

F900 SERIES

User, installation and servicing instructions

OPEN TOP & RANGES

G9042, G9042A, G9084, G9084A, G9084B, G90126, G90126A, G90126B, G9184, G9184A, G9184B

Read these instructions before use

,	DATE PURCHASED:	
	MODEL NUMBER:	
	SERIAL NUMBER:	
	DEALER:	
	SERVICE PROVIDER:	

T100874

REV.7

Dear Customer,

Thank you for choosing Falcon Foodservice Equipment.

This manual can be downloaded from <u>www.falconfoodservice.com</u> Or scan here



IMPORTANT: Please keep this manual for future reference.

Falcon Foodservice Equipment HEAD OFFICE

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

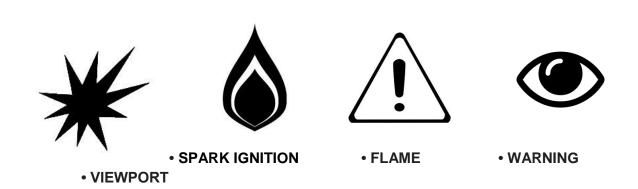
WEEE Directive Registration No. WEEE/DC0059TT/PRO

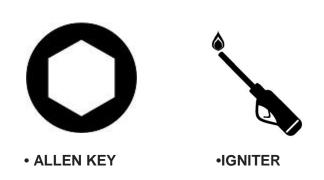


At end of appliance life, dispose of appliance and any replacement parts in a safe manner, via a licensed waste handler. Appliances are designed to be dismantled easily and recycling of all material is encouraged whenever practicable.

SYMBOLS•









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 qualified persons.

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

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.

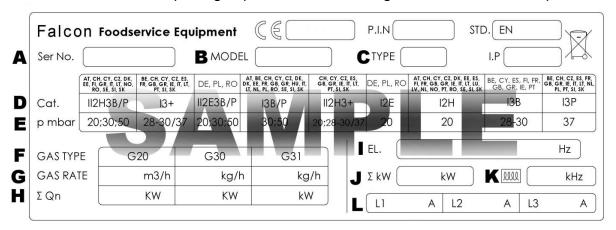
This appliance may be discolored due to testing.

CONTENTS

1.0	APPLIANCE INFORMATION	6
2.0	OPERATION	7
2.1	COMPONENT PARTS	7
2.2	CONTROLS	8
2.3	USING THE APPLIANCE	9
2.4	TURNING THE BURNERS OFF	
3.0	CLEANING AND MAINTENANCE	10
3.1	HOB	10
3.2	OVEN	
3.3	FLUE CAPPER	
4.0	SPECIFICATION	
4.1	TABLE A – Technical Data	
4.1	TABLE B – Heat Input, G20	
4.2	TABLE B – Heat Input, G20	
4.3 4.4	BURNER CONFIGURATIONS	
5.0	DIMENSIONS / CONNECTION LOCATIONS	
	•	
6.0	INSTALLATION	
6.1	SITING / CLEARANCES	
6.2	VENTILATION	
6.3	GAS SUPPLY & CONNECTION	17
6.4	ASSEMBLY	17
6.5	COMMISSIONING – HOB	18
6.6	COMMISSIONING – OVEN	18
6.7	PILOT FLAME PROTECTION	18
6.8	SUITING	19
7.0	CONVERSION	21
7.1	GAS CONVERSION CHECK LIST	21
8.0	SERVICING	22
8.1	CONTROL PANEL	22
8.2	INJECTOR (HOB)	
8.3	PILOT (HOB)	23
8.4	OVEN DOOR REMOVAL	24
8.5	INJECTOR (OVEN)	25
8.6	PILOT (OVEN)	26
8.7	AERATION (HOB)	26
8.8	GAS VALVE (HOB)	27
8.9	GAS VALVE (OVEN)	28
8.10	PRESSURE ADJUSTMENT	
8.11	GOVERNOR	29
9.0	ACCESSORIES	30
9.1	GRIDDLE PLATE	30
9.2	WIRE PAN SUPPORTS	30
10.0	FAULT FINDING	
11.0	SPARE PARTS	
12.0	SERVICING INFORMATION	

