Thornhill Range Cookers.

Eco Range 3 & 5 oven gas fired cooker

For use in Great Britain and Eire (GB & IE)





Instructions for Use, Installation and Servicing

This appliance must be installed in accordance with the regulations in force and only used in an adequately ventilated space. Please read these instructions before installation and use and retain for future reference.

1. Introduction

Thank you for choosing to purchase the 3 oven gas, balanced flue or conventional flued, Eco Range cooker. Each cooker is manufactured and assembled by hand in our factory. This appliance is designed to be capable of operating for long periods of time. With correct installation and use your Eco Range cooker will provide many years of satisfactory service and cooking enjoyment.

The 3 oven cooker consists of two hotplates, 2 top ovens and a bottom oven or warming compartment. The 5 oven has 2 hot plates, a 2 ring induction hob, 3 top ovens and 2 warming ovens. The left sided hotplate is designed for more rapid heating suitable for frying and boiling, whereas the right sided hotplate is more suitable for slower cooking and simmering. Hotplate covers are provided to prevent heat losses when not cooking. The two top ovens operate to provide a consistent temperature controlled environment for all your cooking and baking needs. The bottom oven operates at lower temperatures and is suitable for slow cooking or merely as a warming compartment, depending on the control setting.

These instructions detail how to get the most from your cooker, as well as fundamental information on how the cooker shall be installed, maintained and used in a safe and practical manner. It is important that some time is taken to read these instructions carefully before installation and use of the appliance.

In order for the warranty to remain valid it is imperative that the appliance be installed in compliance with all relevant national and regional regulations.

A competent heating and plumbing engineer must check/install the oil line for the cooker.

The warranty of your Eco Range Cooker applies to products sold in the UK and Eire only. For products sold outside of these areas please contact the manufacturer for details warranty authorisation.

2. Safety Instructions

Safety First:

This is a heating appliance; therefore, it can become very hot when in service.

Young children and pets should be kept a safe distance from the cooker.

Ceiling mounted clothes dryers are strongly unadvised as they can present a fire hazard, this also includes leaving towels on the handrail of the cooker.

Pans, especially chip pans, should not be left unattended on the Eco Range cooker.

Read and understand this booklet before installing and operating this appliance.

- This appliance must be installed in accordance with the rules in force and used only in a well ventilated space.
- The appliance must only be installed and serviced by a suitably qualified and registered technician.
- The appliance shall not be altered in any way and only approved spare parts shall be used. Failure to do so will invalidate any warranty or guarantee.

- This appliance is very heavy and every care should be taken when trying to maneuver it. **Do not attempt to move or lift the appliance by the door handles, this could cause damage to the doors and handles.** It must be sited on a solid, level floor constructed in accordance with any Building Regulations which may apply to the site.
- It is important for the correct operation of this appliance that the installation space and clearances around the appliance are in line with the specifications detailed in these instructions.
- Sufficient space should be available to allow the doors to be fully opened in excess of 120° from the closed position.
- Ventilation openings on the side rear and front of the appliance should never be blocked or restricted, see ventilation requirements
- This appliance is capable of being operational at all times. **Parts of the appliance will become very hot, and remain hot for long periods.** Only adults should operate this appliance and only in accordance with the user instructions. Care should be taken when using the cooker and the use of oven gloves is recommended when applicable. Children should be supervised at all times if in the vicinity of the cooker.
- In the interest of hygiene and safety the cooker should be kept clean at all times.
- The cooker is designed for cooking foods only and must not be used for any other purpose.
- Always allow to cool before cleaning and carrying out maintenance work.
- Do not use unstable or unsuitable saucepans and position handles away from the edge of the hot plate. Thick, flat based saucepans are recommended for best results.
- Do not place combustible materials onto the hot plate surfaces even when the cooker is off.
- Your Eco Range Cooker should be serviced at least once every twelve months. It is impossible to service your cooker while it is hot, therefore DO NOT use your appliance 12 hours before a service is required.

Important:

The installer is responsible to ensure that all persons involved in the installation be provided with the correct health and safety clothing when handling materials which are known to cause potential harm.

