

## **Installation and Servicing Instructions**

for

# LD46, LD47, LD48, LD49, LD50, LD51, LD52 LD53, LD55, LD56 and LD57 FRYERS

## LD58 and LD60 Chip Scuttles

#### LD69 and LD70 Pasta Cookers

The installer must ensure that installation of the unit(s) is in confornity with regulations in force at the time. For the UK, particular attention requires to be paid to:-

#### **BS7671 IEE Wiring Regulations**

**Electricity at Work Regulations** 

Health and Safety at Work Act

#### **Fire Precautions Act**

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

#### **WARNING: THIS APPLIANCE MUST BE EARTHED!**

#### **Preventive Maintenance Contract**

In order to obtain maximum performance from the equipment, we would recommend that a maintenance contract be arranged with **AFE Serviceline**. Visits may then be made at agreed intervals to carry out adjustments and repairs. A quotation for this service will be provided upon request. Contact **AFE Serviceline** as detailed below:-

Tel: 01438 363 000 Fax: 01438 369 900

#### **Falcon Foodservice Equipment**

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

e-mail: info@afefalcon.com

# Technical Installation Information Table 1

If another type of plug is used, a 15A fuse requires to be used in the plug, adaptor or distribution board. Note \* 13A Fuse Rating: The unit must be protected by a 13 amp fuse if a 13 amp plug is used.

C = Countertop Unit F = Freestanding Unit Power Ratings at 230V AC or 400V 2N AC

<del></del>	LD46 Fryer	Chip Scuttle	Chip Scuttle	Pasta Cooker	Pasta Cooker										
Model	LD46	LD47	LD48	LD49	LD50	LD51	LD52	LD53	LD55	LD56	LD57	LD58	1D60	1 69QT	LD70 I

Туре	Width	Depth	Height	Vertical Clearance	Side/Rear CI.	Power Rating	Fuse Rating
ட	300mm	600mm	965mm	900mm	150mm	6kW	n/a
ட	300mm	600mm	965mm	900mm	150mm	9kW	n/a
ш	600mm	600mm	965mm	900mm	150mm	12kW	n/a
ш	600mm	600mm	965mm	900mm	150mm	18kW	n/a
ပ	300mm	600mm	315mm	600mm	150mm	2.75kW	13A
O	300mm	600mm	315mm	600mm	150mm	6kW	n/a
O	450mm	600mm	315mm	600mm	150mm	6kW	n/a
S	450mm	mm009	315mm	900mm	150mm	9kW	n/a
O	600mm	600mm	315mm	900mm	150mm	6kW	n/a
ပ	600mm	600mm	315mm	900mm	150mm	5.5kW	13A
ပ	600mm	900mm	315mm	900mm	150mm	12kW	n/a
S	450mm	900mm	285mm	600mm	150mm	0.75kW	5A
S	450mm	mm009	610mm	600mm	150mm	1.25kW	5A
C	300mm	000mm	315mm	600mm	150mm	2.75kW	13A
С	600mm	600mm	315mm	600mm	150mm	5.5kW	13A

#### **SECTION 1 - SITING**

The PRO-LITE models have been designed in a modular form which consists of base, counter and free-standing units.

Information which relates to individual models is listed in Table 1.

Free-standing and base models should be installed upon a firm, level surface and adjustable feet are provided for levelling purposes.

Counter units must be positioned upon a table, counter or similar surface.

Vertical and horizontal clearances required from top and sides of a particular unit to any overlying combustible surface (ie wall, partition, etc) are listed in Table 1. Relevant fire regulations must be complied with.

#### Mounting Counter Units upon an Oven

When mounting a counter unit upon a PRO-LITE oven, it is recommended that units which carry liquids, i.e. fryers and bains maries, are secured as follows:

Remove oven outer back panel.

Remove oven crown plate.

Position unit(s) which require to be secured upon the oven.

Secure hob unit(s) to oven through side flange centre holes into the threaded inserts in the base(s) of the hob unit(s). Use fixings provided (packed separately) and replace oven back panel.

The unit is now ready for electrical connection.

#### Mounting Counter Units upon a Hotcupboard

PRO-LITE hotcupboards are designed to be used in conjunction with counter models. Assembly is achieved by means of two shouldered fixings being applied to a top unit underside from inside a base appliance as detailed in Figure 1.



# SECTION 2 - ELECTRICAL SUPPLY AND CONNECTION

Electrical ratings are as stated on the unit data plate. The listing in Table 1 is based on standard UK specification at 230V~, 400V 2N~ or 400V 3N~ as appropriate. Wiring must be executed in accordance with the regulations listed in this booklet.

