

# E350/38 and E350/39 COUNTER TOP FRYERS

## INSTALLATION and SERVICING INSTRUCTIONS



### IMPORTANT

The installer must ensure that the installation of the appliance is in conformity with these instructions and National Regulations in force at the time of installation. Particular attention **MUST** be paid to -

**BS7671 IEE Wiring Regulations**  
**Health And Safety At Work Act.**  
**Electricity At Work Regulations.**  
**Fire Precautions Act**

This appliance has been CE-marked on the basis of compliance with the Low Voltage and EMC Directives for the voltages stated on the unit data plate.

### WARNING - THIS APPLIANCE MUST BE EARTHED

On completion of the installation these instructions should be left with the Engineer-in-Charge for reference during servicing. Further to this, The Users Instructions should be handed over to the User, having had a demonstration of the operation and cleaning of the appliance.

**IT IS MOST IMPORTANT THAT THESE INSTRUCTIONS BE CONSULTED BEFORE INSTALLING AND COMMISSIONING THIS APPLIANCE. FAILURE TO COMPLY WITH THE SPECIFIED PROCEDURES MAY RESULT IN DAMAGE OR THE NEED FOR A SERVICE CALL.**

### PREVENTATIVE MAINTENANCE CONTRACT

In order to obtain maximum performance from this unit we would recommend that a Maintenance Contract be arranged with **SERVICELINE**. Visits may then be made at agreed intervals to carry out adjustments and repairs. A quotation will be given upon request to the contact numbers below.



#### **WEEE Directive Registration No. WEE/DC0059TT/PRO**

At end of unit life, dispose of appliance and any replacement parts in a safe manner, via a licenced waste handler.

Units are designed to be dismantled easily and recycling of all material is encouraged whenever practicable.

### **Falcon Foodservice Equipment**

#### **HEAD OFFICE AND WORKS**

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

#### **SERVICELINE CONTACT -**

PHONE - 01438 363 000 FAX - 01438 369 900

T100644 Ref. 3



# Warranty Policy Shortlist

Warranty does not cover :-

Correcting faults caused by incorrect installation of a product.

Where an engineer cannot gain access to a site or a product.

Repeat commission visits.

Replacement of any parts where damage has been caused by misuse.

Engineer waiting time will be chargeable.

Routine maintenance and cleaning.

Gas conversions i.e. Natural to Propane gas.

Descaling of water products and cleaning of water sensors where softeners/conditioners are not fitted, or are fitted and not maintained.

Blocked drains.

Independent steam generation systems.

Gas, water and electrical supply external to unit.

Light bulbs.

Re-installing vacuum in kettle jackets.

Replacement of grill burner ceramics when damage has been clearly caused by misuse.

Where an engineer finds no fault with a product that has been reported faulty.

Re-setting or adjustment of thermostats when unit is operating to specification.

Cleaning and unblocking of fryer filter systems due to customer misuse.

Lubrication and adjustment of door catches.

Cleaning and Maintenance

- Cleaning of burner jets

- Poor combustion caused by lack of cleaning

- Lubrication of moving parts

- Lubrication of gas cocks

- Cleaning/adjustment of pilots

- Correction of gas pressure to appliance.

- Renewing of electric cable ends.

- Replacement of fuses

- Corrosion caused by use of chemical cleaners.



## SECTION 1 - INSTALLATION

UNLESS OTHERWISE STATED, PARTS WHICH HAVE BEEN PROTECTED BY THE MANUFACTURER ARE NOT TO BE ADJUSTED BY THE INSTALLER

### 1.1 MODEL NUMBER, NETT WEIGHTS and DIMENSIONS

MODEL	WIDTH mm	DEPTH mm	HEIGHT mm	WEIGHT kg	WEIGHT lbs
E350/38	350	650	305	26	57
E350/39	700	650	305	46.4	102

### 1.2 SITING

The appliance must be installed on a firm counter or table or alternatively on a special purpose built stand supplied by Falcon. The unit may be installed to within 25mm of any wall or partition at the rear and sides.