- Ceramic materials: Facemask and gloves must be worn, Contact with eyes, skin and throat must also be avoided.
- Fuels: Wear gloves avoid ignition sources Waste fuel should be disposed of correctly, not via domestic waste water courses.
- Fire cement: Wear gloves wash hands.

Safety Notices and Regulations

- The Building Regulations Part J England and Wales Part F section III Scotland Part L Northern Ireland Part J Ireland.
- BS5440 Parts 1 and 2 Installation of Flues and Ventilation.
- D.M.2. Installation of Timber Framed Buildings.
- Safety Document 635 The Electricity at Works Regulations.
- BS7671 Requirements for Electrical Regulations.
- REC Rules regarding PME Earthing (where applicable)

Warning:

Correct earthing must be provided for this appliance.

If in doubt seek advice from a qualified electrical engineer. Prior to carrying out any work on the appliance switch off at the mains and remove the fuses from the fused spur outlet and from the user control panel. Replace when works are complete. Always ensure appliance is 'electrically dead' prior to working on the electrics.

3. Technical Specification

Appliance type - Cooker and Space heater

Cooker Burner System - Infraglo Premix
Fuel - G20, G25 or LPG

Country of Designation I.E, U.K. Fr. ND, BE, DN, DR.

Mains supply - 230 Vac @ 50HZ from a dedicated fused spur.

Fuse rating - 5A I.P Protection - 20

Load (Running) - 60W (Nominal)

Flue - Balance or conventional flue.

CO2 10-12% CO/CO2 > 0.0004 CO > 400ppm

Appliance max energy input - 14KW burn, 5kW hrs. as thermostatically controlled

Installation requirements - Must be installed in accordance with good practice

and as laid down by all relevant codes of practice

by suitably qualified installers.

NB: See Installation Instructions within this manual

Balanced flue only - No further ventilation required.

5 oven 2 ring induction hob, 240V 13amp fuse.

4. Appliance Details

Height	270mm
Depth	500mm
Width	345mm

Your cooker is fitted with a thermostatic control device. This operating system provides the exact heat requirements selected (by the user) for cooking and reduces the overall gas consumption. The user selects the desired cooking temperature and when the cooker approaches the selected operating temperature the thermostatic control operates to turn off the burner flame to maintain a steady temperature. The control knob on the device is marked which relates to a particular temperature setting of the top oven.

4.1 Using your hotplates

Your appliance has two hotplates, with a joint hotplate in the middle, protected with two insulated lids which should remain in a closed position when not using the hotplate. The lids can be raised independently if only using one hot plate. The hot plate temperature is dependent on the setting of oven temperature. The higher the temperature in the ovens, the hotter the hotplate will become.

The design of the hot plates is such that the left hand side will become the hottest, making this suitable for deep fat frying, shallow frying and boiling.

The surfaces of the hotplates are ground flat and it is therefore recommended that all utensils used have a solid, flat base to come in complete contact with the hot plate for efficient results.

4.2 Using your Ovens

Your appliance has 3 or 5 ovens. The thermostatic dial in the top oven door provides an indication to the top oven temperatures. This thermometer reading will reduce quite dramatically when the door is opened and only recover slowly when the door is closed. This occurrence does not mean that the oven temperature has reduced. The bottom oven is warmed by the underside of the oven above. Depending on the control device setting and operational time, this oven will generally operate some $85 - 90^{\circ}$ C below the top ovens. It may be used for small food cooking, biscuits, cakes etc. but it is best used as a warming compartment.

4.3 Overheat thermostat

The cooker is protected by an overheat thermostat designed to shut down the burner if a fault occurs leading to excessive oven temperatures. The overheat thermostat is located below the control device, inside the lower left compartment. To reset, unscrew the protective cap and press the button.

NOTE: If overheat reset occurs more than once contact your service technician.

4.4 Cleaning your cooker

CAUTION: Cleaning of the Eco Range Cooker should only be carried out when the appliance has cooled down.

The Eco Range cooker should be wiped over daily with a damp soapy cloth. The enamel should then be dried and polished with a soft dry cloth to avoid streaking. Any spillages should be wiped up immediately to prevent hardening of deposits which would make removal difficult at a later stage.

