRY OUT ANY NECESSARY ADJUSTMENTS AS DETAILED IN THE APPROPRIATE SECTION OF THIS DOCUMENT.

After carrying out any servicing or exchange of gas components -

### ALWAYS CHECK FOR GAS TIGHTNESS

Warning: Great care should be taken when checking for gas tightness, as, by necessity, electrical components will be exposed and energised.

### 3.1 CONVERSION

When changing from one gas family to another always ensure the following -

Change main, pilot and cross-lighting burner injectors. Refer to Section 1.8. Injectors must be re-sealed using thread sealant.

Set pressures, refer to Section 3.8.

Check pilot flame length. Refer to Section 1.10.

Change data plate.

For detailed procedure, refer to appropriate section in this document.

### 3.2 REMOVAL OF FRONT CONTROL PANELS

#### 3.2.1 Main Control Panel

Ensure pan is in DOWN position.

Pull off thermostat control knob.

Remove handwheel by undoing central fixing, take care to retain shaft key.

Open drop down door.

Remove fixings at corners of control panel bottom edge and also those in top flange.

Pull panel clear of appliance and carefully rest it on floor. Take care not to strain wiring.

Replace in reverse order.

#### 3.2.2 Lower Control Panel

Remove main control panel before removing fixings for lower panel and pull clear.

### **3.3 BURNERS**

#### **Removal of Main Burners**

Tilt pan to fully raised position to allow access to burner compartment.

Remove fixings that retain burners to base of compartment.

Slide burner from injector and remove.

Replace in reverse order.

### **3.4 INJECTORS**

#### **3.4.1 Removal of Main Burner Injectors**

Remove main burners as detailed in Section 3.3.

Undo injectors or injector jets as required.

Replace in reverse order, ensuring that correct injector is fitted to each burner – refer to Section 1.8.

Injectors must be re-sealed using thread sealant.

#### **3.4.2 Removal of Cross Lighting Burner**

Remove main control panel. (See Section 3.2)

Tilt pan to fully raised position. Temporarily re-fit handle (with key) upon shaft.

Undo compression fitting nut at cross-lighting burner venturi.

From top, remove fixings that secure cross-lighting burner and remove burner by lifting it up.

Replace in reverse order.

#### **3.4.3 Removal of Cross Lighting Injector**

The complete burner can be removed as detailed in Section 3.4.2. Alternatively, injector can be removed leaving burner in position. To achieve this, remove control panel, undo gas supply pipe compression fitting nut and remove fitting from burner venturi tube.

Injector can now be removed for renewal or cleaning.

When re-assembling, the injector must be re-sealed using thread sealant.

#### **3.4.4 Removal of Pilot Burner Assembly**

Ensure pilot flame length is correctly adjusted before removing pilot assembly as detailed in Section 1.10.

Remove both front control panels and fully raise pan (see Section 3.2).

Temporarily replace tilting handle (with key) and fully raise pan.

Undo fixings that secure pilot assembly to base of burner compartment.

In controls compartment, pull off electrode lead connector at spark igniter and undo thermocouple and pilot supply pipe connections at rear and side of multi-functional control.

Remove assembly complete with pilot supply pipe and thermocouple by pulling up and away from base of burner compartment.

Replace in reverse order, ensuring thermocouple end is clean (do not use thread compound) and do not over tighten.

Ensure pilot supply pipe is correctly fitted and check for leaks.

Check pilot flame as detailed in Section 1.10.

After making any adjustment, ensure cross-lighting burner ignites smoothly from pilot.

### **3.5 REMOVAL OF THERMOCOUPLE**

Remove main control panel.

Undo thermocouple connection at pilot and multifunctional control valve and remove.

Replace in reverse order ensuring thermocouple is pushed fully into pilot bracket before tightening connection.

### **3.6 PIEZO IGNITER/ SPARK IGNITER**

#### **3.6.1 Removal of Spark Electrode**

Undo thermocouple at Pilot Assembly and remove.

Undo connection to pilot burner to remove electrode.