A vertical clearance of 900mm between the top of the unit and any overlying combustible surface must be provided and Fire Regulations must be complied with.

### 1.3 ELECTRICAL SUPPLY

The fryers are equipped with a single cable entry situated at the rear, suitable for a 20mm conduit connection.

A suitably rated isolating switch with contact separation of at least 3mm in all poles must be installed and all wiring executed in accordance with the regulations listed on the title page of this manual.

THESE APPLIANCES MUST BE EARTHED.

An earth terminal is located within the terminal compartment for this purpose.

### 1.4 ELECTRICAL RATINGS

The fryers are for use on AC supplies only. Either 3 phase/ 4 wire or single phase supplies can be used.

The electrical loadings are stated on the appliance data plate.

## SECTION 2 - ASSEMBLY and COMMISSIONING

### 2.1 ASSEMBLY

- Remove feet from bag and screw into locations on unit base prior to positioning.
- Position appliance and carefully level it. Use feet adjusters when mounting on a counter or table. To mount a unit on purpose built stand, refer to instructions supplied with stand.
- The appliance is supplied complete and ready to connect to the mains supply.

### 2.2 CONNECTION TO THE ELECTRICAL SUPPLY

To gain access to terminals proceed as follows:

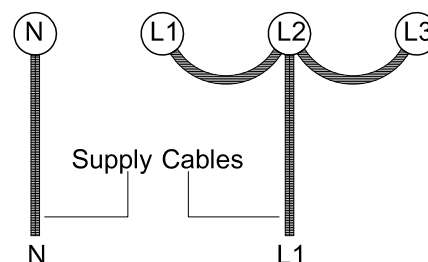
Remove knob at drain valve lever end. Use a 6mm spanner on lever and a 10mm spanner on knob.

Remove two fixings in upper flange panel, i.e. below front hob.

Move panel slightly forward at top until it clears hob. Lift panel slightly upward thus releasing lower fixing and remove panel.

#### Note

When connecting to a single phase supply, the three line terminals must be connected together using wire links provided. It is important that the links and incoming supply cable are connected exactly as shown in the following diagram.



After connecting to supply, replace control panel and drain valve knob and test unit.

### 2.3 COMMISSIONING

Ensure that unit is isolated at mains supply.

Clean pan using hot water and detergent.

Rinse out and dry pan thoroughly before commencing operation.

Fill pan with cooking oil to level marked on element guard and switch on with thermostat at maximum setting i.e. 190°C. Check that indicator lamps function and that thermostat operates.

After completion of installation, demonstrate method of operation to kitchen staff. Point out location of isolating switch for use in an emergency or during cleaning.



## SECTION 3 - SERVICING

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

### 3.1 CONTROL PANEL - TO REMOVE

- a) Drain pan by inserting drain pipe over a suitable receptacle then pull out drain lever and move it to the right.
- b) Remove knob at drain valve lever end using a 6mm spanner on lever and a 10mm spanner on knob.
- c) Remove two screws in upper flange of fascia panel i.e. below front hob.
- d) Move panel slightly forward at top until clear of hob then lift panel slightly upward thus releasing lower fixing and to remove panel.

### 3.2 CONTROL THERMOSTAT and INDICATOR LAMPS

If these prove faulty they are not normally repairable and must be replaced using the following procedures:

#### 3.2.1 Control Thermostat

In order to replace control thermostat, it will be necessary to remove unit from stand or table location. Adopt the following procedure :

- a) Drain pan(s).
- b) Remove control panel as detailed in Section 3.1.
- c) Note positions and remove wires.
- d) Using a 'stubby' pozi screwdriver, remove thermostat from control panel.
- e) Disconnect supply connections and remove fryer from location to enable it to be turned on its side later.
- f) Remove element as detailed in Section 3.3.
- g) Remove cover plate from element hinge block through which thermostat capillary tube passes. Manoeuvre tube and phial through moving hinge tube.
- h) From front, remove two fixings which secure base plate and remove plate.
- j) Turn unit on to its side. Feed capillary tube and phial through hole in base of hinge block and remove thermostat.
- k) Replace in reverse order. Take care that capillary tube is well clear of element terminals.
- m) Replace elements (see Section 3.3). Also replace base and control panels.
- n) Fill pan with oil and heat it up.  
Carry out installation tests.