1.0 APPLIANCE INFORMATION

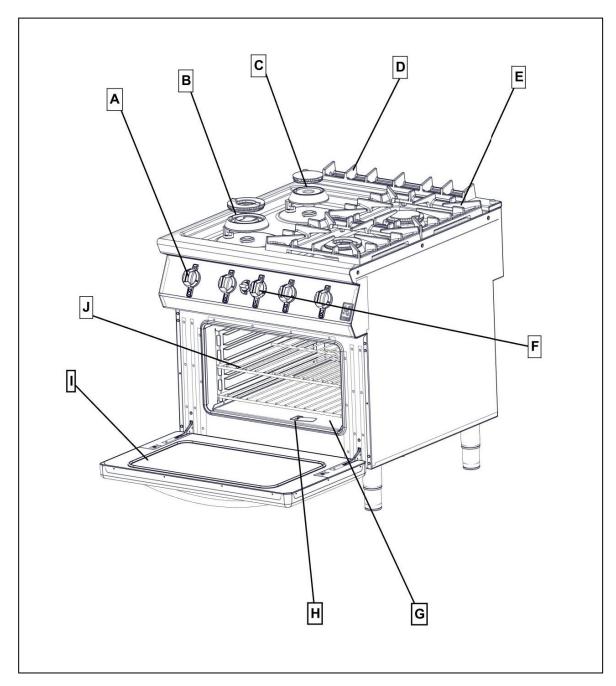
This appliance has been CE-marked on the basis of compliance with the relevant EU directives for the heat inputs, gas pressures and voltages stated on the data plate.



- 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 – Hob Control F – Oven Control

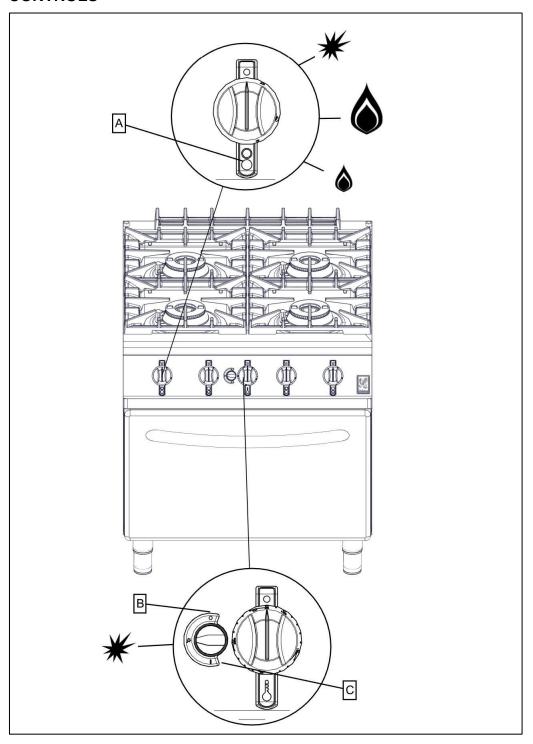
B – 9.5 / 7kW Burner **G** – Drip Tray

C – 4.2kW Burner **H** - Viewport

D – Flue Capper I – Door

E – Pan Support **J** - Shelf

2.2 CONTROLS

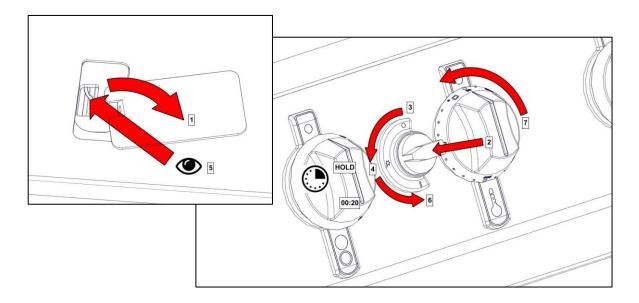


- A Zone Indicator
- **B** –Oven Pilot OFF
- C Oven Pilot ON

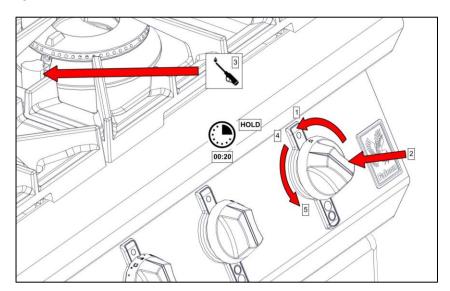
2.3 USING THE APPLIANCE

- 2.3.1 Before use, clean the appliance. See section 3.0.
- 2.3.2 **Oven** Ignite the Pilot burners as shown. Push the knob in to turn.
- 2.3.3 Use temperature control knob to adjust temperature.

 Initial oven heat up time will be approximately 30 minutes from ambient.
- 2.3.4 **Caution:** Opening the oven door will result in the escape of hot air. Care should be taken to avoid being burned by such action.



2.3.5 **Hob** - Ignite the Pilot burners as shown. Push the knob in to turn.





IF A BURNER TURNS OFF, WAIT 3 MINUTES BEFORE RELIGHTING.

2.3.6 The pan supports will safely accommodate pans from Ø125mm to Ø380mm.

2.4 TURNING THE BURNERS OFF

- 2.4.1 Oven Turn pilot knob to 'OFF' position. Look through the view port to make sure the pilot is off.
- 2.4.2 Hob Turn control knob to "OFF" position.

