Installation, Operating, Servicing and Conversion Instructions

Phoenix Gas Open Top Electric Oven Range PHDR01

Please make a note of your product details for future reference:

Date Purchased: _____

Model Number: _____

Serial Number: _____

Dealer: _____

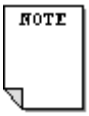
CONTENTS

IMPORTANT INFORMATION

Read these instructions carefully before using this product, paying particular attention to all sections that carry warning symbols, caution symbols and notices. Ensure that these are understood at all times.

WARNING!
This symbol is used whenever there is a risk of personal injury.

CAUTION!
This symbol is used whenever there is a risk of damaging your Lincat product.



NOTE:
This symbol is used to provide additional information, hints and tips.

KEEP THIS MANUAL FOR FUTURE REFERENCE

WARNINGS AND PRECAUTIONS

This appliance must be installed, commissioned, serviced and converted by a qualified person in accordance with national and local regulations in force in the country of installation.

Strip plastic coating and clean the appliance before use.

During operation parts may become hot - avoid accidental contact.

Parts protected by the manufacturer shall not be adjusted by the user.

Disconnect this appliance before servicing, maintenance or cleaning.

TECHNICAL DATA

Model	**PHDR01**

Dimensions	
Height (mm)	900
Width (mm)	900
Depth (mm)	800
Weight (kg)	125
Hob Cooking Surface w x d (mm)	900 x 600
Useable Oven Capacity w x d x h (mm)	715 x 530 x 400
Oven Shelf w x d (mm)	710 x 512

Connection and Operating Pressures	
Gas Inlet Connection	¾" BSP (Rp ¾)
Supply Pressure – Natural G20	20mbar
Supply Pressure – Propane G31	37mbar

Heat Input (Gross)	
Total - Natural – G20	36.0kW
Total - Propane – G31	36.0kW
Hob Burner Full Rate - Natural – G20	6.0kW
Hob Burner Low Rate – Natural – G20	1.9kW
Hob Burner Full Rate – Propane – G31	6.0kW
Hob Burner Low Rate - Propane – G31	2.1kW

Gas Consumption	
Total – Natural - G20	3.42 $m^3 h^{-1}$
Total – Propane – G31	2.58 kg h^{-1}
Hob burner Full Rate – Natural – G20	0.57 $m^3 h^{-1}$
Hob burner Low Rate – Natural – G20	0.18 $m^3 h^{-1}$
Hob burner Full Rate – Propane – G31	0.43 kg h^{-1}
Hob burner Low Rate – Propane – G31	0.15 kg h^{-1}

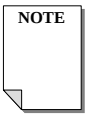
Oven Temperature Range	≈40 – 250 °C

Electrical				
1N~ + E 230V 50Hz		**3N~ + E 400V 50Hz**		
Amps	Watts	Line	Amps	Watts
		L1	8.7	2000
26.1	6000	L2	8.7	2000
		L3	8.7	2000

CHECK LIST OF ENCLOSURES

Model	PHDR01	Tick
Warranty card	1	
Instructions manual	1	
Pan Supports	3	
Oven Shelves	2	

SERIAL NUMBER



Each appliance manufactured at Lincat has a unique identifying number found in the top right hand corner of the data plate attached at the rear of the appliance. Please record that number in the space provided should it be required for future reference.

Serial Number	

INSTALLATION AND COMMISSIONING

Optionally site the appliance beneath an extraction canopy for the removal of combustion products, steam and other odours associated with cooking of products

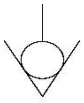
When making the gas connection, fit an isolating cock into the supply line close to the appliance for emergency shutdown or servicing purposes.

Installation must include sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room of installation. There must be a minimum free area of 4.5cm^2 per kW of total heat input.

Allow for a sufficient flow of fresh air for complete gas combustion.

Do not connect directly to any flue, ducting or mechanical extraction system.

The gas supply hose or tubing shall comply with national requirements in force and shall be periodically examined and replaced as necessary.



An equipotential bonding terminal is provided to allow cross bonding with other equipment.

Means of isolation with at least 3mm contact separation in all poles must be incorporated into the fixed wiring of this appliance.

The fixed wiring insulation must be protected by insulated sleeving having a temperature rating of 60 ºC.

Supply cords shall be oil resistant, sheathed flexible cable not lighter than ordinary polychloroprene or equivalent elastomer sheathed cord (code 60245 IEC 57)

ACCESS THROUGH NARROW DOOR WAYS

The overall depth of the appliance (including door handles) is **825mm**.
This can be reduced further to an overall depth of **750mm** by the following steps.

1. Remove the pan supports, burner caps and oven shelves.
2. Using the cardboard packaging lay the appliance on its back in the cardboard cap.
3. Remove the castors both front and back.
4. The appliance width will be reduced to **750mm** sufficient to pass through a standard doorway of **770mm**.

Reassemble all parts when clearance is completed.

SITING

The installer must ensure that all local regulations are met and that there is an unobstructed minimum distance of 1000mm from the top of the flue to the ceiling, which must be of non-combustible material.

Install this appliance on a level surface ensuring all vents are unobstructed.
Any adjacent partitions, walls or furniture must be of non-combustible material otherwise minimum distances = A, 50mm B, 1000mm – see Fig 1

If this appliance is fitted with castors, use caution at all times when manipulating or moving, and lock castors when appliance is in position.

The Installer shall pay particular attention, in order not to disturb the air combustion admission nor the combustion products evacuation of appliances fitted with open burners.

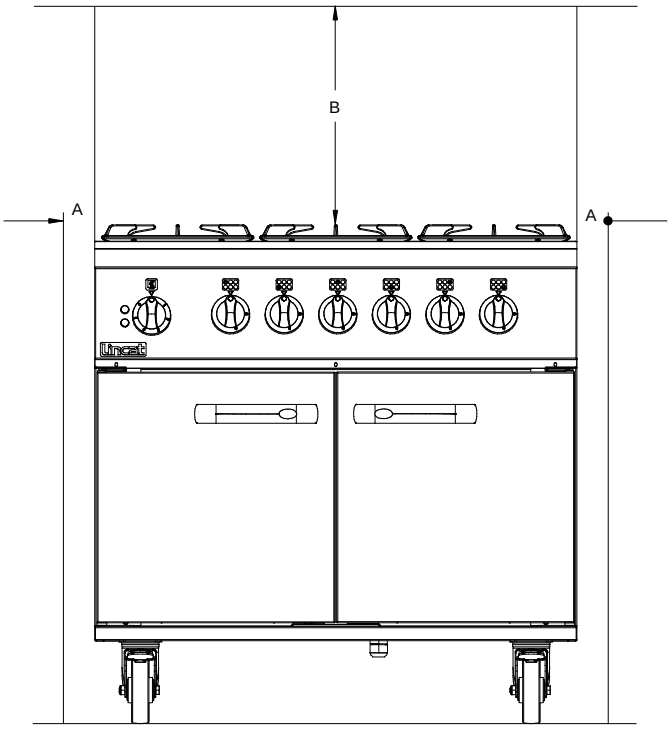


Fig 1

GAS SUPPLY AND CONNECTION

The gas inlet connection is at the rear of the appliance. The pipe work should be of adequate size but not smaller than the gas inlet connection at the rear of the appliance, i.e. Rp ¾" BSP.
The gas supply tubing or hose shall comply with national requirements in force and shall be periodically inspected and replaced as necessary.
All joints made must be leak free.

