



# F900 SERIES

User, installation and servicing instructions

# INDUCTION COUNTER TOPS

i9042, i9043, i9084, i9085

Read these instructions before use

DATE PURCHASED:

MODEL NUMBER:

SERIAL NUMBER:

DEALER:

SERVICE PROVIDER:

**T100895**

REV.5

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



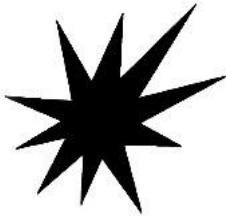
• SCREWDRIVER



• 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 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

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1.0	APPLIANCE INFORMATION .....	6
2.0	OPERATION .....	7
2.1	COMPONENT PARTS.....	8
2.2	CONTROLS .....	9
2.3	USING THE INDUCTION HOB .....	9
3.0	CLEANING AND MAINTENANCE .....	11
4.0	SPECIFICATION.....	11
5.0	DIMENSIONS / CONNECTION LOCATION .....	12
6.0	INSTALLATION.....	13
6.1	SITING / CLEARANCES .....	13
6.2	ELECTRICAL SUPPLY AND CONNECTION .....	13
6.3	ASSEMBLY.....	14
6.4	COMMISSIONING .....	15
6.5	INSTRUCTION TO USER.....	15
6.4	SUITING .....	15
7.0	SERVICING AND CONVERSION .....	18
7.1	CONTROL PANEL.....	18
7.2	REMOVING THE GENERATOR.....	18
7.3	REPLACING CONTROL SWITCH/LED INDICATORS .....	20
7.4	HOB ASSEMBLY .....	21
7.5	INDUCTION COIL ASSEMBLY.....	21
8.0	FAULT FINDING .....	22
8.1	ERROR CODE TABLE .....	22
9.0	CIRCUIT DIAGRAM .....	26
10.0	WIRING DIAGRAM .....	28
11.0	SPARE PARTS .....	31
12.0	SERVICE INFORMATION .....	31

# 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.

<b>Falcon Foodservice Equipment</b>		CE <input type="text"/>		P.I.N. <input type="text"/>	STD. <input type="text"/>					
<b>A</b>	Ser No. <input type="text"/>	<b>B</b>	MODEL <input type="text"/>	<b>C</b>	TYPE <input type="text"/>	I.P. <input type="text"/>				
<b>D</b>	Cat.	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	-
<b>E</b>	p mbar	20;28-30/37	28-30/37	20;30	30	20;50	20;30	20	20;50	-
<b>F</b>	GAS TYPE	G20	G30	G31						
<b>G</b>	GAS RATE	m <sup>3</sup> /h	kg/h	kg/h						
<b>H</b>	Σ Qn	kW	kW	kW	kW					
<b>I</b>	EL.									Hz
<b>J</b>	Σ kW	kW		<b>K</b>			kHz			
<b>L</b>	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

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**IF GLASS-CERAMIC TOP IS CRACKED OR BROKEN IMMEDIATELY DISCONNECT APPLIANCE FROM POWER SUPPLY AND CONTACT YOUR SERVICE AGENT.**

**THE AIR INTAKE FILTER MUST BE IN POSITION DURING OPERATION IT SHOULD BE CLEANED REGULARLY AND DO NOT OBSTRUCT AIR FILTER ENTRY BELOW.**

**USERS MUST BE MADE AWARE THAT INDIVIDUALS FITTED WITH A PACEMAKER SHOULD CONSULT THEIR DOCTOR IF IN A CLOSE PROXIMITY TO THIS UNIT. THIS INDUCTION UNIT EMANATES AN 18KHz TO 20 KHz OUTPUT THAT MAY AFFECT OLDER TYPES OF PACEMAKER.**

**USE OF THE CORRECT TYPE OF PAN IS ESSENTIAL FOR CORRECT OPERATION.**

**DO NOT PLACE ANY METAL OBJECTS, SUCH AS KITCHEN UTENSILS, CUTLERY, ALUMINIUM FOIL, OR PLASTIC VESSELS, ON THE GLASS-CERAMIC TOP.**

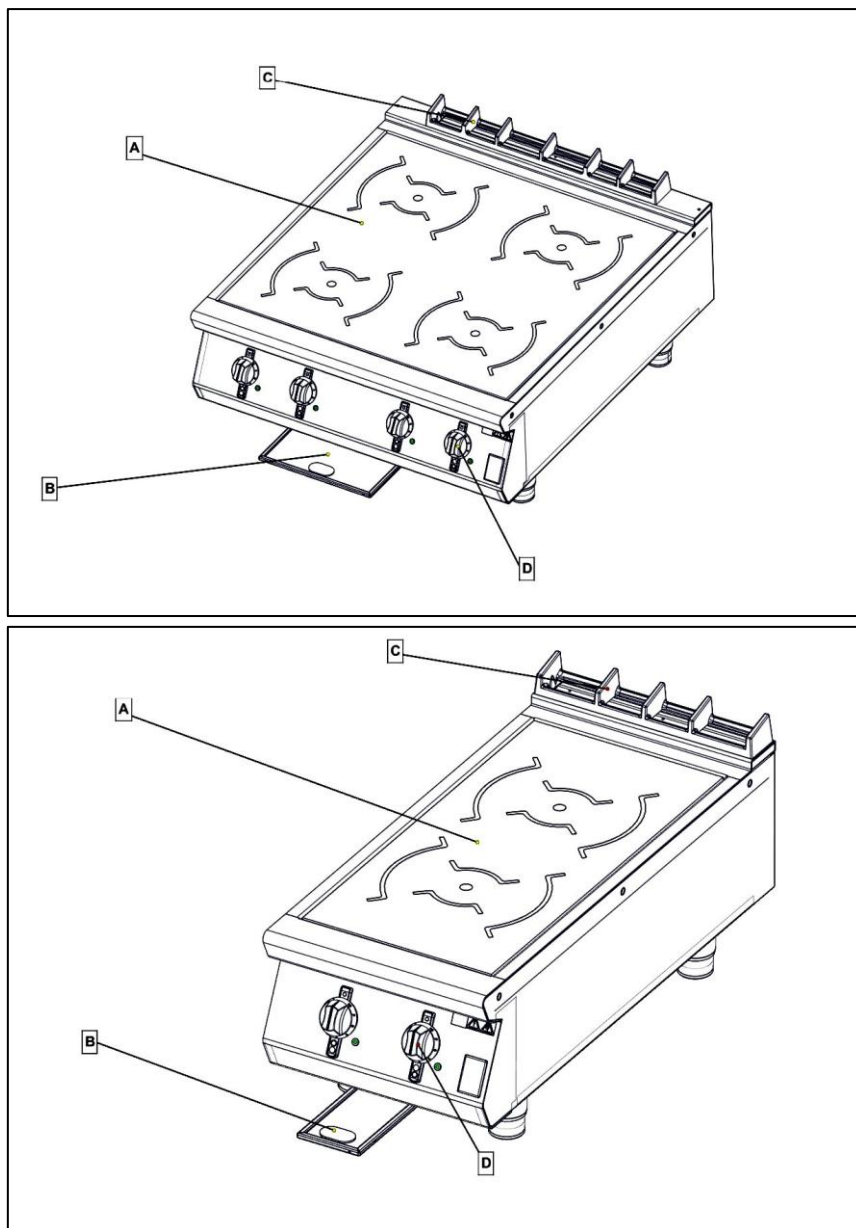
**THE USER MUST ALSO BE AWARE OF POTENTIAL TO HEAT JEWELLERY AND DISRUPT ELECTRONIC EQUIPMENT PLACED OVER THE INDUCTION ZONES MAGNETIC FIELD.**

**DO NOT PLACE CREDIT CARDS, ETC, ON THE GLASS-CERAMIC TOP AS DATA COULD BE WIPED OFF.**

**NEVER LEAVE THE INDUCTION HOB UNSUPERVISED WHEN IN USE. THE GLASS-CERAMIC TOP MUST NOT BE USED FOR STORAGE.**

**DAMAGED PANS CAN REDUCE THE APPLIANCE EFFICIENCY.**

## 2.1 COMPONENT PARTS



A – Glass hob

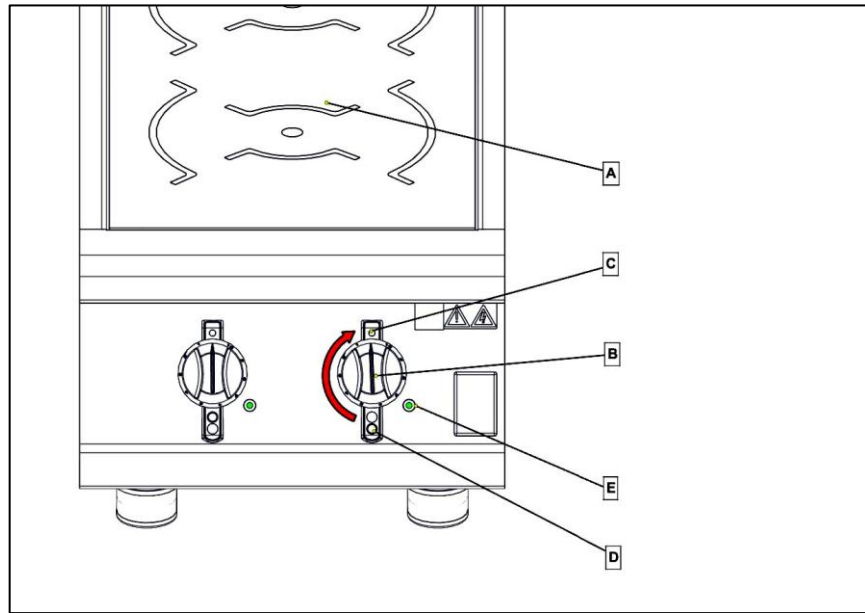
B – Filter

C – Cast iron flue cap

D – Control switch



## 2.2 CONTROLS



A – Cooking surface.