#### Note

When replacing a control thermostat, fit existing insulating sleeving over capillary tubing. Ensure that no portion of tubing is exposed to possible contact with live parts. Coil excess tube by wrapping it around a suitable mandrel of approximately 25mm diameter.

#### 3.2.2 Indicator Lamps

Remove control panel as detailed in Section 3.1.

Pull off lamp connections and undo nut that secures it at rear. Remove lamp and replace in reverse order.

### 3.3 ELEMENT

To replace heating element proceed as follows:

- a) Drain pan.
- b) Remove basket support bar from element and fully raise element.
- c) Remove 10 pozidriv screws in underside of element terminal box.
- d) Remove element terminal box bottom cover plate. This can be effected by prising up lower edge with a screwdriver.
- e) Lower element and remove element guard (4 screws). Also undo clips that secure thermostat phial to element assembly.
- f) Remove push-on element connections, first noting their locations.
- g) Remove two hex-headed screws which secure element assembly to terminal box. Remove element, taking care not to kink or otherwise damage thermostat capillary tube.

Replace element in reverse order ensuring that oil resistant gasket is fitted under element mounting plate.

Note that thermostat phial is fitted in third hairpin of element from left, clamps being applied to centres of three element sheaths.

### 3.4 SAFETY THERMOSTAT

#### 3.4.1 To Reset

In the event of a control thermostat failure that results in overheating of oil, safety thermostat will interrupt and switch off all power to elements.

To re-establish circuit, it will be necessary to reset safety thermostat.

First allow fryer to cool, then remove control panel as detailed in Section 3.1.

On single pan fryer (E350/38), safety thermostat is reset by depressing tubular rod situated immediately below drain valve.

In the case of the double pan fryer (E350/39), two safety thermostats are located at rear of unit between two pans.

Reach in and depress red reset button (left and right thermostats appropriate to left and right pans).



### **3.4.2 To Replace**

In order to replace safety thermostat it will be necessary to remove unit from its location on stand or table. Adopt the following procedure:

- a) Drain pan.
- b) Remove control panel as detailed in Section 3.1.
- c) Disconnect supply connections and remove unit from its location to enable it to be turned on its side later.
- d) Remove element as detailed in Section 3.3.
- e) Remove cover plate on element hinge block through which capillary tube passes. Manoeuvre capillary tube and phial through moving hinge tube.
- f) From front, remove two fixings that secure the base plate and remove the plate.
- g) Turn the appliance on to its side and remove safety thermostat from mounting bracket. Pull off connections.
- h) Feed capillary tube and phial through hole in base of hinge block and remove the thermostat.
- j) Replace thermostat in reverse order, taking care that capillary tube is well clear of element terminals.
- k) Replace elements (see Section 3.3). Also replace base panel and the control panel.
- m) Fill pan with oil and heat it up. Carry out installation tests.

### **3.5 DRAIN VALVE - TO REMOVE**

Drain pan.

Remove control panel as detailed in Section 3.1.

Undo compression fitting nut at rear of valve, adjacent to pan (turn it clockwise).

Remove saddle clamp at front and remove valve.

