

# **DOMINATORPLUS**

## **User, Installation and Servicing Instructions**

# **GAS TWIN PAN FRYER**

G3845, G3845F

## Read these instructions before use

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

**T101112** Rev No: 2

Published: 29/10/2024

#### **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**

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#### 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. 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.

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### 2.1 GENERAL SAFETY







- 2.1.1 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.
- 2.1.2 These appliances have been UKCA/CE-marked based on compliance with the Gas Appliance Regulations/Product Safety and Metrology Regulations, Electrical and Electromagnetic Compatibility (EMC) Regulations/Directives for the Countries, Gas Types and Pressures as stated on the data plate.



- 2.1.3 This equipment is for professional use only and must be used by qualified persons.
- 2.1.4 Never leave this appliance unsupervised when in use and always turn products off at the end of service.



- 2.1.5 The installer must instruct the responsible person(s) of the correct operation and maintenance of the appliance.
- 2.1.6 Check that no damage has occurred to the appliance or supply cord during transit. If damage has occurred, do not use this appliance.



- 2.1.7 If fitted to the appliance, ensure the supply cord is routed free from the appliance to avoid damage.
- 2.1.8 Min-Level Mark: Oil should never be allowed to drop below the mark. Should this occur, top up immediately or switch off the fryer.



- 2.1.9 Suitable Protective clothing must be worn when topping up whilst the fryer is hot.
- 2.1.10 To prevent surge boiling. DO NOT EXCEED recommended loads or charge pan with over-wet food items. NEVER leave a working appliance unattended.
- 2.1.11 If the appliance is fitted with an oil bucket, take care when removing as oil bucket is heavy when full.
- 2.1.12 Training and Competence: To help ensure the safe use of this appliance there is a requirement for you to provide whatever information, instruction, training, and supervision as is necessary to ensure, so far as is reasonably practicable, the health and safety of all users.

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



- 2.1.14 Risk Assessment: As part of managing the health and safety of your business you must control any risks identified in your commercial kitchen. To do this you need to think about what might cause harm to people and decide whether you are taking reasonable steps to prevent that harm. This is known as risk assessment. It is important to consider the environment around the product as well as the product itself. For example, oil or food spills will present a significant risk so users so the need to immediately clean up such spills must be reflected in staff training.
- 2.1.15 Record the training that you provide and support it by providing safe system of work (SSOW) documents that set out procedures to be followed for potentially hazardous tasks.
- 2.1.16 For further help and information on risk assessments we would refer you to you the Health and Safety Executive website; <a href="www.hse.gov.uk">www.hse.gov.uk</a> document ref: risk assessment INDG163. International customers should default to the health and safety guidelines provided by your government body.

#### 2.2 INSTALLATION SAFETY



- 2.2.1 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.
- 2.2.2 The installer must instruct the responsible person(s) of the correct operation and maintenance of the appliance.
- 2.2.3 On gas appliances, only competent persons are allowed to service or convert the appliance to another gas type.
- 2.2.4 Put a documented system in place for periodic inspections, testing and maintenance of our gas/ electrical appliances. Check that the fixed electrical installation has been inspected and tested by a competent electrical contractor (e.g. NICEIC-approved or ECA member) as prescribed in BS7671, within the last 5 years.

#### 2.3 ELECTRICAL SAFETY



- 2.3.1 To prevent shocks, this appliance must be earthed.
- 2.3.2 This unit is fitted with an equipotential connection at the rear on the base.
- 2.3.3 Before attempting any maintenance, isolate the appliance at the mains switch and take steps to ensure that it is not inadvertently switched on.
- 2.3.4 We recommend, Supplementary electrical protection with the use of a type A residual current device (RCD).
- 2.3.5 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.

#### 2.4 GAS SAFETY



- 2.4.1 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.
- 2.4.2 Before Inspection, Servicing or Conversion, Turn Off Gas at isolator.

#### 2.5 FIRE SAFETY





Fryers can present various hazards in the catering environment if not correctly used, operated, and maintained. Hazards including fire, burns from hot oil, contact with hot surfaces, fumes from boiling cleaning chemicals, eye injuries from splashes and slips from oil spillages.

#### **Operator Competency and Training**

- 2.5.1 Ensure you are trained in the safe and proper use of the fryer and know how to turn it off and switch the power or gas off at the mains.
- 2.5.2 Ensure you are familiar with the kitchen fire safety procedures and the location and proper use of correct fire safety equipment.

#### Fryer Safety Equipment

2.5.3 Provide an appropriate BS compliant fire blanket, and an adequate number of fire extinguishers that comply with BS EN 3 (parts 1-6) and carry a BAFE or LPCB approval mark. At least one must be appropriate for use on electrical fires, and one for deep-fat fryers (Class F).

#### **Fryer Suppression System**

- 2.5.4 We recommend kitchen equipment and extraction systems are protected with a fire suppression system. Check your insurance as this may also be a condition of your policy.
- 2.5.5 Protect cooking and extraction equipment (including any associated extraction ductwork and hoods inside the building) by having an extinguishing system installed, in line with (or the equivalent of) LPS 1223. The system should include a local alarm, automatic activation by a detection system and manual activation located a safe distance away from the cooking equipment, preferably by a fire escape route door.

#### **Operational Fryer Safety**

- 2.5.6 Do not leave the fryer unattended when powered on or when it is in use.
- 2.5.7 Always switch the fryer off and replace the pan cover/ lid when not in use.

#### Cleaning

- 2.5.8 Ensure fryers are regularly cleaned serviced and maintained by a qualified and competent service provider, and there is enough room around the appliance to do so.
- 2.5.9 Ensure that the appliance, surrounding work area and extraction system are regularly cleaned, (at least weekly) to avoid the build-up of fats oils and greases that could present a fire risk. A deep clean should be undertaken at least every 6 months by a specialist contractor.

#### Oil Safety

- 2.5.10 Do not operate the fryer with no or low oil levels.
- 2.5.11 We do not recommend using Solid Fat with these fryer models as control does not have a Fat Melt Cycle.
- 2.5.12 Regularly change your cooking oil. Use colour charts to check on oil quality.



- 2.5.13 If you see the cooking oil or fat smoking, switch the fryer off, allow to cool, drain oil, clean and dry fryer pan thoroughly and replace with fresh oil. If the clean fryer oil smokes when heated, switch off immediately and contact service engineer. Do not switch fryer back on.
- 2.5.14 Never add water to the fryer medium at any time.

#### **Gas and Electrical Isolation Points**

2.5.15 Ensure any separate gas shut off switches and electric switches provided for cooking equipment and/or extractor fans are accessible and clearly labelled.

#### Care and Maintenance of Thermal and Operational Safety Devices

2.5.16 Your fryer is fitted with a thermal safety device. This will stop heating of oil if it becomes overheated. This appliance will always fail safe so long as there is no damage to the thermal safety device.



- 2.5.17 Failure to clean and check the safety and operational thermostats can impact the performance of the appliance and increase the risk of an appliance fire.
- 2.5.18 Damage to the thermostat sensors or their capillaries can increase the risk of overheating or fire.
- 2.5.19 Do not operate the fryer if the safety devices located within the fryer pan appear to be dislodged or damaged.

### 2.6 MAINTENANCE SAFETY







2.6.1 Unless otherwise stated, parts which have been protected by the manufacturer must not be adjusted by the installer or end user.



- 2.6.2 Before any cleaning is undertaken, isolate appliance from mains power supply at isolator switch.
- 2.6.3 Suitable protective clothing must be worn when cleaning this appliance.



- 2.6.4 If filtration is fitted, never pump water through the filtration pump at any time! Water and hot oil are an explosive mixture.
- 2.6.5 Oil must be allowed to cool to a safe temperature before draining. Do not overfill the oil bucket. All spills onto the product and on the floor should be cleaned up immediately
- 2.6.6 The appliance must not be cleaned with a jet of water or steam cleaned. Do not use acid or halogen-based (e.g., chlorine) descaling liquids, flammable liquids, cleaning aids or cleaning powders.
- 2.6.7 Failure due to lack of proper cleaning is not covered by warranty.