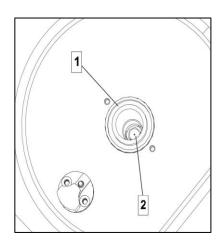
3.0 CLEANING AND MAINTENANCE

3.1 HOB

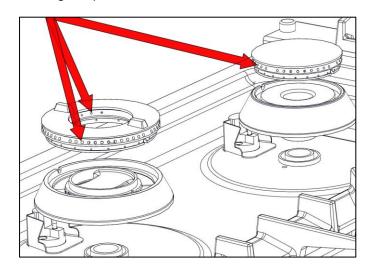
- 3.1.1 At the end of each day or cooking period, turn off and cool down.
- 3.1.2 Remove pan supports, burners and pilot shields if fitted.
- 3.1.3 Clean the hob using soap and water ensuring that no food debris falls down into the burner venture (1).
- 3.1.4 If debris is evident at the base of the venturi or on the injector (2) then this must be cleared prior to use using a non metallic implement such as a wooden skewer.



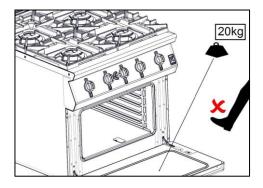
FAILURE TO CLEAN THIS WILL BE DETRIMENTAL TO THE PERFORMANCE OF THE BURNER.



- 3.1.5 Clean the pan supports and pilot shields using soap and water.
- 3.1.6 Clean the burners as follows:Clean with soap and water. Ensure all
 burner ports as shown are clean and free
 from food or cleaning materials; use a non
 metallic implement to remove stubborn
 debris. Rinse under water & dry with
 absorbent paper. Put a few drops of
 vegetable oil onto a piece of absorbent
 paper and wipe over the burner. Replace
 the burner components and light them for a
 few minutes.

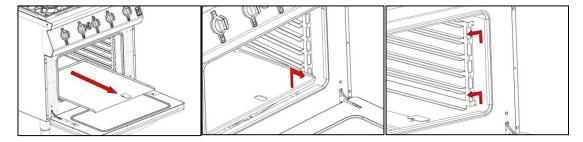


3.2 OVEN





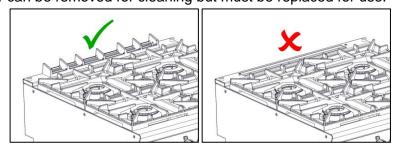
- 3.2.1 Turn off and cool down.
- 3.2.2 Remove base tray, base plate and shelf hangers.



- 3.2.3 Clean oven chamber using soap and water.
- 3.2.4 Clean shelves and base tray using soap and water.

3.3 FLUE CAPPER

3.3.1 The flue capper can be removed for cleaning but must be replaced for use.





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

4.0 SPECIFICATION

4.1 TABLE A – Technical Data

TABLE A								
				G31		G30		
			Oven					
Injector		23	30			135		
Pilot Injectors		31	.2			25		
Supply Proceuro	mbar	2	0	3	7	29	5	0
Supply Pressure	Inches w.g	w	3	14	l.9	11.6	20).1
Operating	mbar	14		37		29		
Pressure	Inches w.g	6		14.9		11.6		
		C	pen Top					
Rate	KW	9.5	4.2	7	4.2	7	7	4.2
Injector	mm	230	150	130	105	13	30	105
Pilot Injectors	mm	0.4	41			0.25		
Low Rate Screw		100	80	80	60	8	0	60
Supply Proceure	mbar	2	0	3	7	29 5		0
Supply Pressure	Inches w.g	8		14.9		11.6 20).1
Operating	mbar	2	0	37		29		
Pressure	Inches w.g	8	3	14	1.9	11.6		

4.2 TABLE B – Heat Input, G20

Heat Inputs – G20												
G9042 G9042A G9084 G9084				G9084A	G9084B	G90126	G90126A	G90126B	G9184	G9184A	G9184B	
	kW _{net}	19	13.7	38	27.4	32.7	57	41.1	51.7	45.5	34.9	40.2
Total Input	Btu/hr gross	71,331	51,433	142,662	102,867	122,765	213,993	154,300	194,096	170,819	131,024	150,922
	m³/H _{net}	1.87	1.35	3.73	2.69	3.21	5.60	4.04	5.08	4.47	3.43	3.9
	kW _{net}	4.4	3.8	8.8	7.6	8.2	13.2	11.42	10.7	8	7.6	8.2
Reduced Heat Input	Btu/hr gross	16519	14266	33038	28532	30785	49556	42799	40171	30034	28532	30785
input	m ³ /H _{net}	0.43	0.37	0.86	0.75	0.81	1.30	1.12	1.05	0.79	0.75	0.81