Final gas connection to the appliance and gas supply shall comply with local regulations.

The above listed appliance has been designated Cat I & Cat II for 2nd and 3rd family gases, flue type A_1

SUPPLY PRESSURES

The appliance is connected directly to the gas supply where the gas supply pressure is controlled at the source of inlet in the building or via the governor attached to the bottle gases. See Technical Data for the supply pressures.

- To gain access to the gas pressure test nipple the fascia panel requires removal (see page11). The test nipple is situated in the centre of the manifold rail.
- Remove the blanking screw and attach a pressure gauge to the boss of the test nipple.
- Light the oven burner and set thermostat to the highest setting and check the pressure.

NOTE

For those destination countries where the supply pressure exceeds the supply pressures given in the Technical Data above a regulator must be fitted and the supply pressure set to the pressures detailed.

ELECTRICAL SUPPLY AND CONNECTION

Connection of the electrical supply cable is made at the rear of the unit. Remove the protective cover and fit a suitable cable into the cable gland and then to the inlet terminal block.
The appliance is supplied for connection to a three-phase supply. Connections are provided to allow termination of all three-phase cables.
If the appliance is to be fed from a single-phase supply then the three supply terminals will need to be connected together using a link wires.

LOCKING OF WHEELS

When the appliance has been installed in its intended position the front castors should be locked by depressing the locking tabs on the castors.

Locks should only be released for the intention of moving the appliance for cleaning purposes and/or routine servicing of the appliance.

OPERATING INSTRUCTIONS

APPLIANCE USE

This appliance is only for professional use and should only be used by qualified personnel.

Ensure that the person responsible understands how to light, safely operate, clean and shut down the appliance and is made aware of the position and operation of the gas isolating cock in the event of an emergency.

Ensure that all controls have free and easy movement, if not contact a qualified service engineer.

This appliance is intended to be used for baking or roasting in the oven and for pan frying or boiling on the hob.

All users should know how to clean burner caps and to correctly locate the burner cap on the burner body.

LIGHTING SEQUENCE – HOB BURNER

- Depress the control knob then rotate anti-clockwise to any position to allow gas through to the burner. Manually light the burner using a taper or piezo ignitor wand.
- On establishing a flame at the burner, keep the knob depressed for approximately 15 seconds then release. The burner should remain lit.

OVEN OPERATION

The oven temperature is set by rotating the oven thermostat knob to the desired setting.

Note: The oven fans will automatically start rotation as soon as switched by the rotation of the oven thermostat control knob.

The green neon denotes power to the appliance.

When in heating mode the orange neon will be illuminated. When the set temperature of the oven has been reached the orange neon will be extinguished.

SHUT DOWN

To shut down the appliance rotate all control knobs clockwise to the OFF position. The gas supply stopcock or bottle valve should now be closed. The electrical supply to the appliance should be isolated.

POTS AND PANS

The minimum recommended pan size should have a base diameter not less than 220mm.

The maximum recommended pan size per burner should not exceed a base diameter of 340mm.

Under no circumstances should multiple burners be covered by a single pan, a plate used for griddle purposes or any other container.

After operation, some parts of the appliance will remain hot for a period of time; care should be taken to avoid risk of burns.

OPENING OF THE OVEN DOOR

Care must be taken to avoid injury when opening the oven door, when the oven is in use as hot air will rapidly escape.

OVEN TEMPERATURES

The temperatures on the thermostat knob are a guide and generally reflect the temperature at the centre of the oven. The temperatures in the oven will vary slightly from top to bottom. It may be necessary to periodically rotate product being cooked to ensure even cooking.

HANDLING OF POTS AND PANS

- Pans should only be filled to a level no more than to prevent a boil over situation.
- Periodically inspect liquid volumes to prevent a boil dry situation.
- Frying of product should never be left unattended.
- Use hand and arm protection when handling hot pans to avoid injuries from burns.

HANDLING OF BAKING TRAYS AND OTHER CONTAINERS USED IN THE OVEN

- During routine cooking it may be necessary to rotate containers/baking trays and therefore hand protection must be worn for safe handling.
- When removing hot containers/baking trays hand protection must be worn.

REPOSITIONING OF OVEN SHELVES DURING USE

- All containers/baking trays must be removed from the oven shelf to be repositioned and hand protection to be worn if oven in hot condition.
- Reposition the shelf to the desired height on the side racks ensuring shelf is properly located.

NOTE

Whilst the oven thermostat is turned to the on position the fans within the oven will remain in operation. Be aware of hot air flow with the oven doors in the open position.

ACCESS TO SAFETY THERMOSTAT RESET BUTTON

This appliance is fitted with a safety thermostat to protect the oven from overheating. If the oven is not heating, try resetting the safety thermostat by pressing the red button located behind the grommet on the rear right hand access panel.

To access the reset button remove the grommet on the panel.

The oven must be cool before the reset can be activated.

