

30MSERIES

turbofan[®]

E30M3
(Manual operation)

Installation and Operation Manual

turbofan
CONVECTION OVEN SYSTEMS

MOFFAT[®]

BLUE SEAL[®]

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E30 Turbofan Convection Oven.


Model Numbers Covered in this Manual


E30M3 - Turbofan Oven - 3 Tray Convection Oven.

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Introduction

Before using your new oven, please read this instruction manual carefully, pay particular attention to any information labelled '**WARNING**', '**CAUTION**', '**IMPORTANT**' or '**NOTE**' in this manual.

 **Warning** Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

 **Caution** Indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.

If you are unsure of any aspect of the installation, instructions or performance of your oven, contact your TURBOFAN dealer promptly. In many cases a phone call could answer your question.

Should you contact your TURBOFAN dealer on any matter concerning this oven, please have the information provided opposite, readily available.

This manual must be kept by the owner for future reference.

A record of the **Date of Purchase**, **Date of Installation** and **Serial Number of the oven** should be recorded in the area provided below.

The serial number of this oven can be found on the Technical Data Plate located on the front right hand side panel, see diagram in 'Installation Section'.

Model Number:

Serial Number:

Dealer:

Service Provider:

Date Purchased:

Date Installed:

Safety Information

For your safety, please pay attention to the following symbols marked on the appliance.

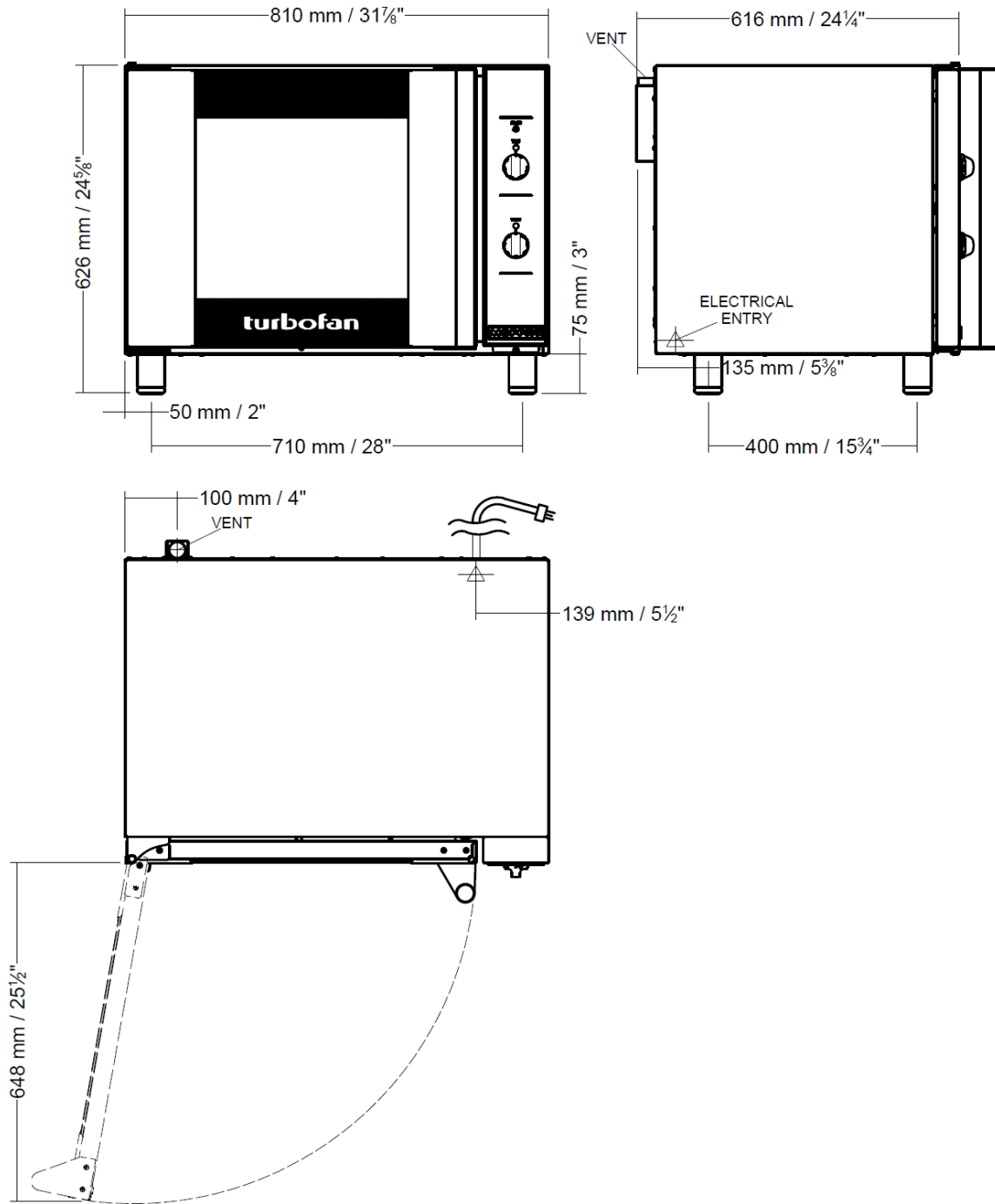
- Risk of electric shock.



