



# F900 SERIES

User, installation and servicing instructions

## GAS CHARGRILL

G9440, G9460, G9490, G94120

Read these instructions before use

DATE PURCHASED:

MODEL NUMBER:

SERIAL NUMBER:

DEALER:

SERVICE PROVIDER:

**T100873**

REV. 7

Dear Customer,  
Thank you for choosing Falcon Foodservice Equipment.

This manual can be downloaded from [www.falconfoodservice.com](http://www.falconfoodservice.com) or scan here.



**IMPORTANT:** Please keep this manual for future reference.

## Falcon Foodservice Equipment

### HEAD OFFICE

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



### **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.

## SYMBOLS



• SPANNER



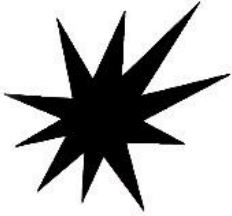
• SCREWDRIVER



• COOKING OIL



• GREASE



• SPARK IGNITION



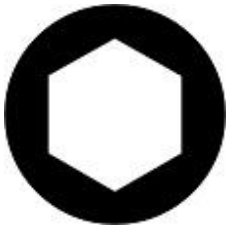
• FLAME



• WARNING



• VIEWPORT



• ALLEN KEY



•IGNITER



**These instructions are only valid if the country code appears on the appliance. If the code does not appear on the appliance, refer to the technical instructions for adapting the appliance to the conditions for use in that country.**

**Installation must meet national or local regulations. Attention must be paid to: gas safety (installation & use) regulations, health and safety at work act, local and national building regulations, fire precautions act.**

**To prevent shocks, all appliances must be earthed.**

**This equipment is for professional use only and must be used by competent persons.**

**The installer must instruct the responsible person(s) of the correct operation and maintenance of the appliance.**

### **Training and competence**

To help ensure the safe use of this appliance there is a requirement for you to provide whatever information, instruction, training and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety of all users.

For further help and information on training and competence we would refer you the Health and Safety Executive website; [www.hse.gov.uk](http://www.hse.gov.uk) document ref: health and safety training INDG345. International customers should default to the health and safety guidelines provided by your government body.

### **Risk assessment**

As part of managing the health and safety of your business you must control any risks identified in your commercial kitchen. To do this you need to think about what might cause harm to people and decide whether you are taking reasonable steps to prevent that harm. This is known as risk assessment. It is important to consider the environment around the product as well as the product itself. For example oil or food spills will present a significant risk so users so the need to immediately clean up such spills must be reflected in staff training.

For further help and information on risk assessments we would refer you to you the Health and Safety Executive website; [www.hse.gov.uk](http://www.hse.gov.uk) document ref: risk

assessment INDG163. International customers should default to the health and safety guidelines provided by your government body.

### **Cleaning and maintenance**

When removing heavy items to aid cleaning or maintenance particular care should be taken. A manual handling risk assessment is the best way to determine the level of risk to anyone using or maintaining this equipment. To help with such an evaluation we have included the weights of individual components that may present significant risk.

For further help and information on manual handling and associated risk assessment we would refer you to you the Health and Safety Executive website; [www.hse.gov.uk](http://www.hse.gov.uk) document ref: manual handling at work INDG143. International customers should default to the health and safety guidelines provided by your government body.

The cleaning of fryers or other products that use hot oil present significant risks to end users and particular care should be taken. Cold water and hot oil for example are an explosive mix and should be avoided at all costs.

Other useful references for health and safety issues

[www.hse.gov.uk](http://www.hse.gov.uk)

Essentials of health and safety at work ISBN978

Noise at work INDG362

Safe systems of work

Other notes added to the body of the instructions

**Only competent persons are allowed to service or convert the appliance to another gas type.**

**Gas appliances must have a stop cock fitted in the supply pipe work. The user must be familiar with the location and operation of this device in order to turn off the supply of gas in the event of an emergency.**

**Unless otherwise stated, parts which have been protected by the manufacturer must not be adjusted by the installer.**

**Take care when moving an appliance fitted with castors.**

**The appliance must be serviced regularly by a qualified person. Service intervals should be agreed with the service provider.**

**This appliance may be discolored due to testing.**



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# 1.0 APPLIANCE INFORMATION

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.

**Falcon Foodservice Equipment**  P.I.N.  STD.  

**A** Ser No.  **B** MODEL  **C** TYPE  I.P.

ES, GB, GR, IE, IT, PT, SI	BE, FR	BG, CZ, DK, EE, FI, HR, LT, LV, NO, RO, SE, SI, SK, TR	CY, HU, IS, MT, NL	AT, CH	PL	LU	DE	-
I2H3+	I3+	I2H3B/P	I3B/P	I2H3B/P	I2E3B/P	I2E	I2E3B/P	-
20;28-30/37	28-30/37	20;30	30	20;50	20;30	20	20;50	-

**D** Cat.

**E** p mbar


GAS TYPE	G20	G30	G31	
GAS RATE	m <sup>3</sup> /h	kg/h	kg/h	
$\Sigma$ Qn	kW	kW	kW	kW

