



# 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.11

Published: 31/8/22

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  
Tel: 01786 455200

### 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.

## SYMBOLS



• SPANNER



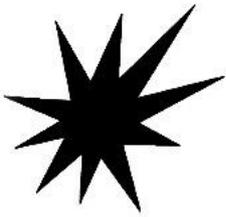
• SCREWDRIVER



• COOKING OIL



• GREASE



• SPARK IGNITION



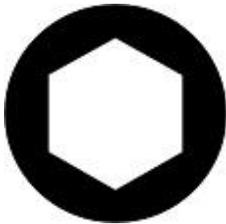
• FLAME



• 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.**

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# 1.0 APPLIANCE INFORMATION

This appliance has been UKCA/CE marked based on compliance with the relevant Electrical and Electromagnetic Compatibility (EMC) Regulations/Directives for the voltages stated on the data plate.

<b>Falcon Foodservice Equipment</b>		P.I.N		STD.					
<b>A</b> Ser No.	<b>B</b> MODEL	<b>C</b> TYPE		I.P					
<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	I12H3+	I3+	I12H3B/P	I3B/P	I12H3B/P	I12E3B/P	I2E	I12E3B/P	-
<b>F</b> GAS TYPE	20;28-30/37	28-30/37	20;30	30	20;50	20;30	20	20;30	-
<b>G</b> GAS RATE	G20	G30	G31						
<b>H</b> $\Sigma$ Qn	m <sup>3</sup> /h	kg/h	kg/h						
	kW	kW	kW						
<b>I</b> EL.	Hz								
<b>J</b> $\Sigma$ 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.**

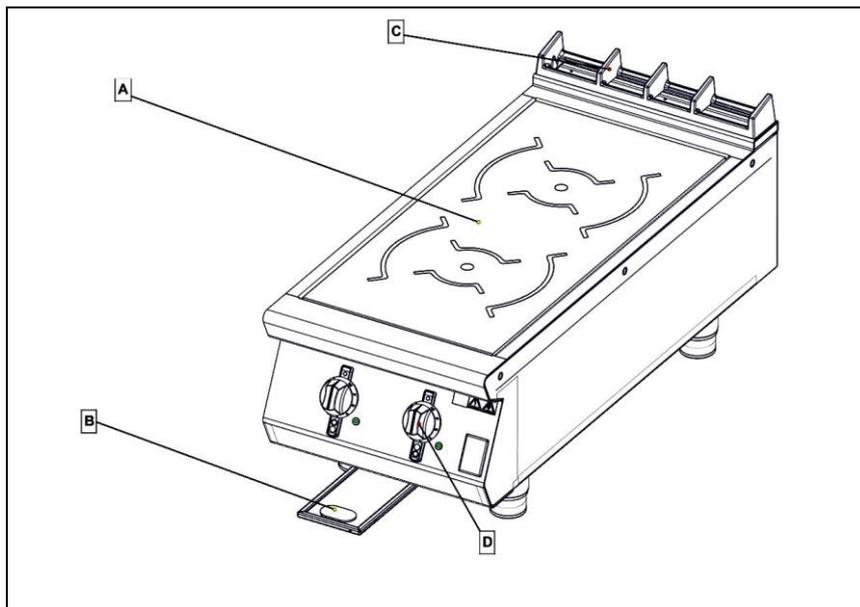
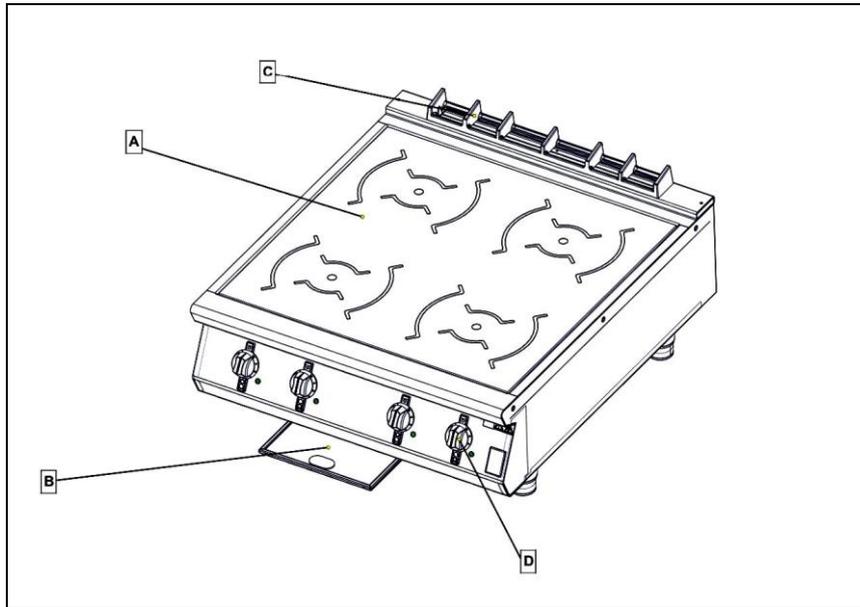
**THE USER MUST ALSO BE AWARE OF POTENTIAL TO HEAT JEWELLERY AND DISRUPT ELECTRONIC EQUIPMENT PLACED OVER THE INDUCTION ZONES MAGNETIC FIELD.**

**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



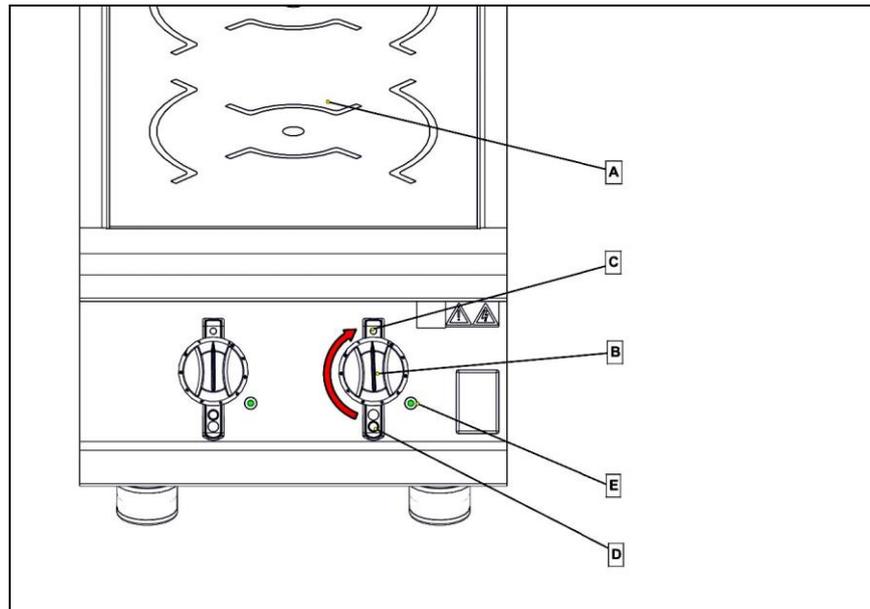
A – Glass hob

B – Filter

C – Cast iron flue cap

D – Control switch

## 2.2 CONTROLS



A – Cooking surface.

B – Control switch.