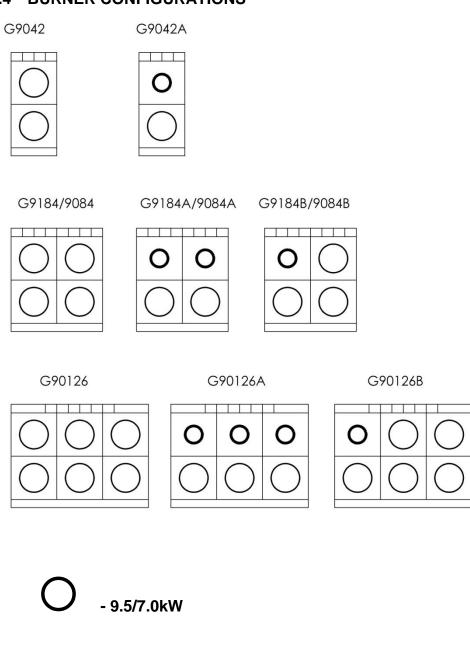
Burners									
нов	нов	Oven							
9.5	4.2	7.5							
35,666	15,768	28,157							
0.93	0.41	0.74							
2.2	1.6	0							
8259	6007	0							
0.22	0.16	0.00							

4.3 TABLE B – Heat Input, G30/G31

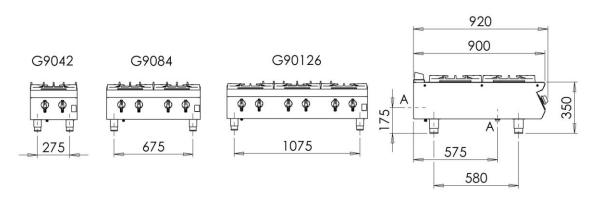
Heat Inputs – G30, G31													В	urners	
	G9042 G9042A G9084			G9084A	G9084B	G90126	G90126A	G90126B	G9184	G9184A	G9184B	нов	нов	Oven	
	kW _{net}	14	11.2	28	22.4	25.2	42	33.6	39.2	35	29.4	32.2	7	4.2	7
Total	Btu/hr	52,560	42,048	105,119	84,096	94,608	157,679	126,143	147,167	131,399	110,375	120,887	26,280	15,768	26,280
Input	kg/h G30	1.018	0.814	2.036	1.628	1.832	3.053	2.443	2.850	2.545	2.137	2.341	0.509	0.305	0.509
	kg/h G31	1.001	0.801	2.002	1.602	1.802	3.003	2.402	2.803	2.503	2.102	2.302	0.501	0.300	0.501
	kW _{net}	5.6	4.4	11.2	8.8	10.0	16.8	13.2	15.6	11.2	8.8	10	2.8	1.6	0
Reduced	Btu/hr gross	21024	16519	42048	33038	37543	63072	49556	58567	42048	33038	37543	10512	6007	0
Heat Input	kg/h G30	0.407	0.320	0.814	0.640	0.727	1.221	0.960	1.134	0.814	0.640	0.727	0.204	0.116	0.000
	kg/h G31	0.400	0.315	0.801	0.629	0.715	1.201	0.944	1.115	0.801	0.629	0.715	0.200	0.114	0.000

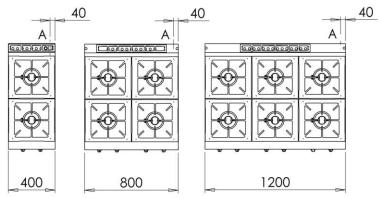
4.4 BURNER CONFIGURATIONS

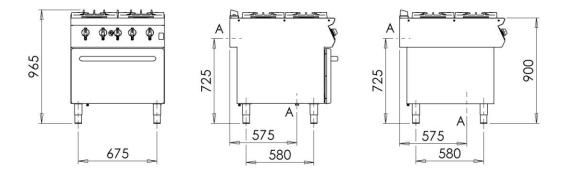
- 4.2kW



5.0 DIMENSIONS / CONNECTION LOCATIONS



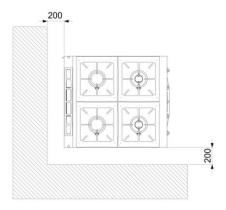




A - GAS INLET

6.0 INSTALLATION

6.1 SITING / CLEARANCES





CAUTION: WALLS CLOSER THAN 200mm TO THE APPLIANCE MUST BE NON COMBUSTIBLE. IF SUITING THE NECESSARY CLEARANCES TO ANY COMBUSTIBLE WALL MUST BE THE LARGEST FIGURE GIVEN FOR INDIVIDUAL APPLIANCES INSTRUCTIONS.

6.1.1 The oven flue discharges vertically through the hob rear. There must be no direct connection of the flue to any mechanical extraction system or to the outside air. Open top burners discharge combustion products directly into the room and care should be taken not to disturb the air combustion admission nor the combustion products evacuation of appliances fitted with open burners.

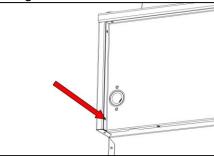
6.2 VENTILATION

6.2.1 These appliances are to 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										
	G9042	G9042A	G9084	G9084A	G9084B	G90126	G90126A	G90126B	G9184	G9184A	G9184B
G20	17m³h	13m³h	34m³h	25m³h	30m³h	51m³h	37m³h	47m³h	42m³h	32m³h	37m³h
G30	13m³h	10m³h	35m³h	20m³h	22m³h	37m³h	30m³h	35m³h	32m³h	27m³h	29m³h
G31	13m³h	10m³h	25m³h	20m³h	22m³h	37m³h	30m³h	35m³h	32m³h	27m³h	29m³h

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. Rp¾ (¾" B.S.P.). If using flexible hosing, the hose must be sized to conform with the hose manufacturers specifications and 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.