**F** GAS TYPE

**G** GAS RATE

**H**  $\Sigma$  Qn

**I** EL.  Hz

**J**  $\Sigma$  kW  kW **K**   kHz

**L** L1 A L2 A L3 A

**A** - Serial No

**B** - Model No

**C** - Flue Type

**D** - Gas Category

**E** - Gas Pressure

**F** - Gas Type

**G** - Gas Rate

**H** - Total Heat Input

**I** - Electrical Rating

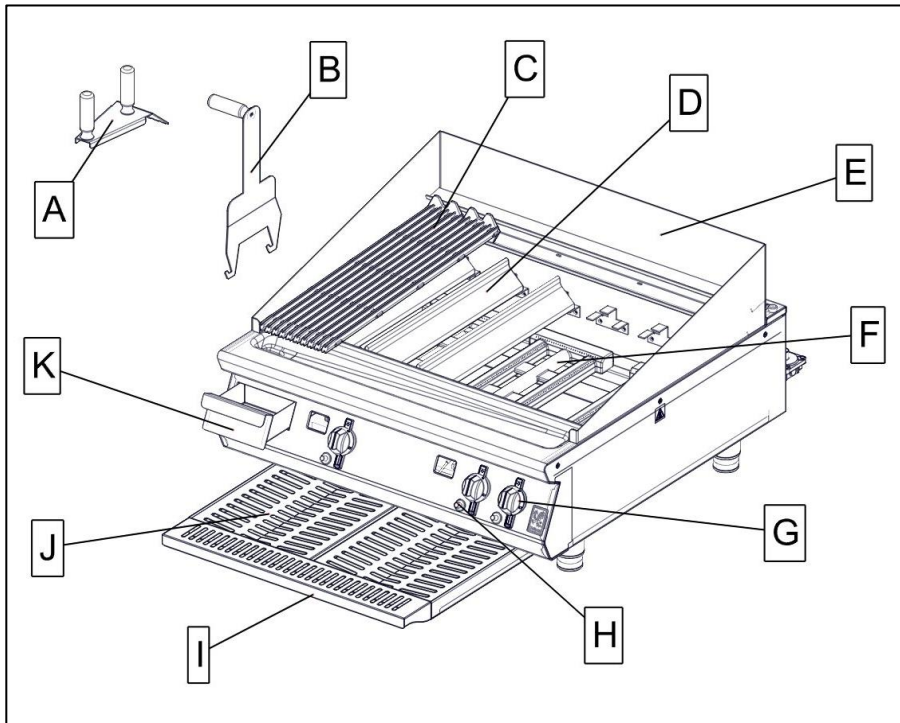
**J** - Total Electrical Power

**K** - Magnetic Field Frequency

**L** - Electrical Phase Loading

## 2.0 OPERATION

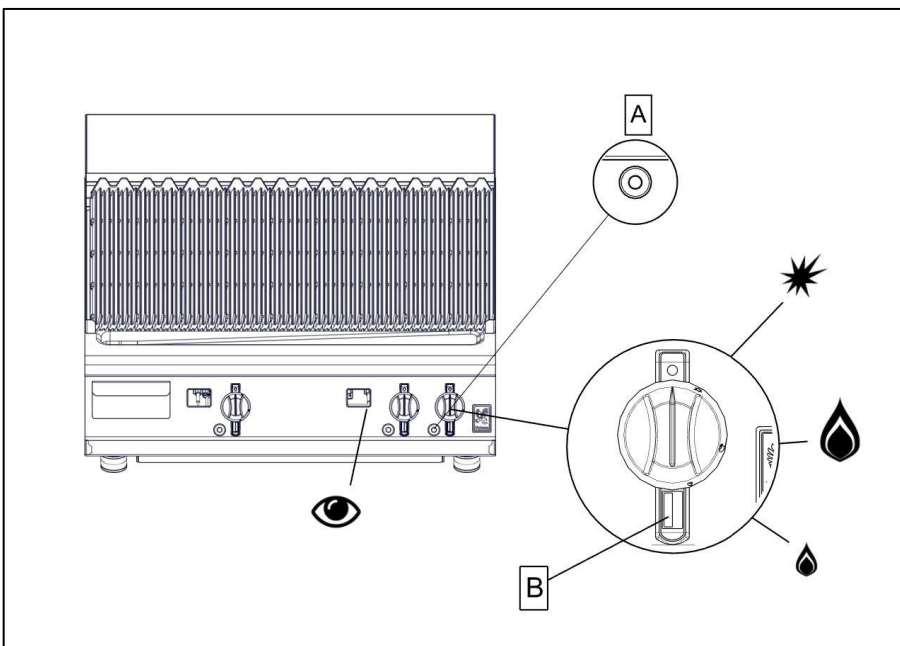
### 2.1 COMPONENT PARTS



- A – Scraper
- B – Lifting Tool
- C – Brander Bar
- D – Burner Baffle
- E – Splashguard
- F – Burner
- G – Control Knob
- H – Spark Igniter
- I – Drip Tray
- J\* – Deflector
- K – Fat Jug

\* Not required in G9440.

### 2.2 CONTROLS



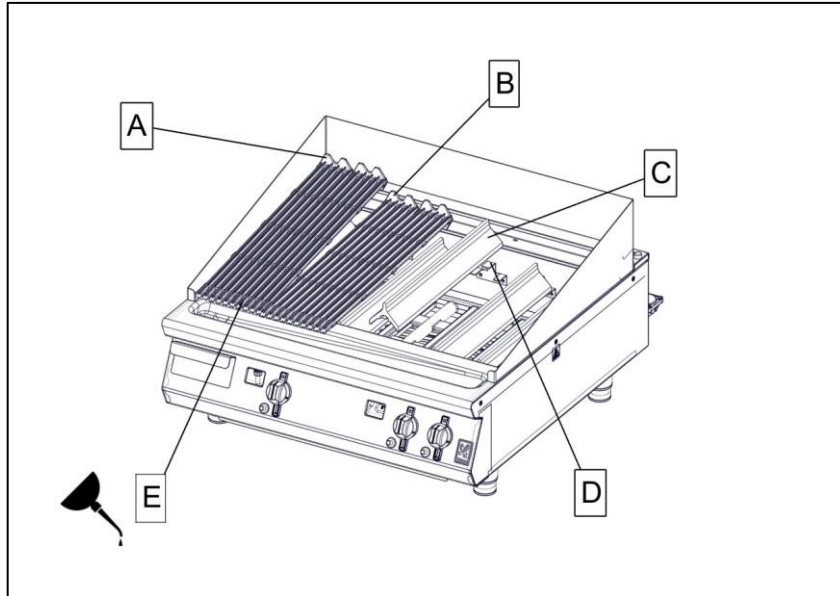
- A – Spark Igniter
- B – Zone Indicator



## 2.3 USING THE APPLIANCE

2.3.1 Before use, clean the appliance inside and out. See section 3.

2.3.2 Position burner baffles and brander bars correctly.



A - High position

B - Low position

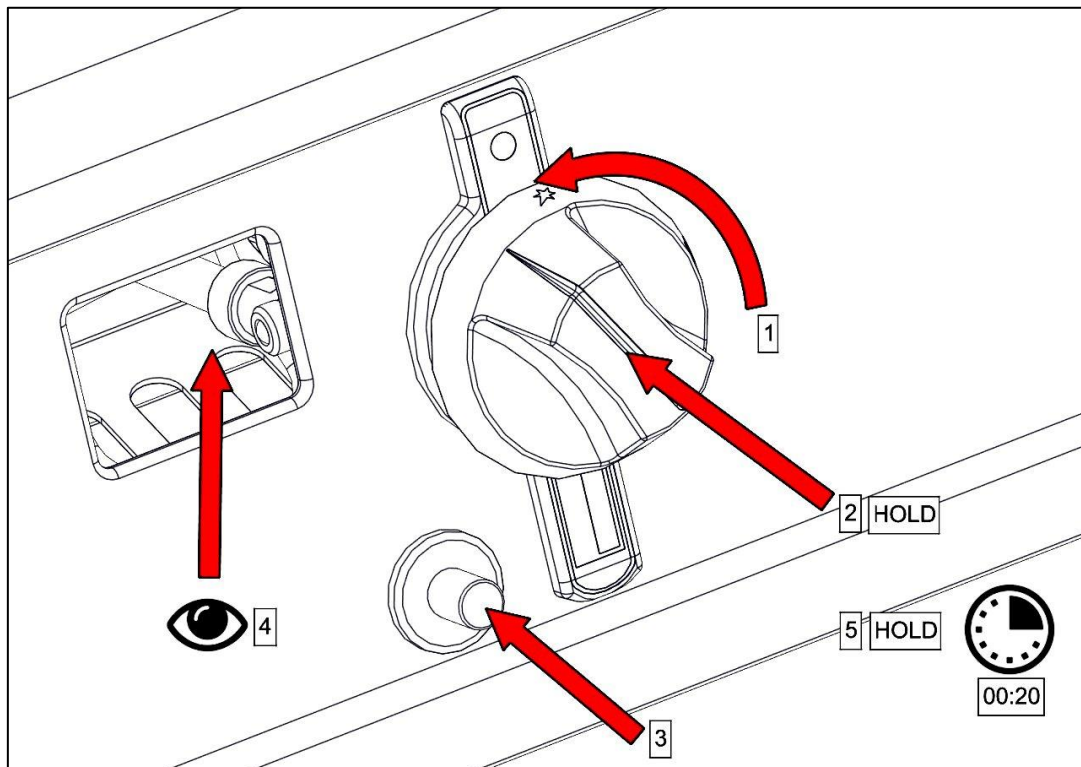
C - Burner Baffle

D - Baffle support

E - Lightly oil bars

2.3.3 Fill about a 1/3 of the drip tray with water.

2.3.4 Ignite the burners as shown. Push the knob in to turn.





**THE DRIP TRAY DEFLECTORS MUST ALWAYS BE IN PLACE WHEN THE CHARGRILL IS IN OPERATION.**

**IF A BURNER TURNS OFF, WAIT 3 MINUTES BEFORE RE-LIGHTING.**

**NEVER LEAVE PRODUCTS THAT ARE IN USE UNSUPERVISED AND ALWAYS TURN PRODUCTS OFF AT THE END OF SERVICE.**

2.3.5 Ensure water in drip tray does not dry up by topping up periodically.

2.3.6 **TURNING THE BURNER OFF**

Turn knob to 'Off' position. Look through the view port to make sure the burner is off.

## **3.0 CLEANING AND MAINTENANCE**

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**NEVER CLEAN PRODUCTS WHILST THEY ARE HOT**

- 3.1 Turn off and cool down.
- 3.2 Remove brander bars.
- 3.3 Scrape off burnt on food.
- 3.4 Remove other debris using a cloth.
- 3.5 Dry and brush with vegetable oil.
- 3.6 Remove splashguard, burner baffles and fat jug and clean.
- 3.7 Wipe burners with a damp cloth.
- 3.8 Clean internal area occasionally with a chemical spray. Refer to product's instructions for use.
- 3.9 Remove drip tray and deflectors and clean.
- 3.10 Dry and replace all removed components.



