



# **F900 SERIES**

**User, installation and servicing instructions**

## **SOUS VIDE**

**E9640**

Read these instructions before use

**DATE PURCHASED:**

**MODEL NUMBER:**

**SERIAL NUMBER:**

**DEALER:**

**SERVICE PROVIDER:**

**T100984**

Rev No: Ref 3  
Published: 19/09/2017

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. 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



SCREWDRIVER



SPANNER



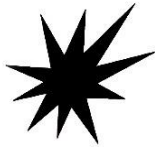
COOKING OIL



GREASE



WARNING



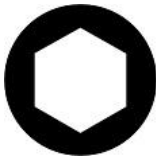
SPARK IGNITION



FLAME



VIEWPORT



ALLEN KEY



IGNITER



C SPANNER



TORX HEAD



- This appliance may be discoloured due to testing.
- 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: safety (installation & use) regulations, health and safety at work act, local and national building regulations, fire precautions act.
- To prevent shocks, this appliance must be earthed.
- This unit is fitted with an equipotential connection at the rear on the base.
- This appliance has been CE-marked on the basis of compliance with the Low Voltage and EMC Directives for the voltages stated on the data plate.
- 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.
- 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.
- Check that no damage has occurred to the appliance or supply cord during transit. If damage has occurred, do not use this appliance.
- Installation, periodic testing, repair and fixed wiring connections should only be undertaken by a competent electrician.
- Ensure the supply cord is routed free from the appliance to avoid damage.
- We recommend supplementary electrical protection with the use of a residual current device (RCD).
- The appliance has been designed and approved to use Falcon kick plates; non Falcon kick plates could potentially adversely affect the performance of the appliance by restricting the air to the appliance.
- All apparatus connected to a potable water network and including water drain device has to be provided with an air break before its discharge to the drainage system. Type AA.

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## 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>				P.I.N		STD. EN			
<b>A</b>	Ser No.	<b>B</b> MODEL		<b>C</b> TYPE		I.P			
<b>D</b>	Cat.	II2H3B/P	I3+	II2E3B/P	I3B/P	II2H3+	I2E	I2H	I3B
<b>E</b>	p mbar	20;30;50	28-30/37	20;30;50	30;50	20;28-30/37	20	20	28-30
<b>F</b>	GAS TYPE	G20		G30		G31			
<b>G</b>	GAS RATE	m3/h		kg/h		kg/h			
<b>H</b>	Σ Qn	KW		KW		kW			
<b>I</b>	EL.	Hz							
<b>J</b>	Σ kW	kW		kW		kHz			
<b>K</b>		kHz		kHz		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

