



User, Installation, Servicing and Conversion Instructions

Opus 700 Gas Chargrills OG7401, OG7402, OG7403 & OG7404

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

Date Purchased: _____

Model Number: _____

Serial Number: _____

Dealer: _____

OPUS 700

Dear Customer,
Thank you for purchasing this Lincat product.

This is just one of over 450 different items of catering equipment available which is constantly being extended and improved. Details are available from your local distributor or direct from us.

Used for the purposes for which it is intended, and with careful maintenance as outlined in this User Guide, your Lincat product will give you years of trouble free service.

For use in GB & IE

IMPORTANT INFORMATION



Please read all of the safety and operating instructions carefully before using this product. Please pay particular attention to all sections of this User Guide that carry warning symbols and notices.



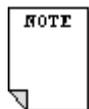
WARNING!

This is a Warning symbol. This symbol is used throughout the user guide whenever there is a risk of personal injury. Ensure that these warnings are read and understood at all times.



CAUTION!

This is a Caution symbol. This symbol is used throughout the user guide whenever there is a risk damaging your Lincat product. Ensure that these warnings are read and understood at all times.



NOTE:

This is a Note symbol. This symbol is used throughout the user guide to provide additional information, hints and tips.

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WARNINGS AND PRECAUTIONS



WARNING!

This appliance must be installed by a competent installation engineer in accordance with the installation instructions, and should conform to the following requirements:

Do not obstruct or block the appliance flue.

Installation must include sufficient ventilation to prevent the occurrence of unacceptable concentrations of substances harmful to health in the room in which they are installed.

It is recommended that this appliance is sited under an extraction canopy for the removal of combustion products.

After operation, some parts of the appliance will remain hot for a period of time. Please take care to avoid accidental burns.

CAUTION!

All equipment must be equi-potentially earth bonded.

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

Installation should allow for a sufficient flow of fresh air for gas combustion.

Parts which have been protected by the manufacturer or his agent must not be adjusted by the installer or user.



The gas supply hose and or tubing shall comply with local regulations and periodically inspected for conformity.

Failure to comply will invalidate the warranty.

TECHNICAL DATA

Model	OG7401	OG7402	OG7403	OG7404
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Dimensions

Overall Height (mm)	460			
Width (mm)	600	900	1200	1500
Depth (mm)	780			
Weight (kg)	57	86.5	116	145.5
Cooking Surface w x d (mm)	460 x 525	760 x 525	1060 x 525	1360 x 525
Cooking Grid Area (m ²)	0.24	0.4	0.55	0.71

Heat Input

Total Heat Input Natural (Gross)	12.3kW	20.5kW	28.7kW	36.9kW
Total Heat Input Propane (Gross)	12.0kW	20.0kW	28kW	36kW
Total Heat Input Butane (Gross)	12.0kW	20.0kW	28kW	36kW

Individual Burner Heat Input

Heat Input Natural (Gross)	4.1kW			
Heat Input Propane (Gross)	4.0kW			
Heat Input Butane (Gross)	4.0kW			
Burners per appliance	3	5	7	9

Connection and Operating Pressures

Gas Inlet Connection	1/2" BSP (R _p 1/2)
Supply Pressure - Natural	20mbar
Supply Pressure - Propane	37mbar
Supply Pressure - Butane	28-30mbar

Gas Consumption Full Rate

Total Gas Rate – Natural	1.17m ³ h ⁻¹	1.95m ³ h ⁻¹	2.73m ³ h ⁻¹	3.52m ³ h ⁻¹
Total Gas Rate – Propane	0.86kgh ⁻¹	1.43kgh ⁻¹	2.00kgh ⁻¹	2.57kgh ⁻¹
Total Gas Rate – Butane	0.87kgh ⁻¹	1.46kgh ⁻¹	2.04kgh ⁻¹	2.62kgh ⁻¹