C – Off position

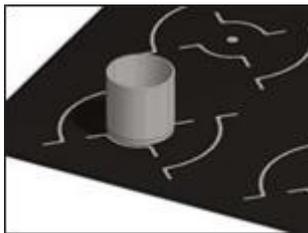
D – Zone indicator

E - LED

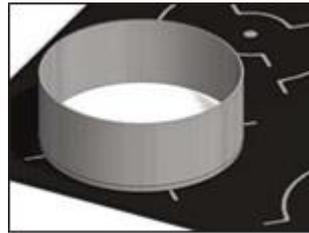
## 2.3 USING THE INDUCTION HOB

2.3.1 Ensure you use the correct size of pot.

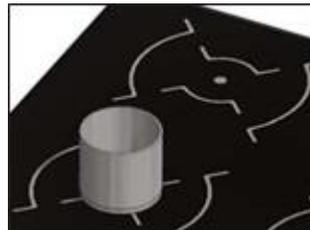
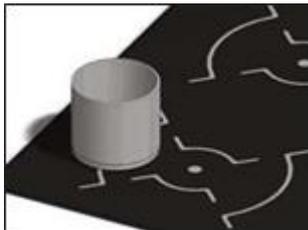
<Ø120



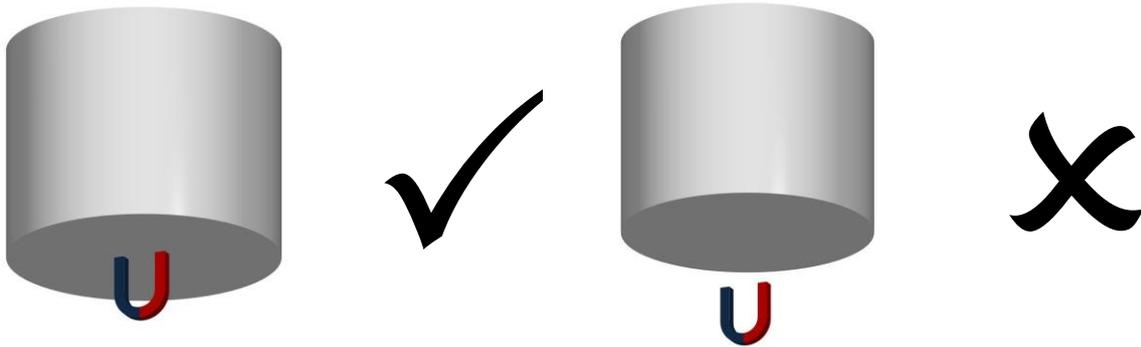
Ø120 – Ø270



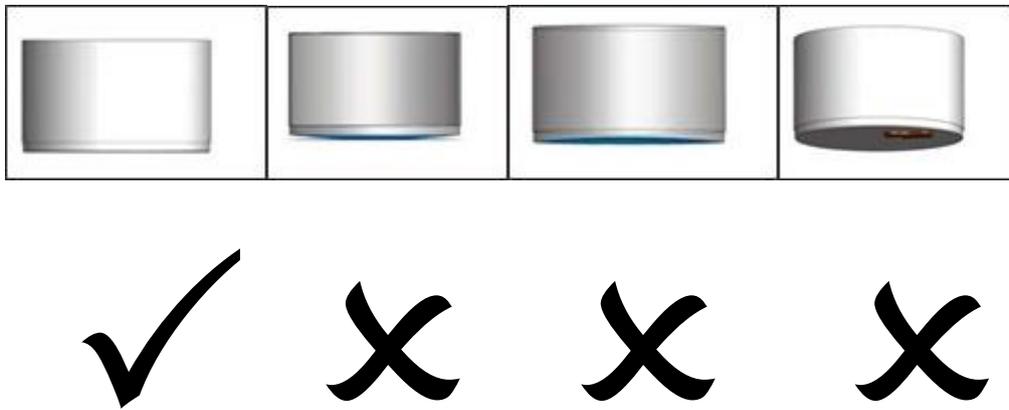
2.3.2 Ensure the pots are central in the cooking zone



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.**

### 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 Schedule. 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.

## 4.0 SPECIFICATION

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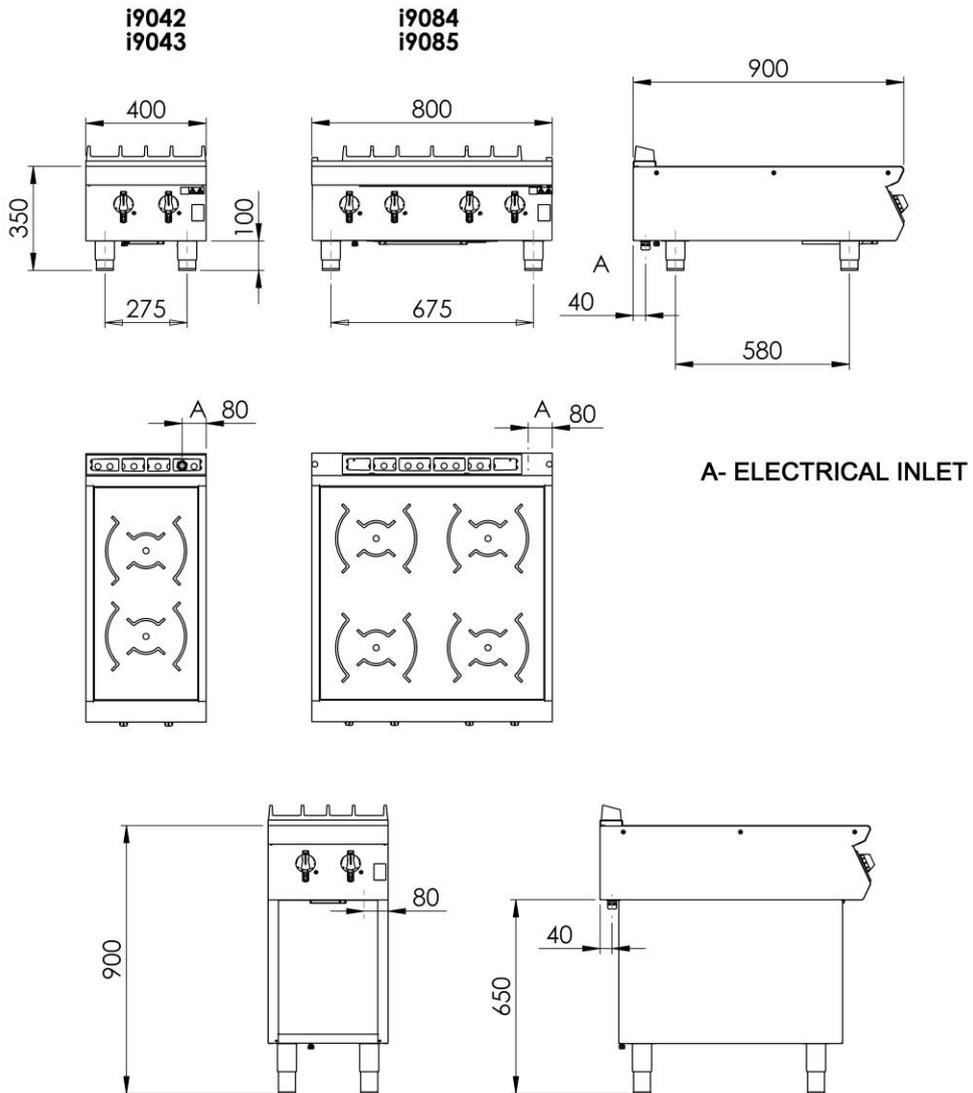
These appliances are suitable for AC supplies only.