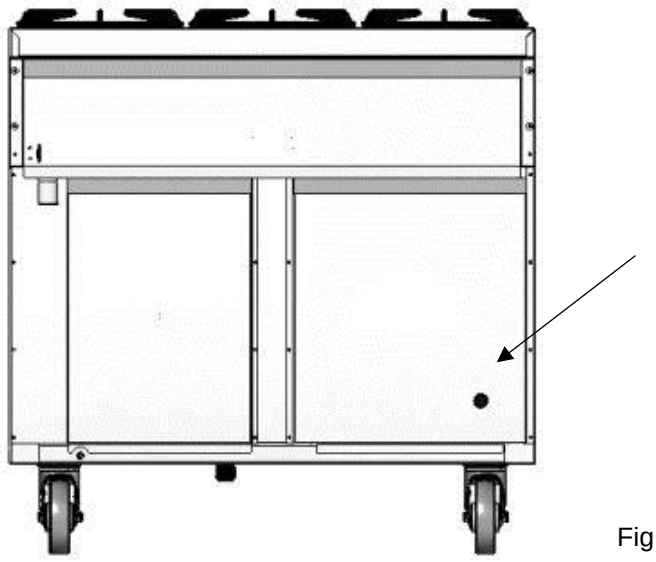


Fig 1A

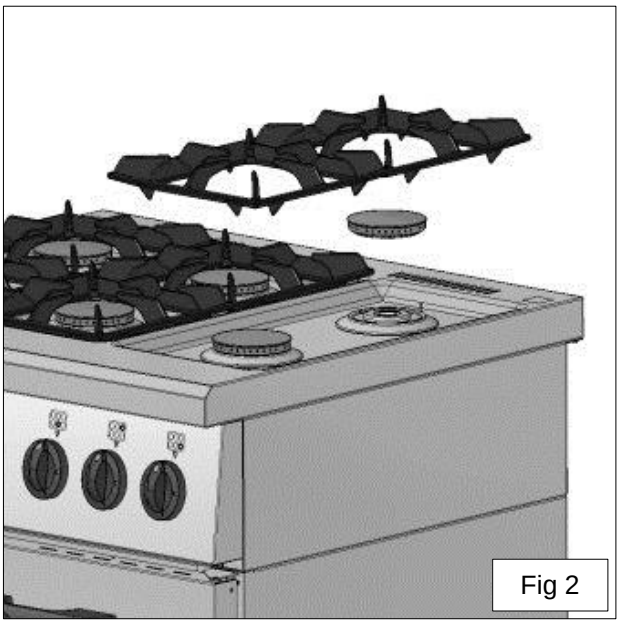
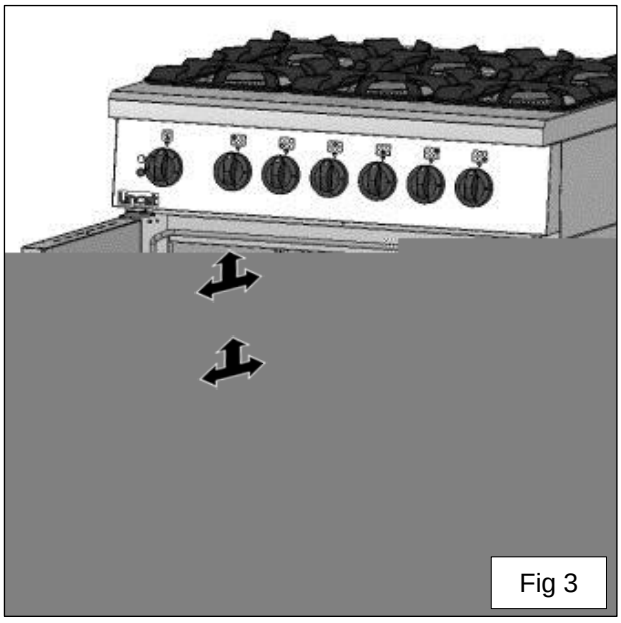
CLEANING

Your Lincat product has a manufacturer's warranty. This requires you to maintain and care for your product and follow maintenance instructions. If you fail to maintain your unit or damage components Lincat may charge you for warranty repair. Please check the website for terms and conditions.

Do not use a water jet or steam cleaner, and do not immerse this appliance.

Clean all panels with warm water and mild detergent do not use abrasive materials. Rinse and dry thoroughly with a soft cloth.

Hob and Oven Components

Cleaning pan supports and burner caps Pan supports can easily lifted free of the hob and cleaned manually or in a suitable dishwasher. Burner caps should be routinely cleaned and the ports inspected. The burner cap ports should be dry and free from debris. Replace the cleaned burner cap by aligning the two lugs with the burner body pockets. The blanked areas of the burner cap should align with the pan support fins.	 Fig 2
Oven shelves will slide freely to the pre-set stop positions. To remove or reposition the shelves ensure the shelf is pushed home to the rear of the oven. Tilt the shelf at the rear to clear the rack runner and slide forward. Once clear lift the shelf so as to clear the stop pin from the rack runner. With shelves removed the side racks can be removed for cleaning. Degreaser may be used for stubborn areas. Maintain the oven cavity in a clean state.	 Fig 3

SERVICING AND MAINTENANCE

All servicing, maintenance and component replacement on this appliance should be carried out by one of our recommended service engineers.

The electrical supply must be isolated before removing any exterior panels

SERVICE ACCESS

To gain access gas control valves remove the control knobs (A) by pulling free from spindles.
Note: Spring clips are fitted in each knob core; care should be taken to avoid loss.

Remove the three screws (B) directly beneath the fascia panel.

Tilt the fascia panel at its base and pull forward.

Note: Wiring will still be connected to neons, thermostat and switch.

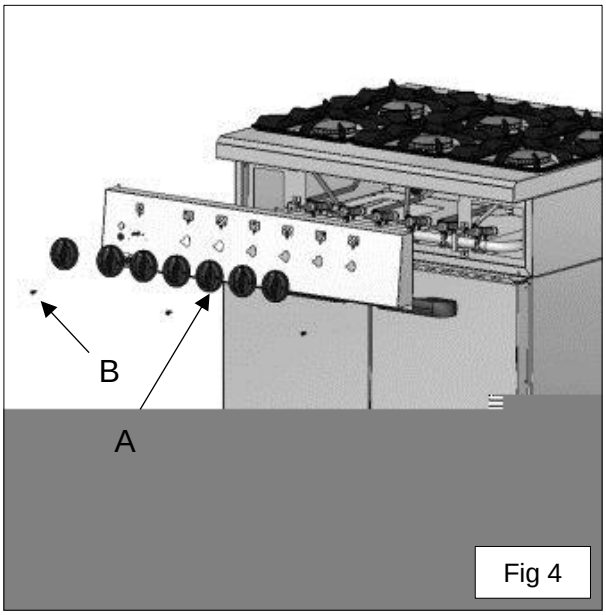


Fig 4

Servicing the Hob Burner Gas Taps - **Recommended every 6 months**

To service the gas tap remove the two screws (C) from the cap.

Carefully remove the cap and valve spindle assembly.

Grease the components ensuring any excess grease does not block valve ports. Re-assemble the spindle and cap.