B – Control switch.

C – Off position

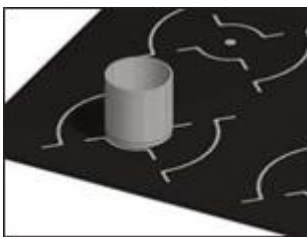
D – Zone indicator

E - LED

## 2.3 USING THE INDUCTION HOB

2.3.1 Ensure you use the correct size of pot.

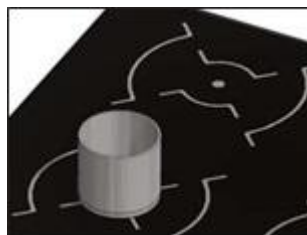
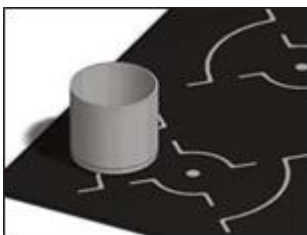
<Ø120



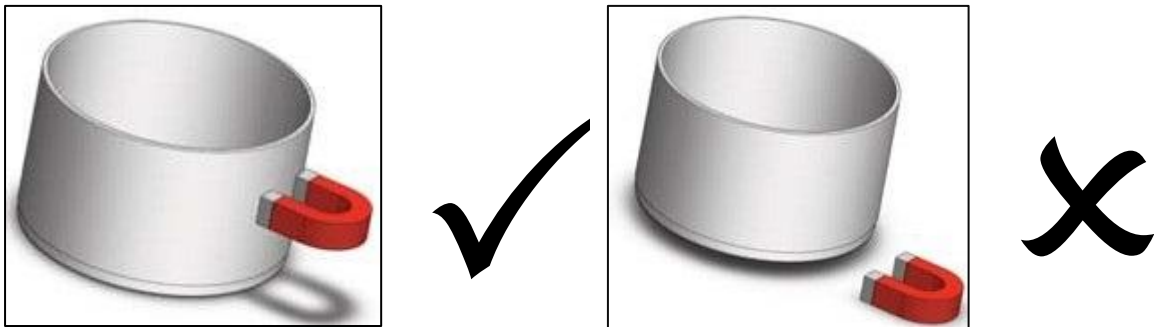
Ø120 – Ø270



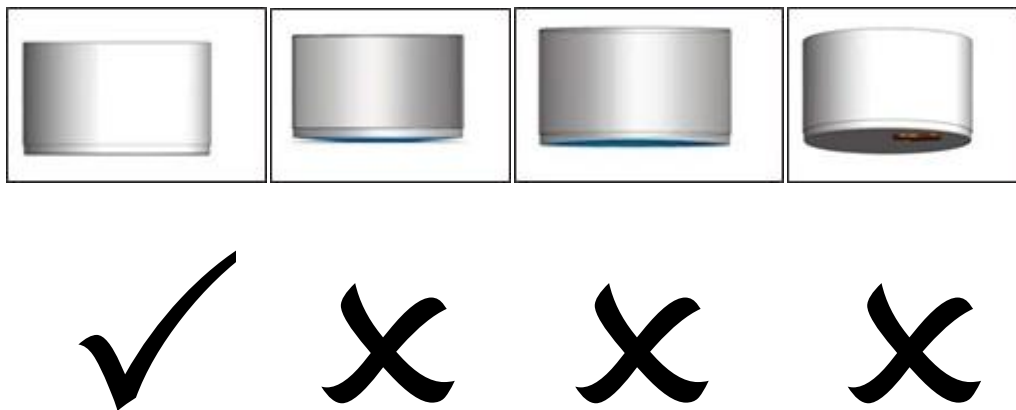
2.3.2 Ensure the pots are central in the cooking zone



2.3.3 Ensure you use the correct type of pot



2.3.4 Ensure you use a clean flat bottom pan



2.3.5 Turn on control. The green L.E.D will light. If you remove the pot from the cooking zone the L.E.D will flash at 1 second intervals to indicate that the cooking zone is still active.

## 3.0 CLEANING AND MAINTENANCE

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3.1 Turn off and cool down

3.2 Clean the glass hob with hot soapy water



**CLEAN THE AIR INTAKE FILTER REGULARLY. FAILURE TO CLEAN THE FILTER REGULARLY MAY CAUSE PROBLEMS WHICH WILL NOT BE COVERED BY WARRANTY. THE AIR INTAKE FILTER MUST BE IN PLACE DURING OPERATION.**

**DO NOT ATTEMPT TO REPAIR OR REPLACE ANY PART OTHER THAN THE AIR INTAKE FILTER. REFER TO THE ERROR CODE LIST TO DEBUG THE PROBLEM.**

## 4.0 SPECIFICATION

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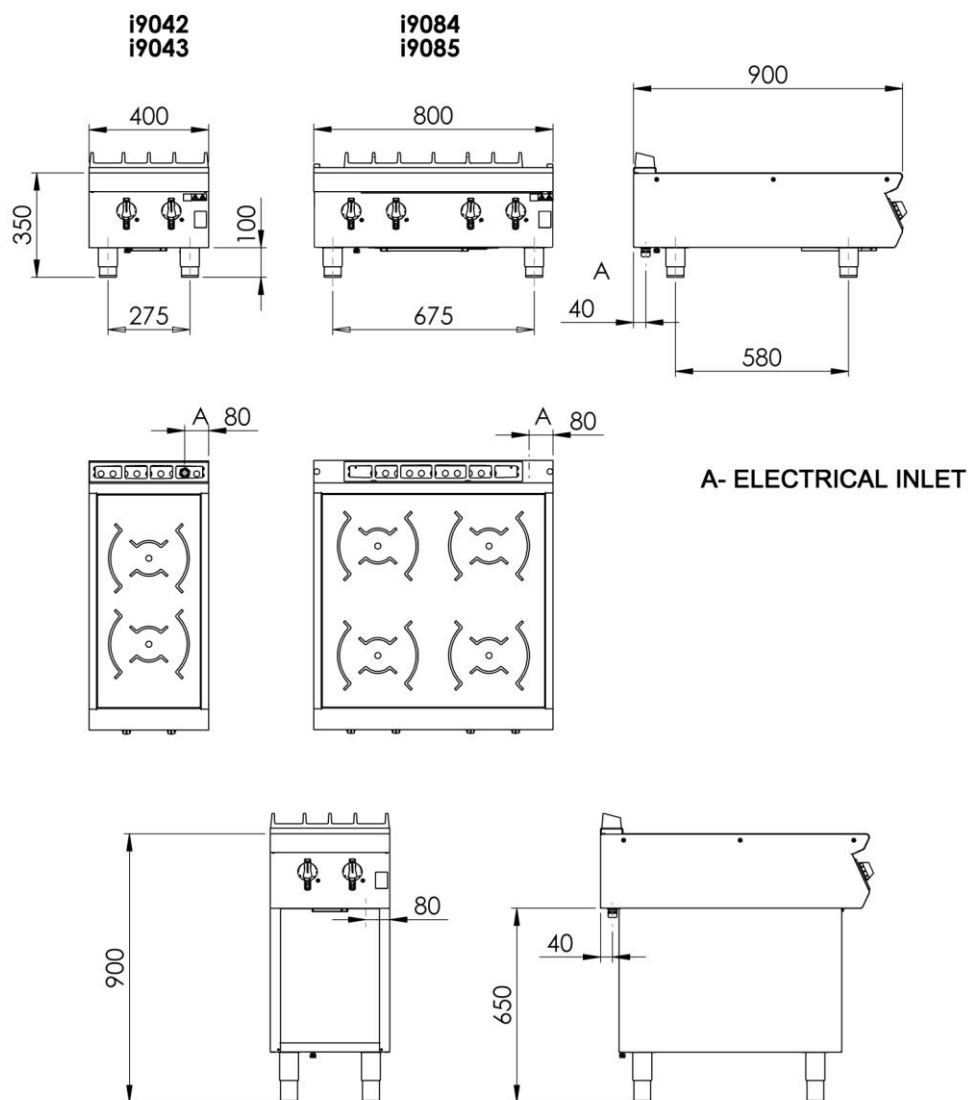
These appliances are suitable for AC supplies only.