No user serviceable parts inside.
Qualified service person access only.
Disconnect from power before servicing.

Specifications

E30M3



Oven Power Ratings	Oven Tray Details	
	Tray Capacity	Tray Spacing
230-240V, 1P+N+E, 50/60HZ, 9.5A, 2.3 kW	3 x GN 1/1 Pan 3 x US 1/2 Pan	100mm

Installation

Installation Requirements

Important:

- Installation shall comply with local electrical, health and safety requirements.
- It is most important that this oven is installed correctly and that oven operation is correct before use.
- If you have any questions regarding the proper installation and / or operation of this oven, please contact your local Turbofan distributor.

Unpacking

1. Remove all packaging and transit protection including all protective plastic coating from the exterior stainless steel panels.
2. Check the oven and supplied parts for damage. Report any damage immediately to the carrier and distributor.
3. Check that the following parts have been supplied with your oven:-
 - 4 x Leg Adjustable.
4. Report any deficiencies to the distributor who supplied your oven.
5. Securely fit the 4 legs supplied with the oven.
6. Check that the available electrical supply is correct to that shown on the Technical Data Plate located on the front right hand side panel.

- Refer to 'Specifications' section, 'Oven Specifications Tables'.

Location

1. Position the oven in its approximate working position.
2. The unit should be positioned so that the control panel and oven shelves are easily reachable for loading and unloading.



Technical Data Plate - Location

Clearances

To ensure correct ventilation for the motor and controls, the following minimum installation clearances are to be adhered to:-

Top	200mm / 8".
Rear	75mm / 3".
Left-hand side	75mm / 3".
Right-hand side	75mm / 3".

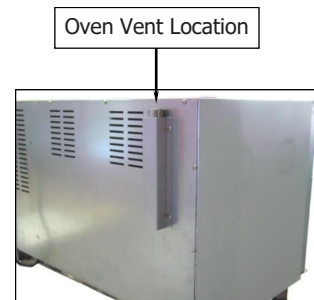
CLEARANCE FROM SOURCE OF HEAT.

A minimum distance of 300mm (12") from the appliance sides is required.

NOTE: Fixed installations require at least 500mm - 20" clearance at right hand side of oven for service access.

Important:

The vent located at the rear of the oven must NOT be obstructed.



Stand Mounted Ovens

For ovens that are to be mounted to a stand, the oven feet are used to level the oven on the stand. Refer to the instructions supplied with separately ordered stands for mounting details.

Installation

Electrical Connection



Warning

**This oven must be earthed / grounded.
If the supply cord is damaged, it must be replaced by a suitably qualified person in order to avoid a hazard.**

Each oven should be connected to an adequately protected power supply and an isolation switch mounted adjacent to, but not behind the oven and must be readily accessible to the operator. This switch must be clearly marked and readily accessible in case of fire.

Check the electricity supply is correct to as shown on the Technical Data Plate on the front right hand corner of the oven side panel.

Ensure that the oven is fitted with the appropriate power cord and plug.

Positioning and Levelling of Oven

1. Correctly locate the oven into its final operating position and using a spirit level, adjust the oven feet so that the oven is level and at the correct height.

Initial Start-Up

Before using the new oven;

1. For first time use of the oven, operate the oven for about 1 hour at 200°C to remove any fumes or odours which may be present.
2. Please refer to the Operation Section of this manual for details on how to correctly operate and shutdown the oven.