# WARNING: Each individual appliance must be earthed!

After completion of installation, the method of operation should be demonstrated to the kitchen staff. The isolating switch location, for use in an emergency or during cleaning should also be pointed out.

## LD50 and LD56 FRYERS LD58 and LD60 CHIP SCUTTLES LD 69 and LD70 PASTA COOKERS

These models are designed to be connected to a single phase AC supply using the 2 metre mains lead fitted as standard.

Wires are coloured in accordance with the following code and should be connected to the plug as follows:

EARTH to terminal marked E or coloured GREEN or GREEN/YELLOW.

NEUTRAL to terminal marked N or coloured BLACK.

LIVE to terminal marked L or coloured RED.

Units which receive power from a plug, adaptor or distribution board must be individually protected by a fuse with an appropriate rating. (See Table 1)

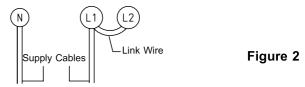
For models with two mains leads, each lead requires to be protected by a fuse with an appropriate rating. (See Table 1)

Any replacement supply cable must be 1.5mm<sup>2</sup>, cord code designation 245 IEC 57 (CENELEC H05 RN-F).

For internal connection, outer sheathing must be stripped 140mm from the cable end. The live and neutral conductors must be trimmed so that the Earth conductor is longer by 50mm. Pass inlet cable through the rear panel cord grip and ensure that cable is routed without leaving excessive free length inside appliance.

#### LD46, LD48, LD51, LD52, LD55 and LD57 FRYERS

These models are supplied for use on 2 phases of a 3 phase and neutral AC supply. Ratings are stated on appliance data plate.



The fryers may also be operated on a single phase AC supply by fitting a bridging link as detailed in Figure 2.

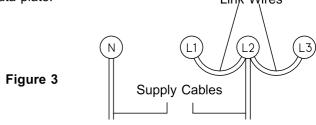
When a unit is connected to a single phase AC supply, data plate information must be amended to indicate the correct voltage supply and the phase power split should be deleted.

The electrical supply must be installed using a suitable isolating switch with a minimum contact separation of 3mm in all poles.

#### LD47, LD49 and LD53 FRYERS

These models are supplied for use on a 3 phase and neutral AC supply. Ratings are stated on the appliance data plate.

Link Wires



The fryers may also be operated on a single phase AC supply by fitting two bridging links as detailed in Figure 3.

When a unit is connected to a single phase AC supply, data plate information must be amended to indicate the correct voltage supply and the phase power split should be deleted.

The electrical supply must be installed using a suitable isolating switch with a minimum contact separation of 3mm in all poles.

# SECTION 3 - USING AND CLEANING PRO-LITE UNITS

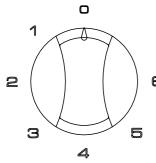
#### **IMPORTANT: GENERAL NOTES ON CLEANING**

Disconnect unit from electricity supply prior to cleaning

Never use a coarse abrasive to clean exterior panels. A soft cloth with a warm water and detergent solution is sufficient.

Never attempt to steam clean a unit or hose it down with a jet of water.

#### LD58 and LD60 CHIP SCUTTLES



The chip scuttles are supplied with removable storage pans and drainer.

The overhead lamp on the LD60 is generated by a 500W halogen heat lamp which is controlled by a switch located upon the control panel.

#### Using a Chip Scuttle

When storing chips, it is not advisable to keep them covered for longer than is absolutely necessary as this will cause the potatoes to become soggy.

#### Cleaning a Chip Scuttle

Clean containers as soon as possible after use with hot water and detergent. Soap filled pads may be used to remove stubborn deposits. Avoid leaving empty used containers in the unit. Food deposits may bake on.

# LD46, LD47, LD48 and LD49 FREE STANDING FRYERS

# LD50, LD51, LD52, LD53, LD55, LD56 and LD57 COUNTERTOP FRYERS



### **Temperature Control**

The fryers are controlled by a thermostat which offers settings between 130 and 190°C.

#### Using a Fryer

Thoroughly clean and dry pan before using for the first time.

A reaction can occur between the protective coating and cooking oil which may cause the oil to foam. Ensure drain valve is closed, i.e. handle turned fully clockwise on LD46, LD47, LD48 and LD49 models and fully left on LD50, LD51, LD52, LD53, LD55, LD56 and LD57 models. Fill pan with oil to level mark.