Three phase & neutral 5 wire connection

MODEL	VOLTAGE	POWER	L1	L2	L3
I9042	400V 3N~	7kW	10.1A	10.1A	10.1A
I9043	400V 3N~	10kW	14.4A	14.4A	14.4A
I9084	400V 3N~	14kW	20.2A	20.2A	20.2A
I9085	400V 3N~	20kW	28.9A	28.9A	28.9A

## 5.0 DIMENSIONS / CONNECTION LOCATION

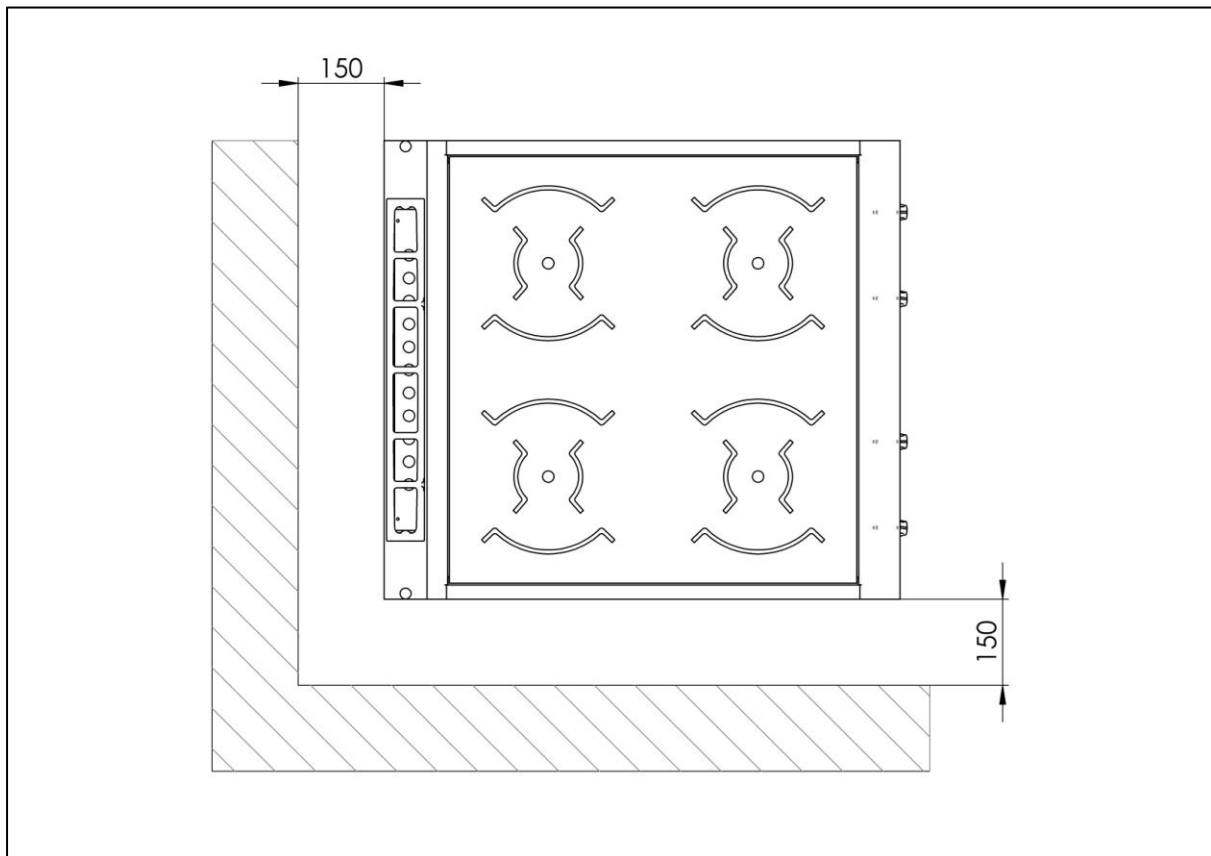
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## 6.0 INSTALLATION

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### 6.1 SITING / CLEARANCES

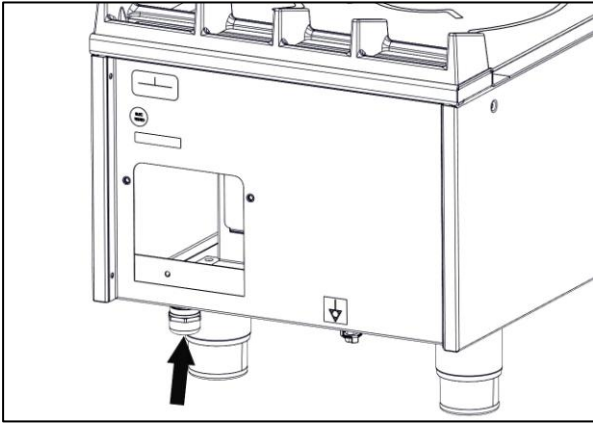


**CAUTION: WALLS CLOSER THAN 150mm TO THE APPLIANCE MUST BE NON COMBUSTABLE. IF SITING THE NECESSARY CLEARANCES TO ANY CUMBUSTIBLE WALL MUST BE THE LARGEST FIGURE GIVEN FOR INDIVIDUAL APPLIANCES INSTRUCTIONS.**

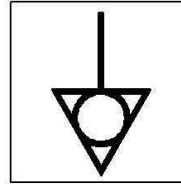
### 6.2 ELECTRICAL SUPPLY AND CONNECTION

6.2.1 Remove control panel to access the inlet terminal (see 7.1)

6.2.2 Cable entry at unit rear. A suitable rated isolating switch with contact separation of at least 3mm in all poles must be installed and wiring executed in accordance with relevant regulations.



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.



The electrical connections color code is shown in the table below.

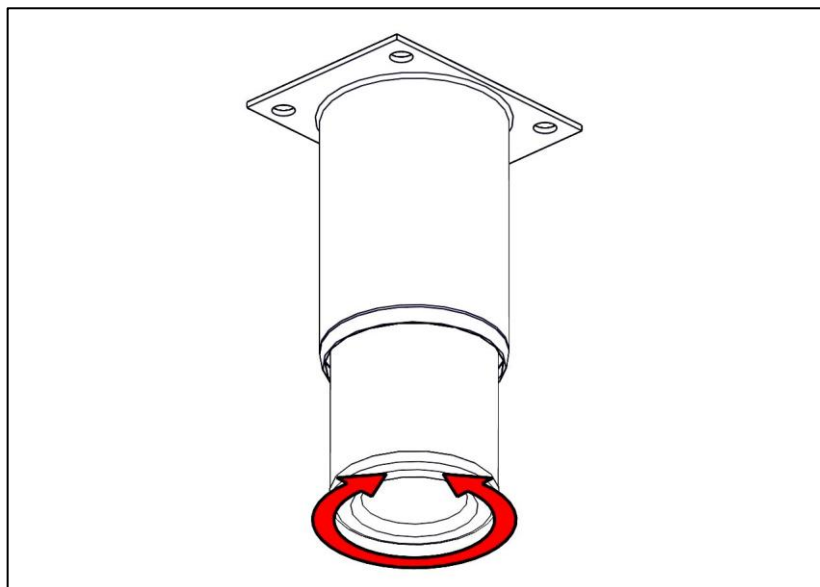
PHASE I	PHASE II	PHASE II	NEUTRAL	EARTH
Brown	Black	Grey	Blue	Green/Yellow



**MAINS INPUT CONNECTION CABLE IS NOT SUPPLIED; SUITABLE CABLE WILL CONFORM TO CODE DESIGNATION IEC 60245-57.**

### 6.3 ASSEMBLY

6.3.1 Unpack, position appliance and level using feet adjusters as shown below.



6.3.2 Ensure fan intake filter is fitted and secured in position below control panel.

6.3.3 Connect to an electrical supply (see 6.2)

## 6.4 COMMISSIONING

6.4.1 Switch all cooking zones on to position 10.

6.4.2 Ensure all L.E.Ds light and begin to flash.

6.4.3 Place a pan suitable for induction cooker tops, filled with water, upon a cooking zone. The pan minimum diameter cannot be less than 120mm.

6.4.4 Ensure that corresponding L.E.D stops flashing and remains lit. This indicates that "Pan detection" feature is working.

6.4.5 Repeat on all different cooking zones.

6.4.6 Leave pots to heat until water boils and switch controls to maintain simmer.

6.4.7 Switch control off.

## 6.5 INSTRUCTION TO USER

After installation and commissioning is completed, please hand the user instructions to the user and ensure that the person/s responsible understand the instructions regarding correct operation and cleaning of the appliance.