Three phase & neutral 5 wire connection

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

## 5.0 DIMENSIONS / CONNECTION LOCATION

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## 6.0 INSTALLATION

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### 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 the load as stipulated by the appliance data label.

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

#### **We recommend:-**

- Supplementary electrical protection with the 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.

#### **Your attention is drawn to:-**

#### **BS 7671:2018–Guidance Note 8 - 8.13 : Other locations of increased risk**

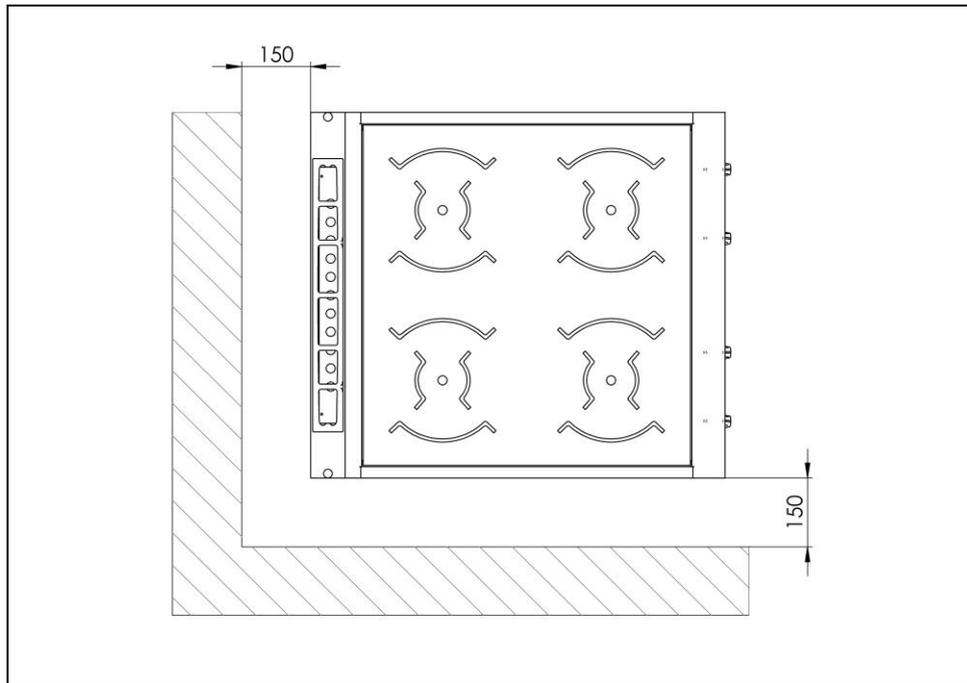
It is recognized that there may be locations of increased risk of electric shock other than those specifically addressed in Part 7 of BS 7671. Examples of such locations could include laundries where there are washing and drying machines in close proximity and water is present, and commercial kitchens with stainless steel units, where once again, water is present.

Where because of the perception of additional risks being likely, the installation designer decides that an installation or location warrants further protective measures, the options available include:

- Automatic Disconnection of Supply (ADS) by means of a residual current device having a residual operating current not exceeding 30mA;
- Supplementary protective equipotential bonding; and
- Reduction of maximum fault clearance time.

The provision of RCDs and supplementary bonding must be specified by the host organization's appointed installation designer or electrical contractor and installed by a suitably qualified and competent electrician so as to comply with Regulations 419.2 and 544.2

## 6.1 SITING / CLEARANCES

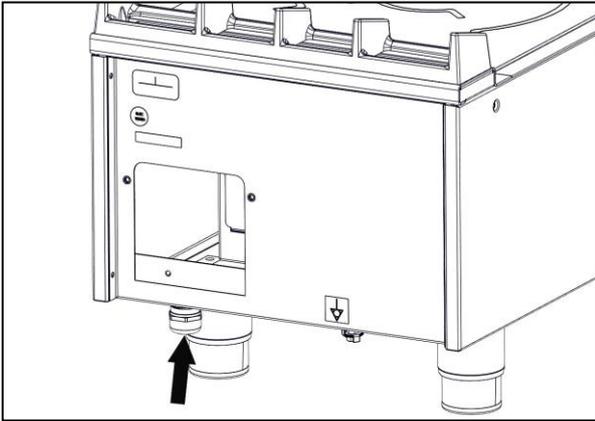


**CAUTION: WALLS CLOSER THAN 150mm TO THE APPLIANCE MUST BE NON COMBUSTABLE. IF SITING THE NECESSARY CLEARANCES TO ANY CUMBUSTIBLE WALL MUST BE THE LARGEST FIGURE GIVEN FOR INDIVIDUAL APPLIANCES INSTRUCTIONS.**

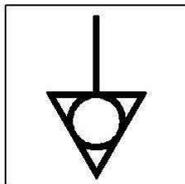
## 6.2 ELECTRICAL SUPPLY AND CONNECTION

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.

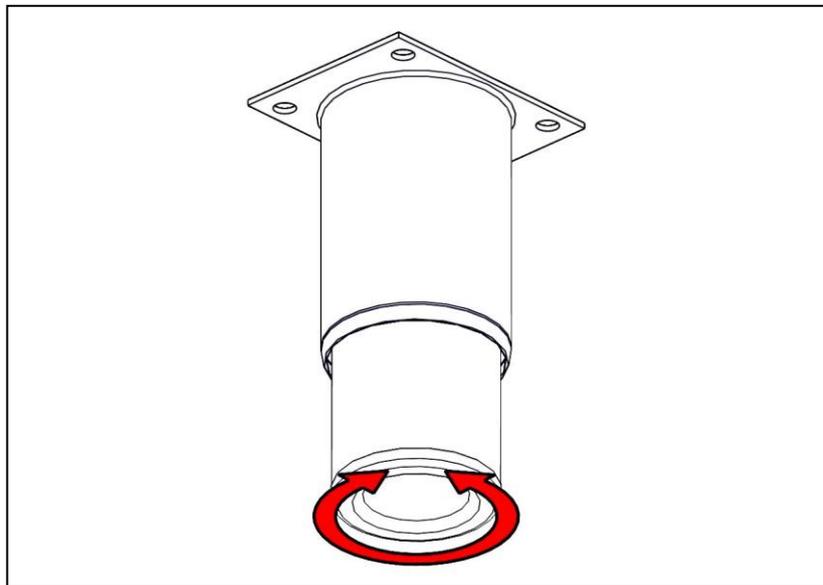
PHASE I	PHASE II	PHASE II	NEUTRAL	EARTH
Brown	Black	Grey	Blue	Green/Yellow