#### Pan Capacities

LD46 - 8 litres	LD53 - 13.5 litres
LD47 - 9 litres	LD55 - 16 litres
LD48 - 2 x 8 litres	LD56 - 2 x 7 litres
LD49 - 2 x 9 litres	LD57 - 2 x 8 litres

#### LD50 - 7 litres

Set thermostat to desired temperature and leave unit to heat up. When selected temperature is reached, the amber neon will go out to indicate that the unit is ready to use. When the oil temperature drops, i.e. when food is immersed in the oil, the thermostat will automatically restore the current to the elements.

Before draining pan or removing elements for cleaning, switch unit off at mains isolating switch. All models are fitted with safety switches to cut off power if element box is raised from pan when power remains on. Repositioning box upon main body automatically restores power. A re-settable safety thermostat is located on the underside of element box to protect against any overheating situation. Attention is drawn to the following safety related points:-

NEVER switch unit on unless pan is filled with oil.

Before draining pan or removing element box for cleaning, isolate fryer at main switch.

The possibility of surge boiling exists when over-wet food or a larger than recommended load is applied to the pan.

The pan may catch fire if oil is below minimum level mark.

Used oil has a reduced flashpoint making it prone to surge boiling.

#### **Cooking Hints**

## Frying Chips

Chips can be fried by the following methods:

#### Raw to finish

Set thermostat to 190°C and load each basket with a maximum batch load of pre-blanched chilled chips.

**LD50 and LD56** - 0.7kg ( $1^{1}/_{2}$  lbs)

LD46, LD48, LD51 and LD57LD56 - 1.4kg (3 lbs)

LD47 and LD49 - 1.8kg (4 lbs)

#### **Outputs per Hour**

**LD47** - 30kg (65lbs)

**LD50 -** 8kg (17lbs)

**LD46**, **LD51**, **LD56** - 16kg (34lbs)

**LD49** - 60kg (130lbs)

**LD48**, **LD57** - 32kg (70lbs)

#### Blanching

This method of pre-frying at a lower temperature (170°C) is used when large quantities of chips are required at peak periods.

Recommended basket loads should be observed. Finishing should be carried out within 3 hours of blanching at a thermostat setting of 190°C. Cook for 1 or 2 minutes only and serve immediately, avoiding further storage if possible.

#### Frying Fish

Battered fish is best cooked directly on the base grid and not in the chip basket. Crumbed fish can be fried in the basket. When ready, remove the fish with the aid of a lifter. Recommended temperature is 170°C, the time varies according to type and weight of fish and requirements. For frying other foods, refer to the unit facia.

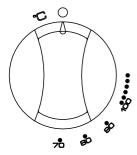
#### Cleaning a Fryer

The unit should be cleaned regularly. To facilitate cleaning of the pan interior, the elements and element box may be lifted out of the pan. When the worst of the food particles and oil have been removed from the pan and elements, replace the box. Fill pan to level mark with water/detergent solution, take care not to let the solution overflow. Drain pan, thoroughly rinse and dry.

#### **IMPORTANT:**

In the event of no power being available to the element box check that it is set properly on the main body. If this is not successful then reset safety stat by pressing red button on the underside of the element box.

#### LD69 and LD70 PASTA COOKERS



#### **Unit Controls**

A temperature control and indicator neons monitor operation of unit. 15 minute mechanical timer with warning bell also fitted as standard.

#### **Using a Pasta Cooker**

Ensure drain valve is closed, ie. lever is fully left and safety catch has dropped into position.

Fill pan with 10 litres of water (to top level mark on element guard).

If a basket is immersed, maximum fill mark corresponds to top of perforated section. Take care not to overfill basket.

#### **WARNING**

Never, under any circumstances, switch unit on unless pan is filled with water. The minimum level is indicated on element guard.

Set control to desired temperature and allow water to heat. If setting is below 100°C, amber neon will go out. Power will be cut to element when temperature is reached.

When temperature drops, control will automatically restore power to elements and amber neon will become lit

If setting is beyond 100°C mark, water will boil continuously and amber neon will remain lit at all times.

Top up water regularly to avoid well from boiling dry, this could damage unit. Regular water replacement of to reduce starch build-up is recommended when cooking pasta. Warning - Take extreme care when draining hot water!

#### **Important Note**

A safety switch is provided to cut-off power to elements if element box is raised from pan. Box repositioning will automatically restore power. In the event of power not being available to element, check box is properly located upon main body.