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

## 6.4 SUITING

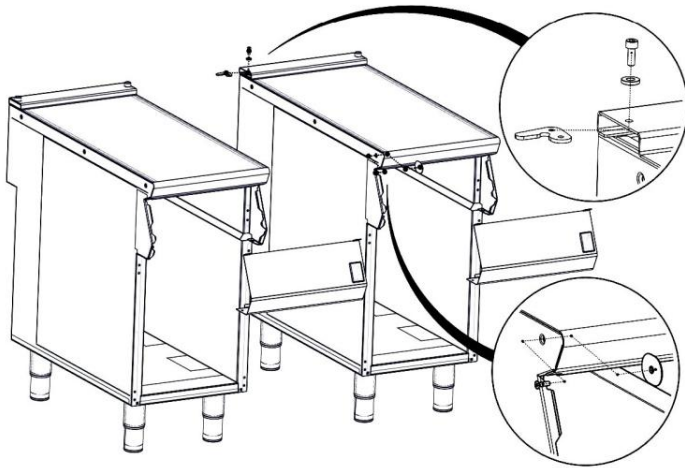
***"Patent pending, application no. GB 1511389.7"***

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.

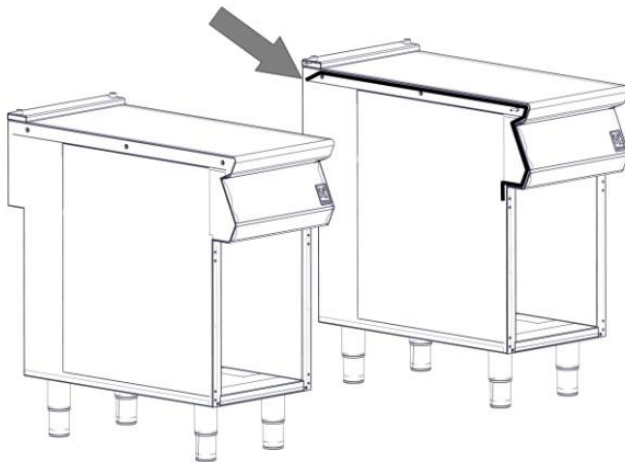
6.6.3 Remove the hob rear infill and replace with rear suiting plate and fixings.

6.6.4 Remove the front side panel countersunk screw and suiting plate.

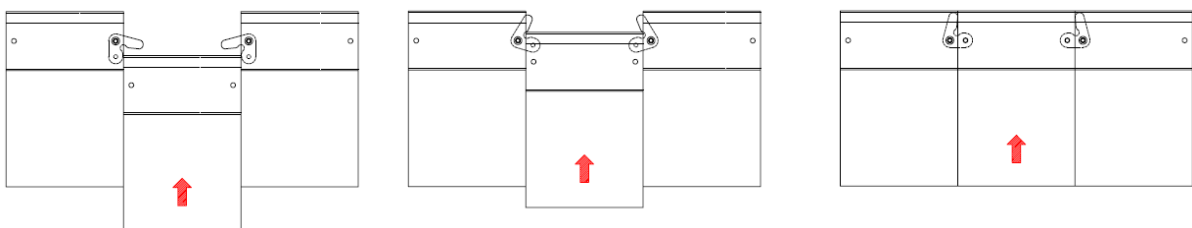


**NOTE:** The DLS system is designed to give a quick and easy suiting solution. If you require an improved seal between appliances we recommend you use, a food grade, high temperature silicon sealant. This can be supplied by Falcon part no – 523400021

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

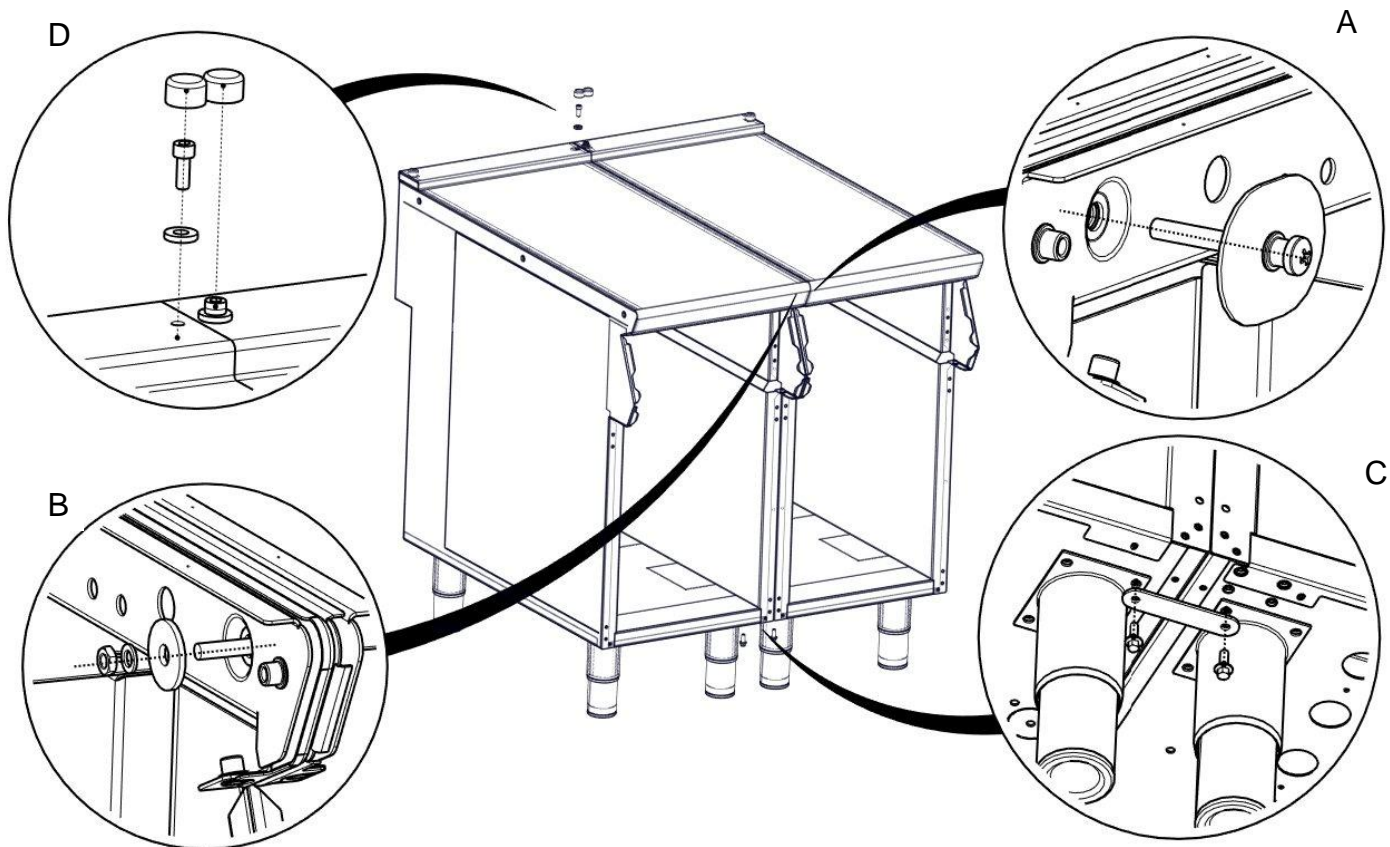


6.6.6 Slide suited units into position.





- 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.



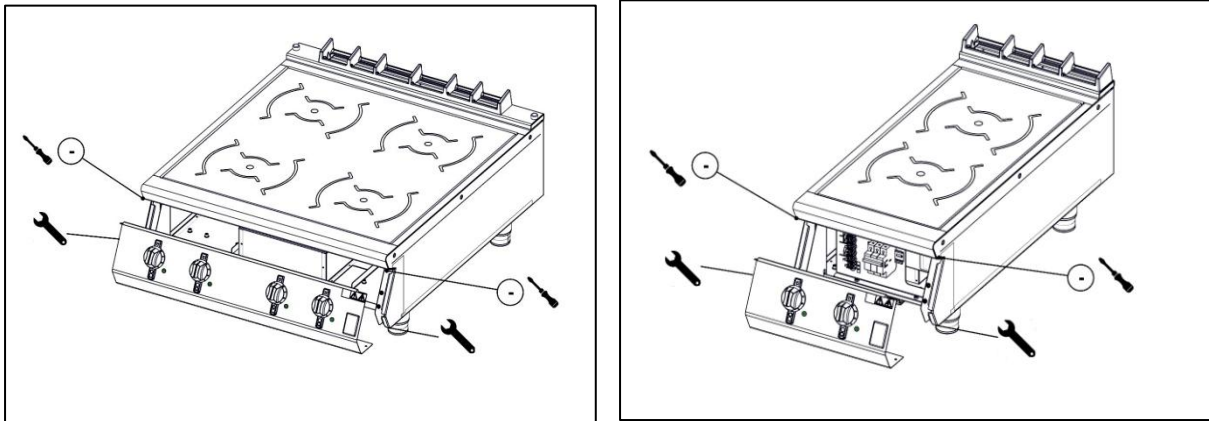
6.6.11 Replace control panel. . .