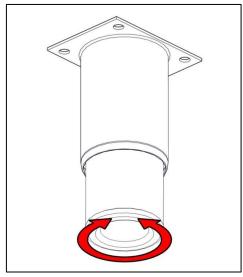


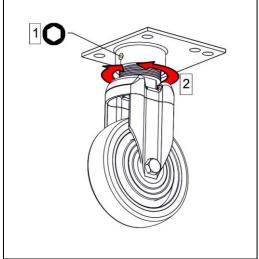
6.3.3 This appliance is also provided with a terminal for connection of an external equipotential conductor. This terminal is in effective electrical contact with all fixed exposed metal parts of the appliance, and shall allow the connection of conductor having a nominal cross-section area of up to 10mm². 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 or caster adjusters as shown below.





6.4.2 Connect appliance to gas supply and test for gas tightness.

6.5 COMMISSIONING - HOB

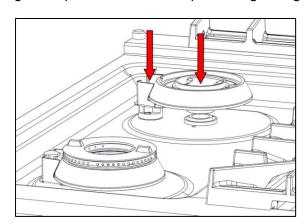
- 6.5.1 Remove control panel. (see 8.1)
- 6.5.2 Ensure line gas pressure is correct. (see 4.0)
- 6.5.3 Light pilots and ensure all stay lit.
- 6.5.4 Turn on burners. Ensure correct lighting occurs.
- 6.5.5 Check for flame stability.
- 6.5.6 Operate controls ensuring they turn smoothly.
- 6.5.7 Turn off appliance.
- 6.5.8 Replace control panel.

6.6 COMMISSIONING - OVEN

- 6.6.1 Remove oven base tray and plate. (see 3.2)
- 6.6.2 Ensure burner pressure is correct. (see 4.0 & 8.10)
- 6.6.3 Light pilot and ensure it stays lit.
- 6.6.4 Turn on burner. Ensure correct lighting occurs.
- 6.6.5 Check for flame stability.
- 6.6.6 Operate controls ensuring they turn smoothly.
- 6.6.7 Turn off appliance.
- 6.6.8 Replace oven base tray and plate.
- 6.6.9 Replace control panel.

6.7 PILOT FLAME PROTECTION

6.7.1 Please not that for your convenience we have included, free of charge, a pilot flame protection device. This may be fitted around the pilot as shown below to give you greater protection from the pilot being extinguished by excessive draughts.





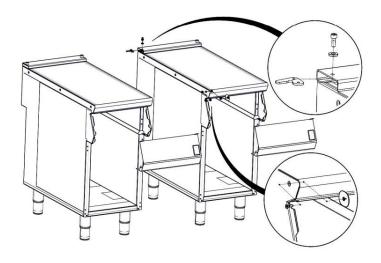
If the appliance does not operate correctly please refer to section 10.0 and rectify the problem.

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

6.8 SUITING

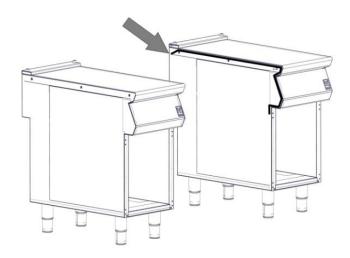
"Patent pending, application no. GB 1511389.7"

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

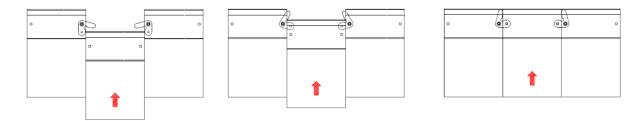


NOTE: The DLS system is designed to give a quick and easy suiting solution. If you require an improved seal between appliances we recommend you use, a food grade, high temperature silicon sealant. This can be supplied by Falcon part no – 523400021

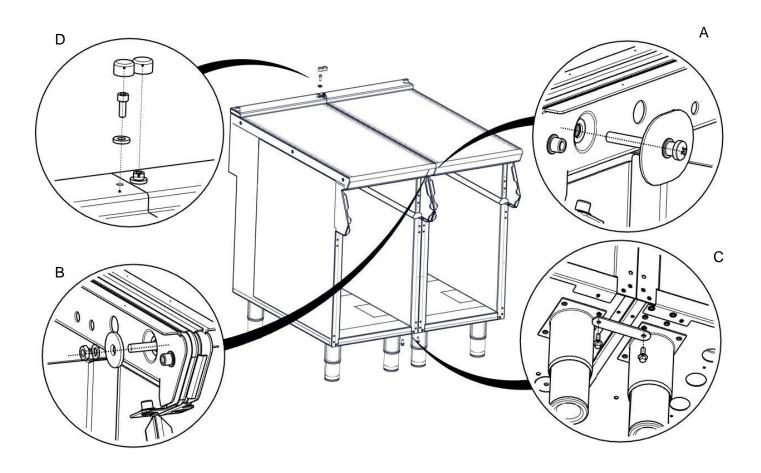
6.8.5 Run a bead of silicon 5mm from profile edge as highlighted below.