**DRIP TRAY DEFLECTORS MUST BE REPLACED AFTER CLEANING.**

**THIS APPLIANCE MUST BE CLEANED BEFORE USE TO AVOID RISK OF FIRE FROM OILS FROM PREVIOUS COOKING.**

**FAILURE DUE TO LACK OF PROPER CLEANING IS NOT COVERED BY WARRANTY.**

**ALL SPILLS ONTO THE PRODUCT AND ON FLOOR SHOULD BE CLEANED UP IMMEDIATELY.**

**TAKE CARE WHEN REMOVING CAST COMPONENTS AS THEY ARE HEAVY ITEMS.**

**BRANDER – 7KG - BURNER BAFFLE – 7.5KG**

**BURNER – 7KG**

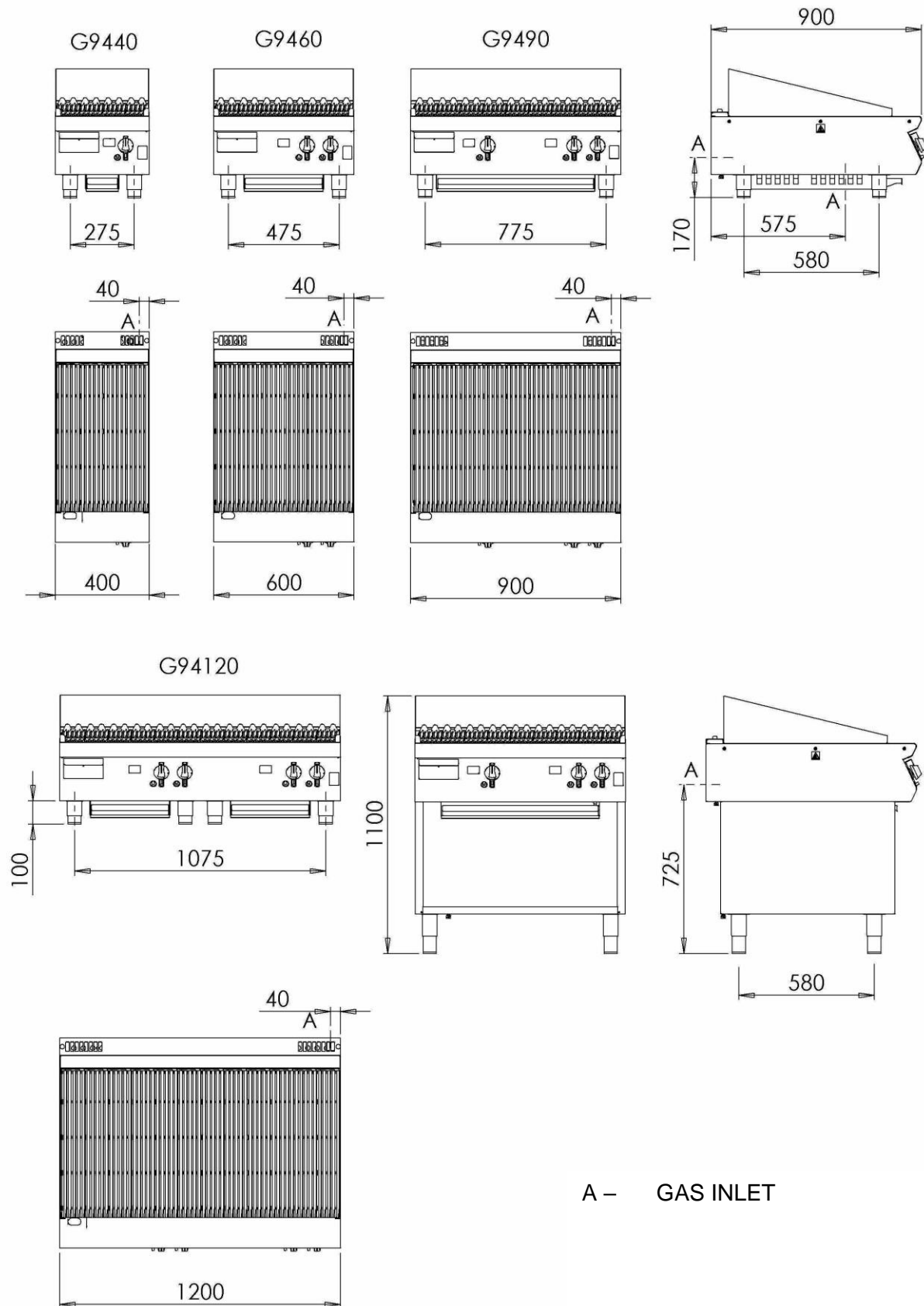
## 4.0 SPECIFICATION

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<b>INJECTOR SIZES</b>				
Gas Type		G20	G30	G31
G9440		Ø2.5	Amal 310	Amal 310
G9460		Ø2.5	Amal 310	Amal 310
G9490		Ø2.5	Amal 300	Amal 300
G94120		Ø2.5	Amal 310	Amal 310
Pilot Injectors		31.2	25	25
Supply Pressure	mbar	20	29/50	37
Operating Pressure	mbar	15	29	37

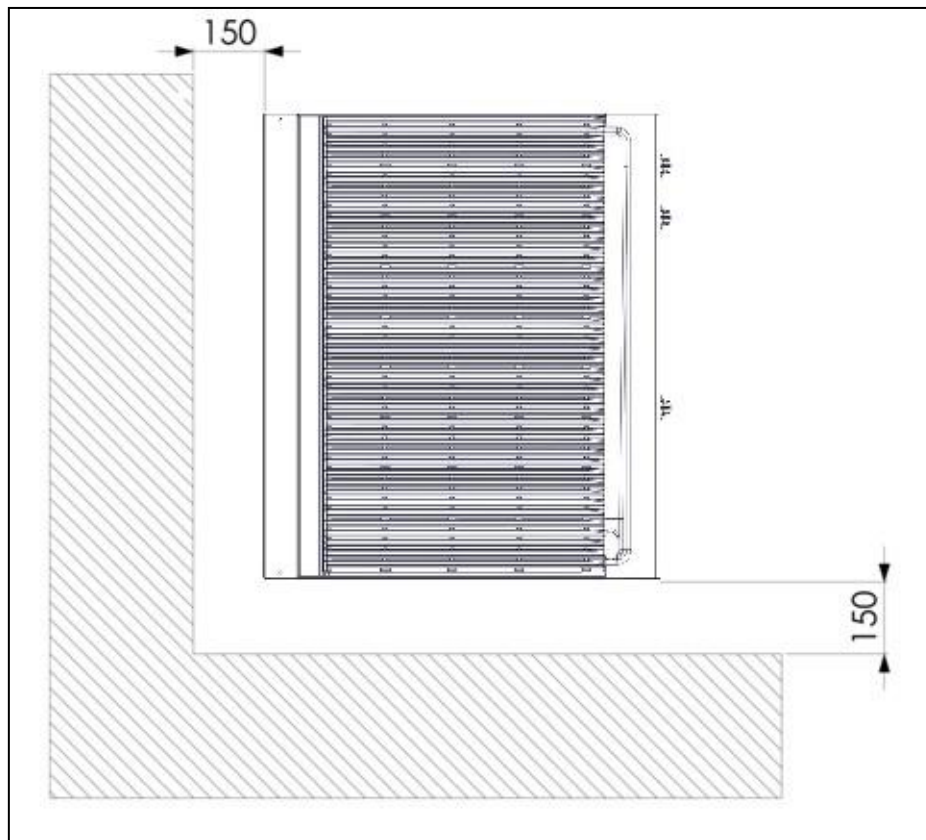
<b>HEAT INPUTS (kW)</b>						
	G20		G30		G31	
	Full	Low	Full	Low	Full	Low
G9440	8.4	5.5	9	5.5	9	5.5
G9460	16.8	11.0	18	11.0	18	11.0
G9490	25.2	16.5	27	16.5	27	16.5
G94120	33.6	22.0	36	22.0	36	22.0