## 7.0 SERVICING AND CONVERSION

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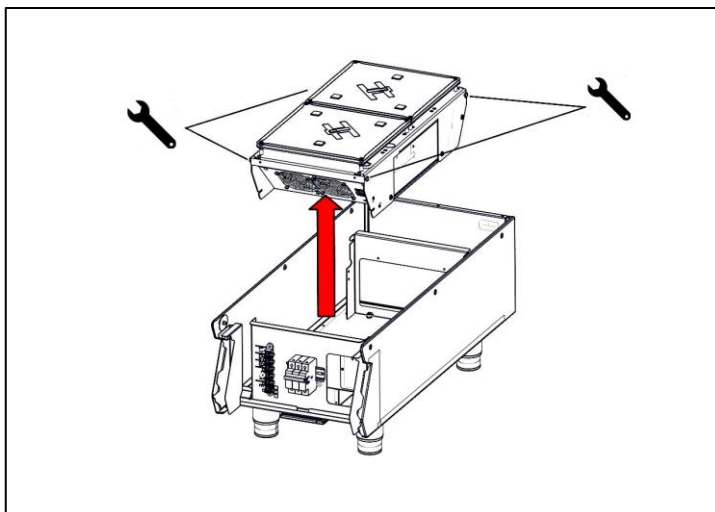
**BEFORE ATTEMPTING ANY MAINTENANCE, ISOLATE THE APPLIANCE AT THE MAINS ISOLATING SWITCH AND TAKE STEPS TO ENSURE THAT IT CANNOT BE INADVERTENTLY SWITCHED ON.**

### 7.1 CONTROL PANEL



7.1.1 Remove control panel as shown.

### 7.2 REMOVING THE GENERATOR

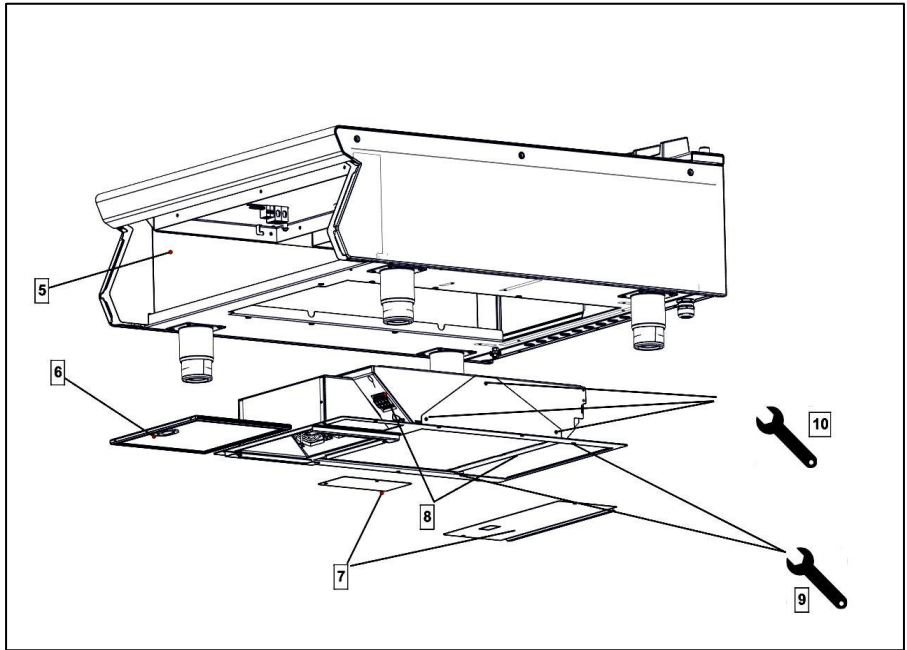


7.2.1 i9042/i9043 - Remove the control panel see 7.1.

7.2.2 Remove the hob see 7.4.

7.2.3 Disconnect the power cables to the generator.

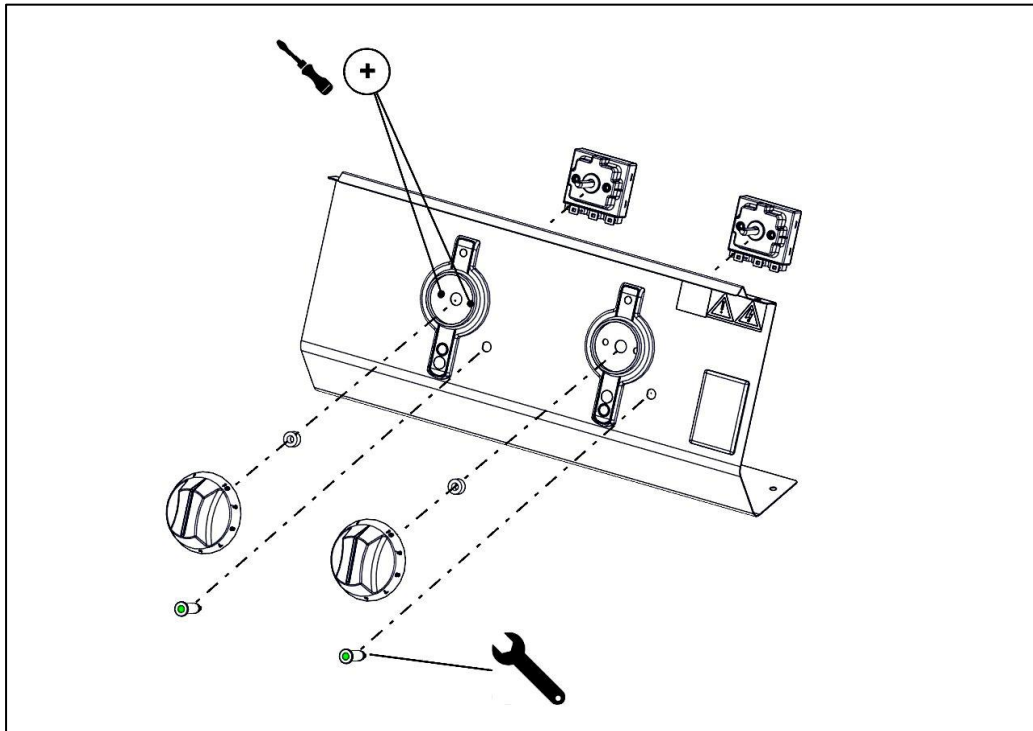
7.2.4 Unscrew the 4 hex bolts and remove.



- 7.2.5 i9084/i9085 – Remove the control panel see 7.1.
- 7.2.6 Remove the filter.
- 7.2.7 Remove the cable access panels.
- 7.2.8 Disconnect the power cables to the generator and coils.
- 7.2.9 Unscrew the fixings holding the generator mounting plate and remove.
- 7.2.10 Unscrew the fixings holding the generator and remove.

## 7.3 REPLACING CONTROL SWITCH/LED INDICATORS

7.3.1 Remove control panel, see 7.1

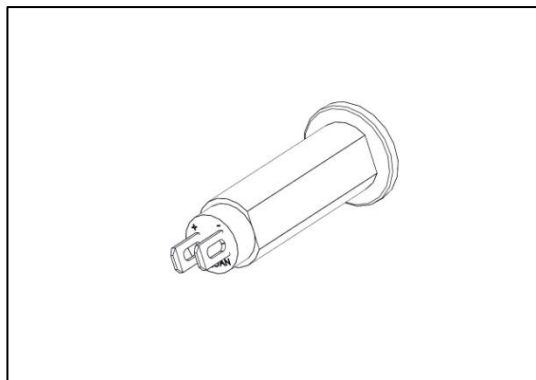


7.3.2 Control switch:- Identify wires that relate to switch and L.E.D attached to generator unit and disconnect.

7.3.3 Unscrew and remove as shown.

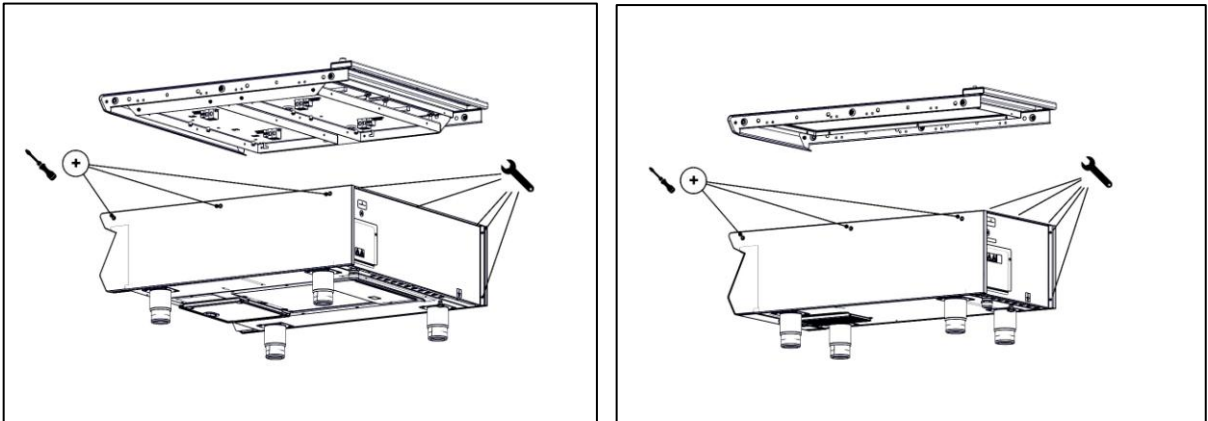
7.3.4 Re-assemble in reverse order.