**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.

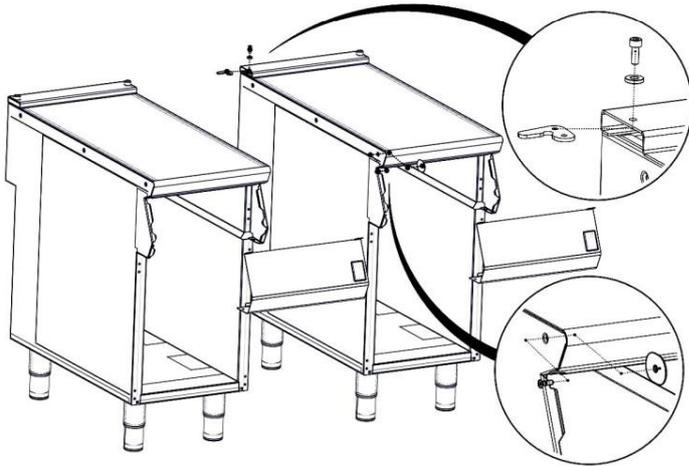


**PLEASE FILL OUT THE INFORMATION TABLE ON THE FRONT COVER AFTER COMMISSIONING.**

## 6.6 SUITING

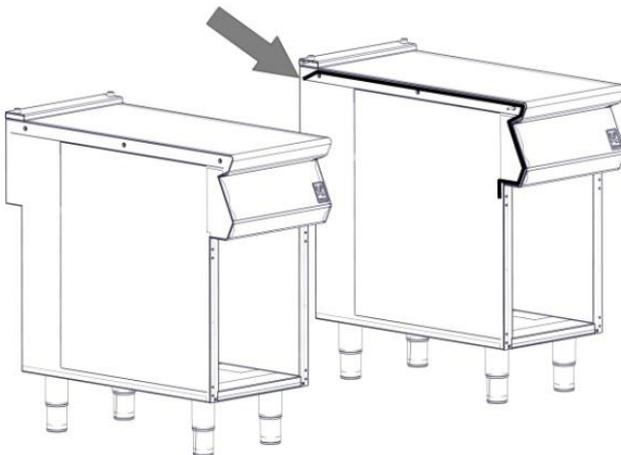
**“Patent No. GB 2540131”**

- 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.

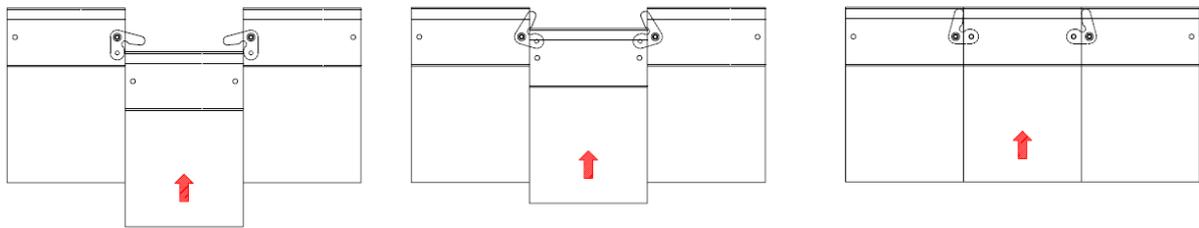


**NOTE:** The DLS system is designed to give a quick and easy suiting solution. If you require an improved seal between appliances we recommend you use, a food grade, high temperature silicon sealant. This can be supplied by Falcon part no – 523400021

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



6.6.6 Slide suited units into position.

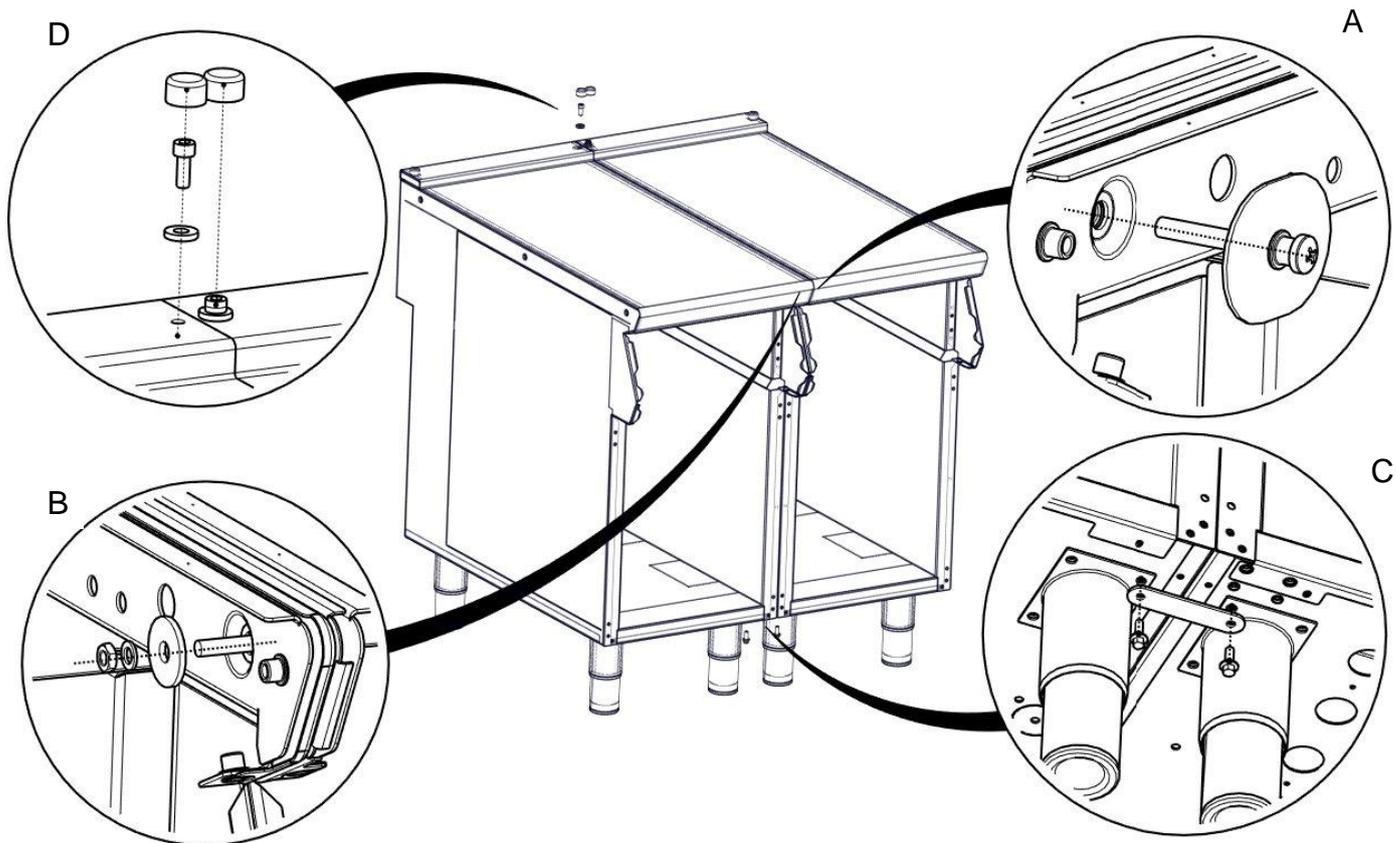


6.6.7 (A) Right hand unit: Screw the M5 x 40 screw (supplied in the kit) into one of the suiting plates as shown and then insert through the front fixing holes of both units.

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.