The hot plates can be kept clean by using a light suede wire brush and gently scrubbing the plates, taking care not to damage the surrounding enamel. Spillages inside the ovens can become carbonized at high temperatures, therefore the ovens should be cleaned at regular intervals with a stiff brush. The surfaces of the oven are natural, therefore to prevent oxidation dry all surfaces after cleaning.

4.5 Routine servicing / maintenance

All gas appliances require a regular annual safety check by a qualified technician. It is recommended that your cooker is checked at least once a year. This will ensure your cooker remains fully functional and in a safe condition.

5.1 Delivery and Transport

Your Eco Range Cooker is an extremely heavy and solid appliance. When attempting to move or transport your cooker please take into consideration these points:

External – In Vehicle – Ensure unit is securely held by ropes and handled carefully by qualified personnel.

Internal

Remove all objects from your path, including rugs and breakables.

It is often easiest to unhinge a door in the case that it is too narrow, it also stops damage being applied to the cooker, the property and injuring people.

The plinth on the cooker is strong and sturdy enough to withhold the unit being moved on rollers, by removing the oven doors you can also create useful handholds.

IMPORTANT:

- The top plate is unable to manage the weight of the cooker so should never be moved or lifted in this way.
- Damage can be caused to the cooker and to persons by using inadequate objects to lever or move the object.
- Difficult terrain, including steps, should not be attempted without adequate manpower and proper precautions.

The supplier of your new ECO Range Cooker can provide you with an authorised engineer to attend site, strip the appliance and rebuild in the correct location.

The warranty will become invalid if you strip and rebuild the cooker yourself.

5.1 Site Considerations

- 1. Sufficient space for appliance, so that access for service and maintenance purposes can be easily attained.
- 2. Provision of a satisfactory flue/chimney/cowl or the cooker must stand against an outside wall so there is an unrestricted space around the outlet and inlet. See Regs J.
- 3. A sold non-combustible hearth capable of supporting the appliance.
- 4. Adjacent to the cooker then should be no combustible walls or surfaces.
- 5. If the cooker is to be placed within an inglenook, allow a minimum of 1.5 meters' height clearance for comfortable operation.
- 6. Units and other work tops should be given enough space, allow 25mm for kitchen units and 10mm for worktops, 3mm should be given for granite and composite stone.
- 7. The cooker must not be built in, especially the top plate and front plate which must be removed for maintenance.

6.0 Balanced Flue

A balanced flue allows the cooker to be placed against an outside wall, with either rear or top outlet concentric flue.

Maximum length of rear flue: 600mm

The surrounding area must be taken into consideration; as strong winds may affect flue performance. This is laid down in Building Regs. Approved Doc J page 49. Which can be down loaded from

http://www.planningportal.gov.uk/buildingregulations/approveddocuments/parti/

Balanced flue units are supplied with the following components:

1 no. Outer flue pipe 4"/100mm (exhaust outlet)

1 no. Air pipe 3"/80mm (air intake)

1 no. Flue terminal

1 no. Heatproof silicon

4 no. Stainless steel self-trapping screws

1 no. Oven vent pipe with tee

Instructions for installation:

- 1. A suitable position for the range must be taken into consideration before attempting to install or move the appliance. See section 5.1 for site considerations.
- 2. Mark the positions for the flue and oven vent, it is important to confirm all measurements by physically measuring the appliance.
- 3. Push oven vent through hole and maneuver cooker into position. After the cooker has been moved to the correct position, tighten the compression fitting so that there is a 3/5° drop from appliance to outside termination.
- 4. Cut the pipes to the correct length.

- 5. With the supplied tape and silicon make a seal on the inner and outer pipes. Push into the cooker, whilst making sure no excess sealant has leaked that may block the cooker spigots.
- 6. With suitable material make a good flue hole.
- 7. Fit the terminal to the pipes whilst ensuring the inner pipe has adequate clearance between terminal end and outlet (min. 50 mm). Secure terminal with supplied screws and heatproof silicon.
- 8. The oven vent must then be cut to the correct length, solder tee to pipe with outlets top and bottom.