Undo connection lead to electrode.

Replace in reverse order ensuring connection to pilot assembly is not overtight as to crack electrode.

#### **3.6.2 Piezo Unit**

Before replacing the spark igniter, ensure that the spark circuit is correctly adjusted.

The igniter is a Piezo spark type and contains no battery. The unit is located on LH side of gas control unit mounting bracket secured by two fixings.

A faulty unit cannot be serviced and must be replaced.

### **3.7 THERMOSTAT**

#### **3.7.1 Control Thermostat**

##### **To Remove**

a) Remove main control panel as Section 3.2.

b) Raise pan fully.

c) Remove phial clamping plate on pan underside.

d) Remove wire connections, noting their locations.

e) Remove fixings that secure thermostat to bracket.

f) Remove thermostat, threading capillary tube and phial through apertures.

g) Replace in reverse order. Ensure capillary bulb and sleeving are in identical position to that of original component.

### 3.7.2 High Temperature Limit Device

The device is set to trip when centre oil temperature at a maximum depth of 50mm reaches 225°C. It should not be interfered with unless cut-out has occurred and device requires to be re-set.

#### To Re-set

- a) Remove main control panel (as Section 3.2). Limit device is on mounting bracket at Right side of pan (as viewed from front).
- b) Remove centre cap, and using a suitably sized small pin or screw, gently press centre spindle pin in until a click occurs.
- c) Replace centre cap.
- d) Replace control panel.

**Warning:** Investigate reason for High Temperature Limit Device trip.

**Warning:** If operation of High Temperature Limit Device is suspect, replace immediately.

#### To Replace

- a) Carry out operations (a) and (b) (as Section 3.7.2).
- b) Remove phial clamp from pan underside.
- c) Remove wire connections, noting respective locations.
- d) Remove fixing(s) that secures limit device body to bracket.
- e) Remove limit device, threading capillary tube and phial through apertures.
- f) Replace in reverse order. Ensure capillary bulb and sleeving are in identical position to that of original component.

### 3.8 GAS CONTROL UNIT (Multifunctional Control Valve) including Solenoid assembly. Fig 1.

The gas control unit combines gas governor, flame failure safety device and control knob for: Off / Pilot / Main operation.

Before removing, ensure main gas and electricity supplies are shut off.

#### 3.8.1 To Remove Gas Control Unit

Remove front control panels as detailed in Section 3.2.

Undo screw fitting and remove electric plug from side of Control unit.

Undo compression-fitting nut on gas inlet pipe at Control unit.

Undo compression fitting nut on burner gas pipe at the rear of solenoid valve.

Disconnect thermocouple and pilot supply pipe at rear and side of control unit.

Pull off wire from spark igniter.

From below base, undo fixings that secure control unit mounting bracket. Remove Gas Control complete with bracket and spark igniter.

Disconnect spark igniter and mounting bracket from existing Control Unit and fit to replacement.

Re-fit new assembly and replace in reverse order.

#### Check for Gas Tightness.

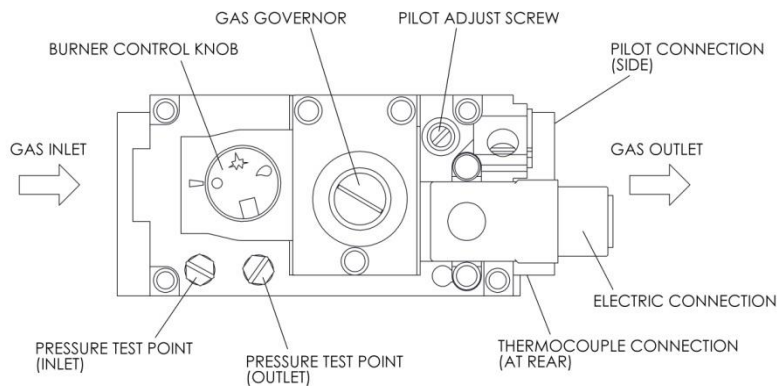


Figure 1

#### 3.8.2 To Check /Adjust appliance operating gas pressure. (Natural Gas Appliances Only)

- a) Refer to Figure 1. Remove screw from outlet test point and connect manometer. Remove protective cap on governor.
- b) Light Pilot.