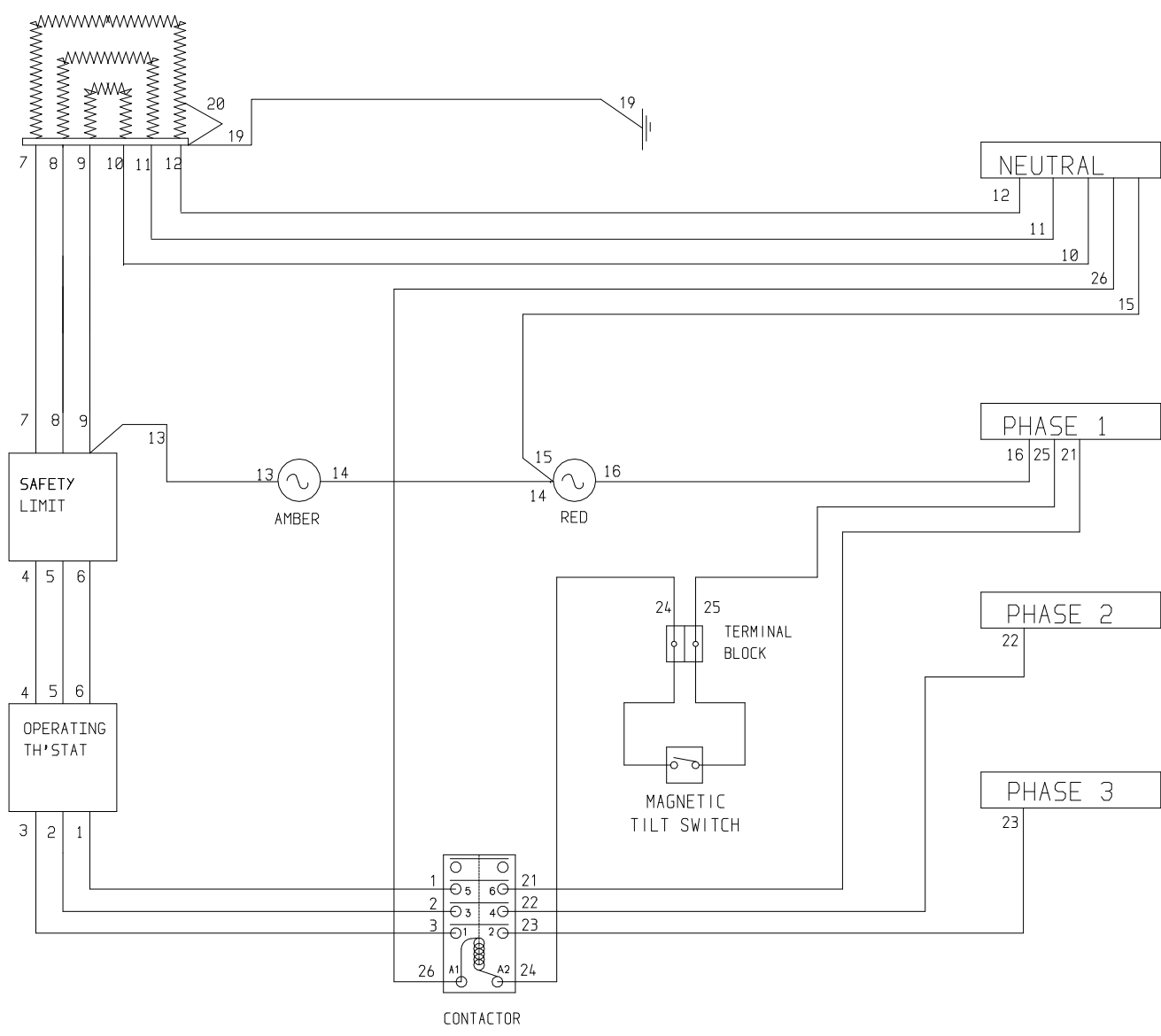
Fit a new valve in reverse order. Apply a small quantity of high melting point grease to sliding parts of operating lever and also to circular shaped plate on which end of spindle runs.

### **3.6 TILT SWITCH**

Located in element terminal box, this component should require no maintenance.



E350/38 Fryer Wiring Diagram





E350/39 Fryer Wiring Diagram