6.8.6 Slide suited units into position.



- 6.8.7 (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.
- 6.8.8 (B) Left hand unit: Slide the penny and lock washer on to the screw and secure using the M5 nut.
- 6.8.9 (C) Remove the front bolts from feet, insert base tie plate and secure the bolts back into position.
- 6.8.10 (D) Replace fixings on the rear hob and tighten screw caps into position.



6.8.11 Replace control panel. .

7.0 CONVERSION



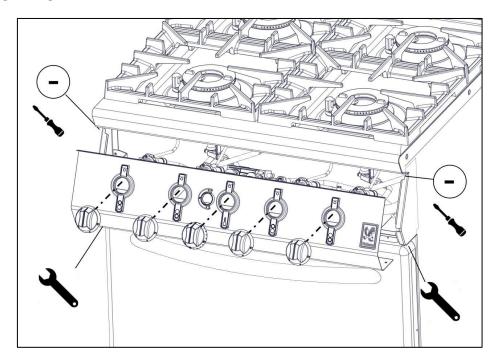
BEFORE INSPECTION, SERVICING OR CONVERSION, TURN OFF GAS AT ISOLATOR.

7.1 GAS CONVERSION CHECK LIST

	Change injectors in burners and pilots stated in section 4.1 (see $8.2 - 8.5$)
	Change low rate screw on hob gas valve stated in section 4.1 (see 8.8)
	Change aeration setting on hob burners (see 8.7)
	Adjust pressure of oven valve stated in section 4.1(see 8.10)
	Change gas type label.
□ (see 8	If supply pressure of G30 is 50mbar fit governor. Set to values stated in section 4.0.

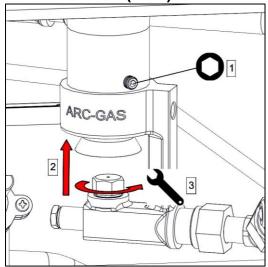
8.0 SERVICING

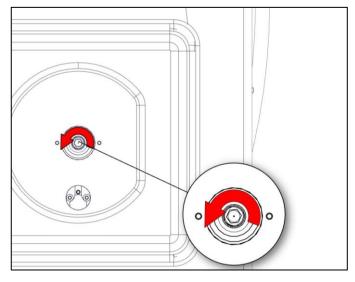
8.1 CONTROL PANEL



8.1.1 Remove control panel as shown

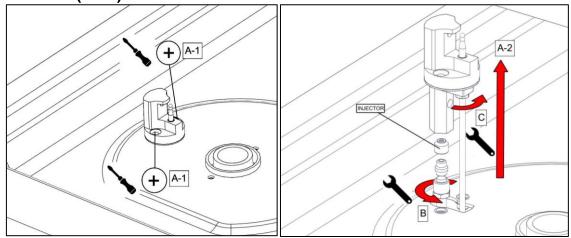
8.2 INJECTOR (HOB)





- Remove injector as shown. Access from front or top of unit. 8.2.1
- 8.2.2 Clean injector.
- 8.2.3 After replacement, check burner performance.(ref 8.7)

8.3 PILOT (HOB)



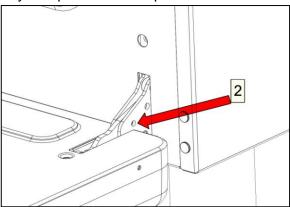
- Remove pilot assembly as shown. 8.3.1
- A Assembly removal
- B Pilot gas pipe C Thermocouple

8.4 OVEN DOOR REMOVAL

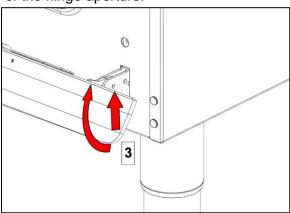


THE HINGE SPRING IS UNDER TENSION AND NO ATTEMPT SHOULD BE MADE TO REMOVE THE PINS WHEN THE DOOR IS OFF.

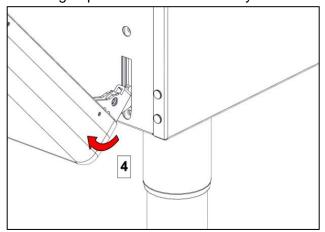
- 8.4.1 Turn off and cool down.
- 8.4.2 Open the door fully and push a Ø4mm pin into the hole on each hinge.



8.4.3 Holding the door with both hands half way down each side, rotate and lift up until the hinge hits the top of the hinge aperture.