Individual Burner Gas Consumption Full Rate

Gas Rate – Natural	0.39m ³ h ⁻¹
Gas Rate – Propane	0.29kgh ⁻¹
Gas Rate – Butane	0.29kgh ⁻¹

Gas Consumption Low Rate

Total Gas Rate – Natural	0.63m ³ h ⁻¹	1.05m ³ h ⁻¹	1.47m ³ h ⁻¹	1.89m ³ h ⁻¹
Total Gas Rate – Propane	0.51kgh ⁻¹	0.85kgh ⁻¹	1.19kgh ⁻¹	1.53kgh ⁻¹
Total Gas Rate – Butane	0.54kgh ⁻¹	0.9kgh ⁻¹	1.26kgh ⁻¹	1.62kgh ⁻¹

Individual Burner Gas Consumption Low Rate

Gas Rate – Natural	0.21m ³ h ⁻¹ (2.2kW)
Gas Rate – Propane	0.17kgh ⁻¹ (2.4kW)
Gas Rate – Butane	0.18kgh ⁻¹ (2.5kW)

COMMISSIONING

PREPARATION

Remove all packaging and protective coatings prior to installation.

VENTILATION

The area in which this equipment is to be installed should have sufficient fixed ventilation to comply with local legislation requirements. It is recommended that a room, or internal space, be provided with a minimum free area of 4.5cm² per kW of total heat input.

CHECK LIST OF ENCLOSURES

Please ensure the following items are included with this piece of equipment:

Model	OG7401	OG7402	OG7403	OG7404	Tick
Warranty Card	1	1	1	1	
Branding Grids	3	5	7	9	
Grid Scraper	1	1	1	1	
User Instructions	1	1	1	1	

SERIAL NUMBER

NOTE

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	
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MARK OF CONFIDENCE



Every single product that leaves our factory bears a serial plate showing the assembler's initials. It's a mark of confidence we have in our people and our manufacturing process.

INSTALLATION

SITING

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

The appliance should be installed on a level surface ensuring the unit is stable and firmly located.

Any partitions, walls or kitchen furniture in close proximity must be of non-combustible materials and not be closer than 100mm from the sides and rear of the appliance.

There must be a minimum of 800mm clearance from the front of the appliance in which to operate the appliance.

COUNTER TOP

If the appliance is to be installed on a counter top it shall be of a sturdy construction to hold the weight of the appliance.

The counter top shall be of a non-combustible material.

The appliance when installed on a suitable countertop shall be level.

The surface of the grid shall be at a safe working height. Recommended safe working height from the floor to grid is 900mm.

To level the appliance on the counter top the feet of the appliance can be rotated until the appliance level is found.

The counter top and the appliance on which it is to be installed shall be beneath an extraction canopy and shall comply with the conditions of SITING above.

FLOOR STAND

The appliance can be fitted to its corresponding floor stand.

GAS SUPPLY AND CONNECTION

The gas inlet connection is at the rear of the appliance on the right hand side when viewed from the front.

The gas inlet is 1/2" BSP (Rp 1/2)

It is recommended that the gas supply line for the OG7403 and OG7404 have a diameter not less than 22mm or 3/4" nominal bore.



If the OG7403 and OG7404 are to be supplied with butane gas it is recommended that the butane reservoir/storage cylinder have an ambient temperature of not less than 15°C owing to the low fill pressure.

The gas supply tubing or hose should 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.

When making the connection to the appliance an isolating cock should be fitted into the supply line for closing the gas supply in case of emergency shutdown or servicing purposes. The isolating cock should have unrestricted access.

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 regulator attached to the bottled gases.

See Technical Data for the supply pressures.



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.

To gain access to the gas pressure test nipple the fascia panel requires removal. The test nipple is situated at the left hand end of the manifold rail.

Remove the blanking screw and attach a pressure gauge to the boss of the test nipple to check the supply pressure.

FIRST TIME LIGHTING

The procedure for first time lighting may only be carried out by registered personnel.