## 5.0 DIMENSIONS / CONNECTION LOCATIONS



## 6.0 INSTALLATION

### 6.1 SITING / CLEARANCES



**CAUTION: WALLS CLOSER THAN 150mm TO THE APPLIANCE MUST BE NON COMBUSTIBLE. IF SITING THE NECESSARY CLEARANCES TO ANY COMBUSTIBLE WALL MUST BE THE LARGEST FIGURE GIVEN FOR INDIVIDUAL APPLIANCES INSTRUCTIONS.**

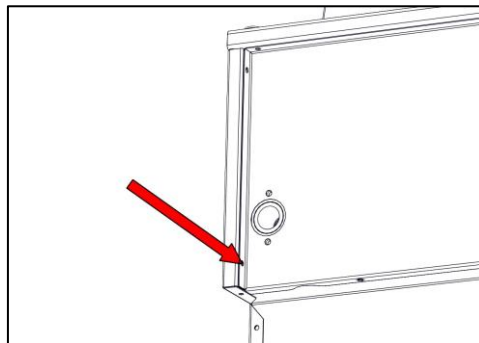
### 6.2 VENTILATION

This appliance must be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room in which they are installed. Installer must consult any additional local / national regulations.

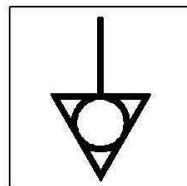
COMBUSTION AIR REQUIREMENTS				
	G9440	G9460	G9490	G94120
G20	7.5m <sup>3</sup> /h	15m <sup>3</sup> /h	22.5m <sup>3</sup> /h	30m <sup>3</sup> /h
G30	7.8m <sup>3</sup> /h	15.6m <sup>3</sup> /h	23.4m <sup>3</sup> /h	31.2m <sup>3</sup> /h
G31	7.8m <sup>3</sup> /h	15.6m <sup>3</sup> /h	23.4m <sup>3</sup> /h	31.2m <sup>3</sup> /h

## 6.3 GAS SUPPLY & CONNECTION

- 6.3.1 Installation pipe work should be fitted in accordance with local / national standards. The pipe work must not be smaller than unit gas inlet connection, i.e. Rp $\frac{3}{4}$  ( $\frac{3}{4}$ " B.S.P.). If using flexible hosing, the hose must be sized to conform with the hose manufacturers specifications and the length must not exceed 1.5m. An isolating valve must be located close by for shut-down during an emergency or servicing.
- 6.3.2 If flexible hose is used, it shall comply with national requirements. These must be periodically examined and replaced as necessary. If a retention chain is required then attach this to the fixing shown below.

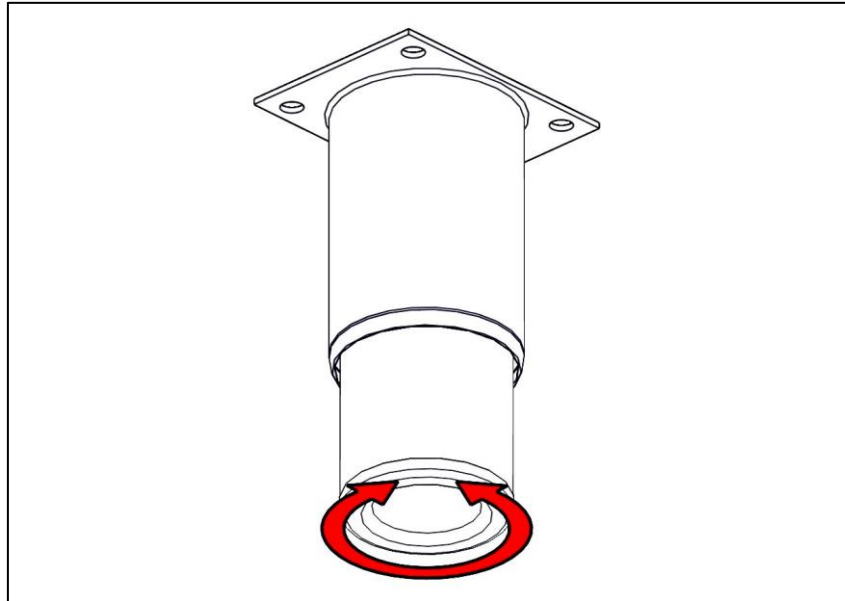


- 6.3.3 Supplied governor must be fitted to the rear of the appliance. (see 8.6)
- 6.3.4 This appliance is also provided with a terminal for connection of an external equipotential conductor. This terminal is in effective electrical contact with all fixed exposed metal parts of the appliance, and shall allow the connection of conductor having a nominal cross-section area of up to 10mm<sup>2</sup>. It is located at the rear of the unit and identified by the following label and must only be used for bonding purposes.



## 6.4 ASSEMBLY

6.4.1 Position appliance and level using feet adjusters as shown below.



6.4.2 Connect appliance to gas supply and test for gas tightness (see 6.3)

## 6.5 COMMISSIONING

- 6.5.1 Remove brander bars and burner baffles.
- 6.5.2 Ensure burner pressure is correct (see 4.0 for operating pressures. See 8.6 for governor adjustment)
- 6.5.3 Light all pilots and ensure all stay lit.
- 6.5.4 Turn on main burners. Ensure correct cross lighting occurs.
- 6.5.5 Check for flame stability.
- 6.5.6 Operate taps between 'high' and 'low' settings ensuring they operate correctly.
- 6.5.7 Turn off appliance.
- 6.5.8 Replace brander bars and burner baffles.

If the appliance does not operate correctly please refer to section 8.0 and rectify the problem.

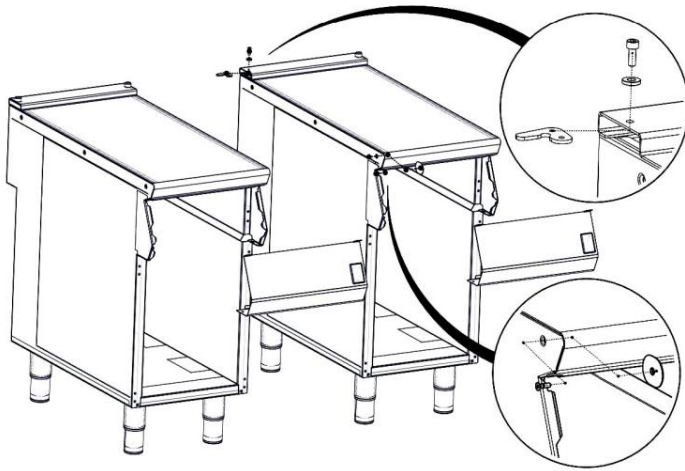


**PLEASE FILL OUT THE INFORMATION TABLE ON THE FRONT COVER AFTER COMMISSIONING.**

## 6.6 SUITING

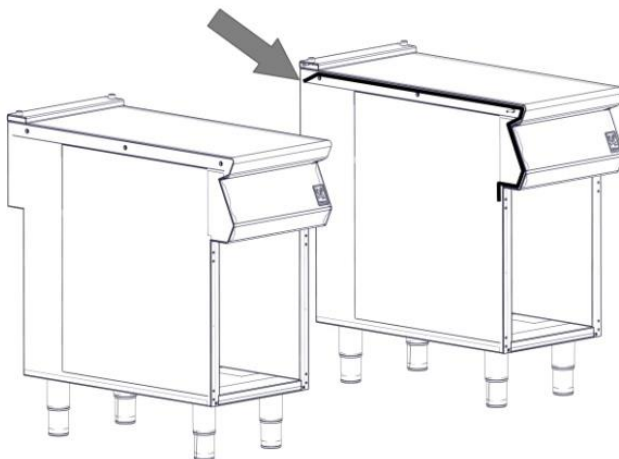
**“Patent No. GB 2540131”**

- 6.6.1 Before leveling and suiting units ensure the units are fully built, including all accessories and castings.
- 6.6.2 Undo the 4 fixing screws on the control panel and remove.
- 6.6.3 Remove the hob rear infill and replace with rear suiting plate and fixings.
- 6.6.4 Remove the front side panel countersunk screw and suiting plate.