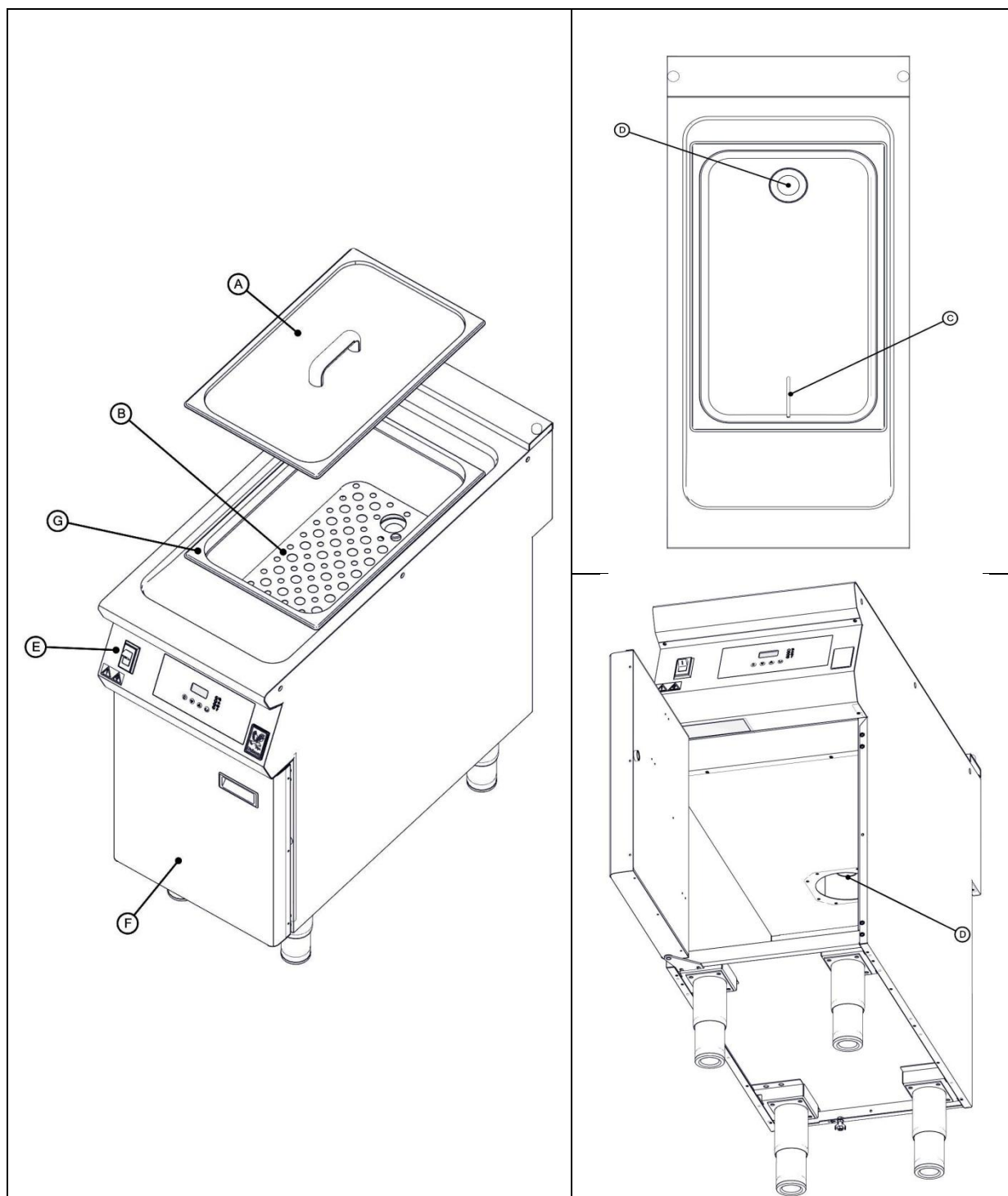
**J** - Total Electrical Power

**K** - Magnetic Field Frequency

**L** - Electrical Phase Loading

## 2.0 OPERATION

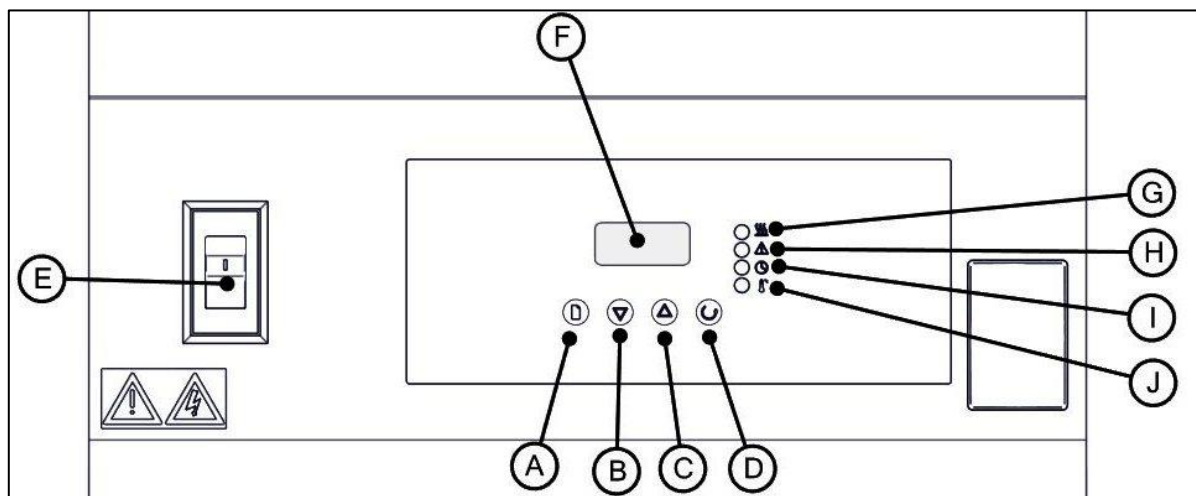
### 2.1 COMPONENT PARTS



- A - Lid
- B - Perforated Plate
- C - Temperature Thermocouple
- D - Drain
- E - Control Panel

- F - Door
- G - Tank

## 2.2 CONTROLS



- A - Function
- B - Down Arrow
- C - Up Arrow
- D - Run
- E - ON/OFF Switch

- F - Display
- G - Heating Indicator
- H - Error Indicator
- I - Timer Indicator
- J - Set Temperature Indicator



**DO NOT PAT TEST THE WATER BATH UNLESS IT  
CONTAINS WATER**

**DO NOT FLASH TEST !!**

## **2.3 USING THE APPLIANCE – SWITCHING ON**

2.3.1 Fill the tank with water or oil prior to connection to an electrical supply.

2.3.2 As a minimum the tank must be half full with water/oil. As a maximum the water/oil level must not exceed the ridge in the tank.



**DO NOT RUN BATH EMPTY OR ALLOW TO RUN DRY**

2.3.3 Switch ON using the power switch located on the control panel. The switch is illuminated and the unit performs a self test. All segments of the 3 digit LED display and indicators illuminate.

2.3.4 If the water/oil drops below the recommended level, or the unit is inadvertently switched on without water a “FILL” warning message appears on the display as a visual alert. The heaters will cycle on and off until the correct level is achieved.

2.3.5 To reset the low liquid level warning, top up liquid and the controller will auto reset.

2.3.6 Switch OFF using the power switch. All current temperature and time values remain in memory when you have finished using the bath.

## **2.4 USING THE APPLIANCE – SETTING TEMPERATURE**

2.4.1 Press and hold the down arrow to display temperature.

2.4.2 Use up and down arrows to select the required temperature. Display flashes between set and actual temperature values, then reverts to actual water temperature.

2.4.3 The water bath is now set and will heat and control the water at the set temperature.

2.4.4 In the event of the over or under temperature alarm being illuminated do not touch the liquid as it may be very hot or cold.

2.4.5 Always use a lid when operating at temperatures above 60°C for continued optimal temperature control.



**TAKE CARE WHEN LIFTING THE LID – STEAM VAPOURS CAN CAUSE SCOLDING.**

2.4.6 The water bath is designed primarily for sous vide/low temperature method using water. If oil is used for direct cooking, the bath will self adjust to oil. If reverting to water you may need to run the bath a couple of times in order that the controller relearns/adjusts its parameters for water and vice versa. When heating oil the FILL message may be displayed. This is due the nature of the oil heating process. Oil heats in layers and when the set temperature is reached the FILL message will stop. To speed up the heating process the oil can be stirred occasionally taking care to avoid spills.

2.4.7 Use only water or food grade oils within their specified temperature range. If the alarm lamp is illuminated the liquid temperature may be above its recommended maximum



**IF THE WATER BATH FAILS TO MAINTAIN WATER/OIL TEMPERATURE OR TO HEAT UP, PLEASE ENSURE THERE IS SUFFICIENT WATER TO MEET THE MINIMUM LEVELS. WE RECOMMEND THIS IS CHECKED REGULARLY WHILE THE WATER BATH IS IN USE.**

## **2.5 USING THE APPLIANCE – SETTING TIME**

2.5.1 Press and hold the function button until “t” appears.

2.5.2 Use arrows to select time required. Time can be set between 00:01 and 99:59.

2.5.3 Press function button to confirm.

## **2.6 USING THE APPLIANCE – TIMER OPERATION**

2.6.1 Press run button to start timer.

2.6.2 Press up arrow to view time remaining.

2.6.3 An audible beep and END message indicate timed period has finished. Press RUN to deactivate beep and clear the message.

2.6.4 To pause timer press RUN. To deactivate timer press and hold RUN button.

2.6.5 If power is interrupted during the timer mode the display shows “P.OFF”. Press and hold RUN button to clear. Timer mode will then continue.

## 3.0 CLEANING AND MAINTENANCE

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### 3.1 CLEANING



**DISCONNECT THE BATH FROM THE POWER SUPPLY PRIOR TO CLEANING**



**PLEASE ENSURE THAT THE WASHING AGENT AND SANITIZING AGENT ARE BSI ACCREDITED AND APPROVED BY THE H&S DEPARTMENT FOR USE ON KITCHEN EQUIPMENT AND STAINLESS STEEL WITHIN YOUR KITCHEN**

3.1.1 The Sous vide should be emptied at the end of each day. Allow the liquid to cool to 40°C before draining.

3.1.2 The exterior and interior surfaces should be washed, rinsed, dried and sanitized.

3.1.3 The above cleaning process should include the outlet on the base of the tank, paying particular attention to flushing the outlet and tap thoroughly.

3.1.4 In hard water areas lime scale can build up and reduce the efficiency of the water bath. Cleaning at the end of the day can prevent this but periodically it may be necessary to descale the bath. Add 1 litre of vinegar to the normal capacity of water and heat for 1 hour to 50°C.



**IF A VACUUM POUCH BREAKS WHILST IMMERSSED IN THE BATH IT MUST BE REMOVED AND THE BATH IMMEDIATELY CLEANED DOWN IN ACCORDANCE WITH THE BASIC CLEANING ROUTINE ABOVE.**

## 4.0 SPECIFICATION

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### 4.1 APPLIANCE WEIGHT TABLE