#### **Cooking Hints**

The control can be set between 70°C to boiling (approx. 100°C). Cooking pasta requires a setting above 100°C to achieve a continuous rolling boil.

The main basket can be used for bulk prepararation with a typical 500g of uncooked pasta per load. Alternatively, portion baskets may be used to re-heat previously cooked food. Regeneration time for individual portions is approximately 30 to 45 seconds. Baskets are also supplied for heating sous vide products.

#### **WARNING**

Do not leave portion or sous vide baskets in boiling water for an unnecessary period of time as the handles quickly become VERY HOT!

#### Cleaning a Pasta Cooker

Attach spout to drain valve. To open valve, lift safety catch at pan front and move lever to the right. Drain water from pan into an appropriate vessel.

Lift off element box to gain access to pan. Wipe empty pan and remove food debris and also remove any debris which may be present on the elements. Reposition element box and refill pan with a water detergent solution to level mark indicated on element guard.

Drain pan. Thoroughly rinse and dry before use. Retain spout in clip provided on lid underside when not in use.

#### **SECTION 4 - SERVICING**

#### LD58 and LD60 CHIP SCUTTLES

#### **SERVICE ACCESS**

#### **Base Plate**

Upturn unit and rest it at edge of worksurface with rear upstand overhanging edge.

Undo base plate fixings to remove base plate.

#### **FUNCTIONAL COMPONENTS**

#### Temperature Control.

Remove base panel.

Remove control knob.

Remove electrical connections, noting their positions.

For units with thermostat, carefully remove phial from retaining clips and clear structure.

Undo fixings which secure control to panel and remove.

Replace in reverse order.

#### **Elements**

Remove base plate.

Undo electrical connections, noting positions.

Undo element fixings and remove.

Replace in reverse order.

#### **Terminal Block**

Remove base plate.

Remove electrical connections at terminal block, noting positions.

Undo fixings which secure block to unit and remove.

Replace in reverse order.

#### Cable

Remove base plate.

Undo mains cable cord grip at unit rear.

Undo electrical connections at terminal block and remove cable.

Replace in reverse order. Ensure cable is fed through securing clamp and pulled taut before tightening clamp.

LD46, LD47, LD48, LD49, LD50, LD51, LD52, LD53, LD55, LD56 and LD57 FRYERS

#### SERVICE ACCESS

#### **Outer Back Panel**

Remove lid, baskets and fish plate. Lift element box from pan.

Remove box rear panel by undoing fixings on box underside.

#### **FUNCTIONAL COMPONENTS**

#### **Control Thermostat**

Remove back panel of element box.

Remove electrical connections, noting positions.

Undo fixings which secure thermostat to control panel.

Remove phial seal at control panel entry point and withdraw phial.

Replace in reverse order and ensure phial seal and electrical insulation sheet/phial cover are secured in position.

#### **Neon Indicator**

Remove back panel from element box.

Remove electrical connections.

Undo neon retaining nut and remove neon.

#### Microswitch

Remove back panel from element box.

Remove electrical connections.

Undo the fixings which secure switch to panel bracket.

Replace in reverse order and ensure electrical insulation sheet is securely in position.

#### **Timer**

Remove back panel from element box.

Remove control knob.

Undo fixing which secure timer to control panel.

Replace in reverse order.

#### **Safety Thermostat**

Remove back panel from element box.

Remove electrical connections.

Undo the fixings which secure the switch to the panel bracket.

Replace in reverse order and ensure that the electrical insulation sheet is securely in position.

#### **Elements**

Remove back panel from element box.

Remove electrical connections, noting their positions.

Remove retaining nuts and withdraw elements.

Replace in reverse order.

#### **Terminal Block**

Remove back panel from element box.

Undo electrical connections, noting their positions.

Undo fixings which secure block to panel and remove block.

Replace in reverse order.

#### **Mains Power Cable**

Remove back panel from element box.

Remove electrical connections, noting their positions.

Undo cable cord grip at panel entry and withdraw cable.