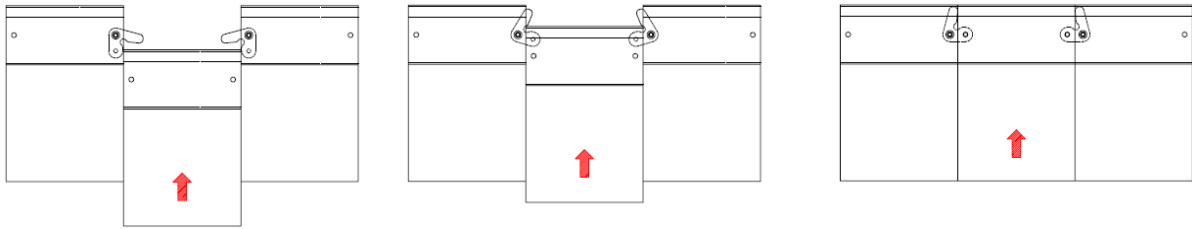
**NOTE:** The DLS system is designed to give a quick and easy suiting solution. If you require an improved seal between appliances we recommend you use, a food grade, high temperature silicon sealant. This can be supplied by Falcon part no – 523400021

- 6.6.5 Run a bead of silicon 5mm from profile edge as highlighted below.





6.6.6 Slide suited units into position.

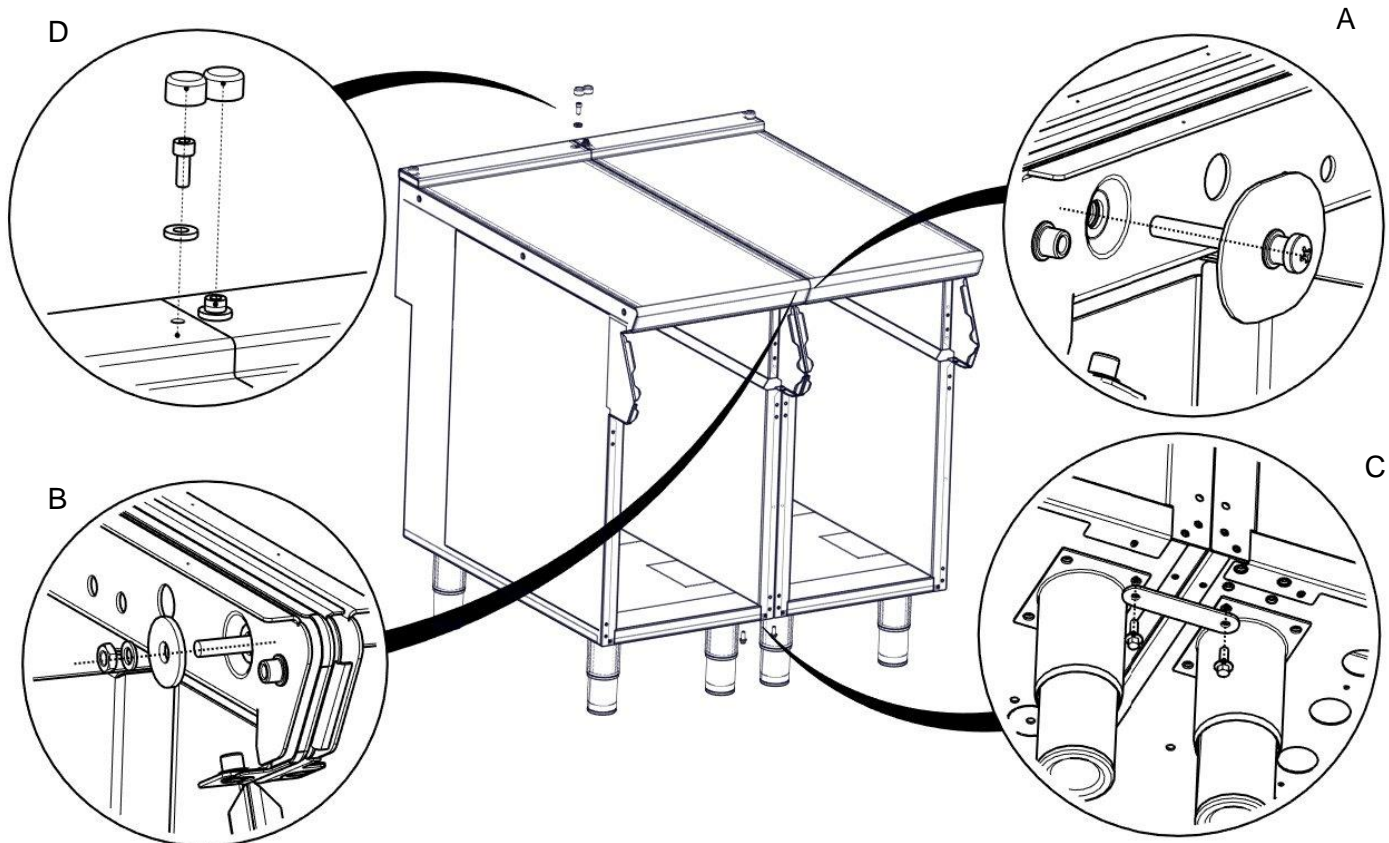


6.6.7 (A) Right hand unit: Screw the M5 x 40 screw (supplied in the kit) into one of the suiting plates as shown and then insert through the front fixing holes of both units.

6.6.8 (B) Left hand unit: Slide the penny and lock washer on to the screw and secure using the M5 nut.

6.6.9 (C) Remove the front bolts from feet, insert base tie plate and secure the bolts back into position.

6.6.10 (D) Replace fixings on the rear hob and tighten screw caps into position.



6.6.11 Replace control panel. .

## 7 CONVERSION

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**BEFORE INSPECTION, SERVICING OR CONVERSION, TURN OFF GAS AT ISOLATOR AND REMOVE BRANDER BARS AND BURNER BAFFLES.**

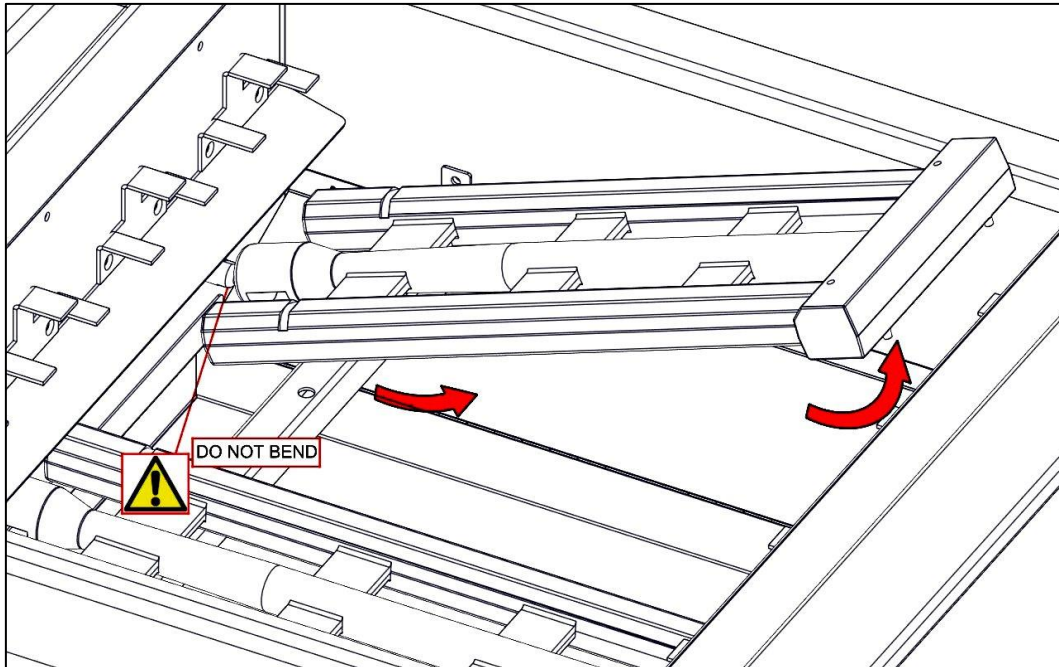
### 7.1 GAS CONVERSION CHECK LIST

- Change injectors in burner(s) and pilots(s) (see 8.2 & 8.4).
- Adjust by-pass screw for LP by turning screw fully clockwise. To convert back to Ng, ensure screw is turned fully clockwise and then turn screw two complete turns anti-clockwise. (see 8.5). As a reference, the flame on turndown should be approximately 60% of that on high.
- Change gas type label.
- Adjust burner aeration shroud (see 8.1.4).
- For G31, remove governor.
- For G30, remove governor if supply pressure is 29mb or adjust governor if supply pressure is higher than 29mb (see 8.6).