APPLIANCE	UNIT WEIGHT (kg)	PACKED WEIGHT (kg)
E9640	41	51

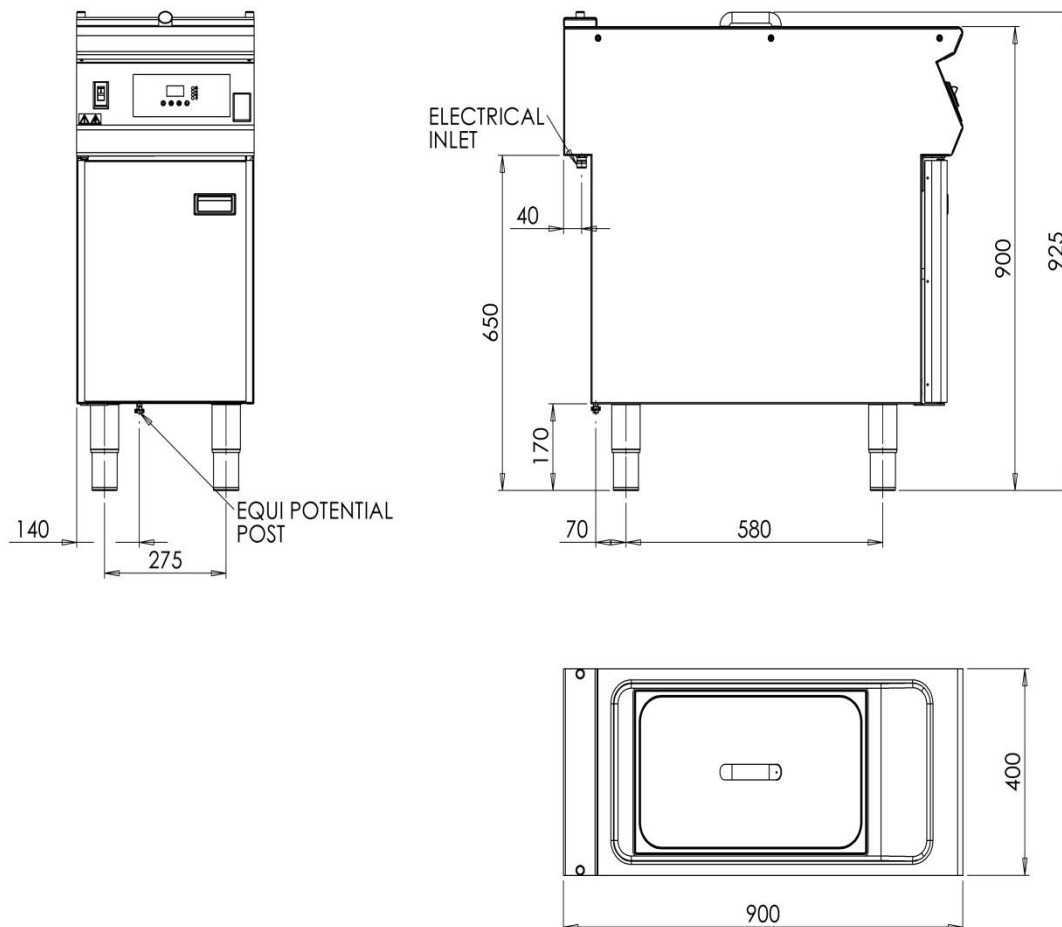
## 4.2 TECHNICAL DATA TABLE

	CURRENT			POWER
PHASE	MIN (A) @ 230V	MAX (A) @ 230V	ACTUAL (A) @ 230V	(kW) @ 230V
L1	7.83	9.14	8.7	2



IF ANY CURRENT IS OUT WITH THESE TOLERANCES, THE CAUSE MUST BE INVESTIGATED AND RECTIFIED.

## 5.0 DIMENSIONS / CONNECTION LOCATIONS



## 6.0 INSTALLATION

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### 6.1 SITING / CLEARANCES

This appliance can be sited next to a combustible wall.



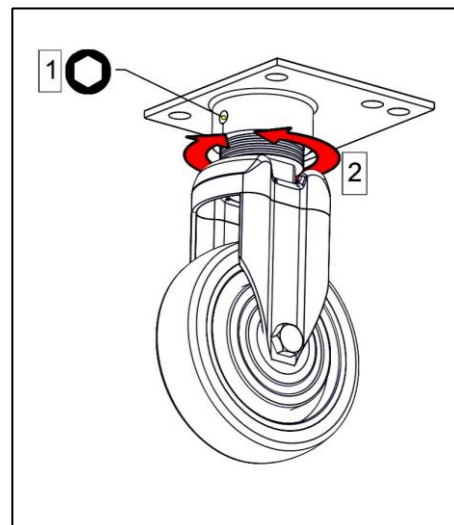
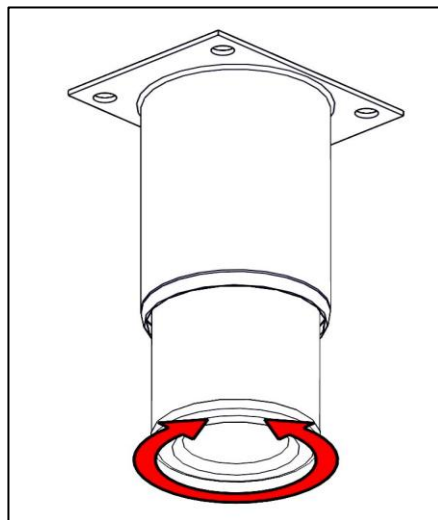
**IF SUITING THE NECESSARY CLEARANCES TO ANY COMBUSTIBLE WALL MUST BE THE LARGEST FIGURE GIVEN FOR INDIVIDUAL APPLIANCES INSTRUCTIONS.**

### 6.2 ASSEMBLY

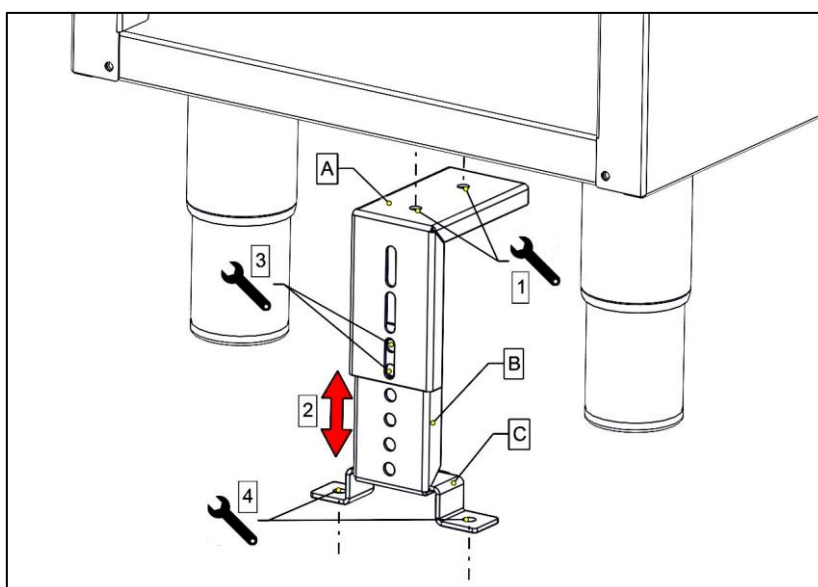
6.2.1 Each tank is supplied assembled complete, tested and calibrated.

6.2.2 Tanks are paired with a control panel, packed together – always keep together and install together – NEVER MIX UP !

6.2.3 Position appliance and level using feet adjusters or castors as shown below.



6.2.4 Appliance to be fixed to the floor using the supplied anti tilt device as shown below.



### 6.3 ELECTRIC SUPPLY & CONNECTION

A suitable supply cord is supplied that conforms to BSEN 50525-2-11, cable type H05VV-F. This appliance is designed to, and must, be connected to suitably rated isolator. It is recommended that the isolator be rated to 230V at 13A, with 3mm core wiring or all pole separation. If cord is damaged, it must be replaced by a suitably qualified person.

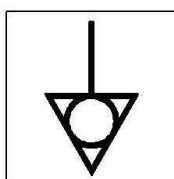
Live 1 ( Phase 1)	Brown
Neutral	Blue
Earth	Yellow/Green



**THIS APPLIANCE MUST BE EARTHED**

6.3.1 Drain connection - 1 1/4" threaded standard basin outlet for your connection.

### 6.4 COMMISSIONING



This appliance is also provided with a terminal for connection of an external equipotential conductor. This terminal is an 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.

If the appliance does not operate correctly please refer to section 9.0 and rectify the problem.