To light any individual burner it may be necessary to purge all pipe work of air. To do this through the pilots alone could take some considerable time. With the fascia panel removed the test nipple can be removed to bleed the pipe work of air. When there is evidence of gas flow the test nipple must be made secure.

Refit the fascia panel and control knobs. A small amount of air will need to be purged from each of the pilot lines.

CONVERSION OF GAS TYPES

CONVERSION OF GAS TYPE

Burner Injector Changes

Model	Gas	Inlet Pressure	Ø	Mark	Part Number
All	G20	20mbar	1.42	280	JE84
	G30	28-30mbar	0.95	120	JE43
	G31	37mbar	0.95	120	JE43

Valve Bypass Injector Changes

Model	Gas	Ø	Mark	Part Number
All	G20	1.10	N	JE136
	G30	0.72	P	JE137
	G31	0.72	P	JE137

Pilot Assembly Changes

Model	Gas	Mark	Part Number
All	G20	NG	PI17
	G30	LPG	PI18
	G31	LPG	PI18

Conversion from One Gas Type to Another

To convert the appliance from one gas type to another it will be necessary to remove the fascia panel.

Remove all the control knobs from the valve spindles. Ensure the control knob spring clips are not dislodged and become lost.

The fixing screws for the fascia panel are located on the underside of the fascia panel.

Remove the fixing screws and pull the fascia panel free from its locating lugs.

Each burner will require 1 pilot assembly, 1 burner injector and washers, 1 bypass injector. Follow the step by step guide to changing the necessary components for the gas conversion process.

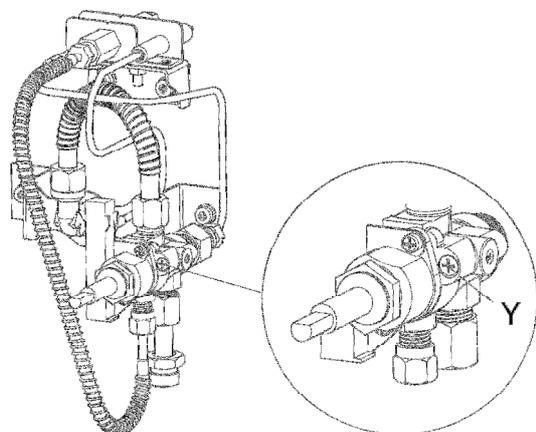
Valve By-pass Injector

The valve by-pass injector is fitted to the right of the valve spindle.

Remove the by-pass injector 'Y' by screwing anti-clockwise.

The rubber 'O' ring fitted to the by-pass injector will offer some resistance. It may be necessary to complete the withdrawal of the by-pass injector using long nose pliers.

Replace the by-pass injector applicable to the relevant gas type. Ensure the by-pass injector is screwed fully home



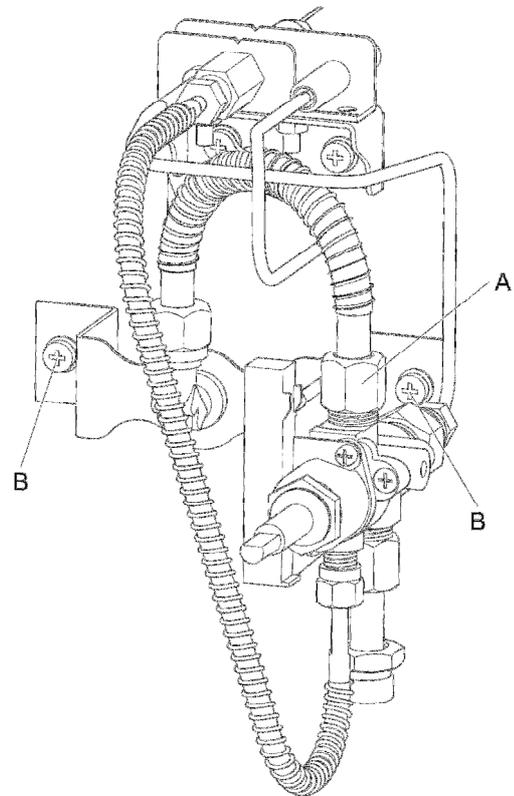
Injector Removal

Remove the fascia panel as detailed previously to gain access to the valves and pilot assemblies.