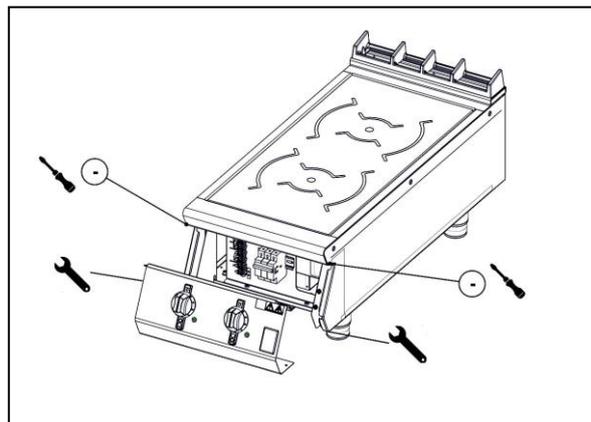
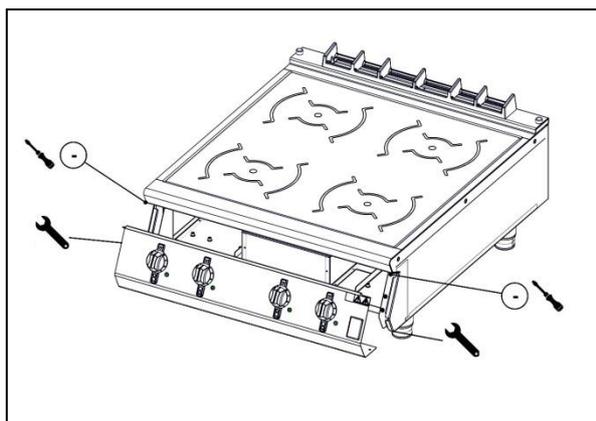
6.6.11 Replace control panel.

## 7.0 SERVICING AND CONVERSION



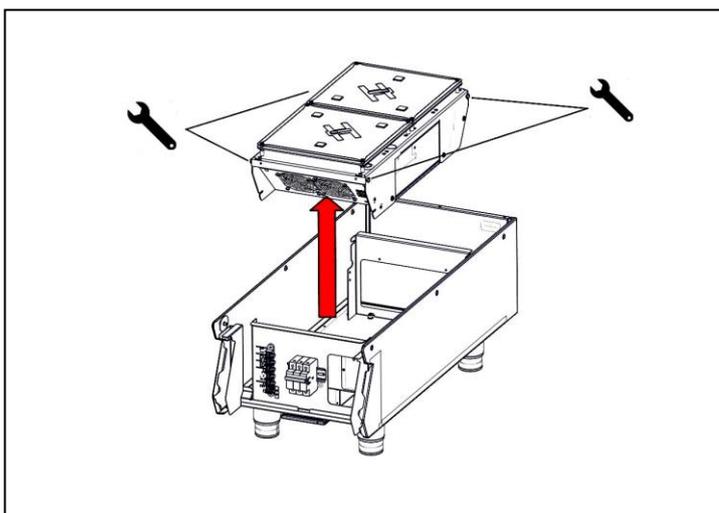
**BEFORE ATTEMPTING ANY MAINTENANCE, ISOLATE THE APPLIANCE AT THE MAINS ISOLATING SWITCH AND TAKE STEPS TO ENSURE THAT IT CANNOT BE INADVERTENTLY SWITCHED ON.**

### 7.1 CONTROL PANEL



7.1.1 Remove control panel as shown.

### 7.2 REMOVING THE GENERATOR

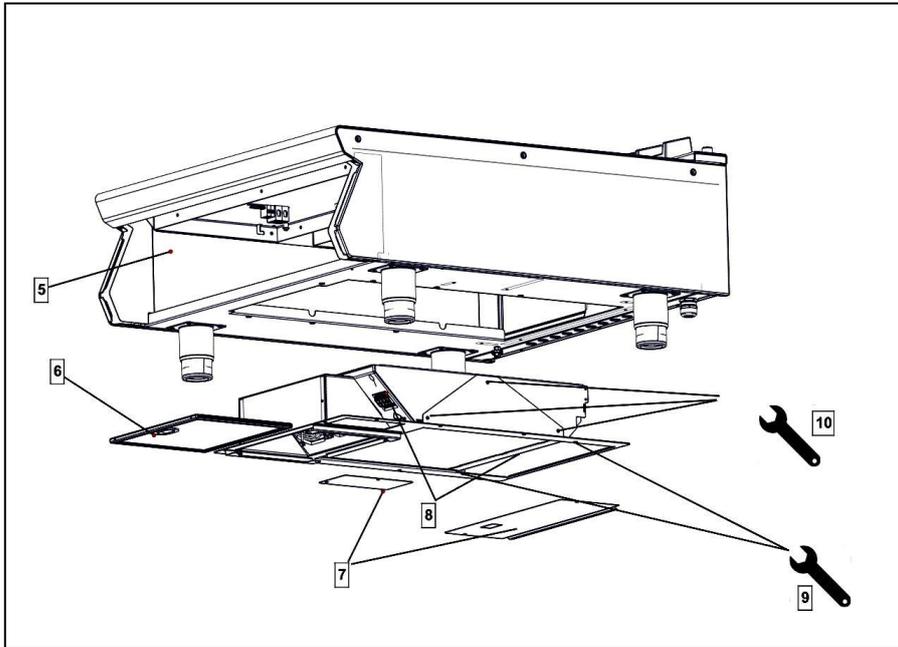


7.2.1 i9042/i9043 - Remove the control panel see 7.1.

7.2.2 Remove the hob see 7.4.

7.2.3 Disconnect the power cables to the generator.

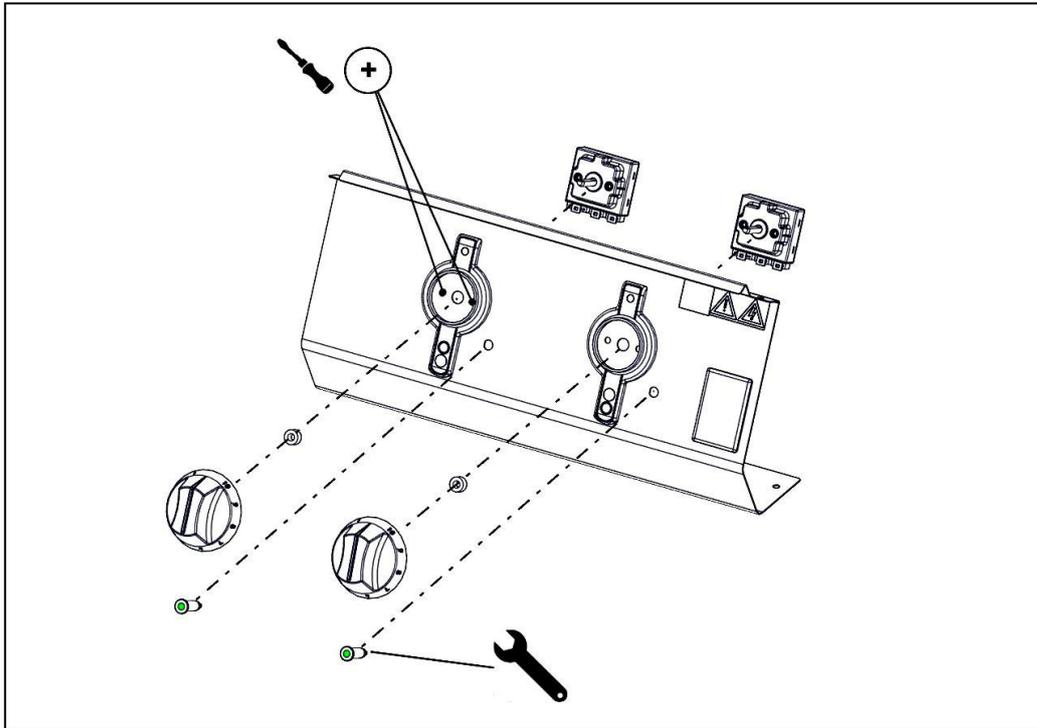
7.2.4 Unscrew the 4 hex bolts and remove.