7.3.5 LED's are polarity driven with the Green cable negative and the purple cable positive. The Green cable connects to the spade terminal above L.E.D body flat side.



7.3.6 Unscrew the fixing nut and remove as shown.

## 7.4 HOB ASSEMBLY



7.4.1 Remove the control panel see 7.1.

7.4.2 Remove the hob assembly as shown. **Note:** It is recommended that two persons carry out the procedure.

## 7.5 INDUCTION COIL ASSEMBLY



**DO NOT USE THE UNIT IF THE CERAMIC TOP IS CHIPPED, CRACKED OR BROKEN. THE PANEL NEEDS TO BE REPLACED.**

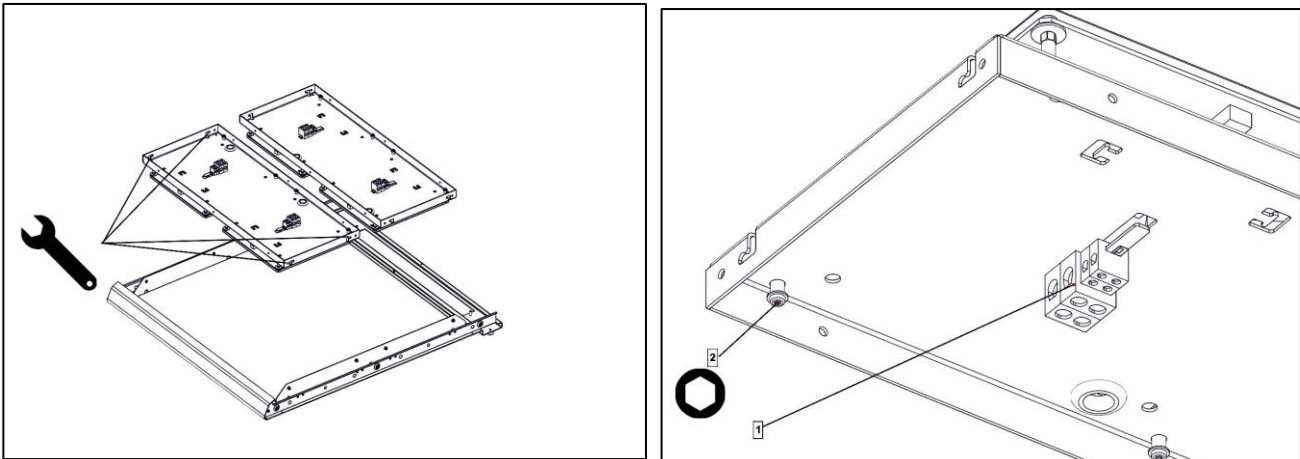


**WHEN REPLACING COILS, ENSURE THAT SPACERS ARE IN POSITION AND ONLY FITTED WITH A SINGLE, LAYERED SPACER AS INDICATED.**



**THE INDUCTION GENERATOR UNIT IS HEAVY AND IT MAY BE REQUIRED THAT TWO PEOPLE ARE INVOLVED WITH THE CHANGING PROCEDURE.**

7.5.1 Unscrew the fixings holding the coil carrier on to the hob and remove.



7.5.2 Disconnect the wires to the coil.

7.5.3 Remove the four fixings holding the coil to the carrier taking care not to loose the springs.

## 8.0 FAULT FINDING

**Note:** Most faults can be rectified by simply switching unit off for 10 seconds. After this time, turn power back on at mains supply. If fault continues to occur after such action then please refer to the table. This will provide a solution to rectify the condition.

### 8.1 ERROR CODE TABLE

If any fault becomes apparent during the tests, an error code may display on an LED as a series of flashes. These flashes correspond to the numbers in the left column of the following table.

For example, 6 short flashes followed by a long flash would indicate error code 06 – “internal temperature too high”.

CODE	ERROR	CAUSE	ACTION
01	Coil Pan Detection Error.	Use of Unsuitable pan material	Use suitable pan.
		Reset appliance	Switch appliance OFF for 10 seconds then ON.
		Defective coil	Check all electrical connections to the inductor coil
			Replace defective Coil
02	No Inductor Coil Current.	Reset appliance	Switch appliance OFF for 10 seconds then ON.
		Inductor Coil connection failure	Check all electrical connections to the inductor coil
			Replace defective Coil
03	Generators Internal Heat Sink Too High.	Reset appliance	Switch appliance OFF for 10 seconds then ON.
		Air routes blocked.	Check below appliance & rear of Appliance for potential Air Flow Obstructions.
		Air Filter blocked (Requires Cleaning).	Check Filter - Does it require cleaning / Replacing?
		Generator Fan(s) Malfunctioned. Due to electrical fault.	Replace Generator
		Generator Fan(s) blowing instead of sucking.	Replace Generator
		Generator Temperature sensor defective.	Replace Generator -

04	Cooking Zone Temperature Too High Or Remains Constant During Cooking.	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Pan empty / Too Hot	Test Disc may be overheated – allow for cooling.
		Cooking Zone Self Protected due to Abnormal Heat Build up	Allow Cook Zone to cool for couple of Minutes
		Temperature sensor faulty (Constantly records a Ambient Temperature)	Check all electrical connections to the inductor coil
			Replace defective Coil
05	Controls Failure	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Controls faulty or incorrectly Wired	Check all electrical connections to the controls & Generator

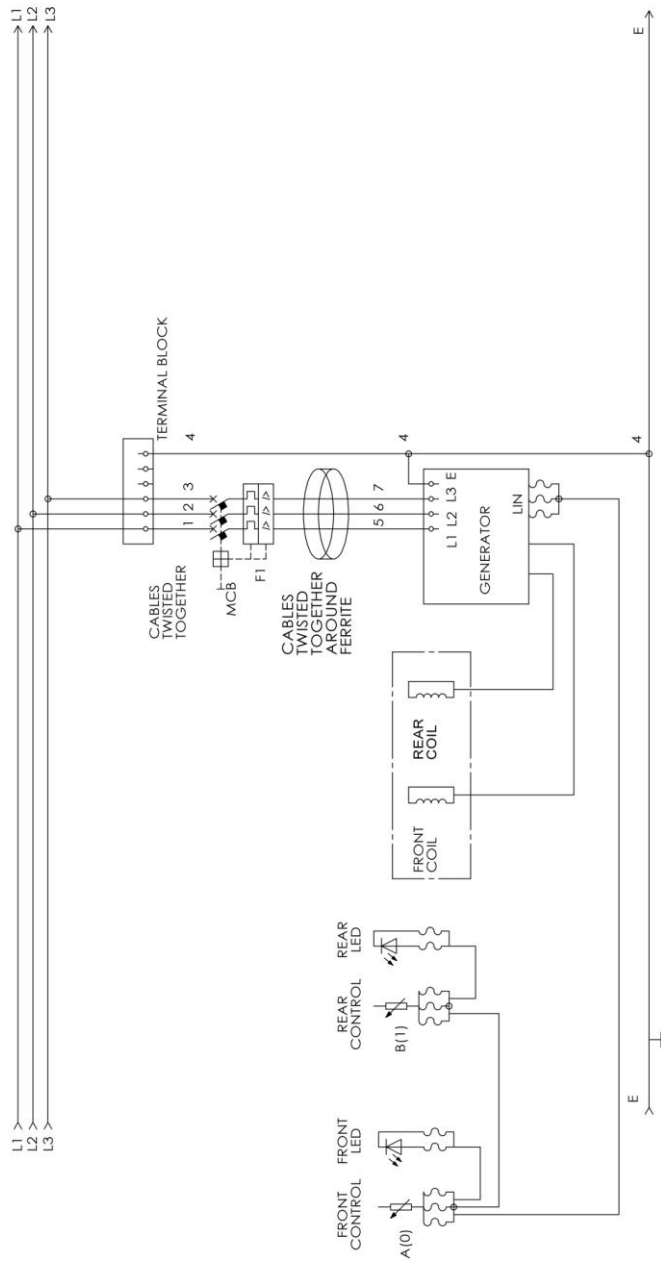
			Replace defective Controls Assembly
<b>06</b>	Generators Internal Temperature Too High.	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		See Fault 3	See Fault 3
<b>07</b>	Cooking Zone Temperature Sensor	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Temperature sensor faulty / Malfunctioned	Check all electrical connections to the inductor coil
			Replace defective Coil
<b>08</b>	Mains Supply Failure	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Fault in mains supply	Is there a Phase(s) Down
			Has supply been interrupted intermittently?
			Has supply Spiked?
			Has Supply Under / Over Voltage?
<b>09</b>	N/A	N/A	N/A
<b>10</b>	Communication Error	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Failure on LIN or CAN-Bus	Check all communications connections