**Warning:** If Pilot flame is extinguished, intentionally or otherwise, no attempts should be made to re-light gas until at least 3 minutes have passed.

- c) Switch on electricity supply to pan.
- d) Ensure pan is fully lowered.
- e) Push in and turn Burner Control Knob to pilot position, then push in fully and hold while repeatedly pressing and releasing igniter button until pilot lights. Check through sight glass.
- f) Keep control knob pressed in fully for a further 20 seconds before release. Pilot should remain lit, but, if it goes out, push in and turn burner control knob to OFF position and wait for 3 minutes. Repeat from step e) until pilot remains lit.
- g) Push in and turn burner control knob to main burner position and set thermostat to 5. Ensure that burners ignite.
- h) When appliance reaches full pressure, adjust pressure to 15 millibars as detailed in section 1.9. (turn governor clockwise to increase and counter-clockwise to decrease).

- i) Extinguish burners by turning thermostat control knob to OFF position.
- j) Re-light burners by turning thermostat knob to position 5 while observing manometer. Re-check the appliance reaches a burner pressure of 15 millibars.
- k) When satisfied that appliance is operating at correct full pressure, turn gas off and replace pressure test point screw and governor protective cap.

### **3.8.3 To Check appliance operating gas pressure (Propane Appliances Only)**

**Note:** On Propane appliances, governor override screw should be fitted, and no gas pressure adjustment is possible.

Gas supply pressure to appliance should be 37millibars.

Ensure Governor override screw is in place.

- a) Remove outlet pressure test point screw and fit manometer.
- b) Light pilot as in Section 3.8.2.
- c) Push in and turn burner control knob to main burner position and set thermostat to 5. Ensure that burners light.
- d) Observe manometer. Check that full burner operating pressure is as in Section 1.9.
- e) Remove manometer and replace screw.

## **3.9 GOVERNOR**

The appliance gas pressure governor is incorporated in the multi-functional control. See Section 3.8 to remove and adjust.

## **3.10 CHECKING and SERVICING THE MULTIFUNCTIONAL GAS CONTROL UNIT**

### **3.10.1 Pilot Will NOT Light (Burner Control turned to Pilot position)**

- a) Main gas supply must be turned on and pilot gas supply line purged of air.
- b) Ensure igniter is supplying spark at Pilot block.
- c) There is a possible obstruction to gas flow. – Using table in section 1.8, check Pilot Orifice is correct size and unblocked, Check pilot supply gas pipe.
- d) Alternatively, pilot gas adjustment screw may be closed.
- e) The pilot flame should envelop 6 to 10mm of thermocouple tip. Turn adjustment screw clockwise to decrease, or anti-clockwise to increase pilot flame. Fig 1.

### **3.10.2 Pilot goes OUT when burner control knob is Released.**

- a) Check pilot flame adjustment as above.
- b) Check that thermocouple to multifunctional gas control unit connection is clean and secure.
- c) If pilot still does not hold, replace thermocouple. If this does not correct condition, replace multifunctional gas control unit.

### **3.10.3 Checkout Multifunctional Control for complete function.**

Put lighting sequence into operation and observe, through a complete cycle that main burners function properly.

### **3.10.4 Lighting the Burner**

**Warning:** If pilot flame is extinguished intentionally or otherwise, NO ATTEMPT should be made to relight gas until at least 3 minutes have elapsed.

Ensure pan is fully lowered.

### **3.10.5 To Light The Burners**

- a) Switch off electricity supply to pan and turn thermostat control OFF.
- b) Press in and turn burner control knob to pilot position, push knob in fully and hold while repeatedly pressing and releasing igniter button until pilot lights, observe through sight-hole.
- c) Keep pilot button pushed in fully for 20 seconds then release it. Pilot should remain alight but should it go out, turn burner control knob to OFF and wait 3 minutes before repeating from Step b).
- d) Turn electricity on and check red neon lights.
- e) Push in and turn burner control knob to Main.
- f) Set thermostat control to desired setting and main burner will light.