Check the valve spindle for free rotation. Perform a gas soundness check

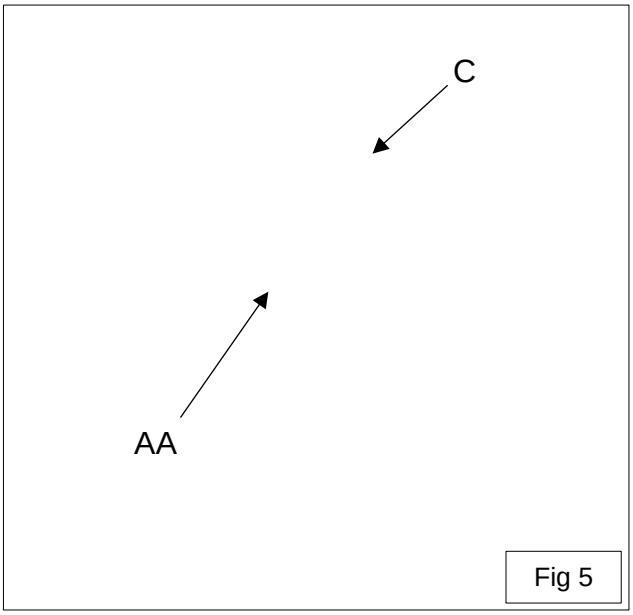
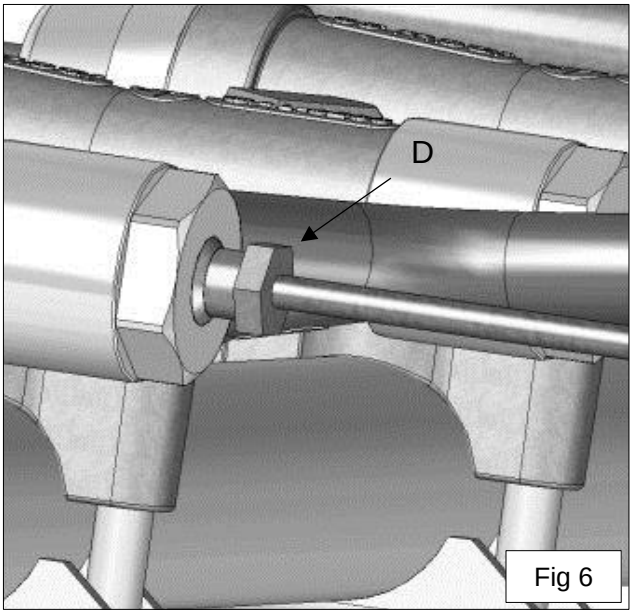
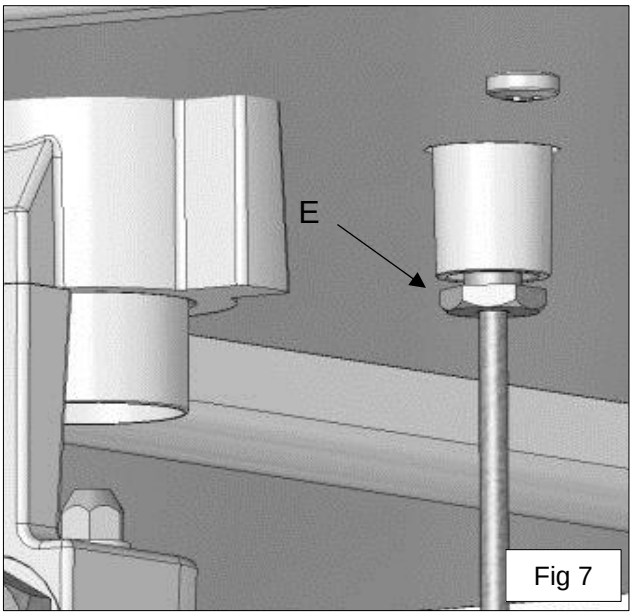
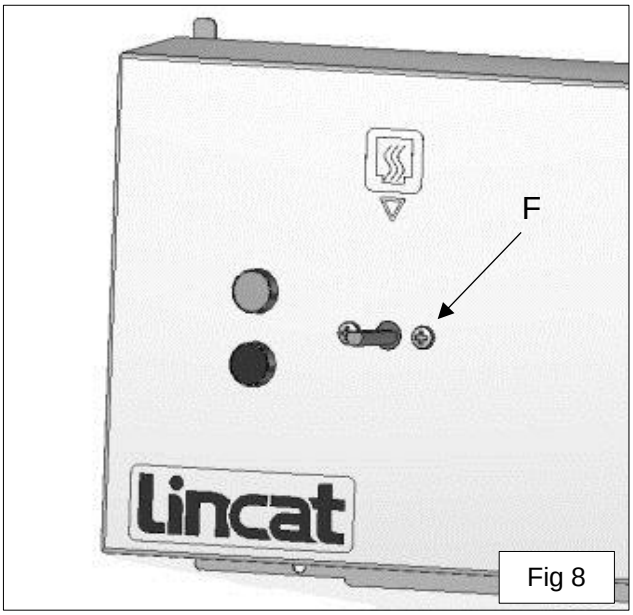
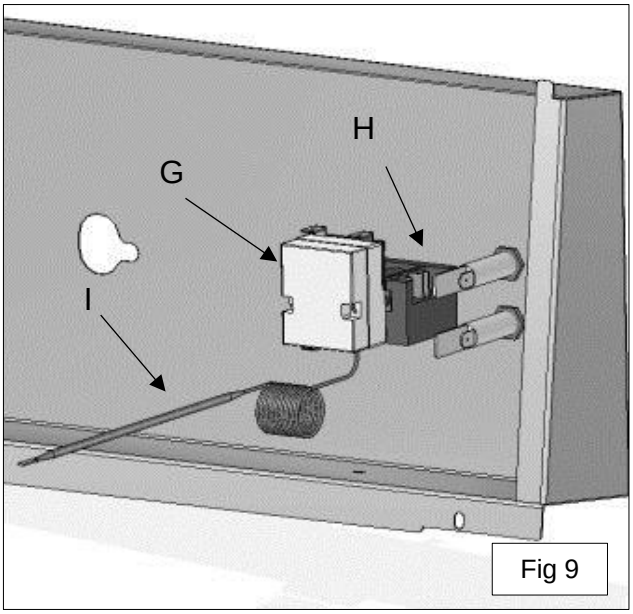