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

## **6.5 SUITING**

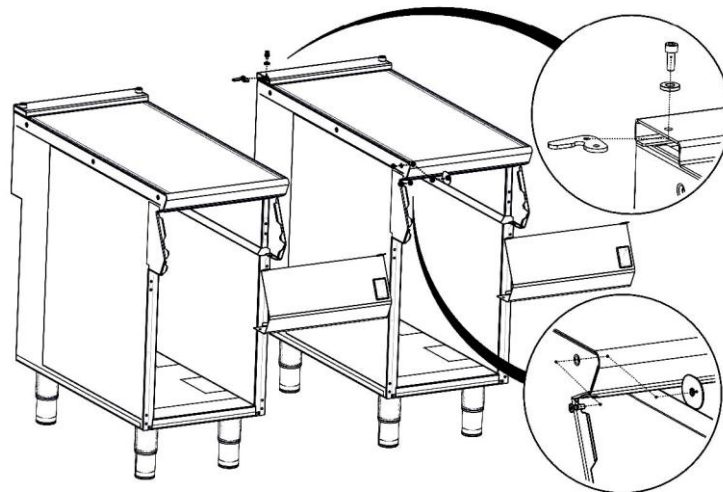
***“Patent No. GB 2540131”***

6.5.1 Before levelling and suiting units ensure the units are fully built, including all accessories and castings.

6.5.2 Undo the 4 fixing screws on the control panel and remove.

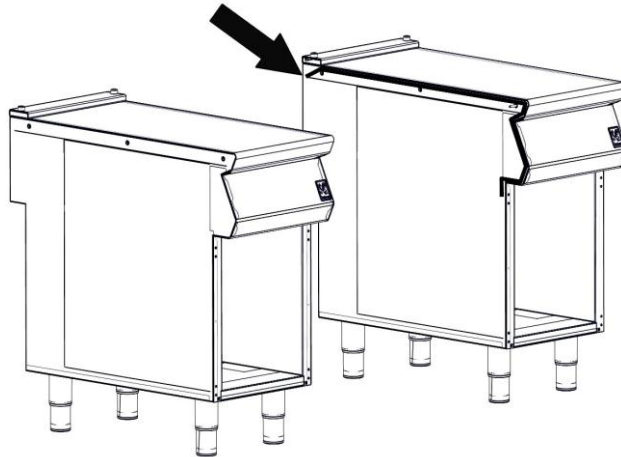
6.5.3 Remove the hob rear infill and replace with rear suiting plate and fixings.

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

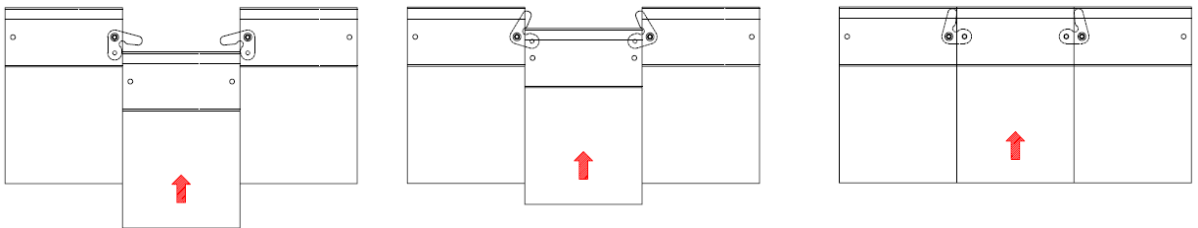


**NOTE:** The DLS system is designed to give a quick and easy suiting solution. If you require an improved seal between appliances we recommend you use, a food grade, high temperature silicon sealant. This can be supplied by Falcon part no – 523400021

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



6.5.6 Slide suited units into position.

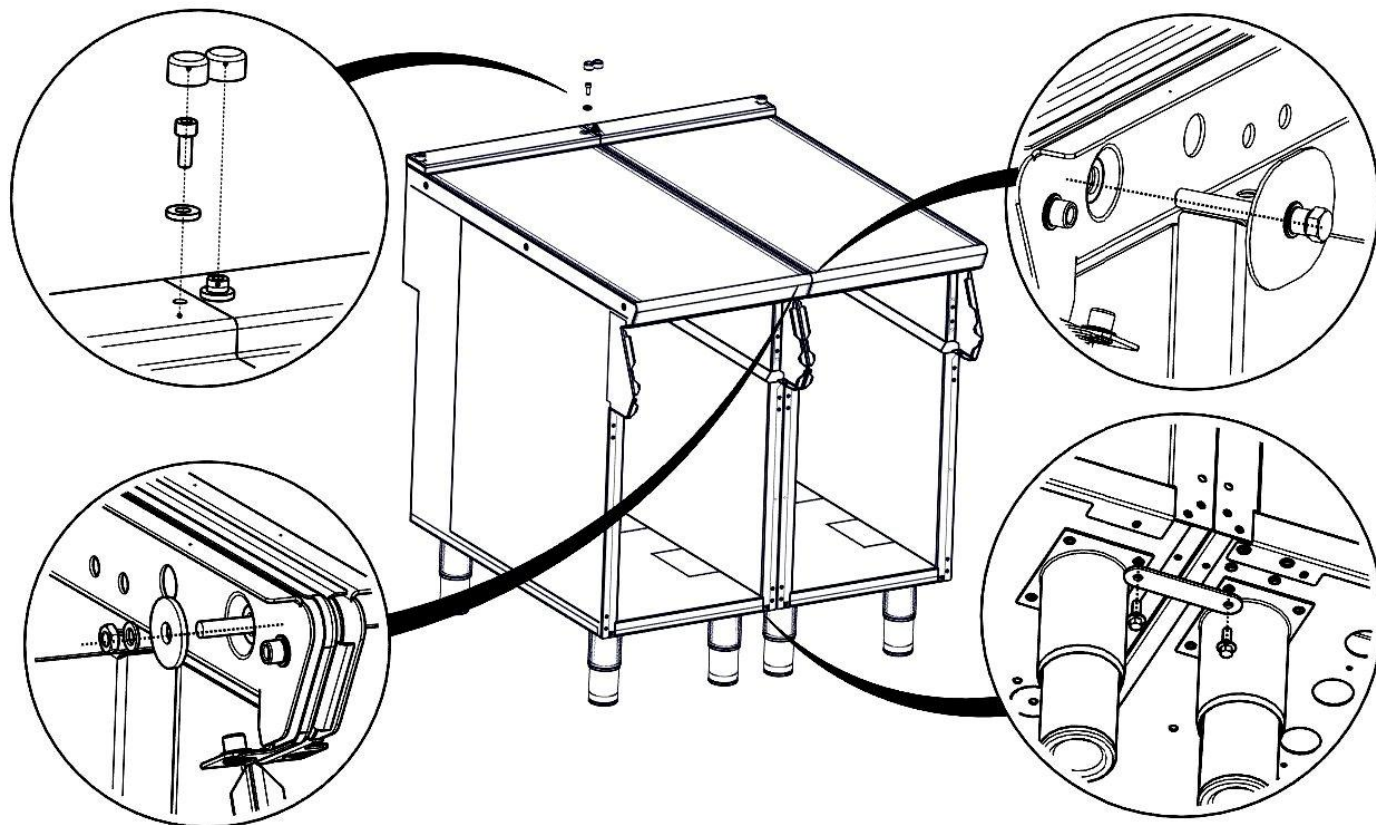


6.5.7 (A) Right hand unit: Screw the M5 x 40 screws (supplied in the kit) into one of the suiting plates as shown and then insert through the front fixing holes of both units.