Commissioning

Before leaving the new installation;

Check the oven functions in accordance with the operating instructions specified in the 'Operation' section of this manual.

Ensure that the operator has been instructed in the areas of correct operation and shutdown procedure for the appliance.

NOTE: If for some reason it is not possible to get the appliance to operate correctly, turn off the power supply at the mains supply and contact the supplier of this appliance.

Operation

Operation Guide



Warning

Some parts of this oven will become **VERY HOT** during use and could cause burns if touched.



Warning

Take care when opening the oven door during baking. Let hot air and steam escape before removing or replacing food as the steam produced can cause steam burns.

- Turbofan Ovens have been designed to provide simple operation.
- This oven is intended for use in a commercial kitchen and must only be put to the use for which it was intended, i.e. cooking food product. To use this oven correctly please read the following sections carefully:-

Oven Control Panel

Description of Controls

Power 'On' Indicator Light.

Indicator light illuminates when the 'On' / 'Off' - 'Temperature' control is turned 'On'.

Oven Heating Indicator Light.

Indicator light illuminates when the elements are cycling 'On'. The oven heating indicator light will turn 'Off' when the oven is up to temperature.

'On' - 'Off' and 'Temperature Control'.

Used to turn the oven 'On' / 'Off' and to select the oven temperature. Also turns the oven interior light 'On' / 'Off'.

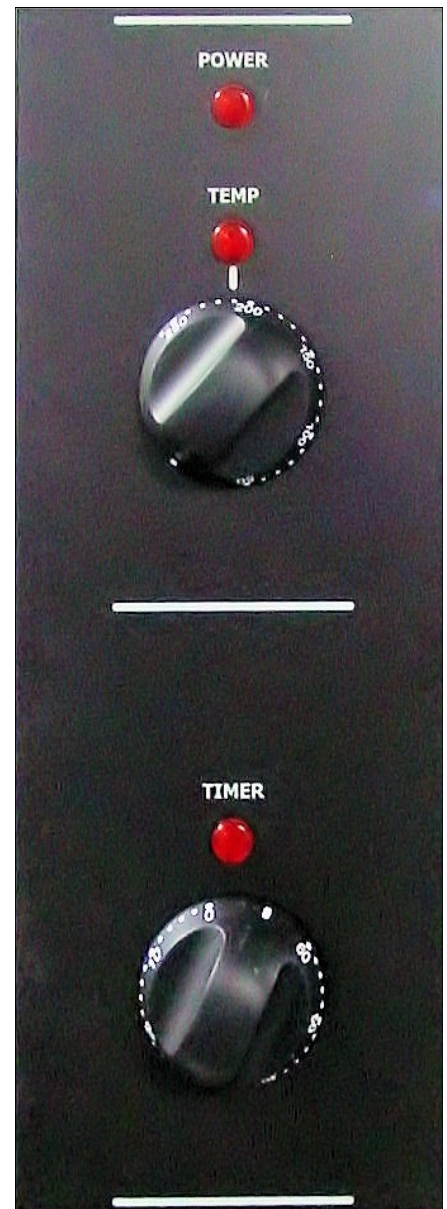
Time Up Indicator Light.

Indicator light illuminates and the oven buzzer will sound when baking is complete.

Timer Control (60 Minute).

Used to set the bake time. At any stage, the time can be adjusted in either direction. For settings less than 10 minutes, first set to a higher setting, then turn the timer down to the time required.

When timer control is 'In Use', the oven light will be 'On'. (Oven light will remain 'On' until the timer control is turned to the 'Off' position).



Operation

Using the Oven



Caution

Do Not cover the bottom of the oven with aluminium foil or similar material as this may cause damage to the oven liner and oven components and will also reduce the efficiency of the oven.



Caution

Some parts of this oven will become VERY HOT during use and could cause burns if touched accidentally.

To Turn 'On' the Oven;- Rotate 'Temp' Control from the 'Off' position. 'Power On' Indicator light illuminates.

To Set the Temperature;- Rotate 'Temp' Control to the temperature required. 'Oven Heating' indicator light will remain 'On' until the oven is up to temperature.

To Load the Oven;- open oven door and load product. Avoid delays in loading the oven as this will delay the oven's temperature recovery. Oven light will come 'On' when oven door is opened.

To Set the Timer;- Rotate the 'Timer' Control to the required time. Oven light will remain 'On' whilst timer is operating. Oven light will remain 'On' whilst timer is operating.