2.6.8 Particular attention must be paid to cleaning the Thermostat bulb & Capillaries.



2.6.9 Take care when cleaning not to dislodge or damage thermostat sensors mounted on the base and side of the pan.



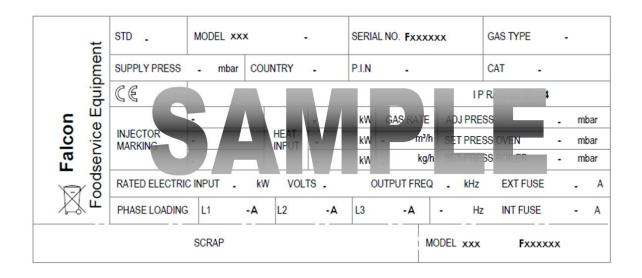
- 2.6.10 If the thermostats or capillaries are damaged, then do not turn the appliance on and contact Falcon or you approved service provider to undertake the necessary repairs.
- 2.6.11 To obtain maximum performance from this unit regular servicing of the appliance should be undertaken to ensure correct 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.



2.6.12 During Servicing of the appliance, where applicable, please ensure seals are checked. If the integrity of the seal is compromised, it must be replaced.

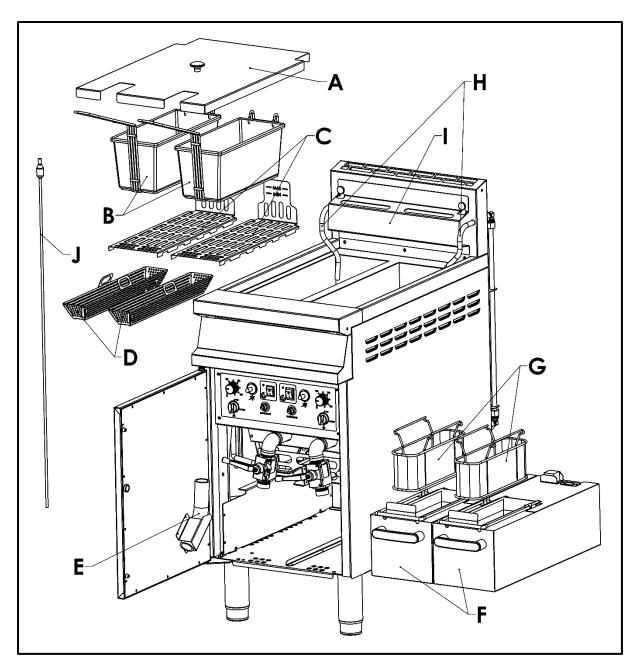
## 3.0 APPLIANCE INFORMATION

This appliance has been UKCA/CE-marked on the basis of compliance with the Product Safety and Metrology Regulations/Gas Appliance Regulations, Electrical/LVD and Electromagnetic Compatibility (EMC) Regulations/Directives for the heat inputs, gas pressures and voltages stated on the data plate.



## **4.0 OPERATION**

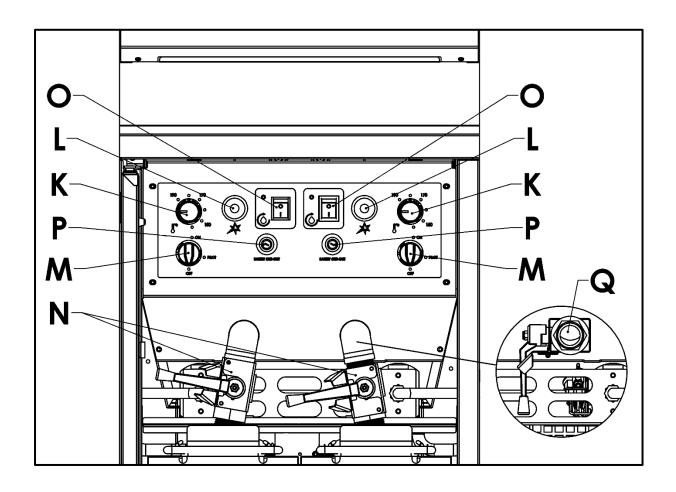
## 4.1 COMPONENT PARTS



- A Dust Cover
- B Baskets
- C Fry Plate
- D Crumb Catcher
- E Drain Tube (G3845 only)

- F Oil Buckets (G3845F only)
- G Filtration Basket & Mesh Filter (G3845F only)
- H Oil Return Pipe (G3845F only)
- I Basket Hanger
- J Drain Cleaning Rod (G3845F only)

## 4.2 CONTROLS



- K Temperature Control
- L Piezo Igniter
- M Gas Control
- N Drain Valve (G3845F Style)
- O Pump Switch (G3845F only)
- P Safety Thermostat Reset Button
- Q Drain Valve (G3845 Style)

#### 4.3 USING THE APPLIANCE

4.3.1 Always clean the appliance before use. See section 5.0.



PARTICULAR ATTENTION MUST BE PAID TO CLEANING THE THERMOSTAT BULB AND CAPILLARIES.

ENSURING FOOD DEBRIS DOES NOT BUILD UP, WHICH COULD DETRIMENTALLY AFFECT THE PERFORMANCE AND SAFETY OF THE APPLIANCE.

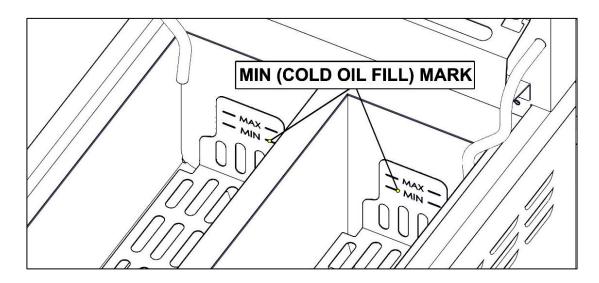


NEVER STORE MATERIALS THAT ARE SUSCEPTIBLE TO HEAT UNDER THE BURNER INSIDE THE APPLIANCE.

NEVER ADD COOKING OIL TO A FRYER IF IT IS NOT COMPLETELY DRY OF WATER. DOING SO CAN LEAD TO EXPLOSION OF HOT COOKING OIL.

4.3.2 Ensure the **drain valve** is closed and fill the pan with **cold** good quality vegetable oil to the **MIN** level marked on the **Fry Plate**. This level is the maximum cold fill mark to achieve the stated performance of the fryer. The volume of oil will increase as the oil is heated.

The approximate volume of cold oil, when filled to the **MIN** level is 12.8 litres.



ALWAYS MAINTAIN AN OIL LEVEL BETWEEN MAX AND MIN LEVELS INDICATED ON FRY PLATE.



WHEN HOT, THE COOKING MEDIUM MUST NEVER BE ALLOWED TO DROP BELOW THE MIN LEVEL AS THIS WILL LEAD TO AN UNSAFE SITUATION.

IF THIS HAPPENS THE OIL MUST BE TOPPED UP BEFORE CONTINUING TO USE THE FRYER.

NEVER ALLOW OIL TO GO ABOVE MAX LEVEL AS THIS MAY CAUSE THE OIL TO OVERFLOW FROM THE PAN WHEN FOOD IS DROPPED IN.

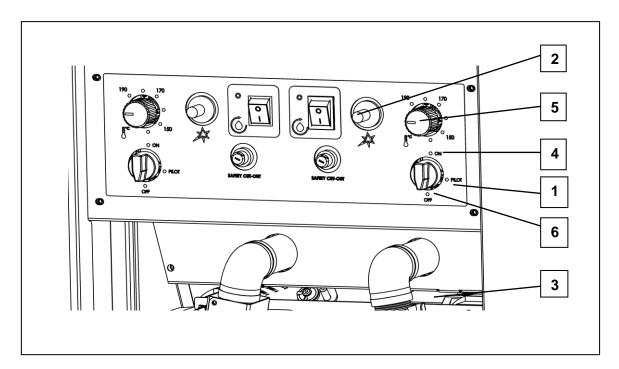


SUITABLE PROTECTIVE CLOTHING AND ALL CARE NECESSARY MUST BE USED WHEN TOPPING UP A HOT FRYER.