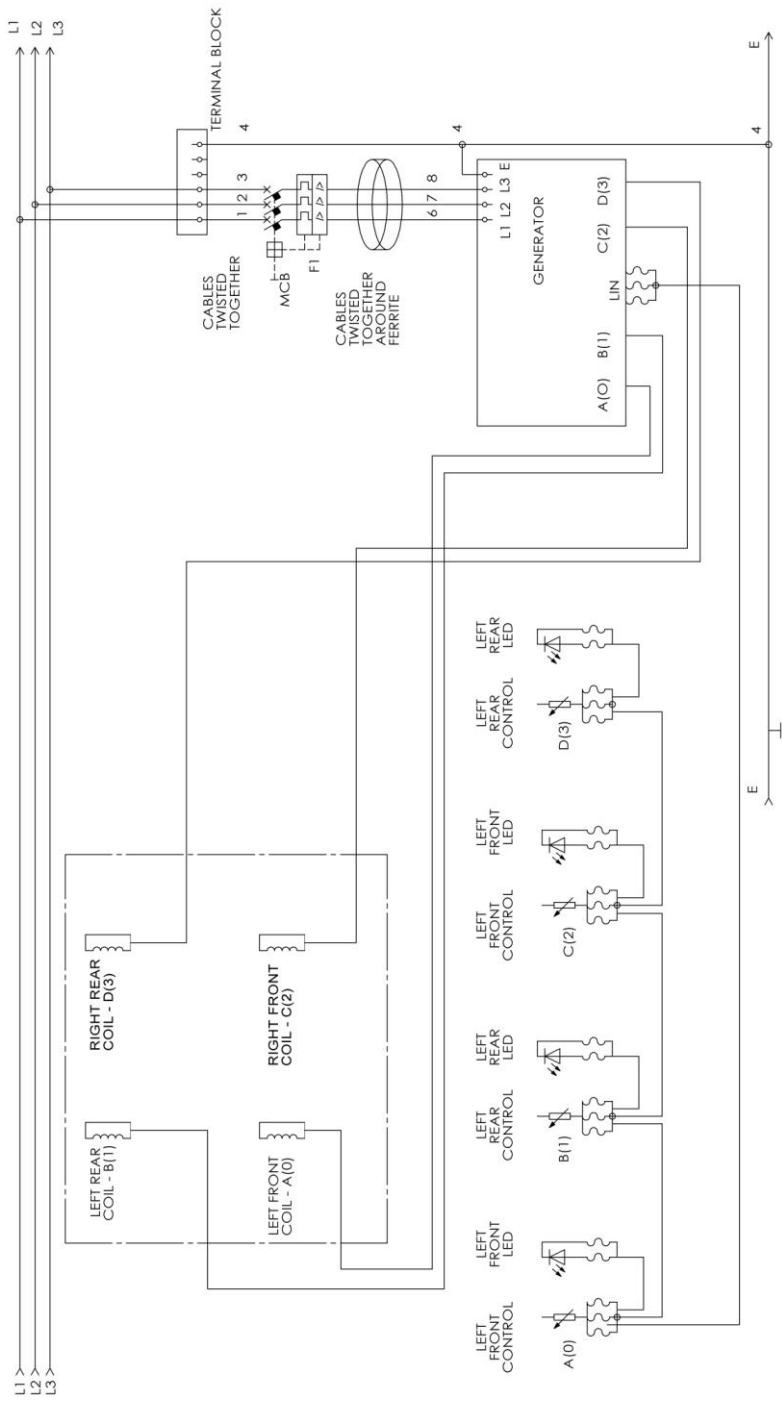
11	Initialisation Error	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Software Failure while initialising hardware	Wait. The generator will reset every 30 seconds.
			Replace Generator .
12	Current Reading Failure	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Generator suspects Current being generated does not reflect what appliance controls are set for.	Check Mains Supply
			Check all electrical connections within appliance.
			Replace Suspect Coil
			Replace Generator .
13	Mains Connection Error	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Mains voltage too high or too low	See Fault 8
14	Mains Connection Error	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		Mains voltage too high or too low	See Fault 8
15	Coil Electrical Circuit Self-Protected.	Reset Appliance	Switch Appliance OFF for 10 Seconds then On.
		See Fault 4	See Fault 4