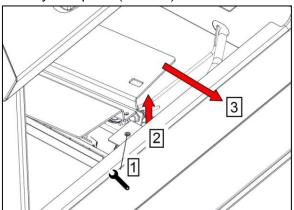
8.4.4 Rotate hinge out of hinge aperture and lift door away.



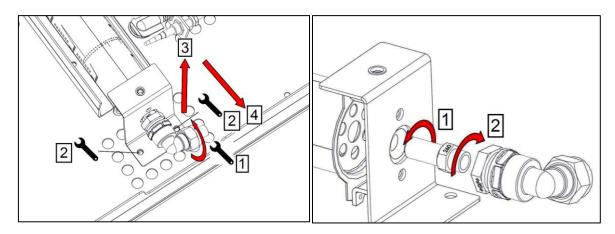
8.4.5 Replace in reverse order.

8.5 INJECTOR (OVEN)

8.5.1 Remove oven base tray and plate (see 3.2)

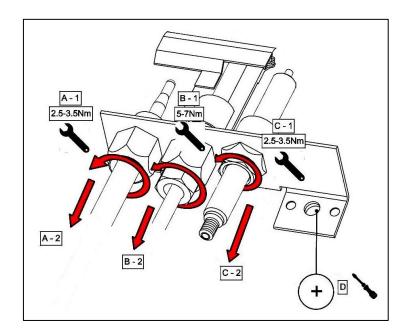


8.5.2 Remove oven burner shield as shown above.



8.5.3 Remove burner and injector as shown.

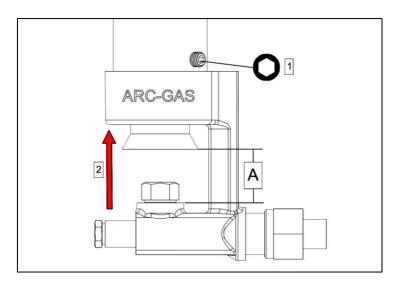
8.6 PILOT (OVEN)



8.6.1 Remove pilot components as shown.

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

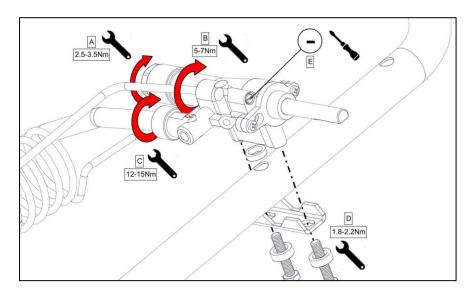
8.7 AERATION (HOB)



8.7.1 Adjust 'A' for gas type used.

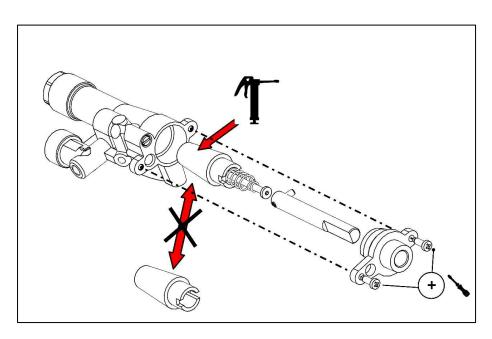
9.5/7	kW Burner	4.2 kW Burner
G20	1mm	1mm
G31	4mm	4mm
G30	4mm	4mm

8.8 GAS VALVE (HOB)



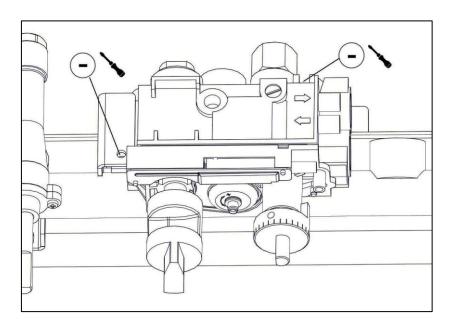
- Remove gas valve as shown. 8.8.1
 - A Thermocouple B Pilot gas pipe