IT IS RECOMMENDED THAT REPLENISHMENT OF THE OIL TAKES PLACE WHEN THE FRYER IS COOL.

Refer to illustration below:

- 4.3.3 Turn **gas control** to the **PILOT** 1 position then push the knob in.
- 4.3.4 While still holding the **gas control knob in** the **PILOT** 1 position, repeatedly press the **piezo igniter** 2 until the pilot burner lights.
- 4.3.5 Once the pilot flame can be seen 3, hold the **gas control knob in** for a further 20 seconds. Pilot should remain lit when knob is released. If not, repeat process.
- 4.3.6 When pilot holds, turn the **gas control** to the **ON** 4 position. Main burner will now light. Set the **temperature control** 5 as required between 140°C and 190°C.
- 4.3.7 To turn the burner off, turn the gas control to OFF 6 position.





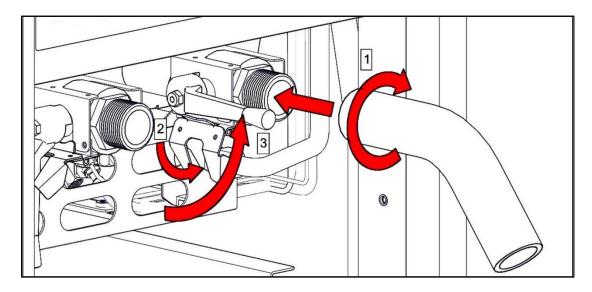
APPLIANCES THAT ARE IN USE MUST BE SUPERVISED AT ALL TIMES.

OIL SHOULD NOT BE OVERHEATED AS THIS WILL INCREASE THE RISK OF FIRE



FRYER IS FITTED WITH A THERMAL SAFETY DEVICE. THIS WILL STOP HEATING OF OIL IF IT BECOMES OVERHEATED. THIS APPLIANCE WILL ALWAYS FAIL SAFE.

4.3.8 **G3845 Draining (model without filtration)** – Draining old oil must be done after the oil has been allowed to cool. Ignoring this advice may lead to burns. Connect the supplied **drain tube** onto the **drain valve** 1 as shown below. The drain valve is fitted with a spring-loaded safety latch. Push this latch aside 2 to unlock the handle, then turn handle 3 to empty the oil into a suitable disposal container. Any large pieces of debris will be captured by the crumb catcher.



- 4.3.9 G3845F Draining (model with filtration) Draining old oil must be done after the oil has been allowed to cool. Ignoring this advice may lead to burns and build-up of oily condensation inside the appliance. Ensure the oil buckets supplied with the appliance are empty and positioned below the pans. The drain valve is fitted with a spring-loaded safety latch. Push this latch aside and turn the handle (similarly to 4.3.9). The drain valves point directly down into the oil buckets below. Any large pieces of debris will be captured by the crumb catcher.
- 4.3.10 **Disposal of used oil** Close the drain handle before removing oil buckets, and transfer used oil to a suitable container for disposal.

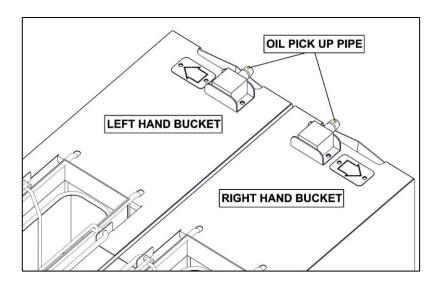


THE DRAIN VALVE MUST ONLY BE OPERATED WHEN THE GAS CONTROL IS SET TO OFF. NOT FOLLOWING THIS PART OF THE PROCEDURE WILL LEAD TO THE RESIDUAL OIL IN THE FRYER CATCHING FIRE. THE OIL BUCKETS MAY BE HOT AND HEAVY WHEN FULL OF OIL. TAKE CARE WHEN REMOVING.

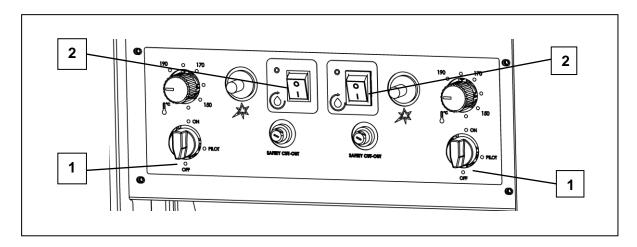
ENSURE THE FILTRATION BASKETS AND MESH FILTER ARE CLEANED REGULARLY. FAILURE TO DO SO MAY CAUSE THE OIL TO OVERFLOW FROM THE OIL BUCKET.

#### 4.4 OIL FILTRATION (G3845F ONLY)

4.4.1 The oil will not pump back into the pan unless the **oil buckets** and the oil pick up pipe are in the correct position. Ensure they are positioned as shown. The arrow on the buckets indicates if it is a left or right-hand bucket and the oil pick up pipe must face towards the back of the unit.



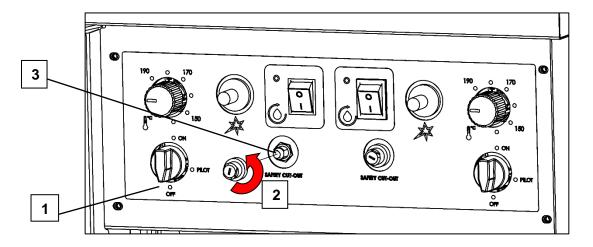
4.4.2 Ensure **gas control** is in the **OFF** 1 position and allow oil to cool for 15 to 20 minutes. Drain the oil into the **oil buckets** and switch on the filtration system using the **pump switch** 2. Let the oil cycle through the provided **filtration basket** and **mesh filter** to clear the debris within the oil. The appliance is designed so that the pump will cut-off after operating for 8 minutes. To continue with the filtration process, simply reactivate the **pump switch**.



4.4.3 Once the oil is filtered, close the **drain valve** and activate the **pump switch** to refill the pan. Once the oil level is between **MIN** and **MAX**, switch off the **pump switch**. After filtering wait 30 seconds before removing the **oil bucket**.

#### 4.5 SAFETY RESET

- 4.5.1 The **safety thermostat** is to prevent fire in the event of an operating thermostat failure and will prevent the main burners from working. If the burners don't turn on, it may be due to the safety cut-out and the safety thermostat will need to be reset.
- 4.5.2 To reset the safety thermostat, first ensure the **gas control** is turned **OFF** 1 and wait at least half an hour for the oil to cool. Remove the black dust cover 2 and press the safety thermostat reset button 3 located inside the threaded boss.





IF SAFETY CUT-OUT CONTINUES, A QUALIFIED ENGINEER MUST INVESTIGATE THE CAUSE.

#### 4.6 CULINARY GUIDANCE

CARE MUST BE TAKEN WHEN INTRODUCING FROZEN OR WET PRODUCT INTO HOT OIL TO PREVENT SURGE BOILING.



OLD OIL WILL HAVE A REDUCED FLASH-POINT AND BE PRONE TO SURGE BOILING.

WATER MUST NEVER BE INTRODUCED INTO HOT OIL.



OVERLOADING THE BASKETS WILL AFFECT THE FRYER PERFORMANCE.

SETTING THE OIL TEMPERATURE ABOVE THE RECOMMENDED VALUE MAY REDUCE THE LIFE OF OIL.

**NEVER LEAVE A WORKING UNIT UNATTENDED.** 

• Take additional care when frying wet products or items from frozen, to prevent surge boiling.