- 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

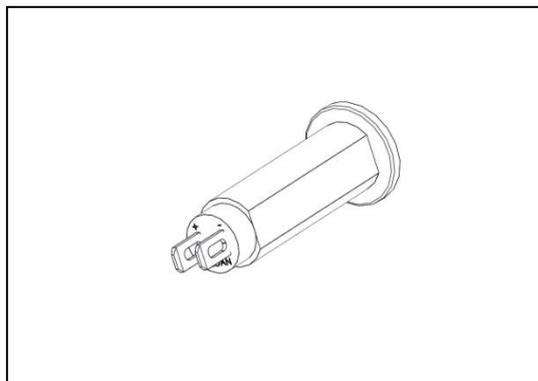


7.3.2 Control switch:- Identify wires that relate to switch and L.E.D attached to generator unit and disconnect.

7.3.3 Unscrew and remove as shown.

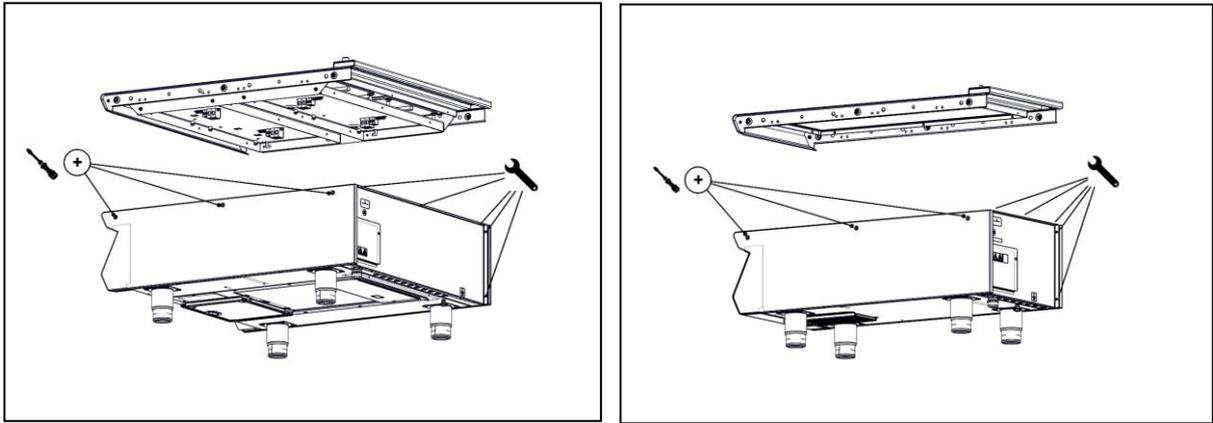
7.3.4 Re-assemble in reverse order.

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.**

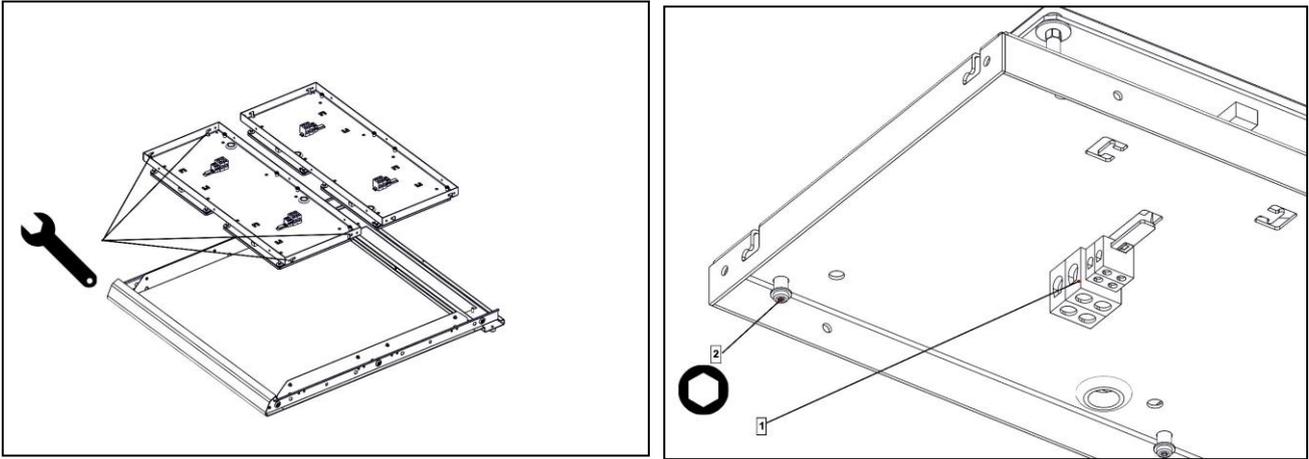


**WHEN REPLACING COILS, ENSURE THAT SPACERS ARE IN POSITION AND ONLY FITTED WITH A SINGLE, LAYERED SPACER AS INDICATED.**



**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.

### SUPPLY PROTECTION DEVICE

The appliance is fitted with a miniature circuit breaker (MCB) as additional protection against over current.

If unit fails to operate or show any operational indicators, Follow details in Error Code Table before calling a service engineer. The symptoms may indicate a failed induction generator

### ERROR CODES

DO NOT remove or attempt to repair or replace ANY part or parts of this appliance other than the air intake filter.

If an error occurs within the unit, the control panel LEDs will flash to indicate an error code.

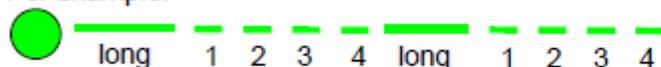
The error code list that follows will help identify the faulty component.

In the "action by user" list, you should follow the action listed, **before contacting a Service Engineer.**

There are two different error types:

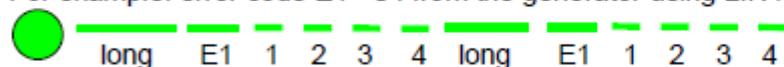
- Generator errors (E1)
- Digital control errors(E2)

**Generator errors** are faults detected by the generator, faults can be detected according to the duration and frequency of the green light blinking. When using potentiometer knob, the green lamp lights one time long and then short regular flashes. For example:

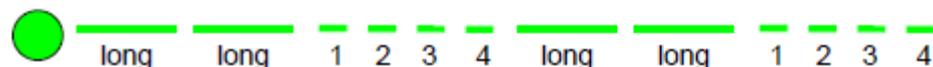


When using LIN knob, the green lamp lights one time long, one medium flash (E1) and then short regular flashes. The number of these short flashes is the error number. This pattern is constantly repeated.

For example: error code E1 - 04 from the generator using LIN knob:



**Digital control errors** are faults from the digital controls. On the display appears "E2", the green lamp lights two times long and then short regular flashes. The number of these short error flashes is the error number. The pattern is constantly repeated.