Warranty on the Cooker 1 year parts and labour. 5 years' parts only.

CONDITIONS OF WARRANTY:

- 1. Boiler MUST BE **installed** by a representative of the company or Gas Safe registered technician, if not
 - permission will be required by building control.
- 2. Burner MUST BE commissioned after installation by a Gas Safe registered Technician.
- 3. Burner MUST BE **serviced/safety checked** every 12 months after installation by a Gas Safe registered technician.

IMPORTANT CHANGES TO BOILER MANAGEMENT:

Annual Service –This is very important in order to keep the flue ways clean and ensure the boiler is correctly set.



SWITCHING THE COOOKER OFF

The burner can be switched off at any time using one of the following:

- Turn the oven control thermostat to the **OFF** position
- Switch the mains (electrical supply) to **OFF**
- Set the control system to **OFF** (e.g. Time Clock)

PLEASE NOTE: For longer periods of shutdown e.g. while away on holiday, switch **OFF** the mains (Electrical supply) and turn **OFF** the gas supply.

BURNER LOCKOUT

The burner has an independent control system (Burner Control Box); this includes a flame detector, which senses the presence of a flame. In the event of a flame failure, the burner control box activates a second reignition sequence. Should a flame not be present the burner goes to LOCKOUT and shuts down.

Continued **LOCKOUTS** are a result of a fault in the operation of the boiler and can be attributed to following examples:

- An interruption of the fuel supply.
- Electrical Supply Fault e.g. Extreme low voltage.
- Failure of a burner component.
- Burner combustion not being correct.

The red light on the control panel illuminates to indicate that a lockout has occurred.

In the event of the Burner locking out, you can try to restart the Burner by pressing the Reset Button on the Control panel. If it does not restart after a couple of goes, please call a technician.

RESTARTING AFTER LOCKOUT

When lockout has occurred, inspect for any obvious causes gas turned off. Blocked flue or air inlet.

RESTART

- Check the gas tap is on.
- Switch on heating system (e.g. Time Clock)
- Press the Burner Reset Button on the burner Control panel, The Burner Reset Button (illuminated) (Fig 1) will go out and the burner will commence the ignition start sequence. After 15 seconds the Burner should fire normally.

PLEASE NOTE: Should the Burner not start, the lockout indicator, on the Control panel will illuminate again.

- Press the Burner Reset Button again. Failure to start a second third time indicates a fault requiring attention.

In the event of a second failure to start:

- Switch off electrical supply
- Call service engineer.

REGULATIONS

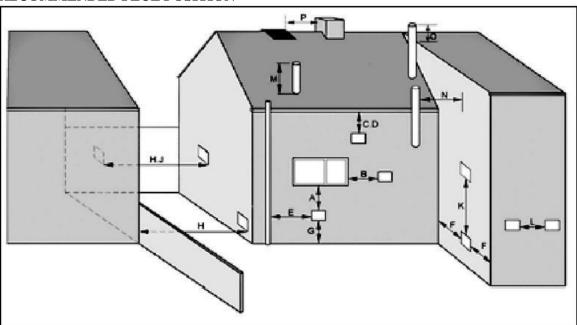
The installation of gas-fired cooker should comply with the following standards and codes of practice:

- BS7671 Electrical Regulations
- Building Regulations Part 1L and J 2002 England and Wales, Part F Scottish Regulations and Technical Booklet L Northern Ireland.
- GAS SAFE Codes of Practice Published or Recommended.

COOKER LOCATION

Sound levels should be discussed with the householder, as some people may be sensitive to low noise levels in a small room, as is may appear more annoying than in larger rooms. Please Note installation should take into account of flue position (see diagram).

RECOMMENDED FLUE POSITION



Please Note where the terminal is within 1 metre of any plastic material, such material should be protected from the effects of the combustion products of the fuel.

IMPORTANT 35 SECOND CLASS D GAS OIL MUST NOT BE USED FOR BALANCED FLUES.