# 9.0 CIRCUIT DIAGRAM

i9042/3 Circuit Diagram

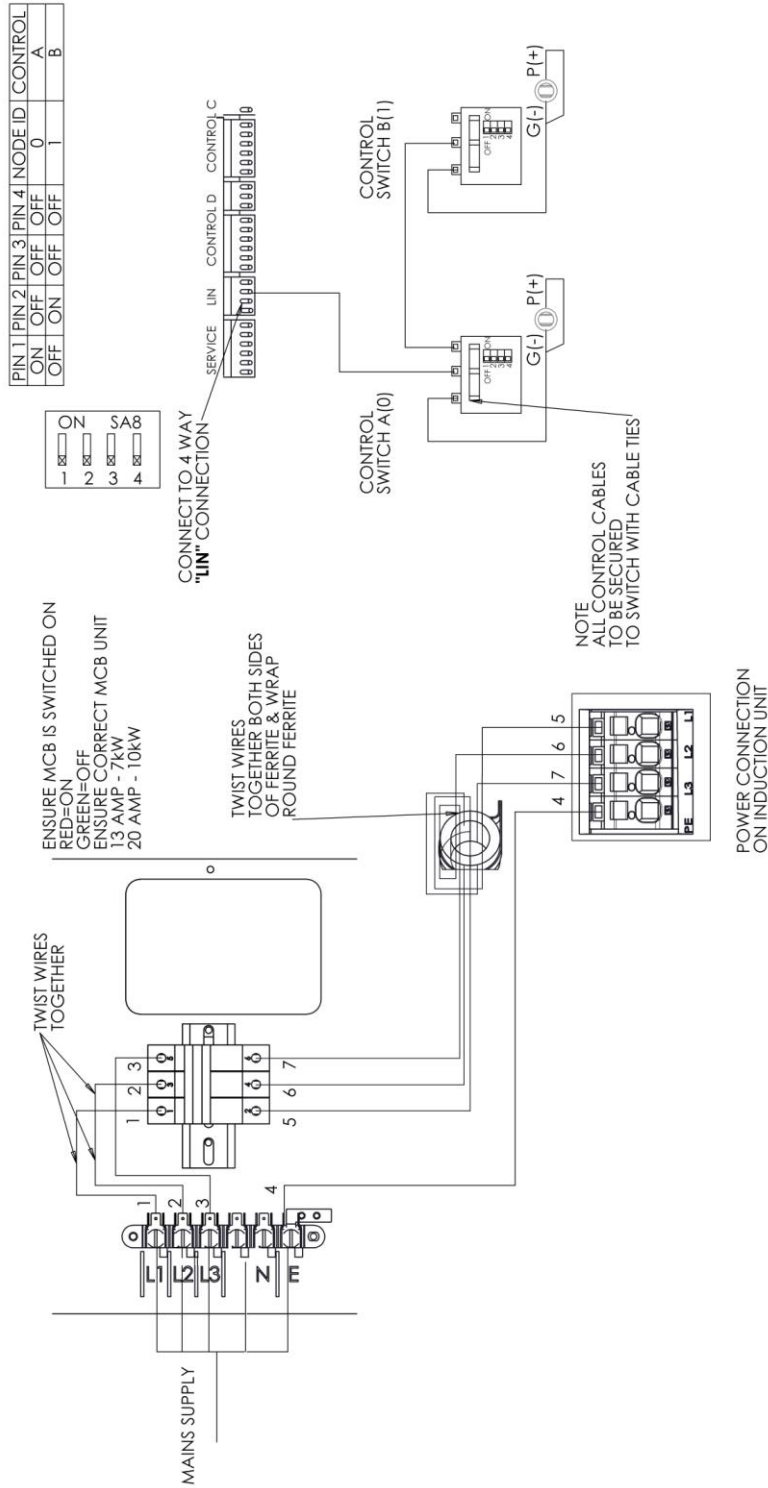


# i9084/5 Circuit Diagram

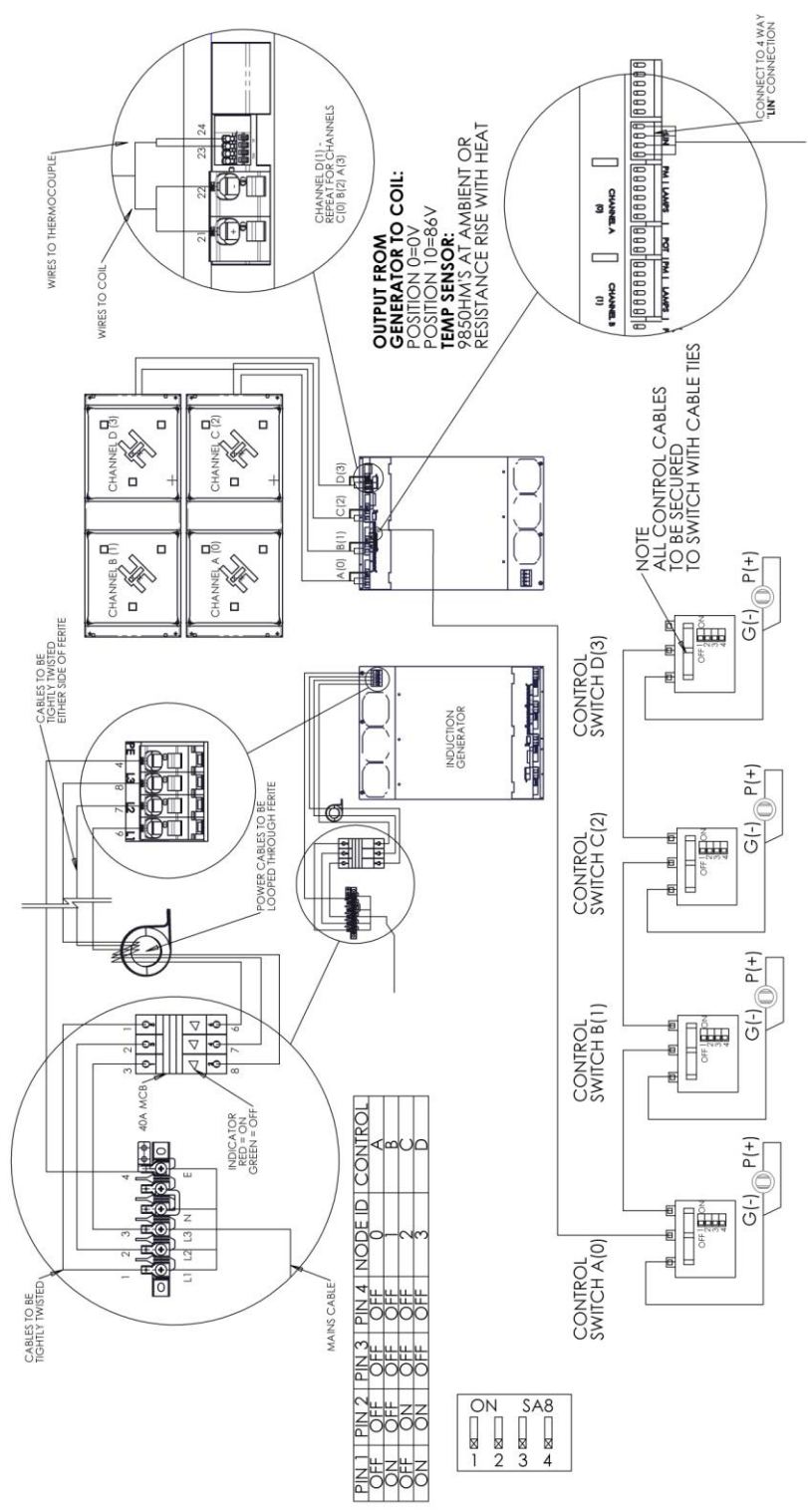


# 10.0 WIRING DIAGRAM

i9042/3 Wiring diagram



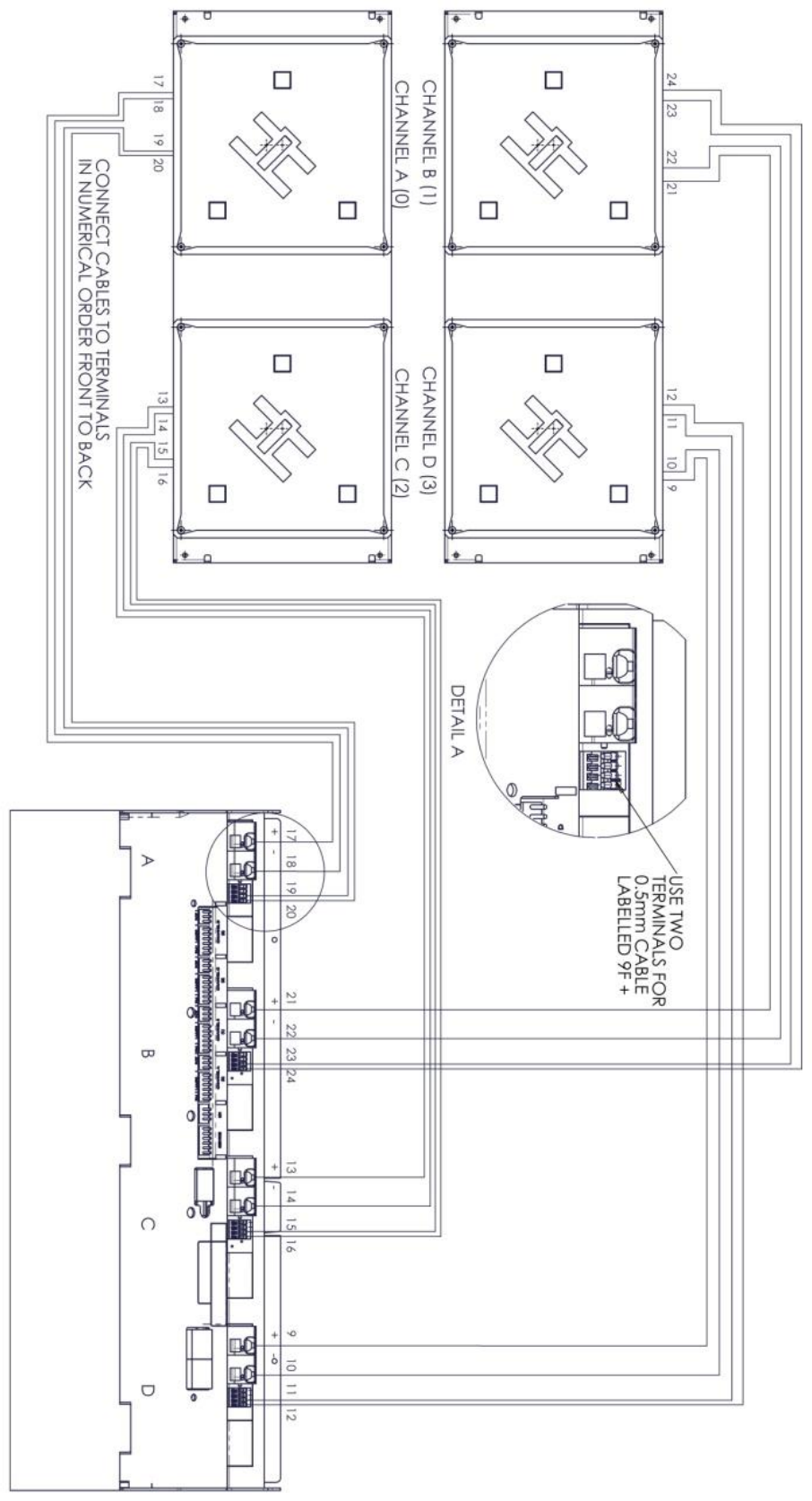
# i9084/5 Wiring diagram



PIN 1	PIN 2	PIN 3	PIN 4	NODE ID	CONTROL
ON	OFF	OFF	OFF	0	A
ON	OFF	OFF	OFF	1	B
ON	ON	OFF	OFF	2	C
ON	ON	ON	OFF	3	D

1	2	3	4	SA8
ON	ON	ON	ON	SA8

# i9084/85 Coil Wiring Diagram



## 11.0 SPARE PARTS

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### Main Spare Parts

- LED
- Hob Control Switch
- Hob control Knob
- Induction Generator
- MCB

When ordering spare parts please quote the following;

#### **Model Number**

#### **Serial Number**

This information will be found on the data plate attached to the appliance. (see1.0)

## 12.0 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)