Where applicable in accordance with food product to be fried, allow food to thaw slightly prior to adding to hot oil to avoid increased thermal shock to oil.

Adjust frying temperature and frying times in accordance with food type, condition i.e. fresh chilled or frozen, battered or crumbed, etc.

Frying at correct temperatures will enhance food appearance and eating qualities, as well as extend the life and safe usability of the oil.

Regular oil skimming must take place during frying, by using a spider or long handle sieve scoop to get rid of floating food debris. Failing to skim, will create an eventual discoloration/darkening of the oil. Which will affect food quality, flavour and appearance.

150° - 175°C is a good frying temperature range.

0	Delicate	150 - 160°C	such as crispy vegetables
0	Crumbed frozen	155 - 160°C	
0	Crumbed fresh	160°C	
0	Battered fresh	165 - 170°C	
0	Tempura	160 - 165°C	
0	Spring rolls	165 - 170°C	fresh or frozen
0	Wontons	165 - 170°C	fresh or frozen
0	Samosas	160 - 165°C	
0	Chips thin fresh	170°C	
0	Chips thin frozen	160 - 165°C	
0	Chips thick fresh	150 - 170°C	
0	Chips thick frozen	160 - 165°C	

Never decant frozen, breaded / crumbed products directly into basket over oil in tank. It is advised to use appropriate trays with fryer basket in them, and then to fill with above products. Giving the baskets a good, few, shakes, will eliminate the excess crumbs and avoid from additional food debris contamination in oil.

 Fresh oil is best. Replace oil regularly, as old oil has a lower flash point which will lead to eventual surge boiling.

- Using old oil further affects performance and adversely affects food quality, fry times and food output.
- Do not overload the baskets and or fryer. Check the maximum allowed weight prescribed for the specific basket used.

A rough guide would be to fill the basket halfway which would equate to the maximum volume approximately.

For G3845 and G3845F models the maximum recommended load per basket is:

- 1.5kg for chilled chips
- 1.2kg for frozen chips
- Fryers when in operation / on, should never be left unattended.
- Water or any other liquid must never be stored near, above or in adjacent equipment, to fryers.

#### 5.0 CLEANING AND MAINTENANCE

#### **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 Schedules. 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.

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

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

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

Other useful references for health and safety issues:

- www.hse.gov.uk
- Essentials of health and safety at work ISBN978
- Noise at work INDG362
- Safe systems of work
- Other notes added to the body of the instructions



BEFORE ANY CLEANING IS UNDERTAKEN, ISOLATE APPLIANCE FROM GAS SUPPLY AND MAINS POWER SUPPLY AT ISOLATOR SWITCH.

SUITABLE PROTECTIVE CLOTHING MUST BE WORN WHEN CLEANING THIS APPLIANCE.

NEVER PUMP WATER THROUGH THE FILTRATION PUMP AT ANY TIME.

OIL MUST BE ALLOWED TO COOL TO A SAFE TEMPERATURE BEFORE DRAINING. DO NOT OVERFILL OIL BUCKET.

THE APPLIANCE MUST NOT BE STEAM CLEANED. DO NOT USE ACID OR HALOGEN-BASED (E.G. CHLORINE) DESCALING LIQUIDS, FLAMMABLE LIQUIDS, CLEANING AIDS OR CLEANING POWDERS.

NEVER CLEAN PRODUCTS WHILST THEY ARE HOT – ALL SPILLS ON TO THE PRODUCT AREA OR THE FLOOR SHOULD BE CLEANED UP IMMEDIATELY

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

**Note:** All surfaces are easier to clean if spillage is removed before it becomes burnt on, cleaned daily.

It should be noted that certain scouring pads including nylon types can easily mark stainless steel. Care should be exercised during cleaning process. When rubbing stainless steel with a cloth, always rub in grain direction.

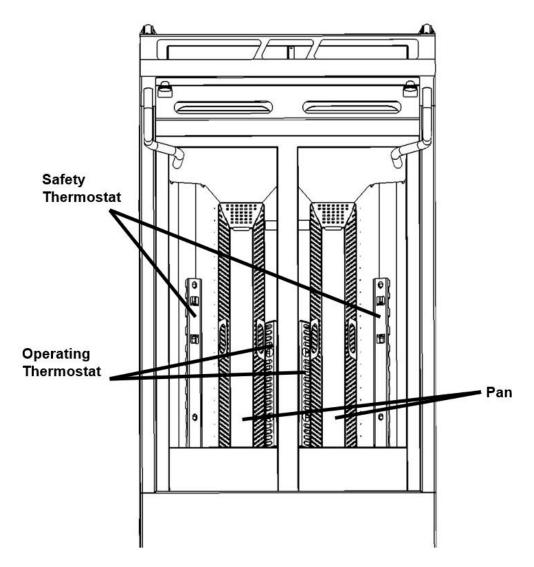
- 5.1.1 Turn appliance OFF and cool down.
- 5.1.2 Drain oil as stated in section 4.3.9 or 4.3.10.
- 5.1.3 **G3845F only** Check and if required, unblock the drain valve with the provided **drain cleaning rod**.
- 5.1.4 **G3845F only** Filter oil as stated in section **4.4** then dispose the old oil.
- 5.1.5 Remove **baskets**, **fry plates** and **crumb catcher** and wash it in warm soapy water. Rinse and dry thoroughly before replacing them back in the appliance.
- 5.1.6 Ensure drain valve is closed and fill pan with warm soapy water to the oil level mark. Soak overnight if necessary and rinse with clean water before draining. Dry pan thoroughly.
- 5.1.7 Clean the safety and operating thermostats removing any food debris from around the thermostats which could detrimentally affect the performance and safety of the appliance.

TAKE CARE WHEN CLEANING NOT TO DISLODGE OR DAMAGE THERMOSTAT SENSORS MOUNTED ON THE BASE AND SIDE OF THE PAN.



DAMAGE TO THE THERMOSTAT SENSORS OR THEIR CAPILLARIES CAN INCREASE THE RISK OF OVERHEATING OR FIRE.

IF THE THERMOSTATS OR CAPILLARIES ARE DAMAGED THEN DO NOT TURN THE APPLIANCE ON AND CONTACT FALCON OR YOU APPROVED SERVICE PROVIDER TO UNDERTAKE THE NECESSARY REPAIRS.



**Location of Safety and Operating Thermostat Sensors** 

- 5.1.8 **G3845F only** Remove all debris from the **filtration baskets** and **mesh filter**. Wash them with the **oil buckets** in warm soapy water.
- 5.1.9 Dry all components thoroughly before replacing them back in the appliance.



DO NOT RE-FILL OIL UNTIL THE PAN AND ALL COMPONENTS ARE COMPLETELY DRY, INCLUDING THE INSIDE OF THE DRAIN VALVE.