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

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

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



6.5.11 Replace control panel.

## 7.0 SERVICING

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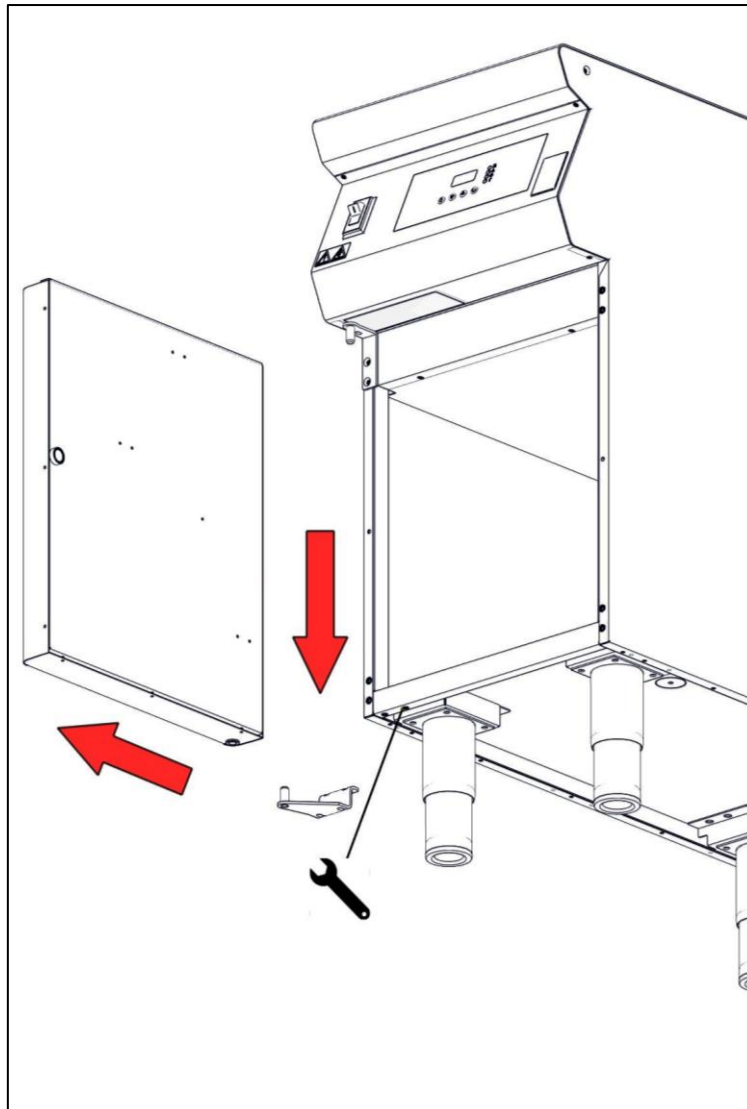


**BEFORE ATTEMPTING ANY MAINTENANCE, ISOLATE THE APPLIANCE AT THE MAINS SWITCH AND TAKE STEPS TO ENSURE THAT IT IS NOT INADVERTENTLY SWITCHED ON.**