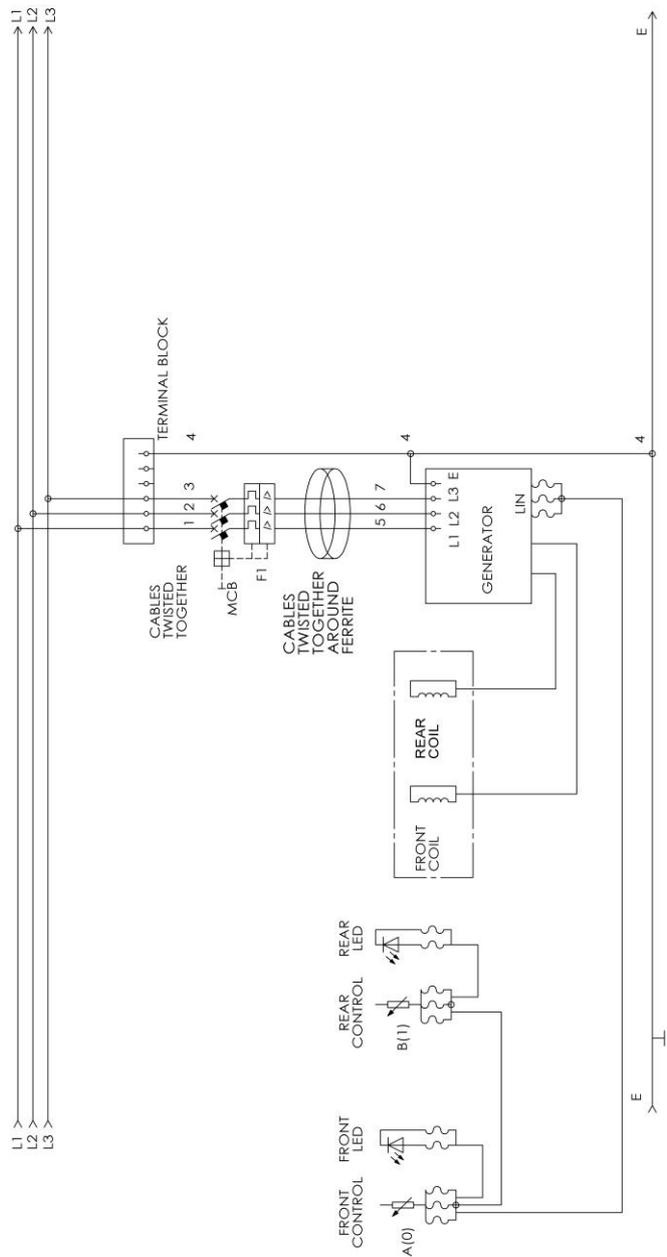


**Note: Most faults can be rectified by simply switching the unit off for 10 seconds. After this time, turn the power back on at mains supply. If the fault continues to occur after this action then please refer to the table. The following codes can be assessed by the user; any others will require a service engineer.**

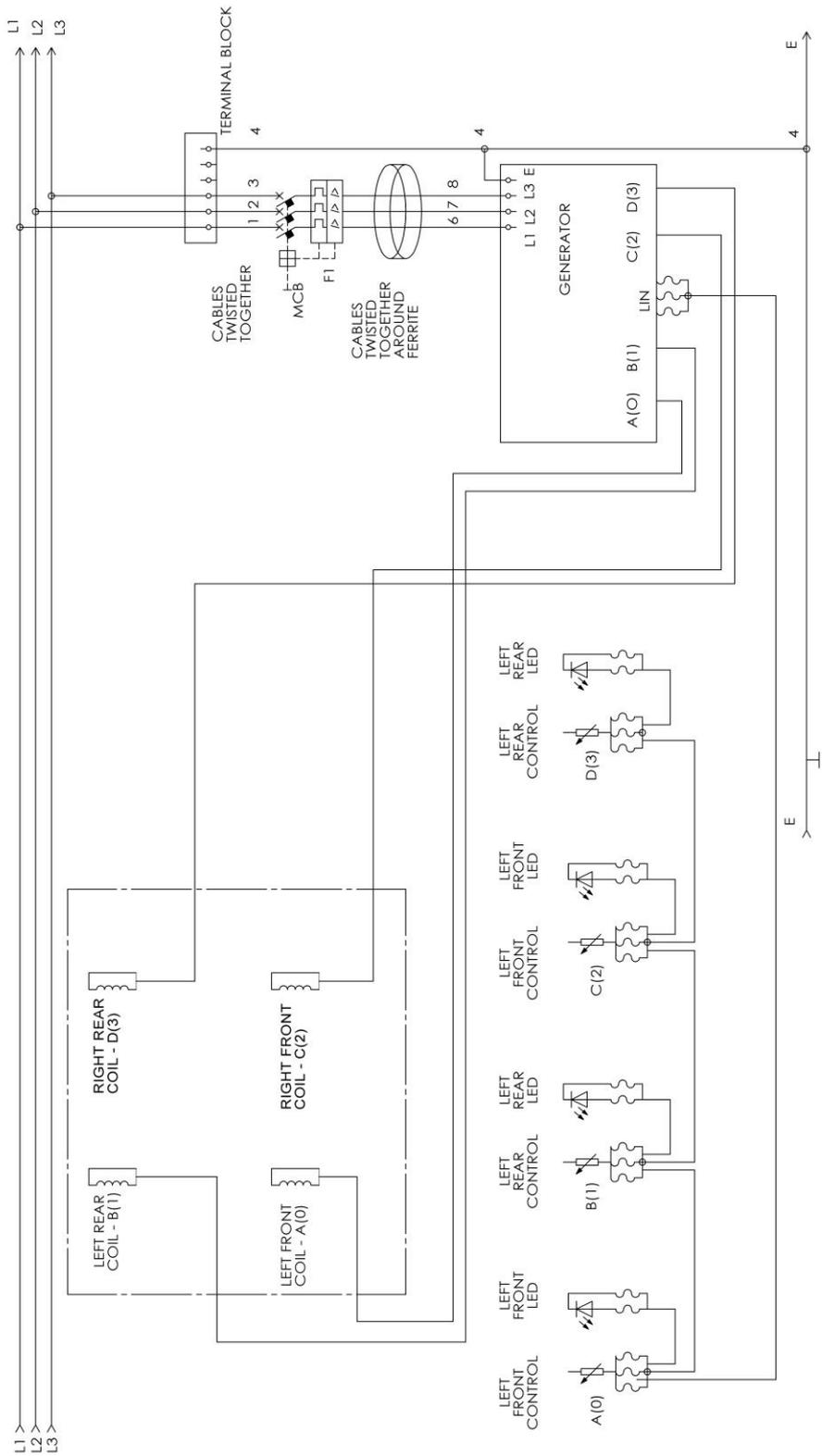
<b>Error</b>	<b>Name</b>	<b>Cause</b>	<b>Corrective action</b>
<b>E1-04</b>	<b>Cooking zone temperature too high.</b>	Pan empty	Remove pan, switch off Appliance and wait a couple of minutes for the appliance to cool
<b>E1-06</b>	<b>Internal Temperature too high</b>	Air routes blocked.	Switch off appliance, clean air units
<b>E1-07</b>	<b>Coil Temperature.</b>	Coil temperature too high.	Remove pan, switch off appliance for a couple of minutes.
<b>E1-15</b>	<b>Empty Pan protection.</b>	Empty Pan.	Remove pan, switch off and wait for a couple of minutes until the cooking field has cooled down.