## 8 SERVICING

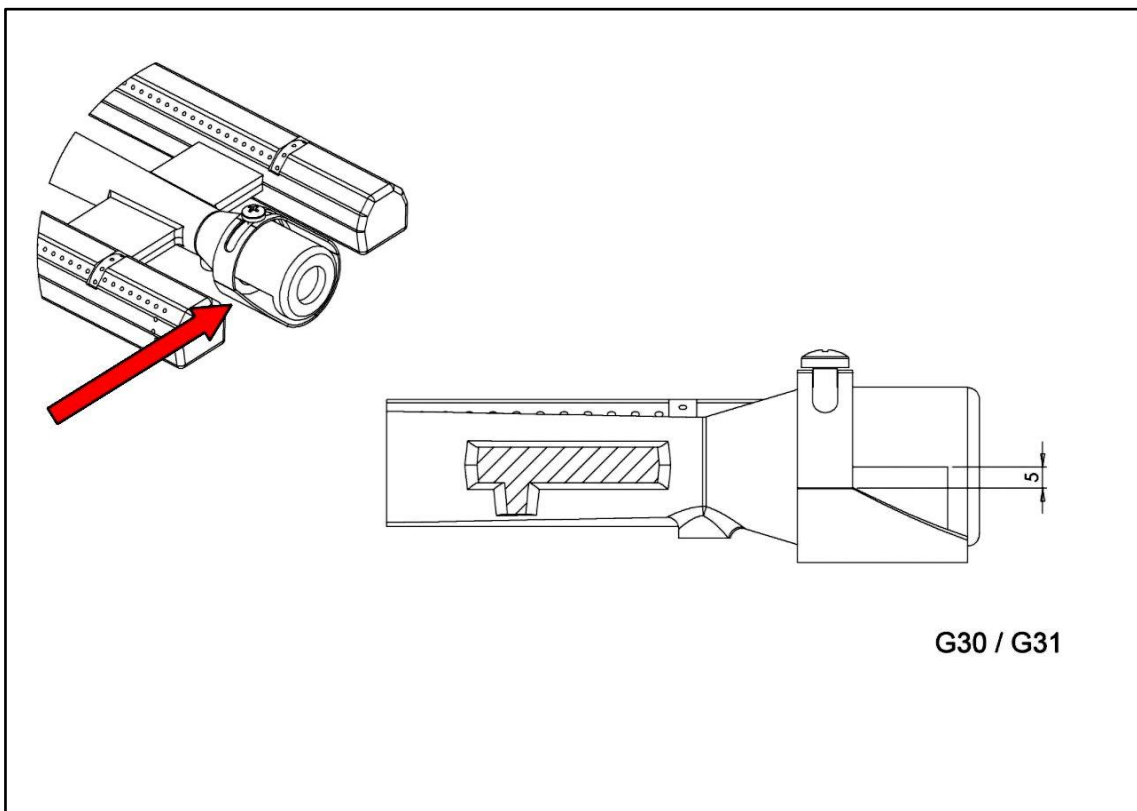
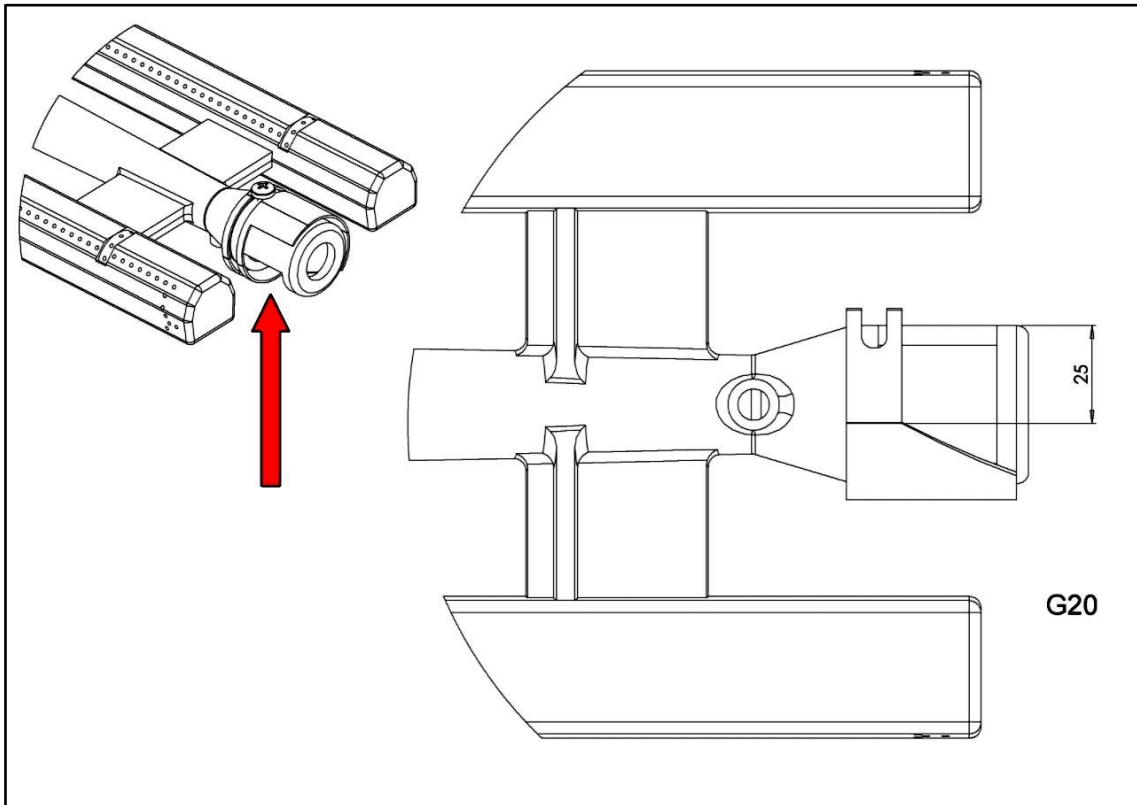
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### 8.1 BURNERS

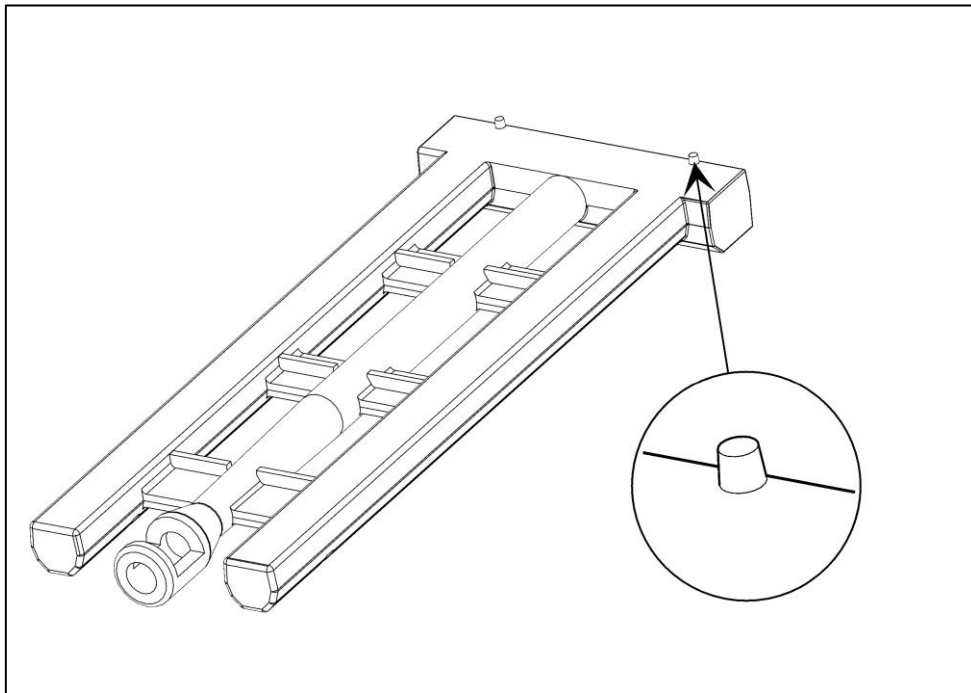


- 8.1.1 Remove burners as shown.
- 8.1.2 Clean burners (see section 3).
- 8.1.3 Clean ports.