To change the main burner injector from one gas type to another:

Loosen the nut 'A' at the valve sufficiently to allow the flexible burner injector feed pipe to be rotated.

Remove the screws 'B' from the injector mounting bracket.

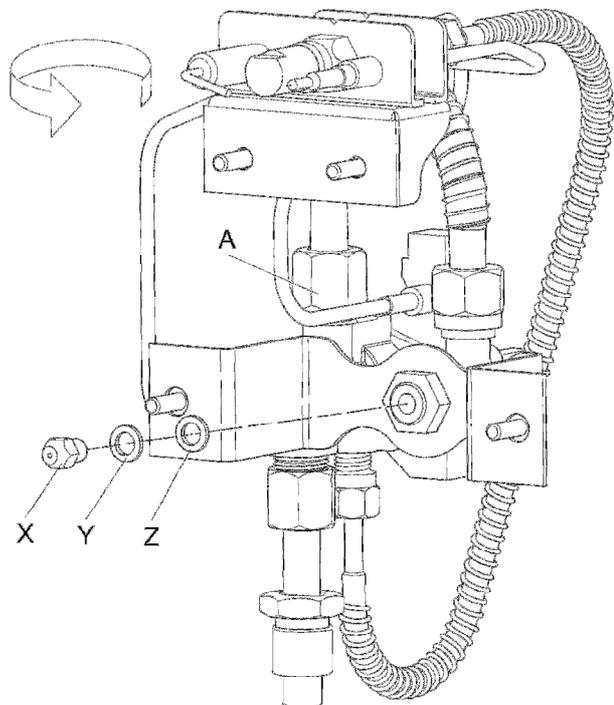


Rotate the injector mounting bracket and the flexible burner injector feed pipe to give access to the injector.

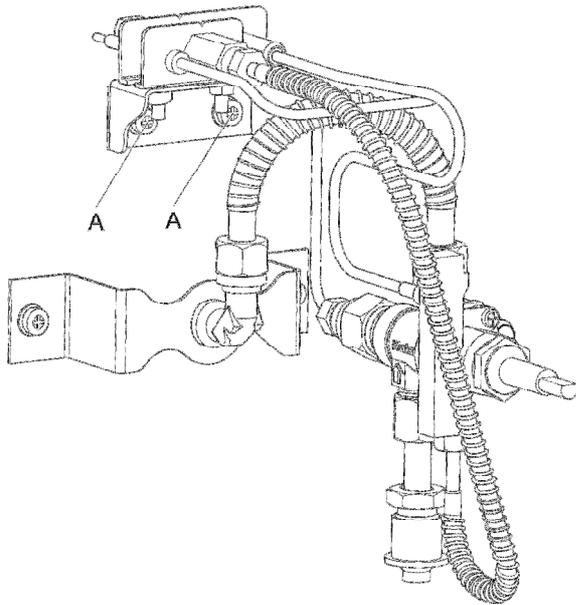
Remove the main burner injector 'X', the copper washer 'Y' and the fibre washer 'Z'.

Replace with the appropriate injector applicable to the desired gas type and reassemble parts.

The nut 'A' after tightening will need to be checked for leaks using a suitable 'bubble' spray or by electronic gas detection instruments.