NOTE: This oven can be used without using the 'Timer Control', as it is purely a timer and does not control the baking operation of the oven.

Time Up;- When the timer reaches 0 minutes the buzzer sounds and the 'Time Up' indicator light illuminates. To cancel buzzer, turn Timer Control to the 'Off' position. This will also turn 'Off' the oven light.

To Turn 'Off' the Oven;- Rotate 'Temp' Control to 'Off' position. 'Power On' light will turn 'Off'.

Cleaning and Maintenance

Cleaning Guidelines



Caution

Always turn off electrical power at the mains supply before commencing cleaning.

This oven is not water proof. Do not use water jet spray to clean interior or exterior of the appliance.

To achieve the best results, cleaning must be regular and thorough. If any small faults occur, have them looked at promptly. Don't wait until they cause a complete breakdown.

NOTE:

- Carefully read and follow the safety instructions on the label of the cleaning product to be used.
- DO NOT use harsh abrasive scouring pads or abrasive detergents as they could damage the oven.
- Ensure that any detergent or cleaning material has been completely removed after each cleaning.

To keep your oven clean and operating at peak efficiency, follow the procedures shown below:-

Oven Cleaning

NOTE:

- If the oven usage is very high, the cleaning procedure should be carried out on a more frequent basis.
- Allow the oven interior to cool to approx 50°C - 120°F before commencing cleaning.

Stainless Steel Surfaces

- Thoroughly clean the exterior surfaces of the oven with, a damp cloth moistened with a mild detergent solution, or a soft bristled brush.
- Baked on deposits or discolouration may require a good quality stainless steel cleaner. Always apply cleaner when the oven is cold and rub in the direction of the grain.

Side Racks

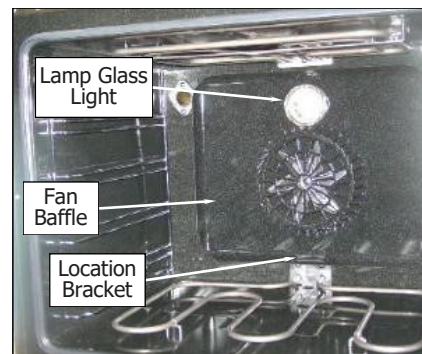
- Remove wire oven racks and bottom element guard.
- Partially undo the rack securing screw (anti-clockwise) securing side rack to the oven wall, until the rack is loose.
- Pull side racks forward to disengage the location pins at the rear of rack from the rear wall of the oven and remove the racks from the oven.



- Clean all racks with a mild anti bacterial detergent and hot water, using a soft bristled brush.
- Dry the racks thoroughly with a dry cloth.
- To refit the side racks, engage the locating pins at the rear of side rack into the locating holes in the rear of the oven.
- At the same time locate the front of the side rack over the rack securing screw and hand tighten the rack securing screw .
- Refit the bottom element guard and wire oven racks to the oven.

Lamp Glass / Fan Baffle

- Remove the wire racks as shown previously.
- Whilst holding the fan baffle in place, undo the lamp glass (anti-clockwise) and remove.



- Pull the fan baffle forward off the location bracket at lower rear of the oven.
- Clean fan baffle with mild anti bacterial detergent and hot water solution using a soft bristled brush.
- Dry fan baffle thoroughly with a soft dry cloth before re-fitting.
- Clean the lamp glass using a soft cloth with a mild anti bacterial detergent and hot water solution.
- Dry the lamp glass thoroughly with a dry cloth.
- Refit the fan baffle onto the location bracket below the fan.
- Whilst holding the fan baffle in place, refit the lamp glass, screw the glass in clockwise to secure the fan baffle in place. **Do not over tighten lamp glass.**

Cleaning and Maintenance

Door Seal

- To remove door seal, pull the 1 piece seal forward until it pulls out of the location groove around the oven. **Note the way the seal is fitted to the oven, with the lip facing inwards.**



- Check for wear and damage to the door seal and replace as required.
- Wash the door seal in a sink, taking care not to cut or damage the seal.
- Dry the door seal thoroughly.
- Refit the door seal with lip facing into centre of the oven.



- Press the door seal into the locating groove in the front face of the oven until the seal is properly located all around the oven.