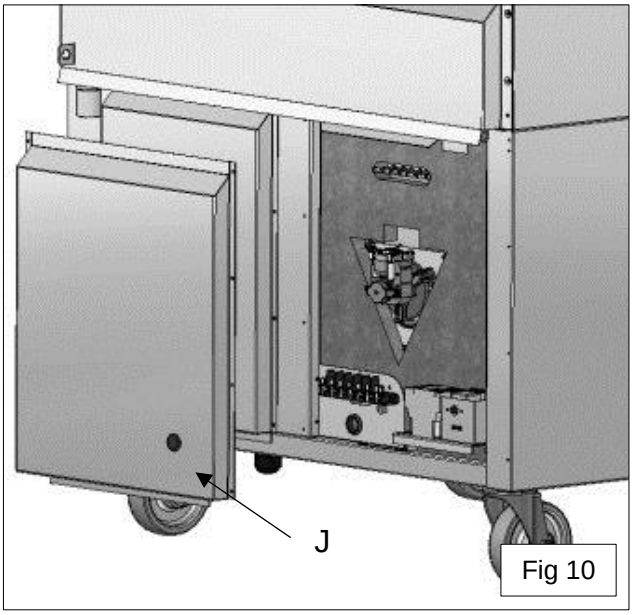
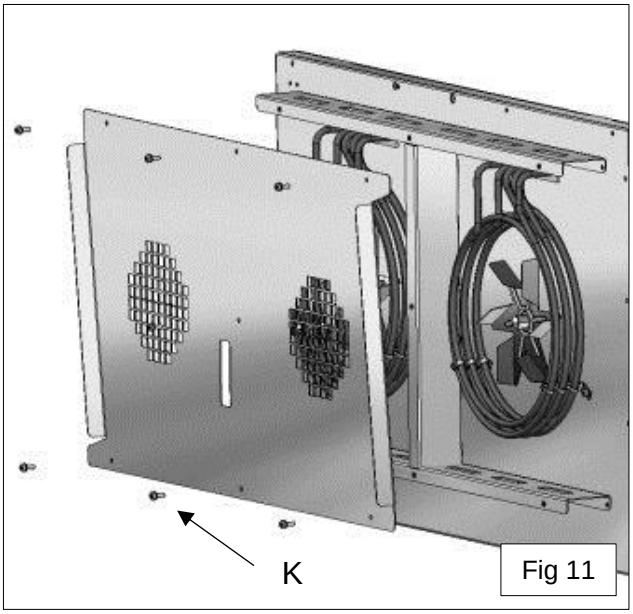
Fig 5

COMPONENT REPLACEMENT

Hob Thermocouple Replacement	
Remove the fascia panel and control knobs as per Fig 4 Loosen the thermocouple tail nut (D) and withdraw the thermocouple from the valve	 Fig 6
Access to the front burners is from the front behind the fascia panel Access to the rear burners is from the rear by removing air intake covers Loosen the nut of the thermocouple head (E) from the burner base and withdraw the thermocouple. Fitting the new hob thermocouple (TC31), screw the thermocouple head nut into the burner base pocket and tighten. Do not over tighten the nut. Route the thermocouple capillary and secure the thermocouple tail nut to the respective valve. Do not over tighten the nut.	 Fig 7

Oven Thermostat and Fan Switch Replacement	
Remove the fascia panel and control knobs as per Fig 4 Remove the two screws F to free the fan switch and oven thermostat from the fascia panel	 Fig 8
To free the thermostat G from the fan switch H, pull the two components apart. Note the wiring to each terminal or refer to Wiring Diagram. The thermostat I bulb can be removed from the bracket within the oven cavity. Image shows new thermostat with capillary coiled. Access to the thermostat bulb is from the rear of the appliance. See Fig 10	 Fig 9

To remove a neon, disconnect the appropriate wires from the terminals.
Loosen the retaining nut, withdraw neon body from fascia panel
Fit new neon and secure.
Rewire the neon.

Oven Thermostat Replacement	
Remove the rear access panel J. Uncoil the thermostat capillary from Fig 9 and feed the thermostat bulb through the upper cavity. Feed the bulb through the grommets in the upper cavity through to the lower section of the appliance. Feed the thermostat bulb through the insulation and rear oven cavity panel into the thermostat bracket within the oven cavity. Refit all panels and check wiring has been reconnected to the correct terminals Reinstate power and perform PAT test	 Fig 10
Oven Element Replacement	
Remove the shelves from the oven cavity Remove the screws K to release the fan guard. Note the orientation of the fan guard	 Fig 11

Remove the element retaining screws L and withdraw the element M from the cavity

Fit the replacement element and secure fully.
Refit the fan guard and reconnect the wires to the element terminals
Replace the rear access panels
Reinstall the oven shelves
Reinstate power and perform PAT test

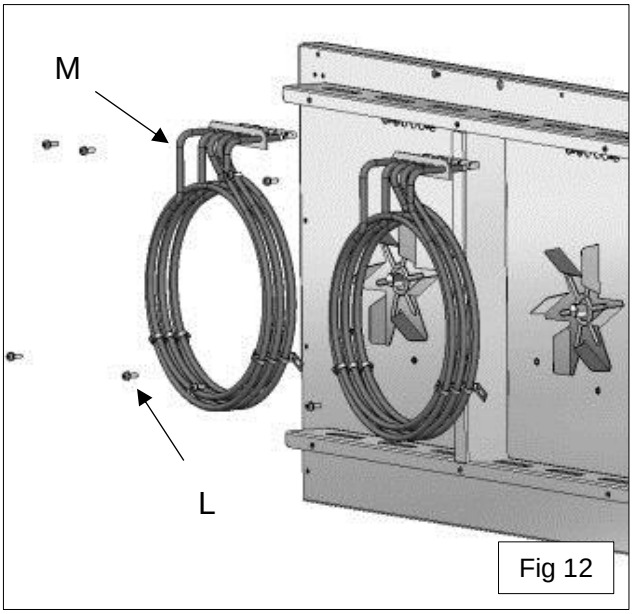


Fig 12

Replacing the Fans and Motors

Remove the fan guard as in Fig 11
Support the fan N and prevent from rotation
Loosen the nut O, left hand thread and remove the nut from the spindle
Remove the fan

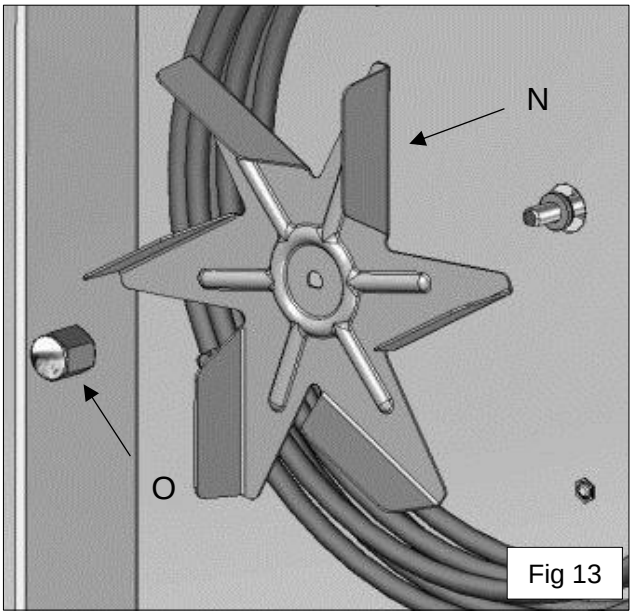


Fig 13

Remove both the rear access panels as in Fig 10
Disconnect the wires from the motor terminals
Remove the 3 retaining screws Q
Withdraw the fan assembly P