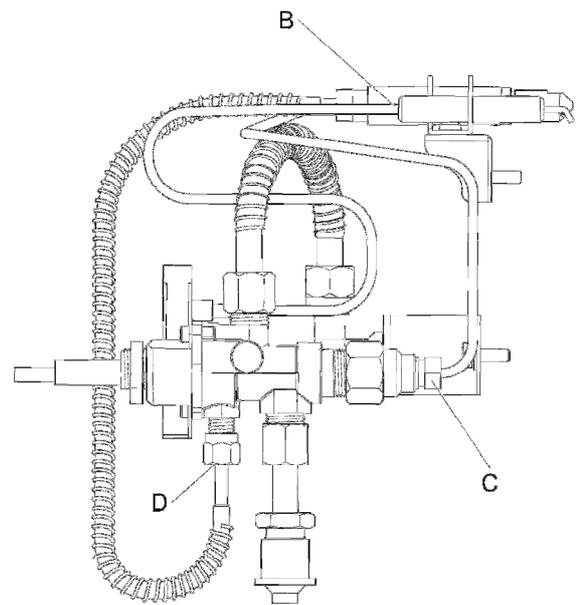


Pilot Assembly



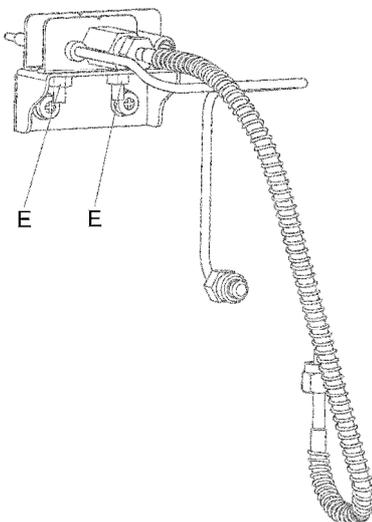
Step 1

Remove the two screws 'A' from the pilot bracket.



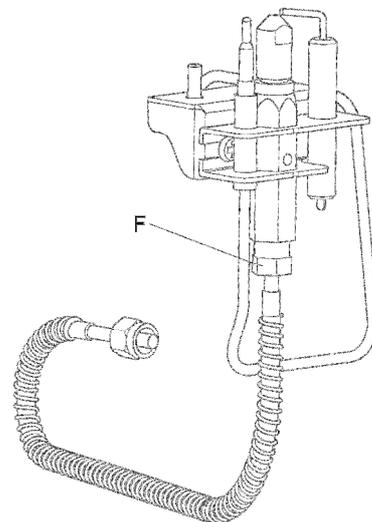
Step 2

Remove the ignitor lead 'B' from the ignitor electrode.
Free the thermocouple lock nut 'C' from the valve.
Loosen the pilot feed pipe 'D' from the valve body allowing the pilot pipe to swivel.



Step 3

Remove the M4 nuts 'E', washers and screws securing the pilot to the pilot bracket.



Step 4

Remove the pilot compression fitting 'F'. Replace and refit parts in reverse order.
Note: Refit the ignitor lead before securing pilot assembly to the body of the appliance.

USER INSTRUCTION

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.

ROUTINE CLEANING



It is important that users of the appliance systematically check and clean down as necessary areas of the grill that have accumulated oils, fats and other combustible debris from previous cooking. This is to prevent the potential risk of fire. Cleaning of the appliance and its parts must be done when the appliance is cold and before the start of service.

Areas to Check

- **Branding grids** – The spaces between the grids may become clogged and will need to be cleaned to ensure even and clean cooking. Regular use of the scraper supplied with the appliance will help keep the tops and the spaces of the branding grid clean and clear.
- **Radiants** – The tops of the radiants will require brushing down to remove build up of debris and ash that may have accumulated from previous cooking.
- **Debris Collection Drawers** – The drawers will need to be emptied of debris and cleaned from old fats and oils that may have accumulated from previous cooking.

LIGHTING SEQUENCE

The operation of each burner is identical. Each valve has its own built in piezo ignition.