 - C Main gas pipe
 D Valve clamp
 E Low rate screw

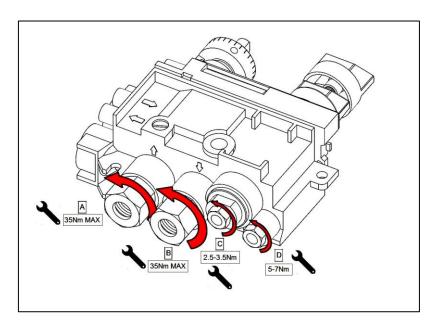


8.8.2 Service valve as shown.

8.9 GAS VALVE (OVEN)



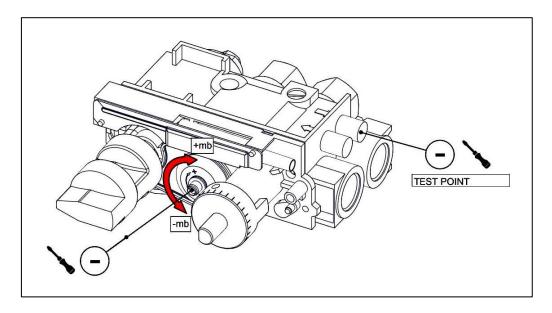
Remove gas valve as shown. 8.9.1



8.9.2 Remove connections as shown.

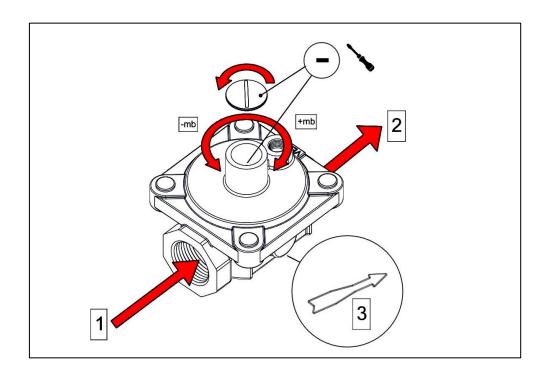
- A Gas in
- B Gas out
- C Spark electrode D Thermocouple

8.10 PRESSURE ADJUSTMENT



8.11 GOVERNOR

This applies requires a governor for G30 with supply pressure of 50mbar.



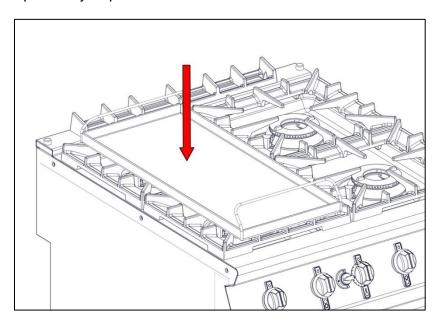


GOVERNOR SUPPLIED IS MAINTENANCE FREE. ENSURE THE BLUE DUST CAP COVERING THE VENT IS FITTED AND IN GOOD CONDITION

9.0 ACCESSORIES

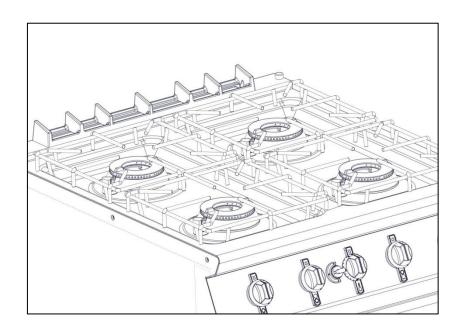
9.1 GRIDDLE PLATE

- 9.1.1 The griddle plate should be placed on the pan supports as indicated below and must only be central on the front & rear burners.
- 9.1.2 The plate may require to be oiled before use.



9.2 WIRE PAN SUPPORTS

9.2.1 Wire pan supports should be fitted as indicated below



10.0 FAULT FINDING

FAULT	POSSIBLE CAUSES	REMEDY
Slow/Poor/No heating	Valve pressure wrong	Check pressure
	Burner ports blocked	Check burner and clean
	Low mains gas pressure	Check with gas supplier
	Gas supply isolated/off	Restore supply
		Check with gas supplier
Piezo oven igniter not	Check for short in high	Replace lead
working	tension lead	
	Check for electrode fracture	Replace electrode
Burner will not light/stay lit	No gas at burner	Check injector for blockages
	Loose thermocouple	Clean and tighten
		connections
	Damaged thermocouple	Replace thermocouple
	Damaged valve	Replace valve
Oven not reaching temperature	Faulty thermostat	Replace valve
Flame has yellow/orange	Not enough primary air	Check aeration setting
tips	Contamination in burner	Clean burner and retry
Weak flame	Incorrect valve pressure	Check valve pressure
	Blocked injector	Clean injector and retry
	Incorrect line pressure	Check with gas supplier
Flame 'lifts' off burner	Incorrect primary air	Check aeration setting
	Incorrect line pressure	Check with gas supplier
Hob Pilot Flame	Excessive draughts	Install supplied pilot flame
extinguishes		protection device

11.0 SPARE PARTS

Main Spare Parts:

- Oven Valve
- Hob Valve
- Oven Injector G20
- Oven Injector G30/G31
- Hob Burner Injector G20 9.5kW
- Hob Burner Injector G30/G31 9.5Kw
- Hob Burner Injector G20 4.2kW
- Hob Burner Injector G30/G31 4.2kW
- Hob Pilot Injector G20
- Hob Pilot Injector G30/G31
- Oven Pilot Injector G20
- Oven Pilot Injector G30/G31
- Hob Pilot Assembly
- Oven Pilot Assembly
- Rear Hob Thermocouple
- Front Hob Thermocouple
- Oven Thermocouple
- Hob Control Knob
- Oven Control Knob

When ordering spare parts please quote the following;

Model Number

Serial number

Gas Type

This information will be found on data plate attached to the appliance. (see 1.0)

Visit our website for further spares information.

12.0 SERVICING INFORMATION

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