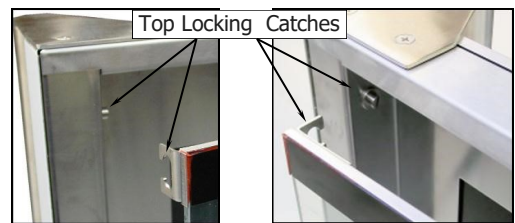
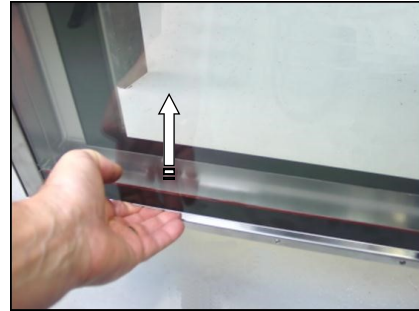


Oven Interior

- **Allow the oven interior to cool to approx 50°C - 120°F before commencing cleaning.**
 - Remove the oven racks, element guard and the fan baffle as shown previously.
 - Clean any build up of grease from the oven interior, using a mild anti bacterial detergent and hot water solution and a soft bristled brush.
 - Dry the oven thoroughly with a soft dry cloth.
 - Clean the oven regularly with a good quality oven cleaner.

Door Glass Cleaning

- **Ensure that the oven door is cool before cleaning the oven door glass.**
 - Open the oven door.
 - Lift up the bottom of the inner glass at the centre of the door to unlock from the inner glass retaining catches and swing the glass inwards towards the oven.



- Clean both sides of the inner glass and the inner side of the outer door glass with a conventional glass cleaner.
- Dry the oven door thoroughly with a soft dry cloth.
- Swing the inner glass back towards the outer door.
- Whilst holding the outer door, lift the inner glass back onto the locking catches until the inner glass is securely held.

Periodic Maintenance

NOTE: All maintenance operations should only be carried out by a qualified service person.

Controls and mechanical parts should be checked and adjusted periodically by a qualified service person. It is recommended that the appliance is serviced every 6 months.

Fault Finding

This section provides a reference to the more common problems that may occur during the operation of your oven. This fault finding guide is intended to help you correct and accurately diagnose problems with your oven.

You may encounter a problem not covered in this section, please contact your service provider who will require the following information:-

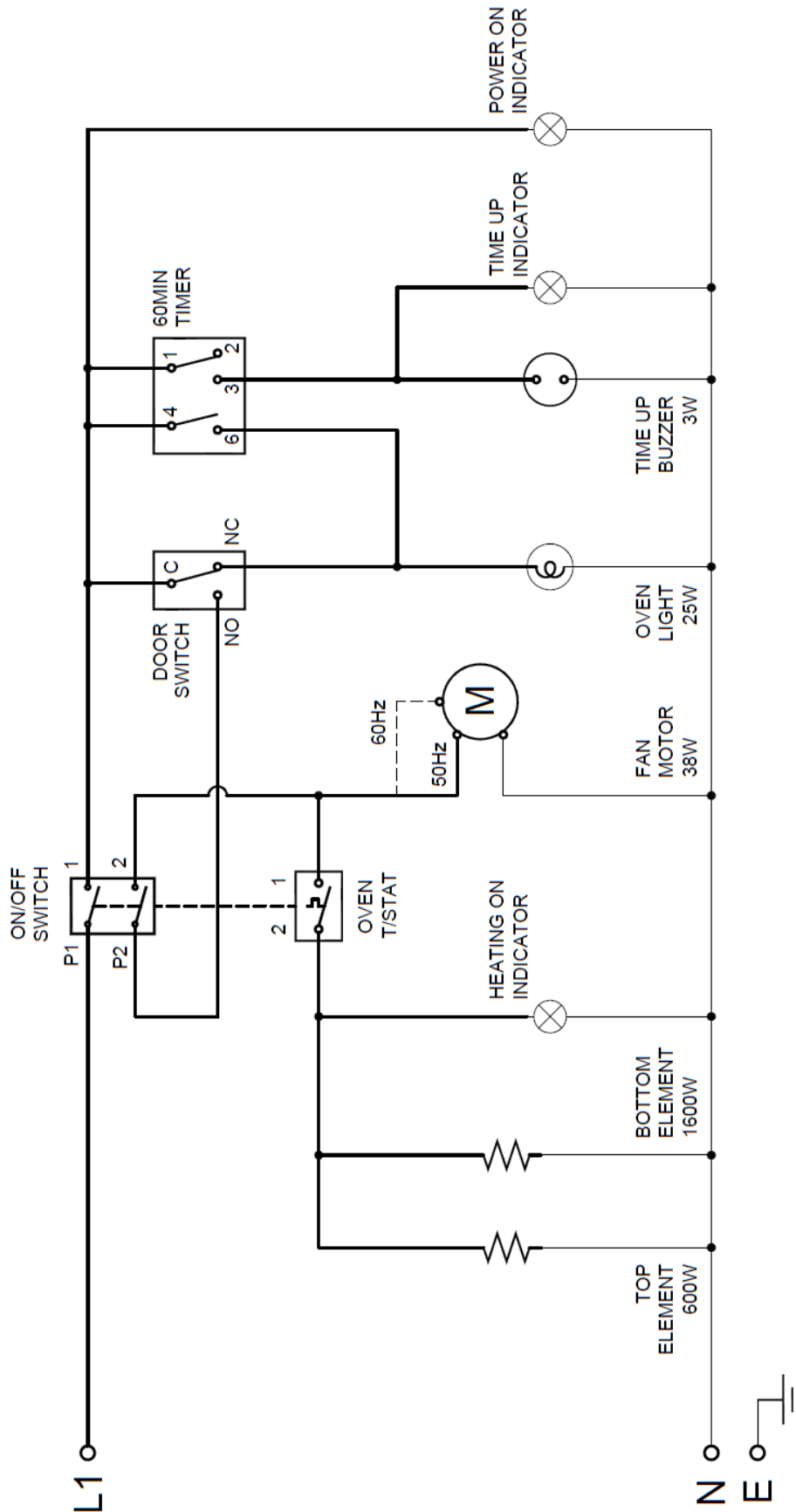
When fault finding a problem, always use a process of elimination starting with the simplest solution and working through to the most complex. Never overlook the obvious.