- To light the gas at a pilot, select the corresponding control knob depress the control knob and rotate 90° anti-clockwise to the position marked with a stylized star to light the gas at the pilot.
Should the pilot not light the first time maintain the control knob in this position for a few seconds to allow a free flow of gas through to the pilot. Return the control knob to the 'OFF' position and repeat the lighting sequence. A portion of the pilot flame can be seen between the firewall and the radiant corresponding to the chosen burner. Part of the pilot flame can also be seen by looking at an angle through the ventilation slots on the firewall.
- After establishing the flame at the pilot; maintain the control knob in the depressed position for approximately 15 seconds to retain the flame at the pilot. Confirmation of the established flame is made by releasing the control knob.
If the pilot flame goes out repeat the process until the flame is maintained.

Leave the pilot lit for a further 45-60 seconds to allow the flame failure sensing element to heat to its full potential.

- To light the gas at the corresponding burner rotate the control knob to any point between the low rate and full rate as denoted by the small and large stylized flames on the control knob.

NOTE

If the appliance has stood unused for any length of time it may be necessary to purge the pilot lines of air. To purge the pilot lines of air depress and rotate a control knob until spring tension is felt. Maintain the knob in the depressed position for 20-30seconds and then fully rotate to the ignition position. Repeat as necessary until the gas ignites at the pilot.

COOKING ZONES

Each branding grid is its own cooking zone and is controlled by its own gas valve. The cooking temperature can be controlled at any point between the low rate and the full rate. After lighting, each zone can be left on pilot standby.

DEBRIS COLLECTION DRAWERS

It is recommended that each drawer is filled with a small volume of water before the start of service. Any fats or oils from the cooking process falling through to the drawers will form a film on the water whilst heavier pieces of debris will lie on the base of the drawer. At regular intervals during quieter times of service the drawers should be periodically checked for the level of water and emptied of collected debris as necessary.

USING THE APPLIANCE

For first time use it is recommended that the branding grids are 'seasoned'. To season the grids, lightly coat the cooking surfaces with cooking oil. Place the grids back on to the appliance and heat the grids to season.

Before the start of daily service flip the branding grids and heat at full power for 10 minutes to carbonize the previous day's deposits. Remove debris using the scraper. Lower the temperature of the zones to the desired cooking temperature.

SERVICING

SERVICE

The only **end user** service operation permitted is the routine cleaning and inspection of external parts of the appliance. The only maintenance operation permitted is the replacement of parts by approved and qualified representatives appointed by Lincat Ltd. Visual inspection shall determine that:

- Branding grids are not clogged and excessive carbon build up has been removed
- Debris collection drawers are in an acceptable clean condition including surge bars
- Radiant tops are free from excessive build up of carbon
- Splash back and hob top are in an acceptable clean condition
- Equi-potential earth bond is attached
- The flexible gas supply hose (where fitted) is of a sound condition and the safety restraint chain/cable is attached
- All gas taps function correctly in terms of lighting pilots and burners

COMPONENT REPLACEMENT

Valve Body

To remove the valve from the appliance:

Free the thermocouple lock nut 'A'

Loosen the nut 'B' and free the burner feed pipe from the valve body

Loosen the pilot feed pipe nut followed by the burner inlet nut denoted 'C'

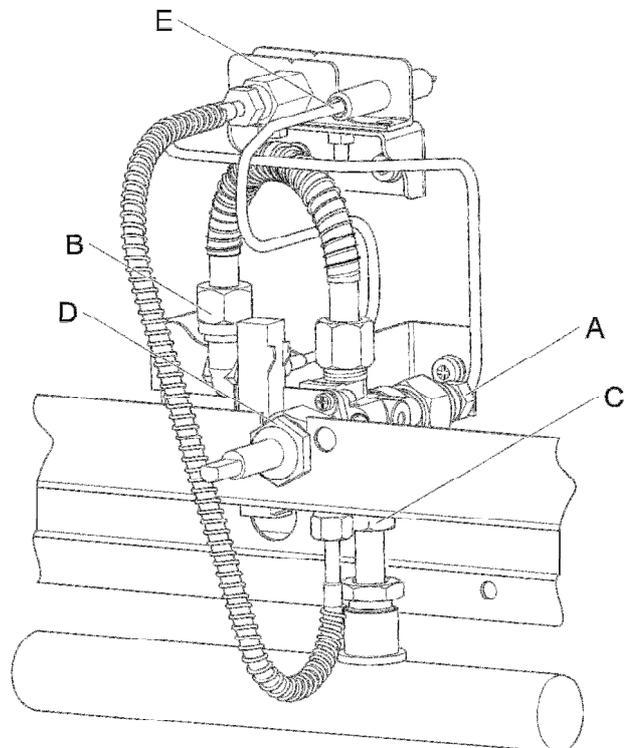
Loosen the valve body nut 'D' and lift the valve free from the valve support bracket.