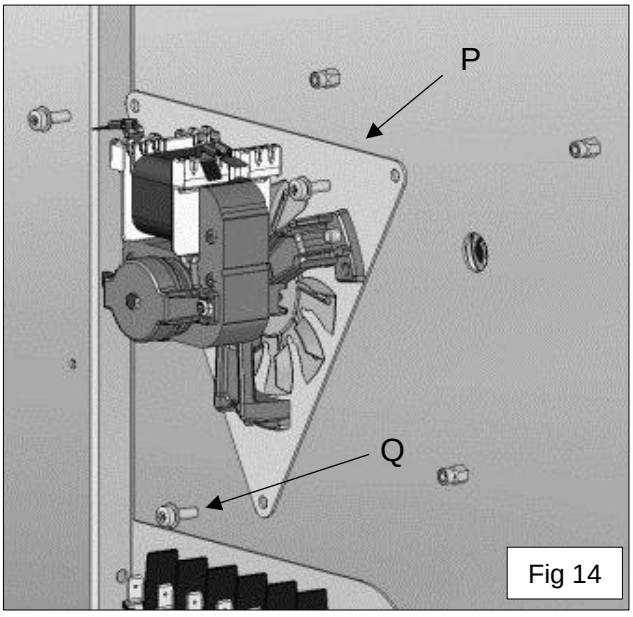


Fig 14

The fan assembly comprises of 4 components
To remove the motor from the appliance follow steps in Fig 13 & Fig 14
The motor can be removed from the fixing plate R, by removing the retaining screws S

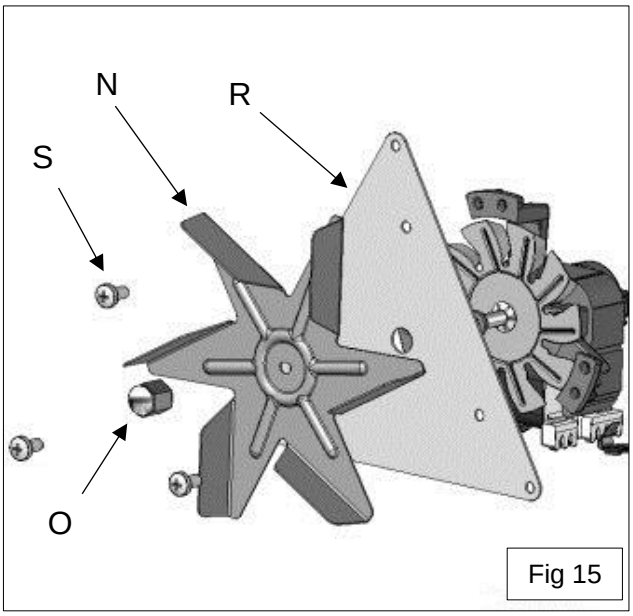


Fig 15

Other parts as in Fig 16 can be replaced if necessary.
Terminal block T is fixed by 2 screws
The Contactor U clips to the mounting bracket
The Safety Thermostat V is secured by 2 screws.
To access these parts see Fig 10

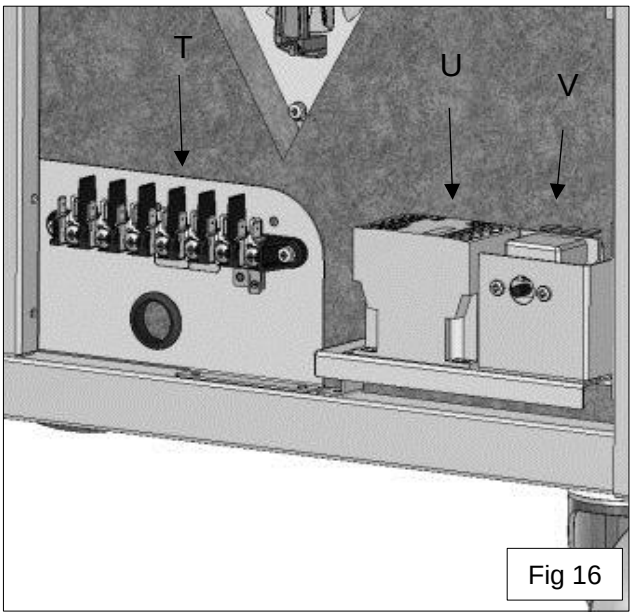


Fig 16

Door Replacement
Open both oven doors and undo the two lower hinge fixing screws
Pull door away together with lower hinge and lower the door assembly free of the top hinge pin taking care not to lose the upper door bush
Replace and fit in reverse order.

Hob Valve Replacement
Remove the fascia panel as per Fig4
Remove the burner feed pipe nut from the valve body (Fig5)
Remove the thermocouple tail from the valve body (Fig6)
Remove the saddle clamp and screws (Fig5)
Remove the valve from the manifold
Check the integrity of the valve to manifold seal, replace as necessary
Replace the valve, relevant bypass injector and refit associated components
Perform soundness and functional check

Wiring Diagram
Electrical repairs and maintenance should only be carried out by qualified personnel.
The wiring diagram, E672, is available on request.

CONVERSION

Conversion of Gas Type – Injector Changes

Model	Gas	Inlet Pressure	Injector	∅	Mark	Part No.
PHDR01	**G20**	20 mbar	AA	1.10	11	JE275 x 6
			BB	0.74	74	JE250 x 1
			CC	1.86	500	JE05 x 6
			DD	2.30	740	JE28 x 1
	G31	37 mbar	AA	0.74	74	JE250 x 6
			BB	0.51	51	JE251 x 1
			CC	1.20	200	JE13 x 6
			DD	1.51	310	JE45 x 1

G20 denotes Natural Gas
G31 denotes LPG (propane)

Hob Burner Bypass Injectors
Remove the fascia panel as per Fig4
Remove the hob valve burner bypass injector AA (Fig5)
Replace the bypass injector AA applicable to gas type and screw fully home

Oven Thermostat Bypass Injector
Remove the fascia panel as per Fig4
Remove the oven thermostat burner bypass injector BB (Fig6)
Replace the bypass injector BB applicable to gas type and screw fully home

Changing the Hob Burner Injector

Remove the pan supports
Remove the burner caps
Insert a ¼" AF socket through venturi and remove the hob injector CC
Note: Line the socket interior with a little PTFE tape to aid the grip on the injector
Replace the hob burner injector (washers included) applicable to gas type
Replace burner caps ensuring ports are clear
Replace pan supports