- **The Model and Serial Number of the oven, can be found on the Technical Data Plate located on the front right hand side panel of the oven.**

Fault	Possible Causes	Remedy
Oven does not operate.	Mains isolating switch, circuit breaker or fuses are 'Off' at the power board.	Turn 'On'.
	Door not closed fully.	Close door.
	External power switch is 'On', oven is 'Off'.	Turn 'On' the 'Temp Control' switch. ('Power On' light will illuminate when oven is 'On').
	Element faulty.	Call for service.
	Thermostat faulty.	Call for service.
	Door Switch faulty.	Call for service.
Oven operates but No Heat in Oven.	On / Off Temp Switch faulty.	Call for service.
	Door not closed fully.	Close door. (Refer 'Door does not close fully').
	Door Switch faulty.	Call for service.
	Element faulty.	Call for service.
Oven heats up but fan does not operate.	Fan motor faulty.	Call for service.
	Fan or fan motor obstructed.	Call for service.
Door does not close fully.	Tray in way of door.	Correctly position tray in rack.
	Door mis-aligned.	Re-align door.
	Door seal obstruction.	Correctly install door seal. (Refer to 'Cleaning' Section).
Oven Door hot to touch	Inner glass not fitted.	Fit inner door glass (Refer to Cleaning and Maintenance Section).
Bake timer does not time down.	Bake timer not set correctly.	For settings less than 10 minutes, first set timer to a higher setting then turn back to setting required.
	Bake timer faulty.	Call for service.
Oven light not illuminating.	Oven door is closed	Open oven door.
	Blown bulb.	Replace bulb.
	Timer not switched 'On'.	Switch 'On' timer.
	Timer faulty	Call for service.
Uneven cooking.	Door switch faulty.	Call for service.
	Too high a temperature selected.	Select a lower temperature.
	Oven or racks not level.	Check oven racks and level.
	Insufficient air space around trays or baking tins.	Ensure oven racks are spaced to allow air flow around baking on all shelves.
	Oven overloaded with too much product.	Re-load oven.
	Opening oven door un-necessarily.	Ensure oven door remains closed during the baking process.
	Oven door seal damaged or faulty.	Check seals and replace if damaged.
Oven vent restricted.	Ensure oven vent not blocked or shrouded.	