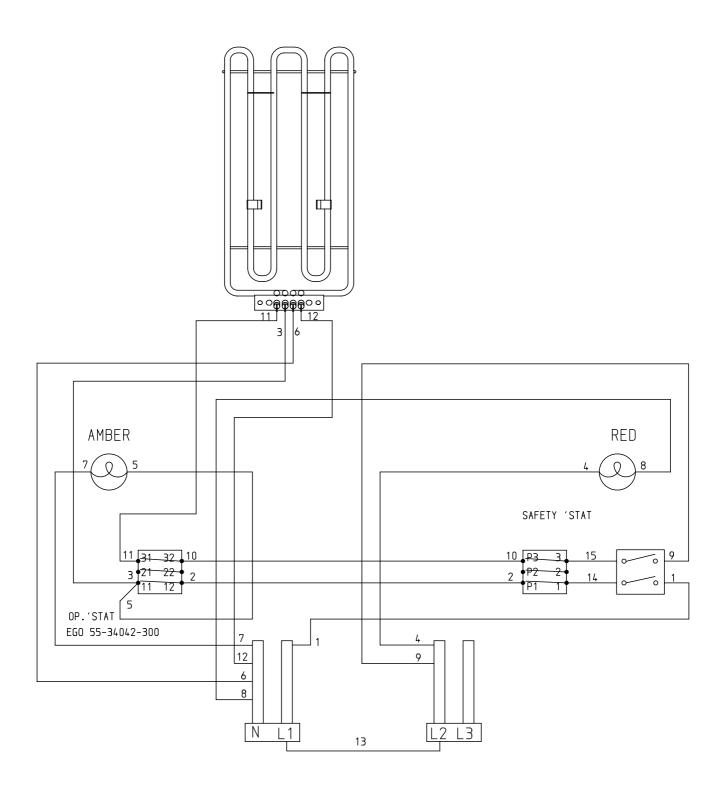
Replace in reverse order.

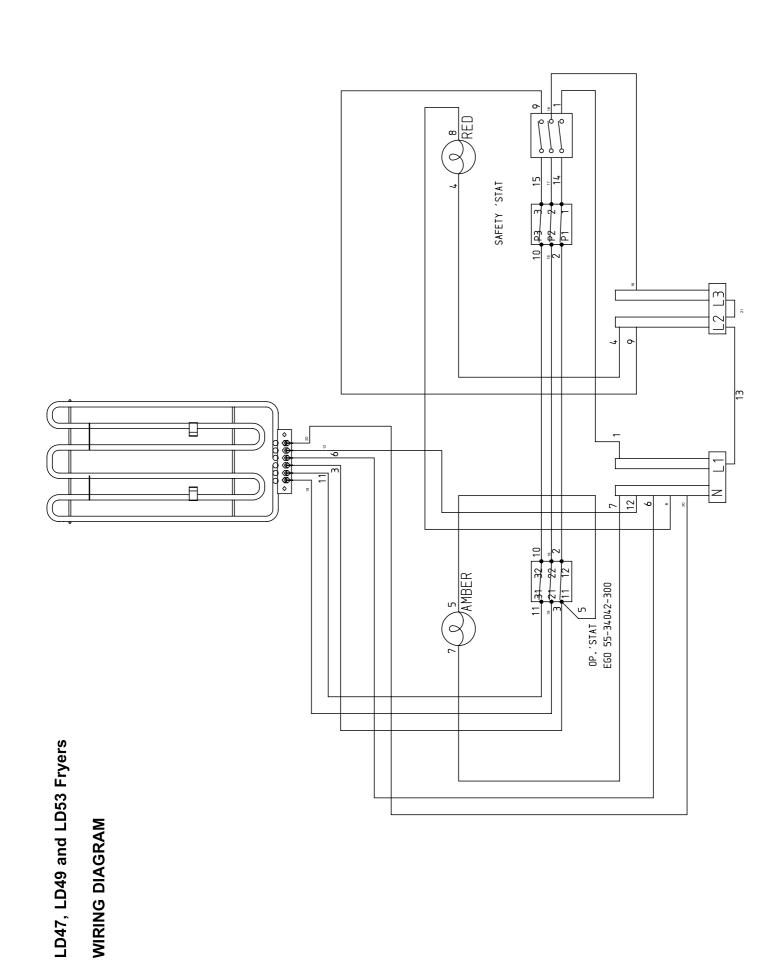
LD69 and LD70 PASTA COOKERS	PRO-LITE SH	ORT SPARES
SERVICE ACCESS	Fryers	
Outer Back Panel	735110060	Red Neon
Remove lid and baskets. Lift element box from pan.	735110070	Terminal Block L1 & N
Remove box rear panel by undoing fixings on box	735110100	Supply Cable
underside.	735120010	Control Knob
FUNCTIONAL COMPONENTS	735120011	Timer Knob
Control Thermostat	735110012	Thermostat
Remove outer back panel.	735120034	Safety Thermostat
Remove electrical connections, noting positions.	735120014	Amber Neon
Undo fixings which secure thermostat to element box.	735120015	Element (2.75kW)
Remove phial seal at element box entry and withdraw phial.	735120016	Element (6kW)
Replace in reverse order and ensure phial seal and	735120017	Element (9kW)
electrical insulation sheet/phial cover are secured in	735120018	Chip Basket (200mm)
position.	735120019	Chip Basket (160mm)
Neon Indicator	735120020	Drain Valve
Remove outer back panel from element box.	735120021	Door Hinge (LD46, 47, 48, 49)
Remove electrical connections.	735120022	Strainer
Undo neon retaining nut and remove neon.	735120023	Door Handle
Microswitch	735120024	Microswitch Kit - Single (LD50, 56)
Remove outer back panel from element box.  Remove electrical connections.	735120025	Microswitch Kit - Double (LD46, 48, 51, 52, 55, 57)
Undo fixings which secure switch to panel bracket.	735120026	Microswitch Kit - Treble
Replace in reverse order. Ensure electrical insulation sheet is securely in position.	735120027	(LD47, 49, 53) Terminal Block (L2 & L3)
Timer		
Remove outer back panel from element box.	Chip Scuttle	
Remove control knob.	735230001	Control Knob
Undo fixing which secures timer to element box.	735230002	Thermostat
Replace in reverse order.	735230003	Element
Elements	735110060	Red Neon
Remove outer back panel from element box.	735240001	Lamp Switch (LD60)
Remove electrical connections, noting the positions.	735240002	Lamp (5000W LD60)
Undo retaining nuts and withdraw elements	735110100	Supply Cable
Replace in reverse order.	D ( 0 )	
Terminal Block	Pasta Cooker	
	735250001	Control Knob
Remove outer back panel from element box.	735250002	Timer Knob
Undo electrical connections, noting the positions.	735110060	Red Neon
Undo fixings which secure block to panel and remove block.	735120014	Amber Neon
Replace in reverse order.	735250003	Microswitch
Mains Power Cable	735120015	Element
Remove outer back panel from element box.	735250004	Thermostat
Remove electrical connections, noting positions.	735250005	Basket Liner
Undo cable cord grip at panel entry and withdraw cable.	735250006	Basket Portion
Replace in reverse order.	735110100	Supply Cable