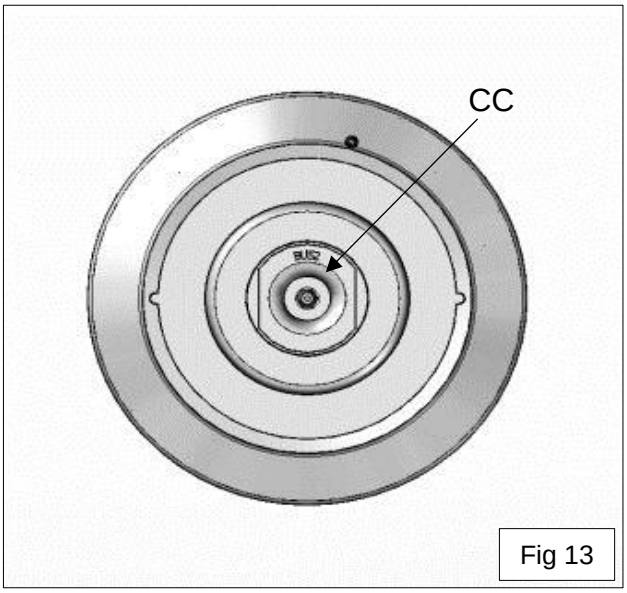
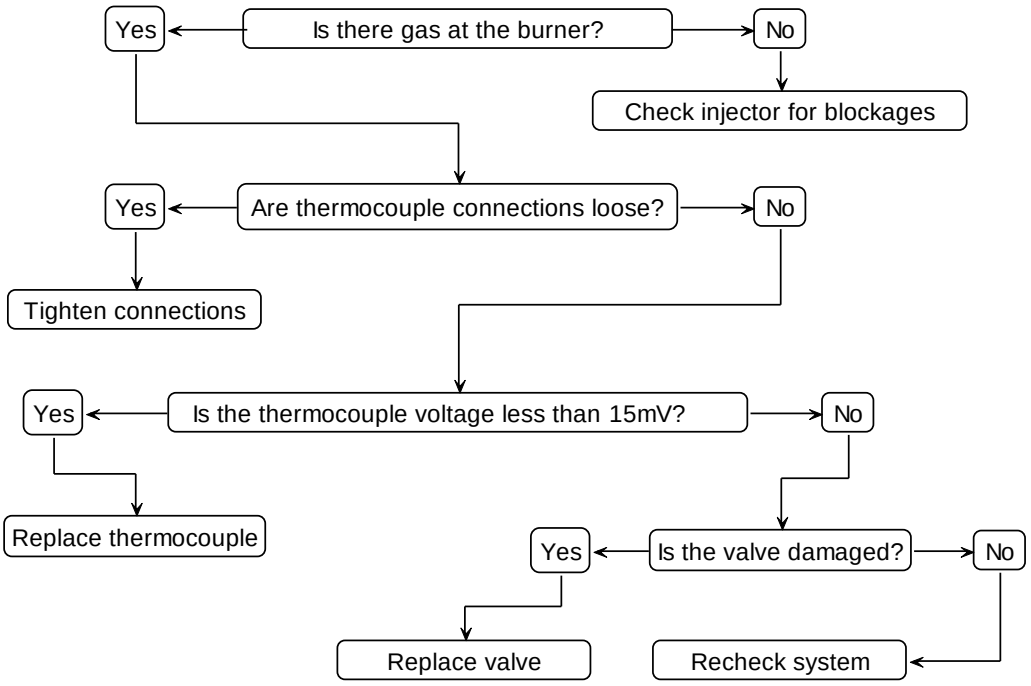