Electrical Schematics

Electrical Schematic E30M3 Turbofan Oven



CIRCUIT SCHEMATIC - E30M 230-240V 50-60HZ

Replacement Parts List

Important:

**Only genuine authorized replacement parts should be used for the servicing and repair of this oven. The instructions supplied with the parts should be followed when replacing components.
For further information and servicing instructions, contact your nearest authorized service provider or Turbofan Dealer.**

When ordering replacement parts, please quote the part number and the description as listed below. If the part required is not listed below, request the part by description and quote model number and serial number which is shown on the Technical Data Plate.

Item	Description
233607	Thermostat, 50 - 260°C
233887	Rotary Switch On/Off, 2 Pole
233616	Knob 50 - 260°C
233613	Knob (Timer) 60 Min
239345	Timer 60 Min 2 Pole
11794K	Buzzer 240V
238770	Indicator LED Red
238680	Oven Bottom Element, 1600W, 230 - 240V
238679	Oven Top Element, 600W, 230 - 240V
242024K	Fan Motor Kit, B/B
013432	Fan
233862	Door Microswitch
003002	Oven Lamp Lens
231814	Lamp Bulb G9 25W, Halogen, 230V
234048	Lamp Assembly G9/25W (Complete)
234580	Door Roller Catch
235277	Door Roller Catch Strike
235278	Strike Lock Nut
234930	Door Hinge Kit
234756	Door Inner Glass Assembly
234464	Door Seal
232379	Foot Adjustable (73 - 80mm)
238685	Oven Side Rack LH, E30
238686	Oven Side Rack RH, E30
233567	Oven Rack
233552	Rack Securing Screw

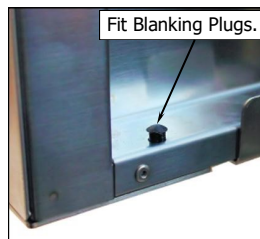
Appendix 1 - Oven Door Reversal

Reversing the Oven Door

- Refit all screw fasteners using a low-mid strength thread locking adhesive unless otherwise stated.
- Door reversal should only be carried out by a suitably competent person.

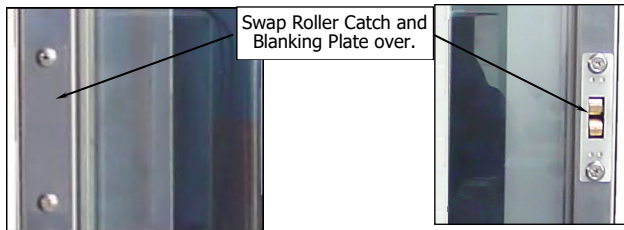
Remove the Oven Door Inner Glass.

1. Open the oven door and open the door inner glass.
2. Remove screw securing inner glass retaining clip and remove clip.
3. Lift up inner glass and remove, ensuring that pivot spacer is removed from lower inner glass pivot and retained.
4. Remove black plastic plugs from top and bottom of door and fit to holes where inner glass pivots were removed from.

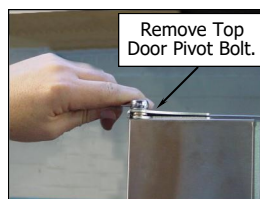


Remove the Oven Door.

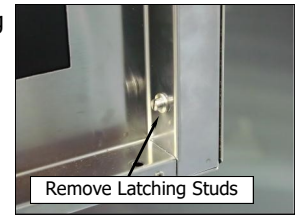
5. Remove the door roller catch and blanking plate from the inside of the door and swap these over.



6. Whilst supporting door, unscrew and remove top door pivot bolt from top door hinge assembly.
7. Remove door and lay on a flat surface or workbench.
8. Unscrew screws securing the door handle remove door handle.
9. Remove top door hinge and fit to bottom door opposite corner of door.
10. Remove bottom door hinge and fit to top opposite corner of door.



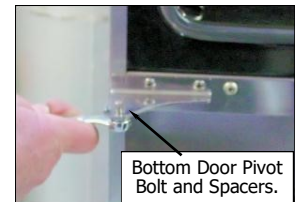
11. Remove inner glass latching studs and fit to opposite side of door using **Loctite 243** to secure.



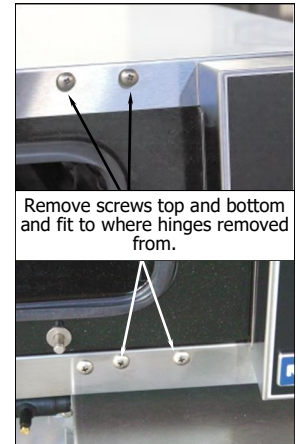
12. Turn door handle over and fit to other end of door where hinges were removed from. Ensure Flat of handle is to the outside.