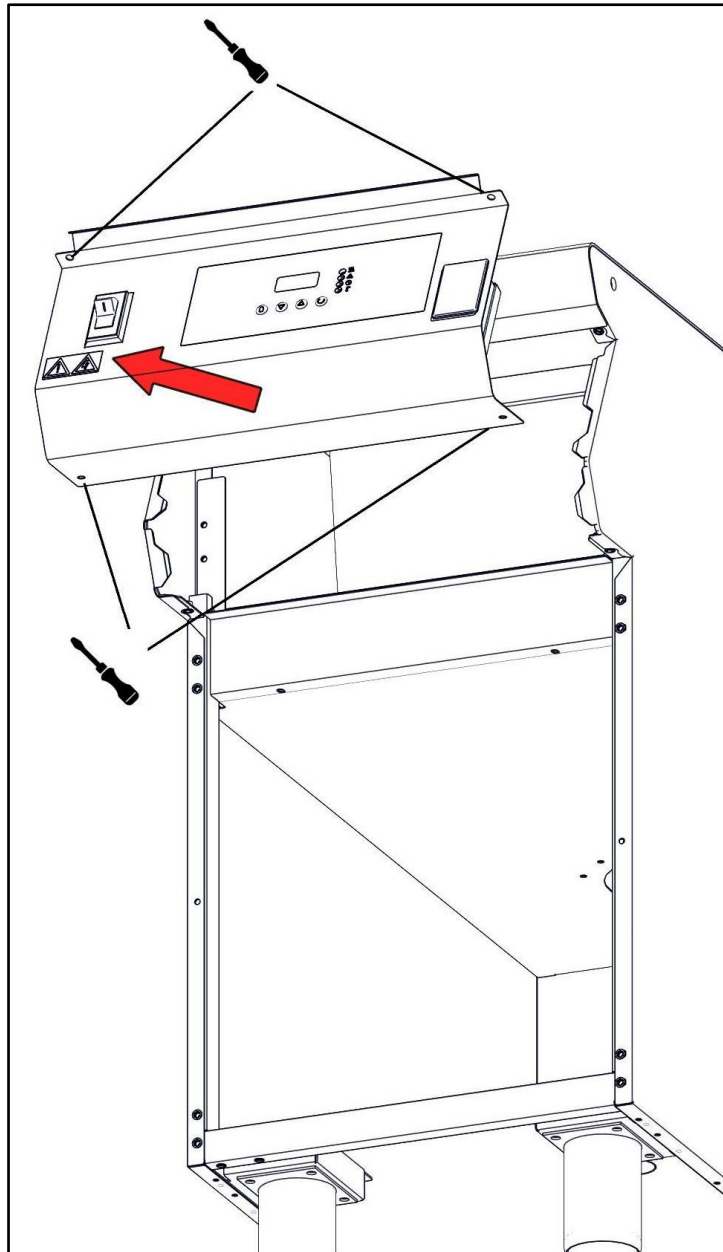


**BEFORE ATTEMPTING ANY MAINTENANCE, ENSURE THE WATER BATH IS EMPTY.**

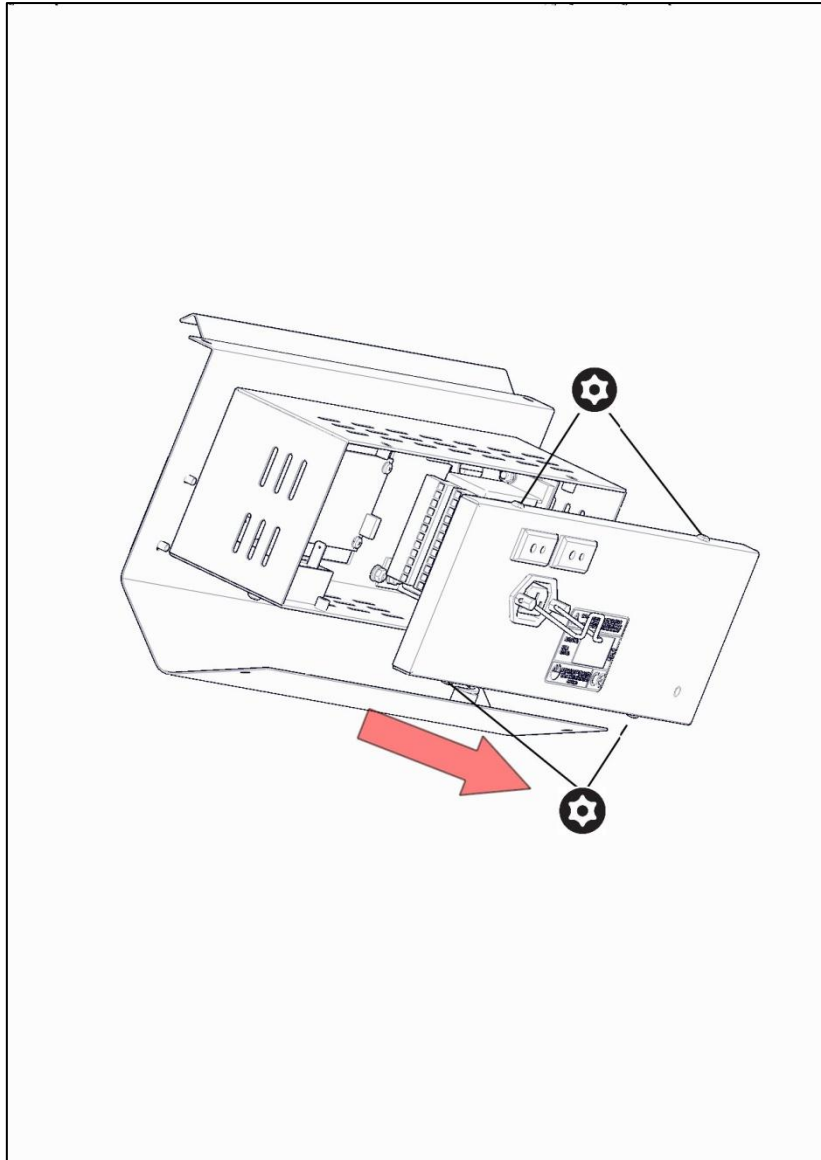
## 7.1 REMOVING/ REPLACING CONTROLLER



7.1.1 Remove door by unfastening the bolts holding the lower bracket.



7.1.2 Loosen the control panel assembly by undoing the securing screws. The control panel assembly can then be lifted forward to gain access to the controller box.

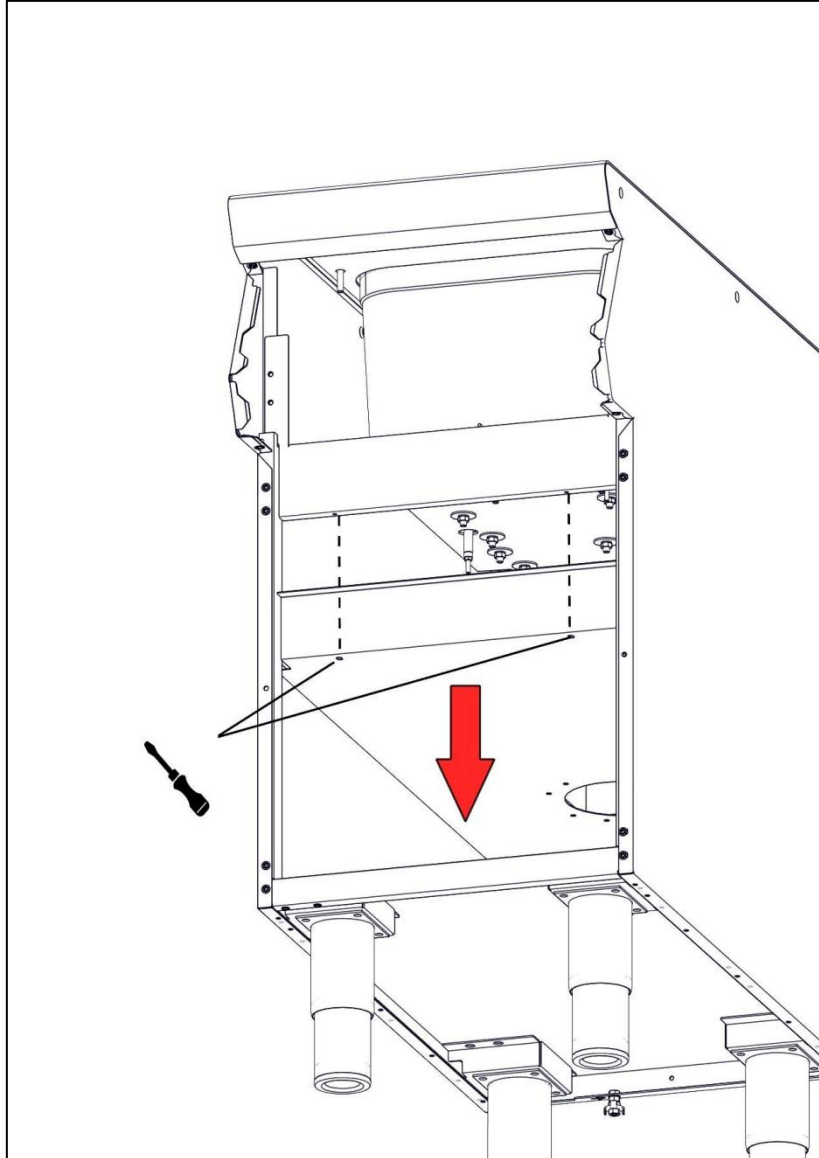


7.1.3 Undo the securing TORX screws on the back of the controller box and remove the panel.

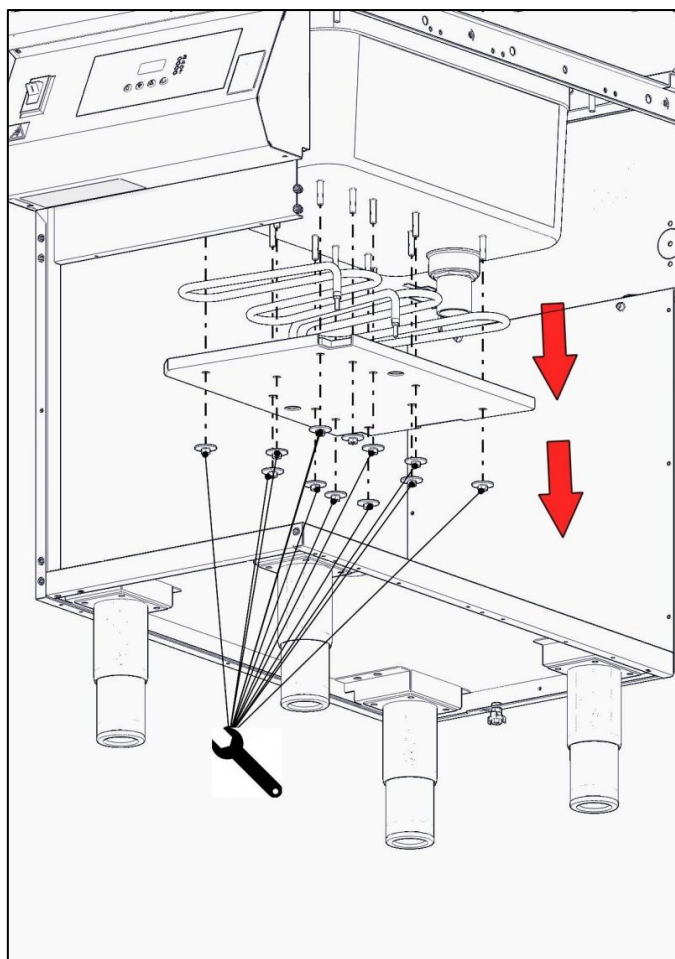
- 7.1.4 Disconnect the top green sensor connection blocks.
- 7.1.5 Disconnect the bottom black power connection block.
- 7.1.6 Carefully pull out the interlink cable from the controller. Leave the other end connected to the display.
- 7.1.7 Undo the two fixings from the controller. The controller should now be free and can be removed.
- 7.1.8 Fit the replacement controller ensuring that it faces the same direction as the one removed.
- 7.1.9 Secure in place using the securing screws.
- 7.1.10 Re-connect the interlink cable to the controller.
- 7.1.11 Replace the bottom green connection block observing the red line as before.
- 7.1.12 Ensure a firm connection is made on all replaced parts.
- 7.1.13 Replace controller box back panel and secure.
- 7.1.14 Refit control panel assembly and tighten into place.
- 7.1.15 Refit door by replacing bottom hinge.