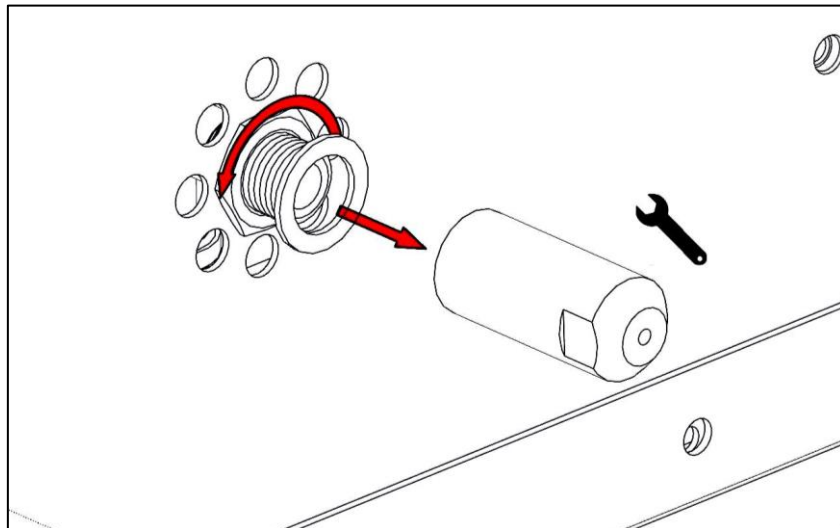
8.1.4 For conversion, adjust aeration shroud as shown.



8.1.5 When replacing burner, ensure locating lugs locate in the rear support bar correctly.



## 8.2 INJECTORS



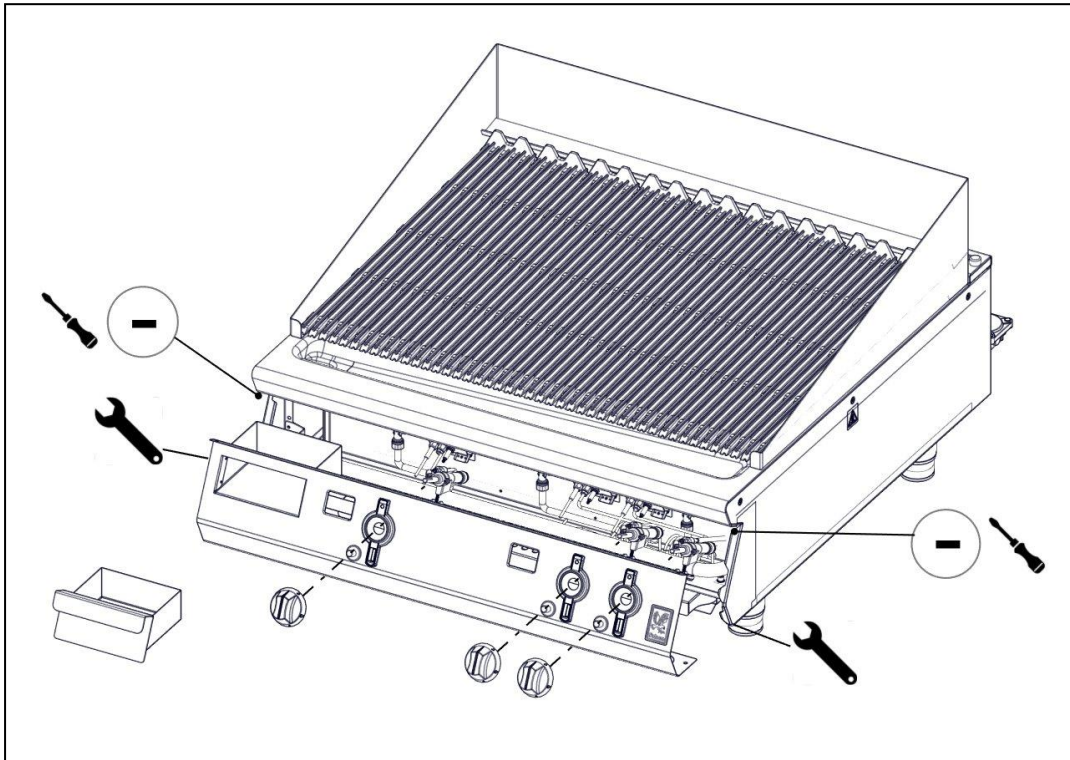
8.2.1 Remove injector as shown.

8.2.2 Clean injector.

8.2.3 Check washers are clean and serviceable.

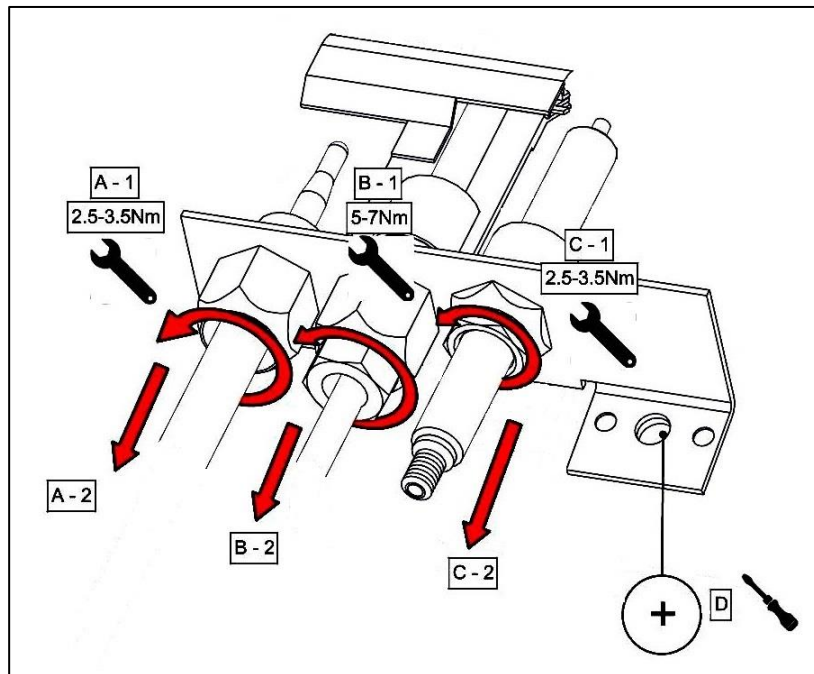
8.2.4 After replacement, check burner performance.