Ref	Min. Position	mm
Α	Directly below an opening, air brick, opening window etc.	600
В	Horizontally to an opening , air brick, opening window etc.	600
C	Below a gutter, eaves or balcony with protection.	75
D	Below a gutter or a balcony without protection.	600
Е	From vertical sanitary pipework,	600
F	From an internal or external corner.	600
G	Above ground or balcony level.	600
Н	From a surface or a boundary facing the terminal.	600
J	From a terminal facing the terminal.	1200
K	Vertically from a terminal on the same wall.	1500
L	Horizontally from a terminal on the same wall.	750
Μ	Above the highest point of an intersection with the roof.	600
Ν	From a vertical structure on the side of the terminal.	750
0	Above a vertical structure less than 750mm.	600
Р	From a ridge terminal to a vertical structure on the roof,	1500

ELECTRICAL ENTRY

The electrical supply to the cooker must be wired using a double pole-isolating switch 230v/50hz, fused 5 amps or standard plug/socket. The mains supply must be connected via the clock, the supply will then continue down to the burner control box. The burner is supplied with a three wire cable plug which allows disconnection for maintenance.

General Data

Electrical Supply. 240w-50hz

Gas Supply Connection 1/2" BSP male.

Maximum Control Thermostat Setting 220°C

High Limit Stat: Manual Reset

Draught Limit Min 12.5 Pa -0.05" WG Max 33.0 Pa -0.12" WG

SERVICING & COMISINING INSTRUCTIONS

A competent registered service technician should be appointed on an annual basis.

- Remove inspection to see burner, check for fluff and air inlet blockages,
- Test combustion.

BURNER SETTINGS

BURNER MODEL		Infraglo PM
MAXIMUM OUTPUT	Btu/hr	45000
	Kw/hr	14
FACTORY SETTING	Btu/hr	48000
	Kw/hr	14
CO ²	%	10-12

SMOKE		0
FLUE GAS TEMPERATURE Ave.	°C	185
Electrical Power		230/240 V 50 Hz
Fuse		5 amp

THE

HEARTH

The temperature of the surface below the boiler is less than 100°C. If the floor under the boiler is of

combustible material, then protection such as steel should be fitted between the boiler and the floor.

Consideration should be given to the weight of the cooker, approx. 550kG; the floor must provide adequate support. Please consult the building regulation for safe floor loadings.

CONTROL

PANEL

The boiler control panel is factory fitted prior to dispatch.

ELECTRICAL ENTRY

The electrical supply to the boiler must be 230v/50hz, fused at 5 amps. Connection of the appliance and any system controls, to the mains supply, must be a common isolator and must be fused at 5A maximum.

This must be fixed wired to a double pole-isolating switch that has a maximum contact separation of 2mm in both poles. The isolator should be clearly marked showing its purpose, and preferably positioned close to the boiler.

Warranty Registration

Your cooker now has a one year parts and labour guarantee and a further four year parts guarantee, it is the responsibility of the installer to ensure that the cooker is properly commissioned. This must be by a qualified technician. It is essential that the commissioning procedures detailed in this manual are carried out by a qualified engineer, using recognised test equipment and that the regulation of the latest edition of BS 5410, Part 1 is read and fully adhered to. The following warranty registration page should be completed by the installer, signed by the customer and returned to Thornhill Range Cookers. The installer should re-check the cooker and ensure everything is completely satisfactory before demonstrating the operation of the cooker to the householder.

WARNING: Failure to return the Warranty Registration will render the guarantee null and void this complete manual must be left with the householder.

WARRANTYREGISTRATION

Appliance Model Serial Number		
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Customer Name: (in BLOCK CAPITALS)		
Address:		
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Customer Signature		
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Technician's Name: (in BLOCK CAPITALS)		
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CO2%		
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FGT		
Electrical Safety		

Before leaving Eco Range Cookers this unit was: Checked By:

Date:

Please return this completed page to: Thornhill Range cookers 60 Wincheap Canterbury Kent CT1 3RS

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Our products are subject to continuous development and improvement and it is consequently acknowledged that errors and omissions may occur.

This publication is intended only to assist the reader in the use of our products. Eco Range Cookers will not accept any liability for any loss or damage whatsoever arising from the use of any information, error or omission found in this guide.

Maintenance on our products must only be carried out by approved personnel.

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info@trcookers.co.uk

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