## **6.0 SPECIFICATION**

#### 6.1 APPLIANCE WEIGHT TABLE

APPLIANCE	UNIT WEIGHT (kg)	PACKED WEIGHT (kg)
G3845	80	89
G3845F	100	109

#### 6.2 ELECTRICAL DATA TABLE

		CURRENT			POWER
APPLIANCE	PHASE	MIN (A) @ MAX (A) @ ACTUAL (A) 230V 230V @ 230V		(kW) @ 230V	
G3845	L1	NA	NA	NA	NA
G3845F	L1	2.79	3.26	3.1	0.58



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

#### 6.3 INJECTOR SIZES & PRESSURE TABLE

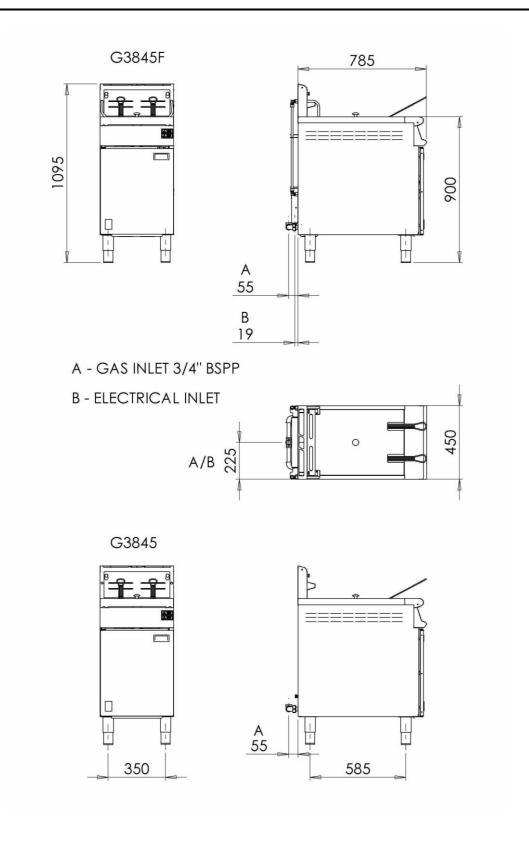
INJECTOR SIZES & PRESSURE					
NATURAL GAS PROPANE					
G3845		2.75	1.70		
G3845F		2.75	1.70		
Pilot Injectors		51	35		
Supply Pressure	mbar	20	37		
Operating Pressure	mbar	13.6*	N/A		

<sup>\*</sup>Operating Pressure on Natural Gas (G20) is set with one burner on

#### 6.4 HEAT INPUT TABLE

HEAT INPUTS (NATURAL GAS AND PROPANE)				
APPLIANCE kW Btu/hr				
G3845	2 x 11.4	2 x 39,000		
G3845F	2 x 11.4	2 x 39,000		

## 7.0 DIMENSIONS / CONNECTION LOCATIONS



### **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.

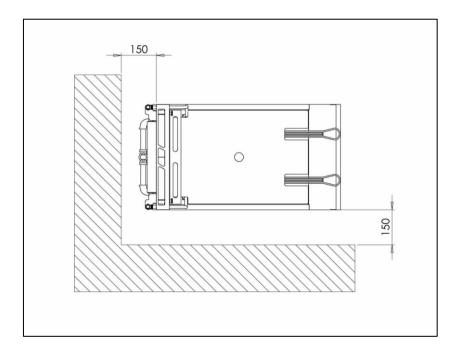
The installation and periodic inspection of the appliance should only be undertaken by a qualified, skilled and competent electrician; and connected to the correct power supply suitable for load as stipulated by the appliance data label.

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

#### We recommend:-

- Supplementary electrical protection with 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.

#### 8.1 SITING / CLEARANCES





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

#### 8.2 VENTILATION

This appliance must be installed with sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room in which they are installed.

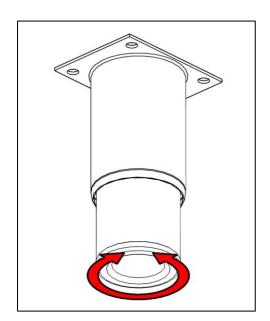
A competent installer MUST be used and be carried out in accordance with local and national regulations which apply at time of the installation.

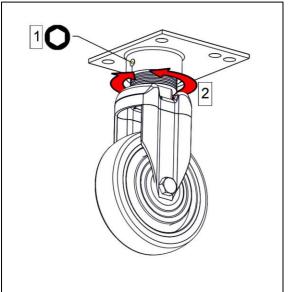
Recommendations for Ventilation for gas appliances of rated input not exceeding 70kW<sub>net</sub> (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> family gases) are given in BS 5440:2.

For multiple appliances the requirements for individual units must be added together.

#### 8.3 ASSEMBLY

8.3.1 Position the appliance and level using feet adjusters as shown below.







#### TAKE CARE WHEN MOVING AN APPLIANCE FITTED WITH CASTORS.

8.3.2 Connect appliance to gas supply and test for gas tightness (see section 8.4)



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.

#### 8.4 GAS SUPPLY & CONNECTION

- 8.4.1 Installation pipe work should be fitted in accordance with local / national standards. The pipe work must not be smaller than unit gas inlet connection. If using flexible hosing, the hose must be sized to conform to BS 6173 and the length must not exceed 1.5m. An isolating valve must be located close by for shutdown during an emergency or servicing. An inlet manifold is supplied with to enable connection to 3/4" BSP inlets.
- 8.4.2 If flexible hose is used, it shall comply with national requirements. These must be periodically examined and replaced as necessary. A retention chain must also be attached to the rear of the appliance.
- 8.4.3 **Natural Gas Appliance** Supplied governor must be fitted to the rear of the appliance. (see section 10.9)
- 8.4.4 The installation should be checked for gas tightness and purged as specified in IGE/UP/1.

#### 8.5 ELECTRIC SUPPLY & CONNECTION

**G3845F Only** - 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 contact separation of at least 3mm in all poles. If cord is damaged, it must be replaced by a suitably qualified person.

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



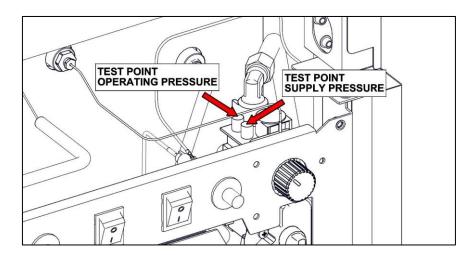
THIS APPLIANCE MUST BE EARTHED.

#### 8.6 COMMISSIONING

Refer to section 2.2 Installation Safety and section 4.0 for operation. If safety thermostat is activated, refer to section 4.5 to reset it.

Carry out the following operation:

- 8.6.1 Turn the main gas supply on to the appliance.
- 8.6.2 Remove front facia as stated in section 10.1. Connect a suitable pressure gauge to the test points on the gas valve shown below and ensure the gas pressures are correct (see section 6.3 for gas pressures).



- 8.6.3 Natural Gas Appliance only Adjust Governor as shown in section 10.9.
- 8.6.4 Fill pan with cold oil to the MIN mark.
- 8.6.5 Light all pilots to ensure they all stay lit.
- 8.6.6 Turn on main burners and check for flame stability.
- 8.6.7 Checking the user thermostat calibration: Using a reliable thermometer with measurement tip immersed 25mm below oil surface at centre of pan.

Set the temperature control to 190°C. Measure oil temperature during heat-up from ambient.

The temperature reading when main burner goes OFF should be 190°C +/- 5°C.

#### 8.6.8 Switch appliance off

If the appliance does not operate correctly, please refer to fault finding guide in section 12.0 and rectify the problem.



PLEASE FILL OUT THE INFORMATION TABLE ON THE FRONT COVER AFTER COMMISSIONING. HAND INSTRUCTIONS TO RESPONSIBLE PERSON.

#### 9.0 CONVERSION



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

Identify and check Injector sizes provided in conversion kit (see table section 6.3).

#### 9.1 GAS CONVERSION CHECK LIST

Change injectors in burner(s) and pilots(s) (see 10.7 & 10.8).
Change gas type label(s).
For natural gas (G20) an appliance governor is required to be fitted.
For Propane (G31) an appliance governor is not required to be fitted.

Once unit has been converted, the installation should be checked for gas tightness and purged as specified in IGE/UP/1.

Finalise conversion by carrying out commissioning checks and tests (see section 8.6).

#### 10.0 SERVICING

#### SERVICE INFORMATION

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.



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



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

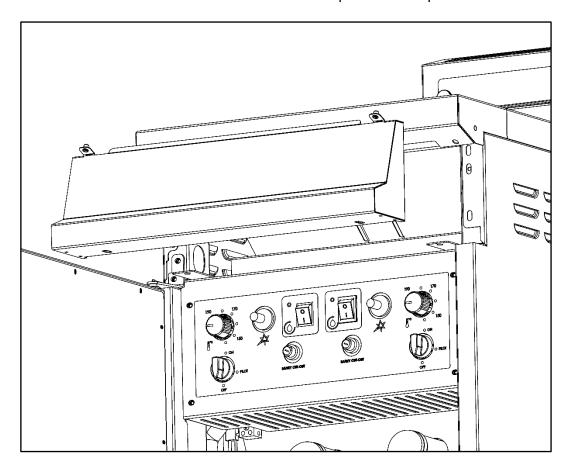
#### PREVENTATIVE MAINTENANCE CONTRACT



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.