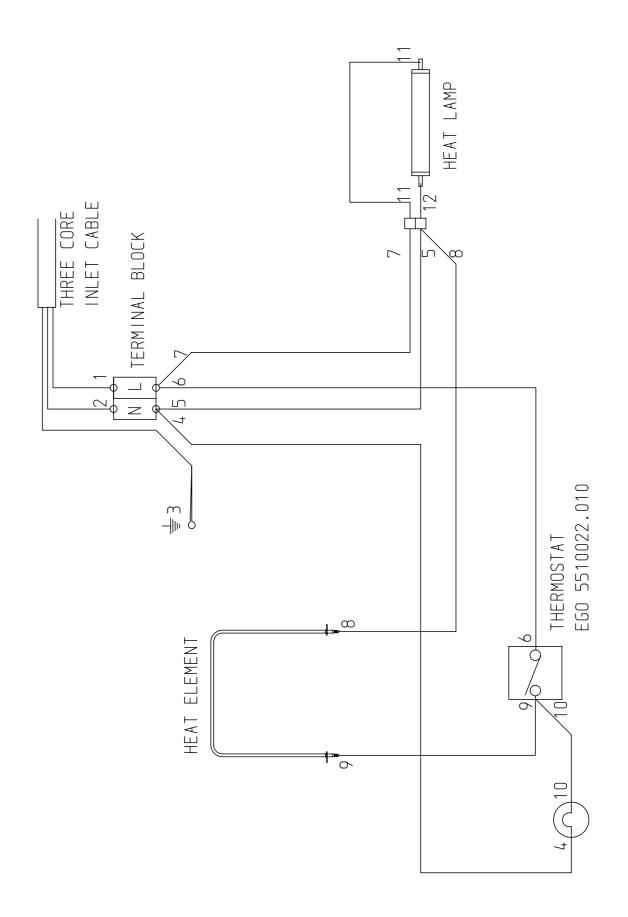
Replace in reverse order.

# LD46, LD48, LD51, LD52, LD55 and LD57 Fryers

# **WIRING DIAGRAM**







#### LD69 and LD70 Pasta Cookers

## **WIRING DIAGRAM**