### **3.10.6 If Main Burners Do Not Light**

High temperature limit device may have tripped. To re-set, refer to Section 3.7.2.

**IMPORTANT:** Investigate reason for trip.

### **3.10.7 To Shut Down**

#### **3.10.7.1 For Short Periods**

Turn thermostat knob OFF. This leaves only pilot lit.



### 3.10.7.2 For Longer Periods (Complete Shut-down)

- a) Turn thermostat knob to OFF (fully anticlockwise).
- b) Turn burner control knob to OFF position.
- c) Turn off electricity to appliance.

**Note:** Gas multifunctional control is fitted with a safety interlock, therefore a period of 3 minutes will elapse before it is possible to re-light after complete shut-down.

### 3.11 GAS SOLENOID VALVE

This is positioned between multifunctional control valve and main burner inlet in the gas circuit.

#### To Remove

- i. Solenoid coil
- ii. Solenoid complete assembly including body

**Note:** If solenoid is malfunctioning, it is recommended to replace coil first, and check to see if this solves problem, as this is simpler than removing complete assembly.

#### i. To remove solenoid coil

- a) Remove front control panels as detailed in Section 3.2.
- b) Disconnect wires and remove circlip from top of solenoid spindle. Pull coil free off centre spindle.

#### ii. To remove complete solenoid assembly including solenoid body

Follow instructions in Section 3.8 for removal of Gas Multifunctional Control Unit (multifunctional control valve) including Solenoid assembly.

Separate solenoid body from Gas Multifunctional Control Unit.

### 3.12 NEONS

To replace a neon, first remove main control panel (Refer to Section 3.2).

Remove connections and undo nut that secures neon to panel and pull neon from panel front.

Replace neon (230V type) and securing nut and replace electrical connections.

### 3.13 TILT SWITCH MECHANISM

This switch is located at base of screw jack. Access is gained by removing 2 fixings to enable removal of small rectangular inspection plate at bottom of outer

back panel.

To remove switch, proceed as follows –

- a) Raise pan slightly so that end of the screw jack is at least 50mm away from tilt switch.
- b) Undo fixing securing switch bracket to lower bearing block.
- c) Remove switch and bracket assembly. Disconnect wires and note respective positions for correct replacement.
- d) Undo fixings which secure switch and tufnol insulation strip to bracket.
- e) When replacing switch/bracket assembly, tighten fixing until bracket is firm and allow adjustment by application of a small amount of force. Bracket should be positioned at lower end of possible adjustment at this stage.
- f) Lower pan to horizontal working position. Adjust switch to operating setting by pushing bracket upward until switch arm is engaged on bottom of jack. This will depress switch button.
- g) Fully tighten fixing which secures switch bracket.

Operation of tilt switch mechanism must be checked at regular intervals. Procedure as follows -

- a) Light burners as detailed in Section 2 of User Instruction manual.
- b) Slightly raise pan by turning screw jack handle.
- c) Look through sight glass and observe that main burner and cross-lighter flames extinguish. This will indicate that tilt switch is cutting power supply to controls.

If burner does not go out, check operation and wiring of switch mechanism and replace if necessary.

## SECTION 4 - SPARE PARTS

When ordering spare parts, always quote the appliance type and serial number.

This information will be found on the data badge attached to the controls cover behind the controls compartment door.

### Short Spares List

- Multifunctional Gas Control
- Burner Injector(s)
- Burner Injector Jet(s)
- Cross Lighter Jet(s)
- Pilot Jet(s)
- Thermocouple
- Spark Igniter
- Spark Igniter Lead
- Spark Igniter Electrode
- Control Thermostat
- Safety Thermostat
- Microswitch
- Neon Indicator – Red
- Neon Indicator – Amber

## WIRING DIAGRAM