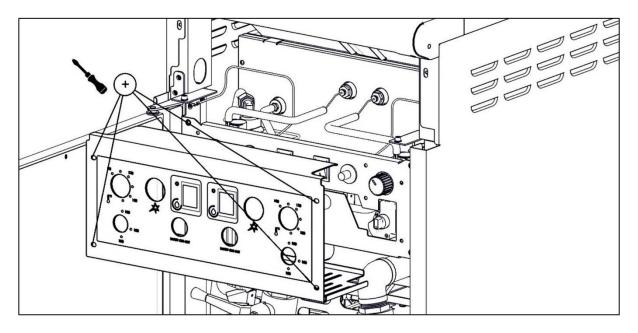
#### **10.1 FRONT FACIA**

10.1.1 Removal of the front facia allows access to the pressure test points.



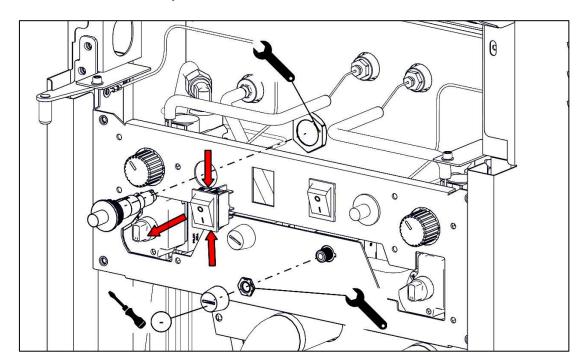
## **10.2 INNER CONTROL PANEL**

10.2.1 Remove the inner control panel to gain access to the control parts.



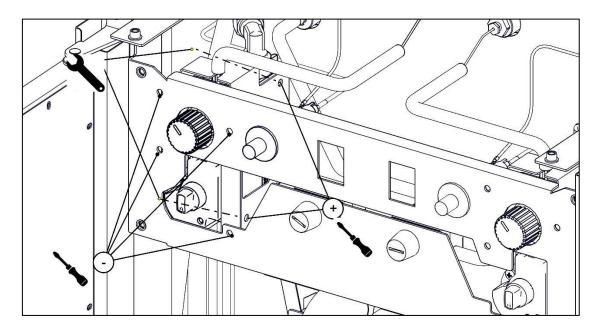
## 10.3 PIEZO IGNITER, SAFETY THERMOSTAT, PUMP SWITCH

10.3.1 To remove the safety thermostat sensor, see section 10.5.



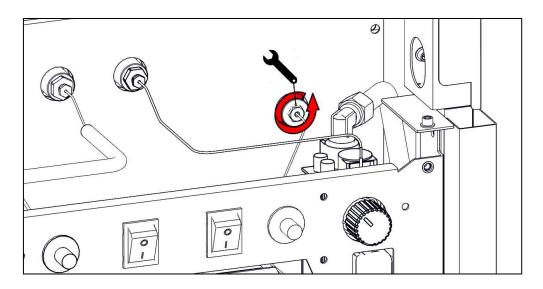
#### **10.4 GAS VALVE**

10.4.1 To gain access to the gas valve, remove the 4 screws that hold the gas valve bracket. The valve is secured to the bracket with nuts and screws. To remove the thermostat sensor see section 10.6.

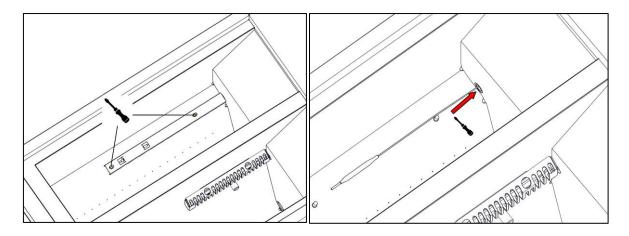


#### **10.5 SAFETY THERMOSTAT SENSOR**

10.5.1 To remove the sensor, loosen the safety thermostat sensor nut located behind the front fascia.



10.5.2 Remove the sleeve nuts holding the sensor cover then unclip the sensor form the cover. Use a screwdriver to knockout the sealing gland to remove the sensor.



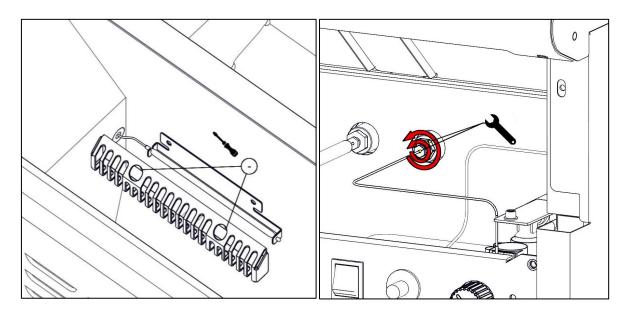
10.5.3 When replacing the sensor, apply an appropriate oil and temperature rated sealant on the nut to fix it in place.



TAKE CARE TO ENSURE THERE ARE NO SHARP BENDS ON THE CAPILLARY TUBE.

#### **10.6 OPERATING THERMOSTAT SENSOR**

10.6.1 Remove the sensor guard then unclip the sensor out of its holder. Remove the two nuts to pull the sensor out of the pan.



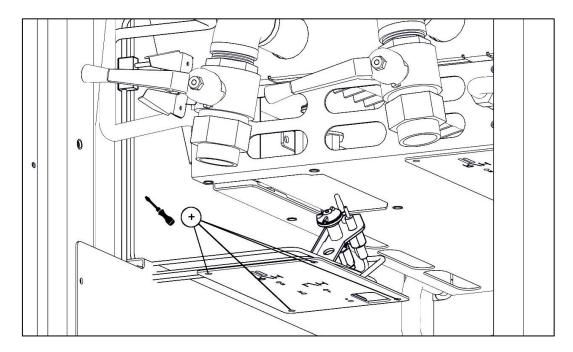
10.6.2 When replacing the sensor, apply an appropriate oil and temperature rated sealant on the nut to fix it in place.



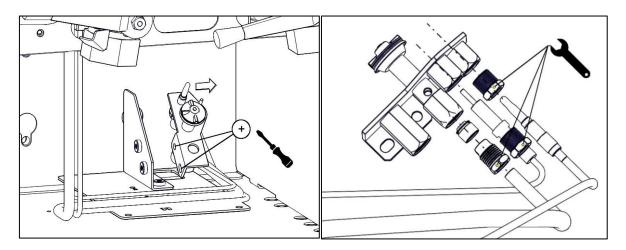
TAKE CARE TO ENSURE THERE ARE NO SHARP BENDS ON THE CAPILLARY TUBE.