Disconnect the ignitor lead 'E' from the ignitor.

Fit the new valve and perform a leak check on all nuts.

Fit the ignitor lead to the ignitor

N.B. Take care not to damage the crimp terminal of the ignitor lead.



For all other components refer to the conversion of gas type instructions.

SPARE PARTS LIST

Part number	Part description	Used on
BP43	Cast Branding Grid	All
CO113	Copper Washer	All
CO254	Tube Nut	All
CO52	Stud Elbow 8mm	All
CO53	Lock Nut	All
GP07	Insulation Board (x2)	All
IS461	User Manual	All
JE136	Bypass Injector Natural Gas	All
JE137	Bypass Injector Butane/Propane Gas	All
JE43	Burner Injector Butane/Propane Gas	All
JE84	Burner Injector Natural Gas	All
KN271	Control Knob	All
LE38	Adjustable Foot	All
MA134	Manifold	OG7401
MA135	Manifold	OG7402
MA136	Manifold	OG7403
MA137	Manifold	OG7404
PI17	Pilot Assembly Natural Gas	All
PI18	Pilot Assembly Butane/Propane Gas	All
SC04	Scraper	All
TU05	Valve Inlet Tube	All
TU08	Flexi Tube 8 X 150	All
TU09	Flexi Tube 4 X 300	All
VA70	Control Valve (complete with fittings)	All
WA08	Fibre Washer	All

FAULT FINDING

User Fault Finding

Pilot not lighting

Check gas supply is on
Turn on the gas supply

Gas supply is on but pilot not lighting

Check for spark at ignitor

The spark can be seen by looking at an angle through the ventilation slots, it may be necessary to remove a branding grid.

There is a spark at the ignitor

See note on lighting sequence

Spark cannot be seen at ignitor

Contact Service Agent

Service Agent Fault Finding

Gas supply is on but pilot not lighting

Check for short in ignitor lead or ignitor

Replace valve*

or

Replace pilot assembly

*Ignitor lead is an integral part of the valve

Pilot lighting but will not stay lit

Check thermocouple integrity

Replace pilot assembly

SERVICE INFORMATION

Gas catering equipment should be routinely serviced to ensure a long trouble free life. It is recommended that this appliance is serviced every 6 months by a competent gas engineer.

For help regarding the installation, maintenance and use of your LINCAT equipment, please call:-

LINCAT SERVICE HELP DESK

 **+44 (0) 1522 875520**

AUTHORISED SERVICE AGENTS

All service work, other than routine cleaning, to be carried out by our authorised agent. We cannot accept responsibility for work carried out by other persons.

Please quote both the model and serial numbers from the data plate attached to the unit. Give brief details of the service requirement.

If possible please quote the product code of the part number you require.

Work carried out under warranty will normally be undertaken only during normal working hours, i.e. Monday to Friday, 8.30 a.m. - 5.00 p.m.

CONDITIONS OF GUARANTEE

The guarantee does not cover:-

- 1) Accidental breakage or damage
- 2) Operational misuse, wear and tear from normal usage, incorrect adjustment, or neglect.
- 3) Incorrect installation, maintenance, modification or unauthorised service work.