Remove Upper and Lower Door Hinges and Door Catch.

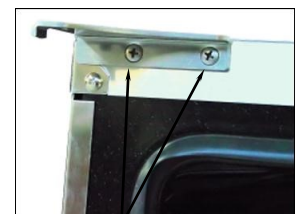
13. Remove bottom door pivot bolt and spacers and fit pivot bolt to top door hinge assembly (as this will be swapped over and fitted to bottom of other side of oven).



14. Remove the 4 blanking screws from front of oven.



15. Remove Hinge Plate from top of oven and fit diagonally opposite, to lower corner.



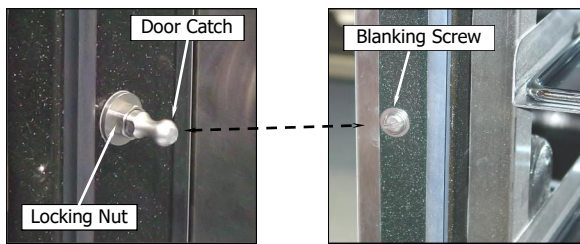
16. Remove Hinge Plate from bottom of oven and fit diagonally opposite, to upper corner.

17. Fit screws removed at Item 14 above to where hinges were fitted.



Appendix 1 - Oven Door Reversal

18. Remove Blanking Screw and Door Catch from front of oven and swap around (refer 'Adjusting Door Catch').

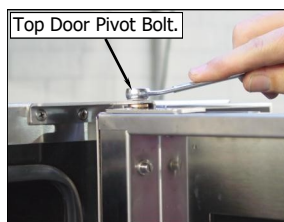


19. Fit door spacers removed at Item 13 previously, to lower hinge pivot bolt.

Oven Door Re-Fitting

Fit the Door.

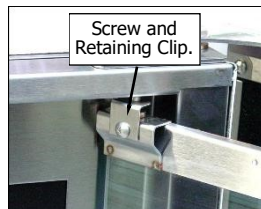
1. Refit oven door by locating bottom of door onto bottom hinge plate pivot bolt and spacers.
2. Fit top of door into top hinge plate and secure with top pivot bolt.



Fit Inner Glass to Door.

NOTE: It is important to ensure that the inner glass is fitted correctly and that the glass pivots at the hinge end of the door and not the handle end.

3. Fit pivot spacer removed at Item 3 on previous page, to the lower inner glass pivot and locate inner glass lower pivot into position on inside of door.
4. Locate top pivot of inner glass into top of door and secure in position with inner glass retaining clip.



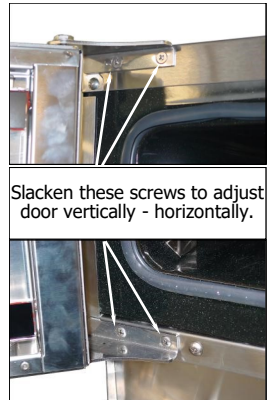
5. Lift inner glass up onto locking catch to lock glass into position.



Adjust Door for Correct Alignment.

Check alignment and operation of the door. Ensure that the door is correctly aligned horizontally and vertically.

1. To align, slacken off the upper and lower hinge plates and correctly align the door. Re-tighten both hinge plates.
2. Check that the roller catch correctly retains door in the closed position.
3. To adjust, slightly loosen screws securing roller catch and close the door. The roller catch will centralise itself.
4. Open door and tighten roller catch securing screws.



Slacken these screws to adjust door vertically - horizontally.

Adjusting Door Catch

If the door sealing requires adjustment, carry out the following to adjust:-

1. Check that the door seals correctly when closed, by placing a sheet of paper between the door and the seal.
2. Close the door on the paper and attempt to withdraw the paper by firmly tugging on the paper. The paper should just pull out with some resistance but without tearing.
3. To adjust the door catch, loosen the locking nut on the door catch:-
 - a. If the paper withdraws easily, **screw the door catch 'In' by ½ a turn** and repeat the test above until adjusted correctly.
 - b. If the paper cannot be withdrawn and the door springs open, **screw the door catch 'Out' by ½ a turn** and repeat the test above until adjusted correctly.
4. Tighten the locking nut on the door catch.