## 7.2 REMOVE AND REFIT ELEMENTS

7.2.1 Remove door and control panel assembly per 7.1.1 & 7.1.2 the connectors should also be removed per 7.1.4 & 7.1.5



7.2.2 Remove screws at front of inner top cover allowing it to freely move off the rear nutserts.



7.2.3 Unscrew bolts attaching element assembly to base of pan. Element assembly can be slid off mounting studs, take care not to damage insulation (retain for replacement element).

7.2.4 Assemble replacement element and insulation and mount element assembly onto mounting nuts on base of pan, secure using nuts.

7.2.5 Ensure inner top cover is seated correctly on rear nutserts and secure using screws at front.

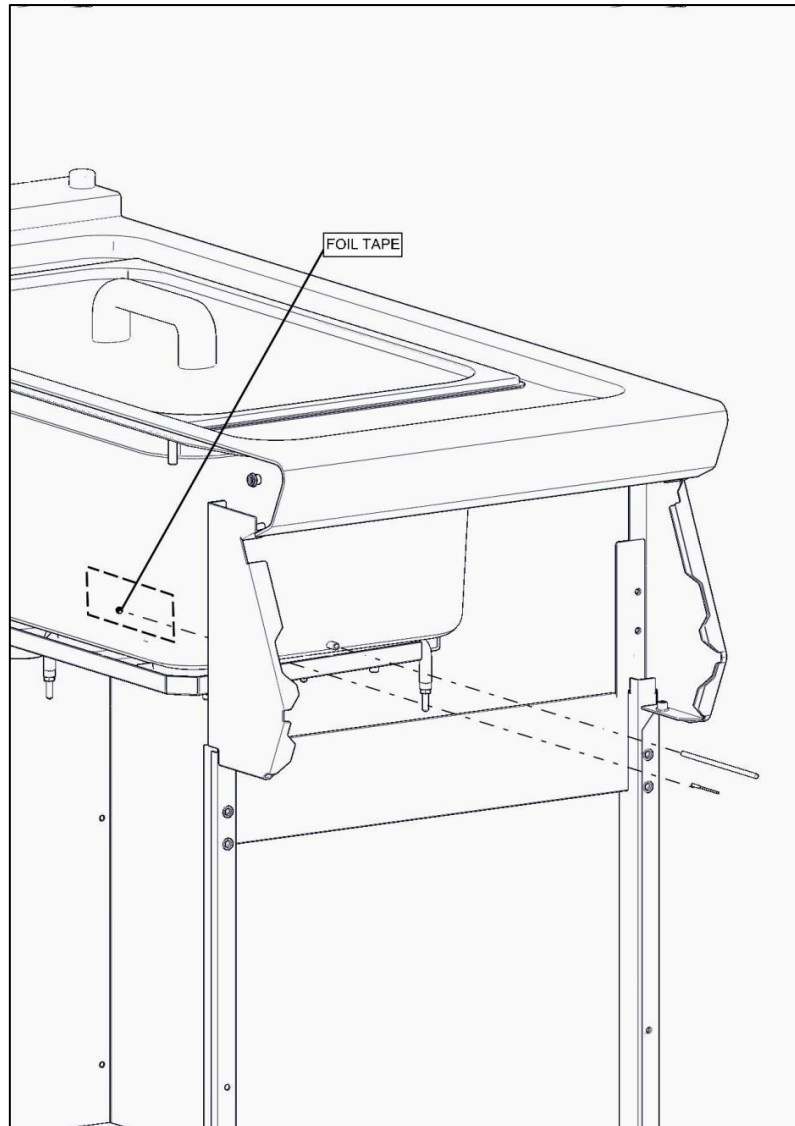
7.2.6 Refit control panel assembly per 7.1.14.

7.2.7 Refit door per 7.1.15.

## 7.3 REPLACING TEMPERATURE AND LOW LEVEL SENSORS

7.3.1 Remove control panel assembly per 7.2.1.

7.3.2 Remove inner top panel per 7.2.2.



7.3.3 Thermostat is located in a sleeve at the front centre of the pan, remove by sliding out of sleeve. Replace by sliding new thermostat into sleeve.

7.3.4 The low level sensor is taped to the side of the pan, remove and replace ensuring that the sensor is 40mm from base of pan.

7.3.5 Refit inner top panel per 7.2.5

7.3.6 Refit control panel assembly per 7.1.14.

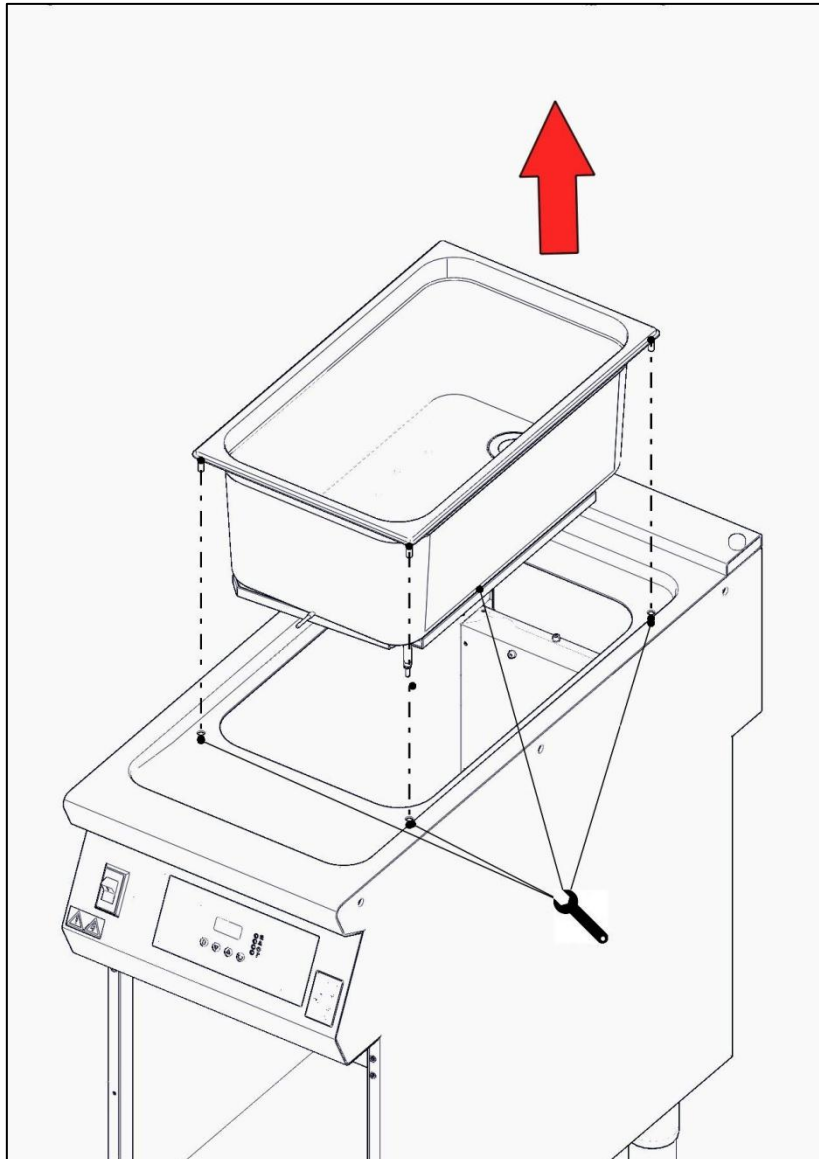
7.3.7 Refit door per 7.1.15.