#### **10.7 PILOT ASSEMBLY**

10.7.1 Remove the fixings holding the pilot mounting panel and drop the entire pilot assembly down to gain access to it.

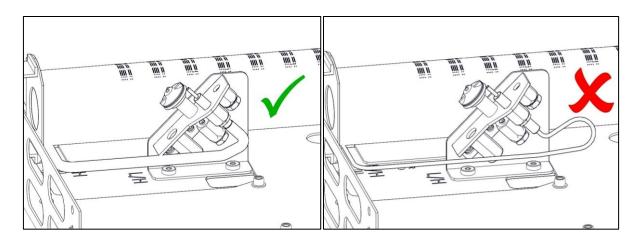


10.7.2 Remove the pilot assembly from the mounting panel to access fittings easier for the pilot gas pipe, pilot injector, thermocouple and electrode. The pilot injector is removed using a 10mm spanner



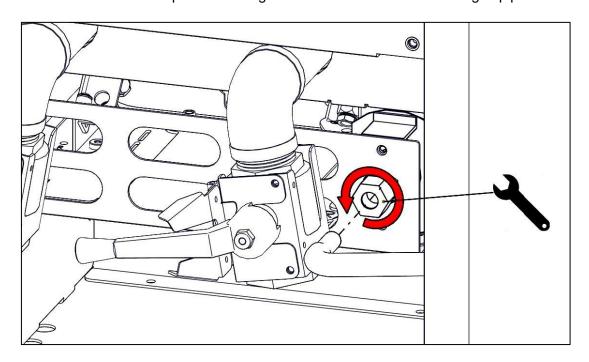


WHEN REPLACING THE PILOT ASSEMBLY, TAKE CARE WITH THE ROUTING OF THE CABLE AND PIPE WORK. THE ELECTRODE CABLE MUST BE ROUTED TIGHTLY TOWARDS THE FRONT OF THE UNIT AND NOT LOOPING INSIDE THE UNIT. ALSO THE VIDAFLEX SLEEVING MUST BE ON THE CABLE.

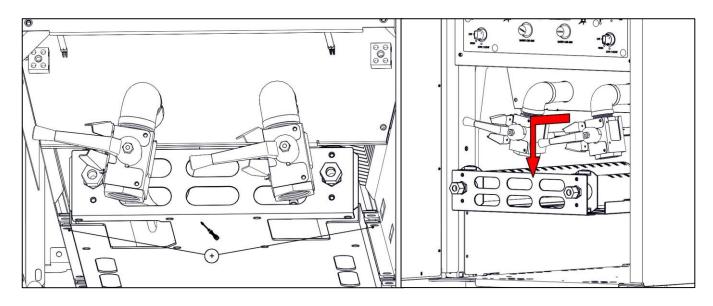


#### **10.8 BURNER**

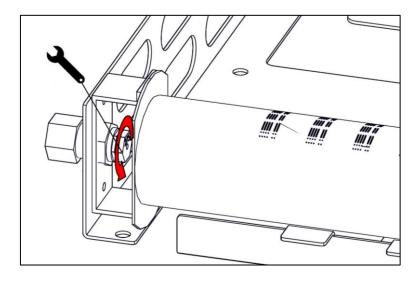
10.8.1 Disconnect the compression fitting on both burners to remove the gas pipes.



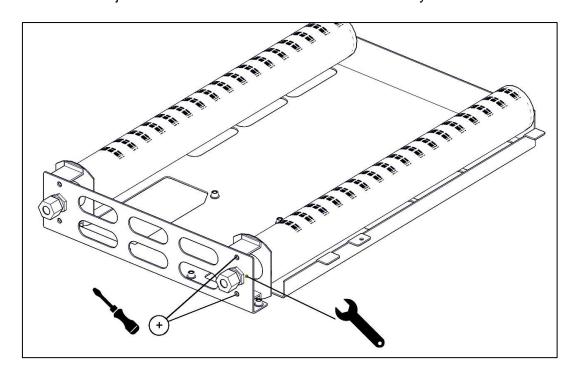
10.8.2 Remove the fixings retaining the burner tray and slide the entire burner tray assembly out to gain access to the burner fittings.



10.8.3 Now the burner injector can be accessed. Use a 13mm spanner to remove.

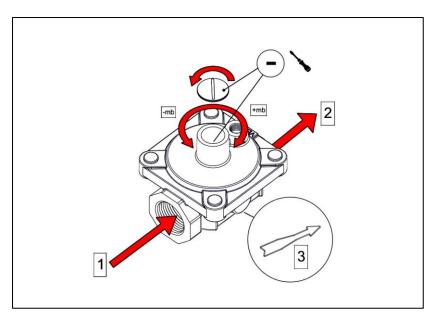


10.8.4 To remove burner from the burner tray, remove the two fixing screws at the front and remove the injector holder nut. Slide the burner out of the tray.



#### **10.9 GOVERNOR**

10.9.1 Natural Gas Appliance only – Adjust Governor as shown.



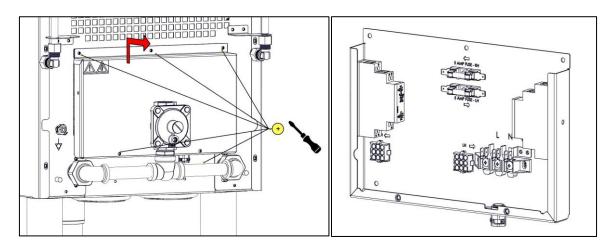
- 1 Gas in
- 2 Gas out
- 3 Direction of flow



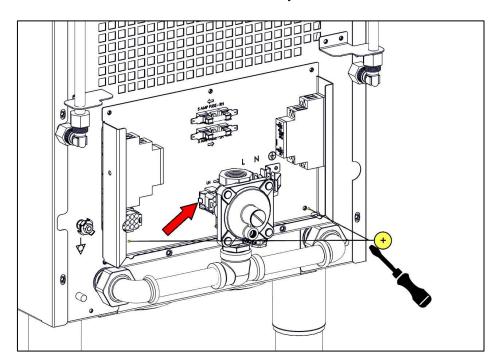
GOVERNOR SUPPLIED IS MAINTENANCE FREE. ENSURE THE BLUE DUST CAP COVERING THE VENT IS FITTED AND IN GOOD CONDITION.

## 10.10 REAR ELECTRICS BOX (G3845F ONLY)

10.10.1 Remove five screws to slide out the rear electric s box cover. This will allow access to the pump timer, fuse and terminal block.

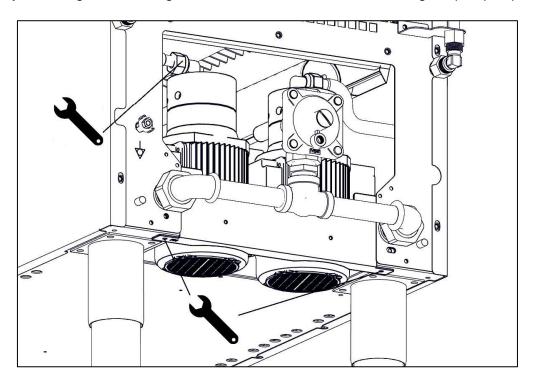


10.10.2 Unplug 9 pin connector and push remaining part through electrical box. Remove two screws and lift electrical box away from unit.

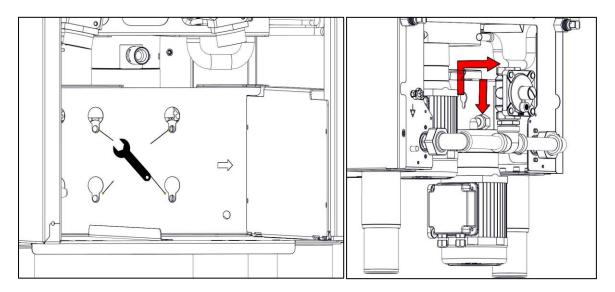


## 10.11 PUMP (G3845F ONLY)

10.11.1 Remove pipe fixing on pump head. Remove the bottom pump access bracket by removing the two fixing screws. Then remove the nut securing the pump capacitor.

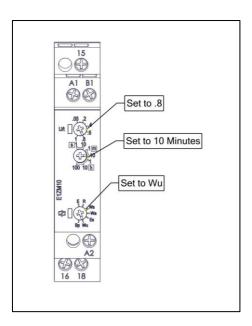


10.11.2 From the front of the appliance, loosen the screws slightly that holds the pump. Remove the pump by lifting it out of the keyway and dropping it out of the appliance.