### 8.3 CONTROL PANEL



8.3.1 Remove as shown.

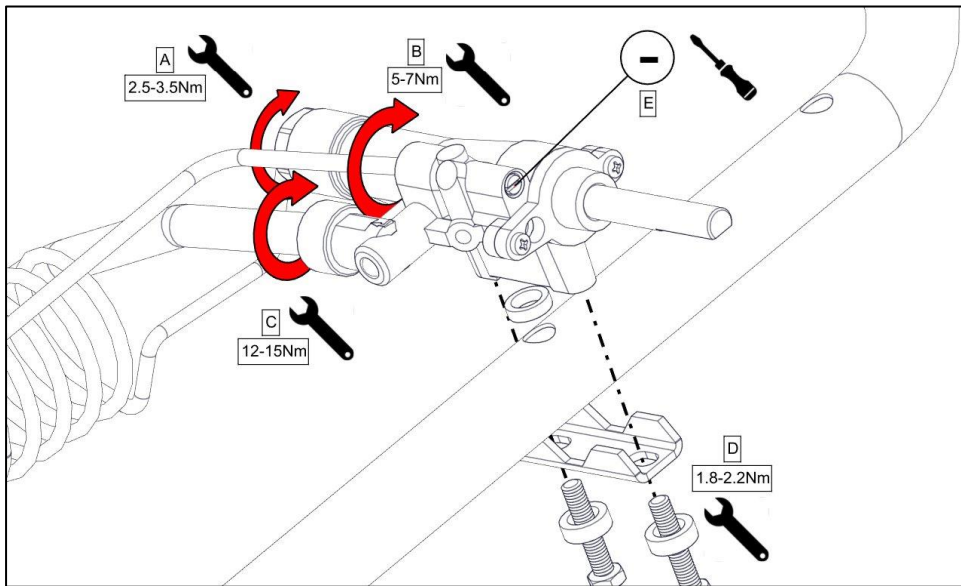
### 8.4 PILOT ASSEMBLY



8.4.1 Remove pilot components as shown.

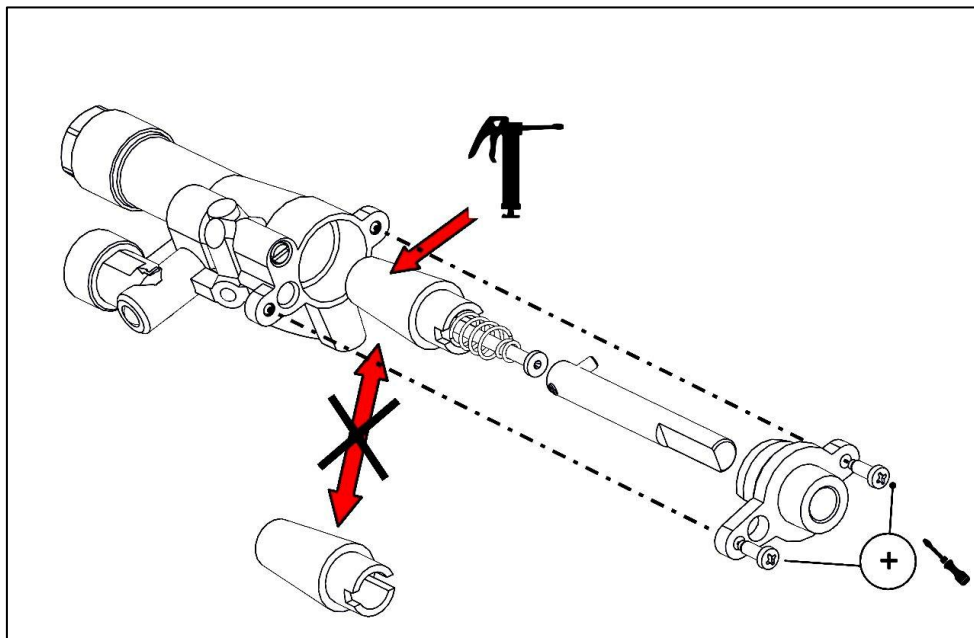
- A – Thermocouple
- B – Pilot gas pipe
- C – Spark electrode
- D – Pilot bracket

## 8.5 GAS VALVE



8.5.1 Remove gas valve as shown.

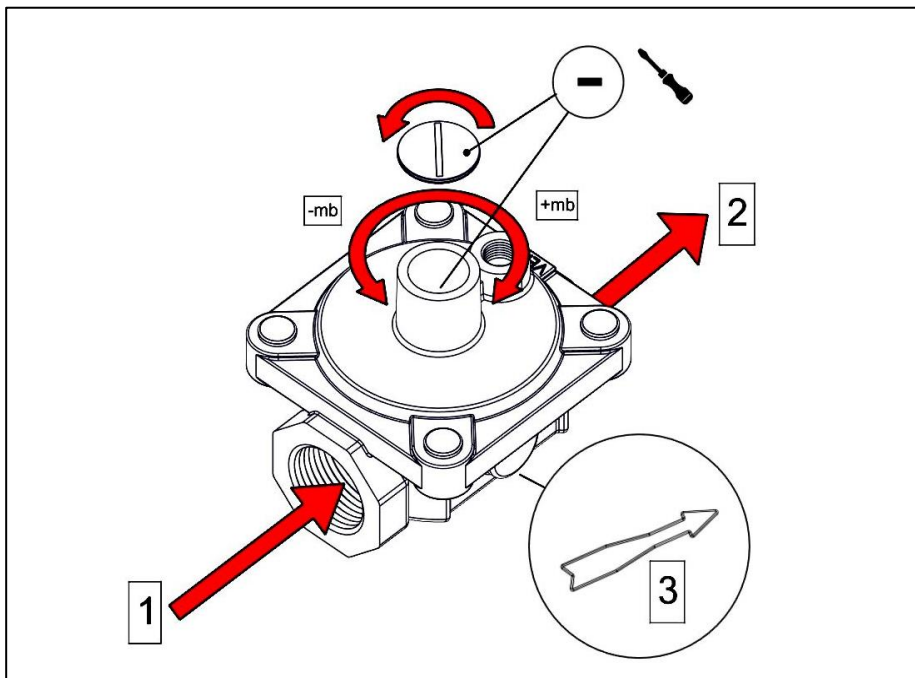
- A – Thermocouple
- B – Pilot gas pipe
- C – Main gas pipe
- D – Valve clamp
- E – Bypass screw



8.5.2 Service valve as shown.

## 8.6 GOVERNOR

8.6.1 This applies to G20 and G30 (50mb) models only.



- 1 – Gas in
- 2 – Gas out
- 3 – Direction of flow



**GOVERNOR SUPPLIED IS MAINTENANCE FREE. ENSURE THE BLUE DUST CAP COVERING THE VENT IS FITTED AND IN GOOD CONDITION.**



## 9 FAULT FINDING

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<b>FAULT</b>	<b>POSSIBLE CAUSES</b>	<b>REMEDY</b>
Pilot does not light.	No gas supply.	Restore supply.
	Faulty spark igniter.	Test igniter button, lead and electrode. Replace as necessary.
Pilot does not stay lit.	Faulty thermocouple.	Check thermocouple is tight and tip is in pilot flame.
Main burner(s) does not light.	Gas pressure too low.	Check pressure, adjust as necessary.
	Injector(s) blocked or damaged.	Clear nozzle(s) or replace.
	Burner ports blocked.	Clear ports or replace.
	Gas tap(s) seized or blocked.	Clear or replace as necessary.
Slow/Poor heating.	Governor out of adjustment.	Adjust as necessary.
	Valve pressure wrong.	Check pressure and adjust if necessary.
	Burner ports blocked.	Check burner and clean if dirty.
	Low mains gas pressure.	Check with gas supplier.
	Gas supply isolated/off.	Restore supply. Check with gas supplier.

## 10 SPARE PARTS

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Main spare parts:

- Gas valve
- Pilot assembly
- Thermocouple
- Fat jug
- Drip tray
- Drip tray deflector
- Control knob
- Spark igniter

When ordering spares, quote the following:

**Model Number**

**Serial number**

**Gas Type**

This information is found on data plate on front panel. (See section 1.0)

Visit our website for further spares information.

## 11 SERVICE INFORMATION

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It is recommended to have a maintenance contract with a local service provider.

**SERVICELINE CONTACT:**

**(UK only)**

**Phone: +441438 363 000**

### **Warranty Policy Shortlist**

For our warranty policy please go to [www.falconfoodservice.com](http://www.falconfoodservice.com)