## 7.4 TANK ASSEMBLY REPLACEMENT

7.4.1 Remove door and control panel assembly per 7.1.1 & 7.1.2

7.4.2 The connectors should be removed per 7.1.4 & 7.1.5

7.4.3 Remove inner top panel per 4.2.2.



7.4.4 Remove M6 retaining bolts and train washers for replacement.

7.4.5 The tank assembly can now removed by lifting vertically out of the hob taking care to damage temperature sensor or element tails when removing.

7.4.6 The seal should be positioned to allow the tank to be fitted with out distorting the seal.

7.4.7 The new assembly can now be fitted by lowering into the hob taking care not to damage the electrical parts. It is important the seal is flush with the hob all the way around the edge of the new tank.

7.4.8 The M6 bolts can now fastened, DO NOT over tighten this will damage the tank and seal. While tightening attention should be paid to the seal to ensure that it is still positioned correctly.

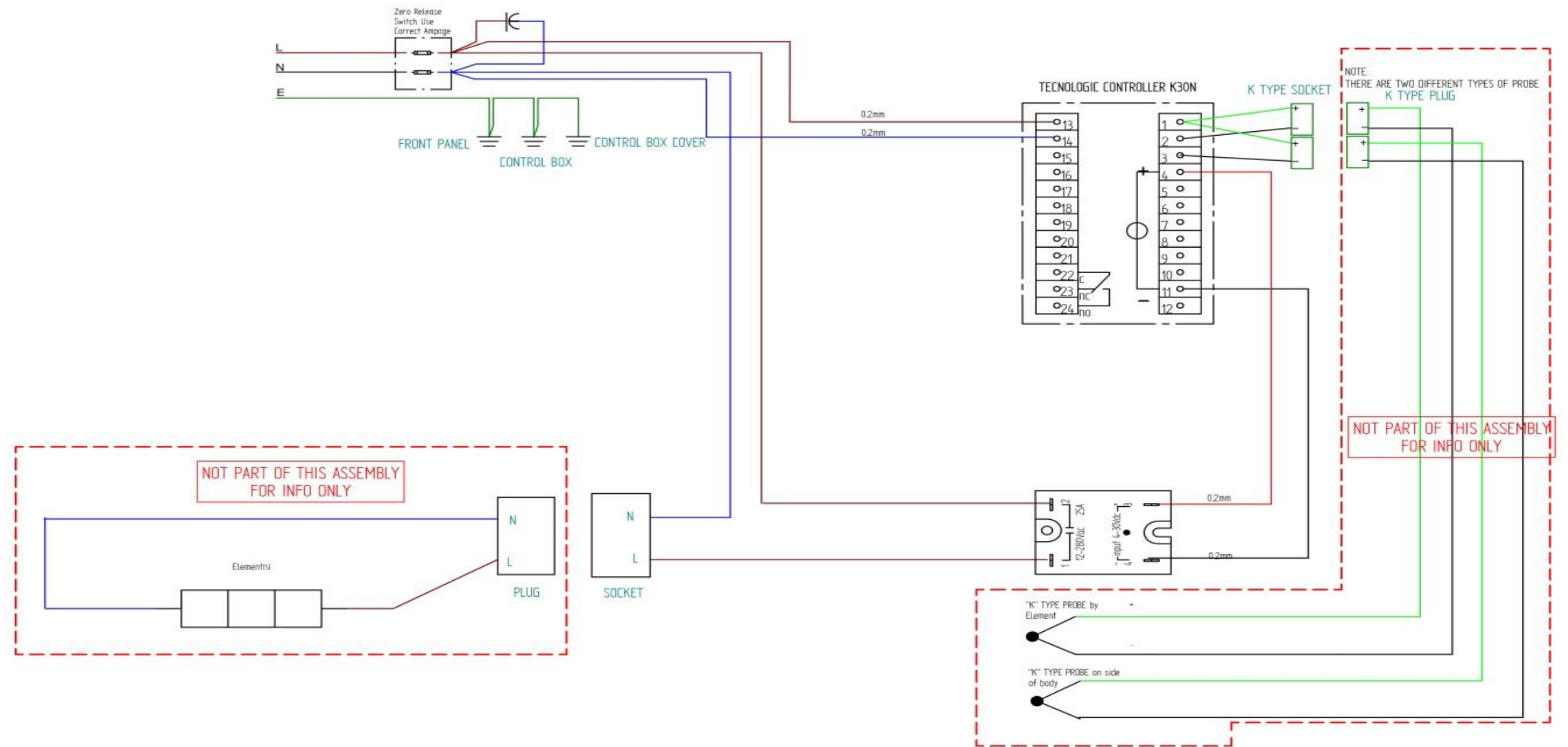
7.4.9 Refit inner top panel per 7.2.5

7.4.10 Refit control panel assembly per 7.1.14.

7.4.11 Refit door per 7.1.15.

7.5 WIRING DIAGRAMS

7.5.1 Wiring Diagram



## 8.0 ACCESSORIES

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## 9.0 FAULT FINDING

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CONTROLLER DISPLAY CODE	POSSIBLE CAUSES	REMEDY
oooo	Out of range – Over	Decrease temperature and/or time setting to within range.
uuuu	Out of range – Under	Increase temperature and/or time setting to within range.
----	Sensor break	Contact Service Engineer
ErAt	Fast auto tune unable to start	Measure value is too close to set point, press PAGE key to clear
NoAt	Auto tune not finished within 12 hours	Restart
oFFL	Display offline	Contact Service Engineer
oFFL	Signal break in controls caused by excessive moisture or steam	Contact Service Engineer
oFFL	Ribbon or connection break	Contact Service Engineer
P.oFF	Power interrupt during timer mode	Press and hold RUN key until display reverts to actual temperature
FiLL	Liquid level too low	Refill liquid to above minimum level
FiLL	Build up of lime scale	Descale as per maintenance instructions

## 10.0 SPARE PARTS

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PART DESCRIPTION	SPARES NUMBER
Control Panel Assembly	733670000
Tank Assembly	733670001
K30 Temperature Controller	733670002
IPX65 Switch	733670003
Solid State Relay	733670004
Low Level Sensor	733670005
Temperature Sensor	733670006

Element 1kW	733670007
10A Breaker	733670008
Door Assembly	533810000
Hinge Assembly	533810002
F900 Screw Cap Kit	533550009
Fixed Castors Set of Two	535400222
Swivel Castors Set of Two	530964340
Adjustable Leg 150mm	535480067

When ordering spare parts please quote the following:

**Model Number**  
**Serial number**

This information will be found on data plate attached to the appliance  
 Visit our website for further spares information.

## 11.0 SERVICE INFORMATION

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

**SERVICELINE CONTACT:**  
**(UK only)**  
**Phone: +44 (0)1438 363 000**

### Warranty Policy Shortlist

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