# 9.0 CIRCUIT DIAGRAM

i9042/3 Circuit Diagram

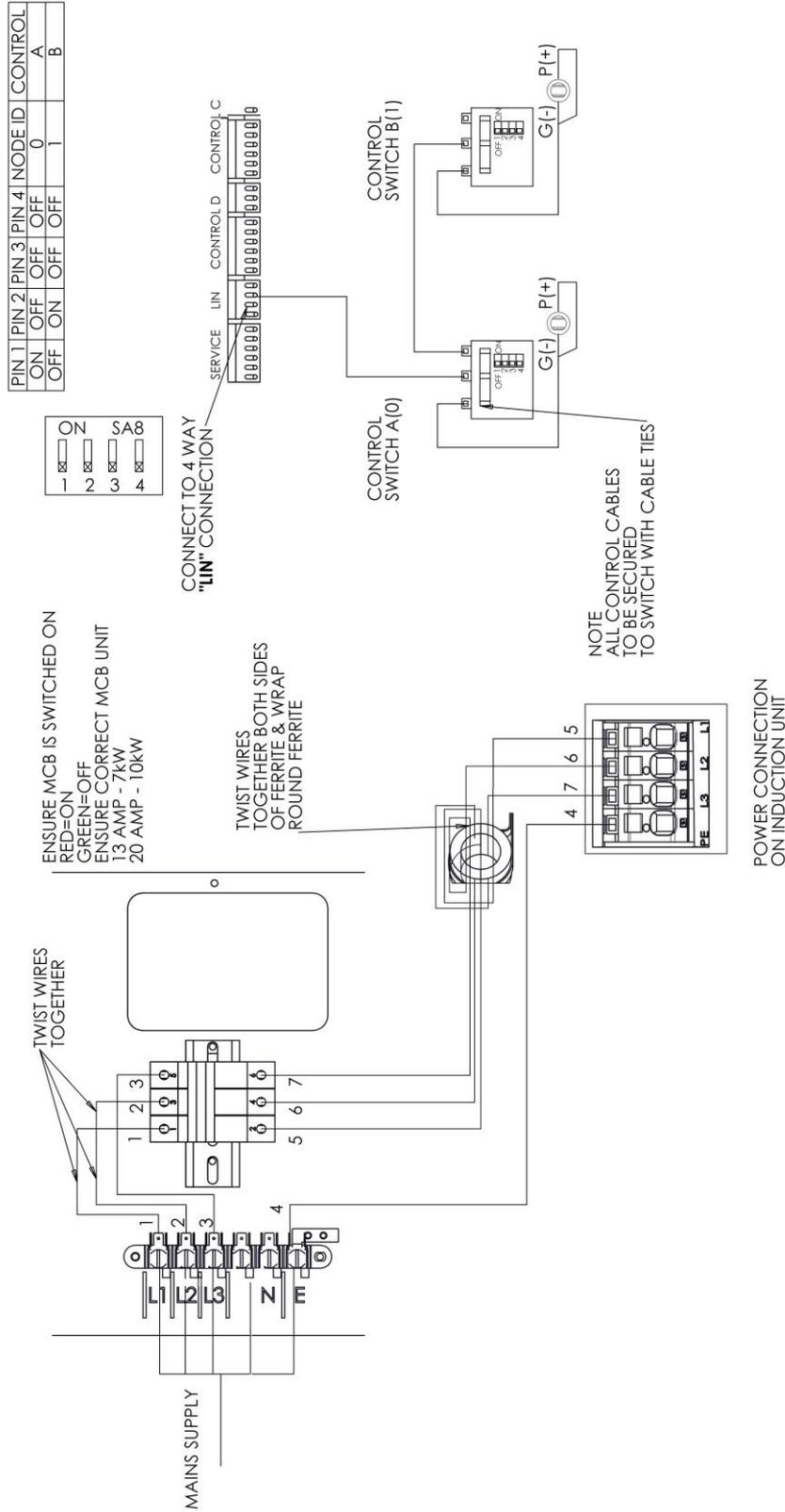


# i9084/5 Circuit Diagram



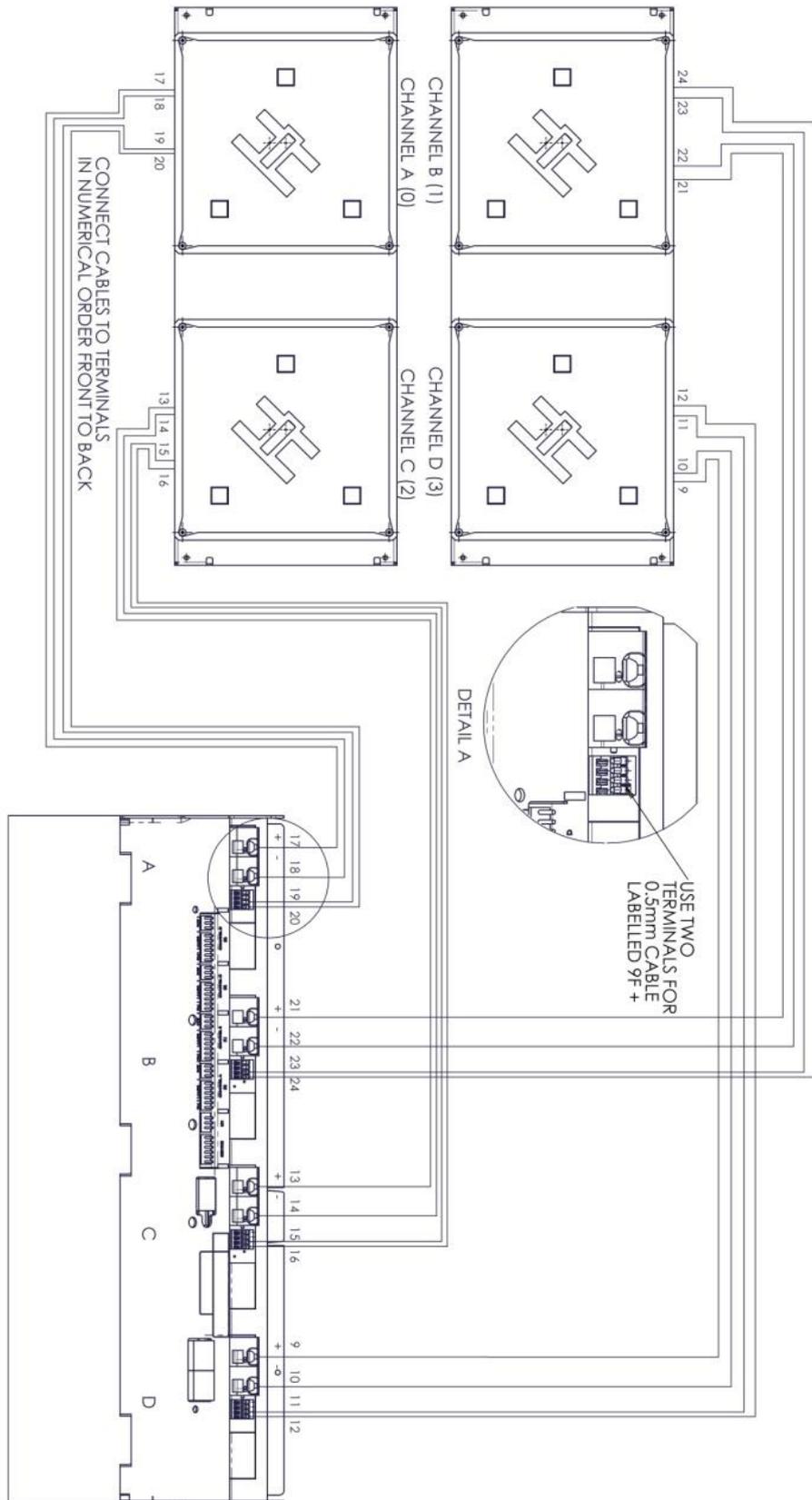
# 10.0 WIRING DIAGRAM

i9042/3 Wiring diagram





# 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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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.