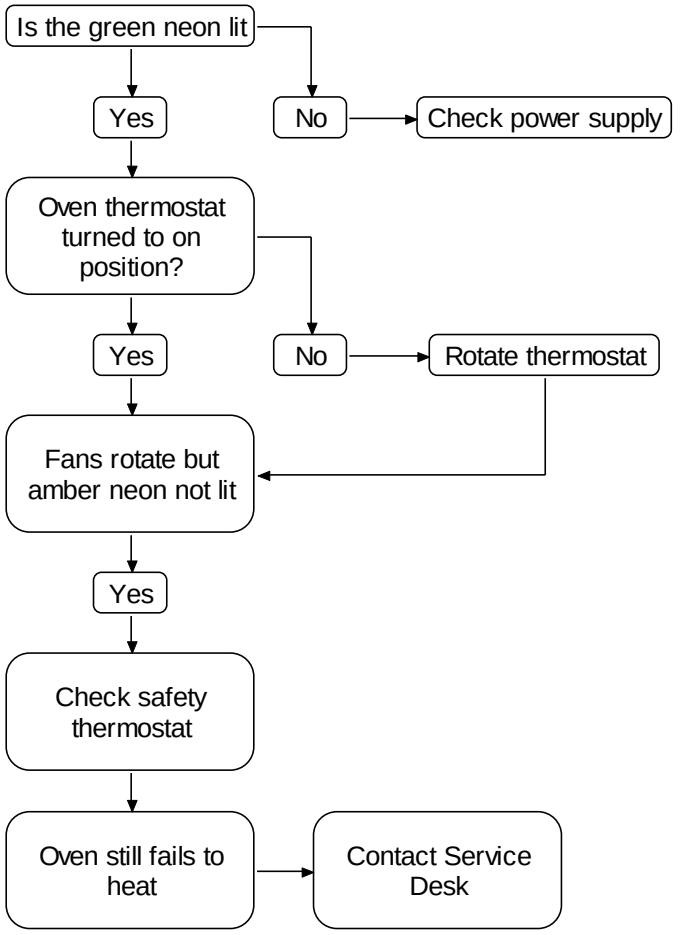
Fig 13

FAULT FINDING

- Burner/s will not light or stay lit



Oven fails to heat



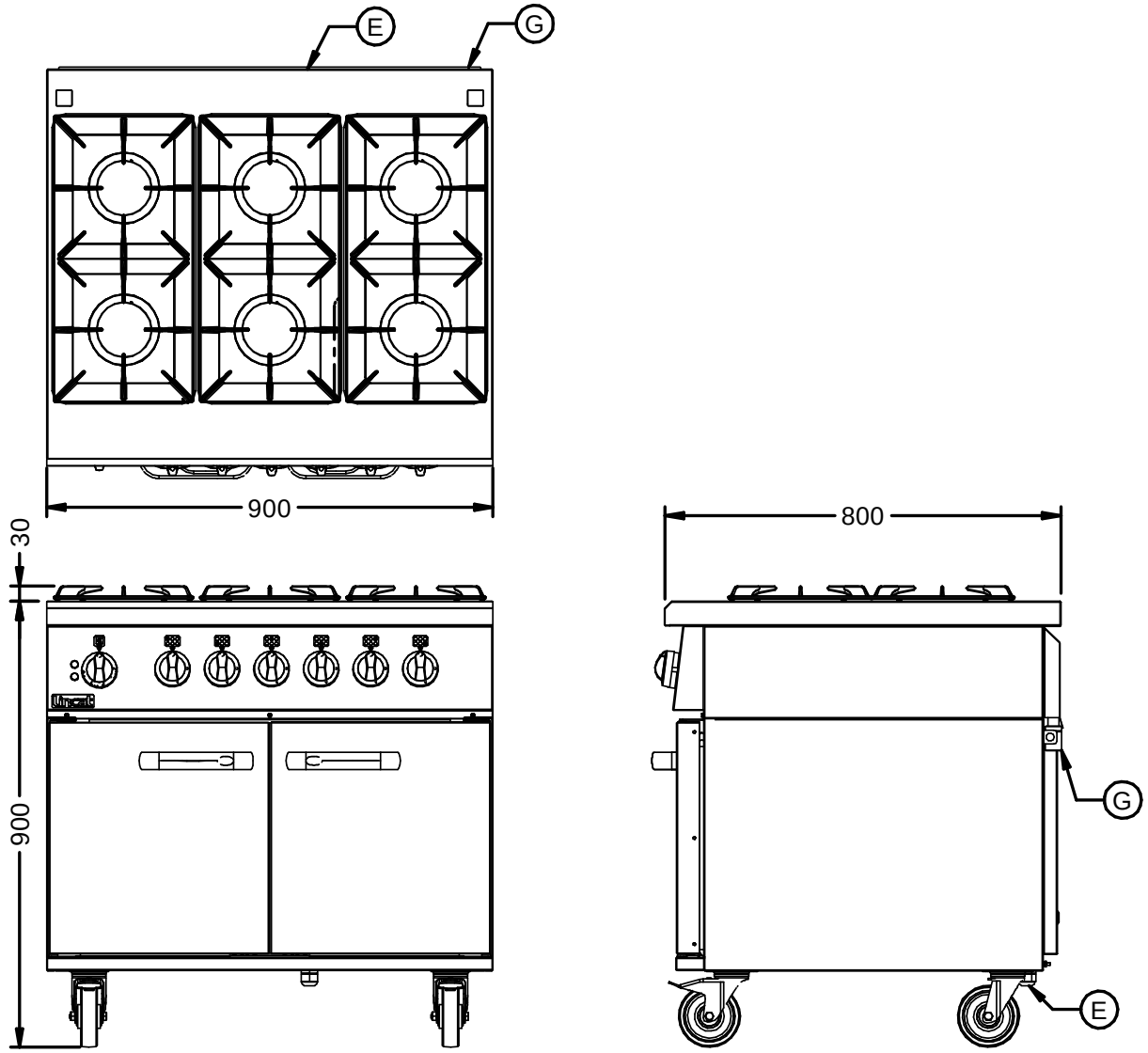
SPARE PARTS LIST

Part number	Part description
BU50	BURNER BODY
BU51	BURNER CAP
BU52	VENTURI
BU53	INJECTOR HOUSING
BU54	BURNER GASKET
BU55	UPPER DOOR BUSH
BU72	LOWER DOOR BUSH
CA143	125MM CASTOR OPUS SWIVEL BRAKED
CA145	125MM CASTOR OPUS SWIVEL UNBRAKED
CO113	COPPER WASHER
CO215	CONTACTOR
EL248	ELEMENT
FA142	FAN ASSEMBLY
JE05	HOB BURNER INJECTOR NATURAL GAS
JE13	HOB BURNER INJECTOR PROPANE GAS
JE250	HOB BURNER BYPASS INJECTOR PROPANE GAS
JE275	HOB BURNER BYPASS INJECTOR NATURAL GAS
KC01	KNOB CLIP (THERMOSTAT)
KC02	KNOB CLIP
KN503	HOB BURNER CONTROL KNOB
KN505	OVEN CONTROL KNOB
NE46	GREEN NEON
NE47	AMBER NEON
PA02	PAN SUPPORT
RB01	DOOR CATCH
SH113	OVEN SHELF
SR08	OVEN SIDE RACK
SW58	FAN SWITCH
TC31	HOB BURNER THERMOCOUPLE
TH46	OVEN THERMOSTAT
TH63	OVEN SAFETY THERMOSTAT
VA74/S	HOB VALVE COMPLETE SET OF PARTS

ACCESSORIES

Part Number	Description
OA8902	Splashback/Shelf

APPLIANCE DIMENSIONS



G denotes gas inlet connection

SERVICE INFORMATION

For help with the installation, maintenance and use of your **Lincat** equipment, please contact our service department:

☎ UK: 01522 875520

For non-UK customers, please contact your local Lincat dealer
All service work, other than routine cleaning MUST be carried out by qualified personnel and a record kept of any remedial actions taken and at least cover the requirements of the service schedule of this document. We cannot accept responsibility for work carried out by other persons.

To ensure your service enquiry is handled as efficiently as possible, please tell us:

- Brief details of the problem
- Product code
- Type number
- Serial number

} All available on serial plate

Lincat reserve the right to carry out any work under warranty, given reasonable access to the appliance, during normal working hours, Monday to Friday, 08:30 to 17:00.

DECLARATION
All Lincat products capable of burning gaseous fuels, satisfy the requirements of the Gas Appliance Regulations 2016/426.

GUARANTEE
This unit carries a comprehensive UK mainland warranty. The guarantee is in addition to, and does not diminish your statutory or legal rights. Contact Lincat for terms and conditions

The guarantee does not cover:

- Accidental damage, misuse or use not in accordance with the manufacturer's instructions
- Consumable items (such as filters, glass, bulbs, slot toaster elements and door seals.)
- Damage due to incorrect installation, modification, unauthorised service work or damage due to scale, food debris build-up, etc.

The manufacturer disclaims any liability for incidental, or consequential damages. Attendance is based on reasonable access to the appliance to allow the authorised personnel to carry out the warranty work.

Service calls to equipment under warranty will be carried out in accordance with the conditions of sale. Unless otherwise specified, a maximum of 15 minutes of administrative time, not spent directly carrying out servicing work, is provided for within the warranty. Any requirement for staff attending the call to spend greater time than 15 minutes due to administrative requirements, such as on health and safety risk assessments, will be chargeable at the prevailing rate.