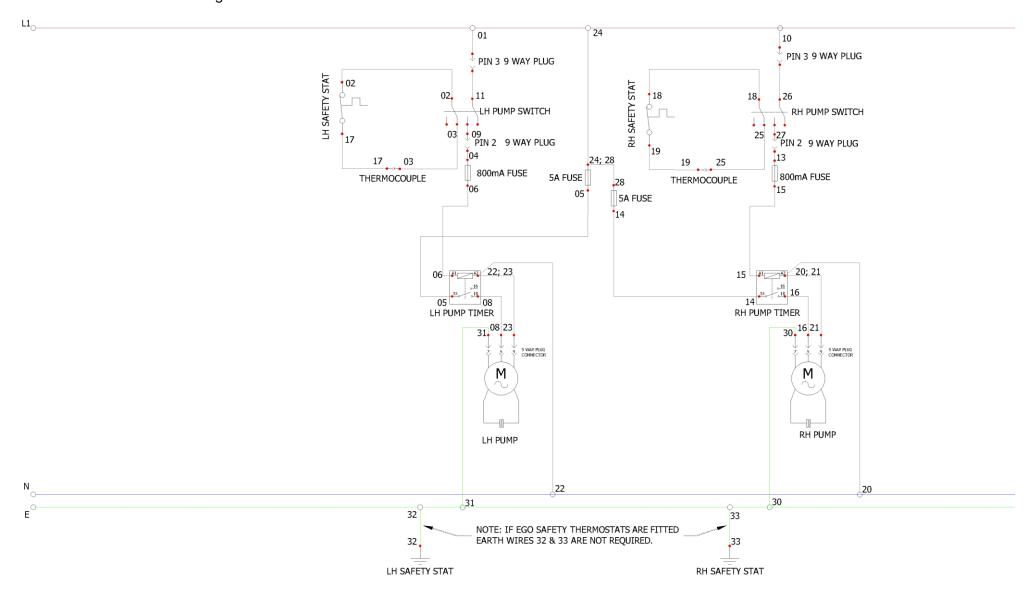
## 10.12 PUMP TIMER SETTING (G3845F ONLY)

- 10.12.1 Set top function to "0.8".
- 10.12.2 Set middle function to "10" minutes
- 10.12.3 Set base function set to "Wu".



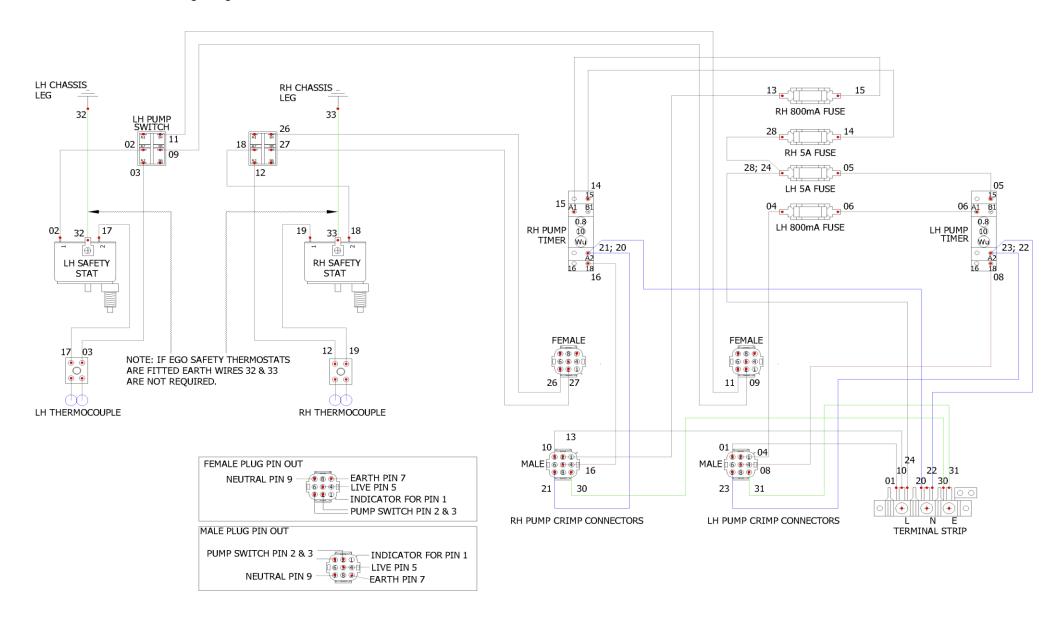
#### **10.13 CIRCUIT DIAGRAMS**

### 10.13.1 G3845F Circuit Diagram



#### **10.14 WIRING DIAGRAMS**

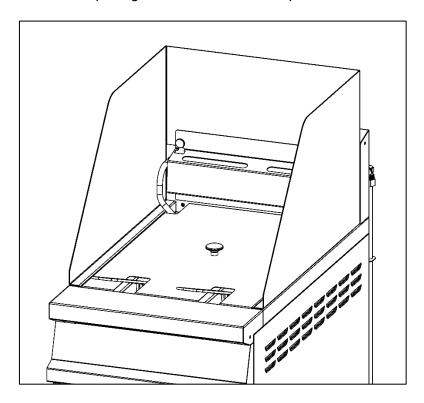
#### 10.14.1 G3845F Wiring Diagram



## **11.0 ACCESSORIES**

## 11.1 SPLASHGUARD

11.1.1 Remove basket hanger and place splashguard on top of the hob. Refit the basket hanger in front of the splashguard to secure them in place.



## **12.0 FAULT FINDING**

FAULT	POSSIBLE CAUSES	REMEDY	USER	*ENG
Burner/Pilot will not light/stay lit.	No gas to the unit.	Check main gas is turned on.	<b>√</b>	
	Safety thermostat has activated.	Reset safety thermostat as per section 2.5 If activates again call service engineer.	✓	
	Blocked injector.	Clean or replace injector.		<b>√</b>
	Pump switch turned ON.	Switch OFF pump switch.	<b>√</b>	
Pump not working.	No electrical power to unit	Check mains power is connected and turned on.	<b>✓</b>	
	Fuse has blown.	Investigate and solve the cause then replace fuse at the rear of the unit.		$\checkmark$
	Pump overheating.	Allow unit to cool for 15 minutes.	$\checkmark$	
	Pump timer activated after running for 8 minutes.	Switch pump switch OFF then ON again.	<b>✓</b>	
Safety thermostat activated	Low oil level	Add oil to min level mark	$\checkmark$	
	Burner switched ON without any oil in pan.	Add oil to min level mark. Ensure the pan is never empty when the burner is ON.	<b>√</b>	
Oil not getting up to the desired temperature.	Faulty thermostat.	Replace thermostat.		$\checkmark$

PROBLEM	POSSIBLE CAUSES	REMEDY	USER	*ENG
Surge Boiling	Over loading with wet food	Reduce the amount of wet food	$\checkmark$	
	Overloading with oil	Reduce the amount of oil to the Min Level	$\checkmark$	
Pan Not Draining	Blocked with debris	Clean drain hole	$\checkmark$	
Oil not Filtering	Blocked filters with debris	Clean filters inside the oil bucket	$\checkmark$	
Debris is being returned to pan after filtering	Blocked filters in fryer bucket and overflowing, allowing unfiltered oil back to pan	Ensure oil has time to filter through strainer. Heavily unfiltered oil can block pump	<b>✓</b>	

<sup>\*</sup>ENG Service engineer only.

## 13.0 SPARE PARTS

PART DESCRIPTION	
Dust Cover	
Basket	
Fry Plate	
Crumb Catcher	
Basket Hanger	
Drain Tube	
Oil Bucket	
Fine Mesh Filter Wire Support	
Fine Mesh Filter	
Filter Basket	
Oil Pick Up Pipe	
Suction Pipe Filter	
Front Facia	
Door Assembly	
Piezo Igniter	
Safety Thermostat	
Pump	
Pump Switch	
Gas Valve	
Timer Control	

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 Visit our website for further spares information.

## **14.0 SERVICE INFORMATION**

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

To contact Falcon for a warranty issue dial (UK only) 01786 455 200 and select Warranty Issues from the menu.