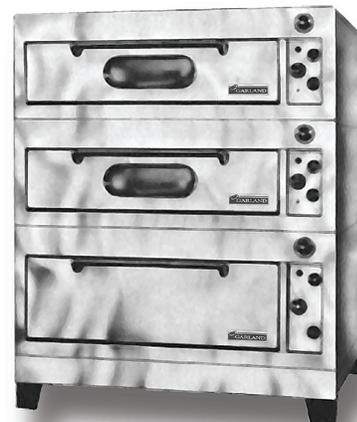




# INSTALLATION AND OPERATION MANUAL

## GARLAND 2000 SERIES ELECTRIC BAKE, ROAST AND COMBINATION OVENS



**FOR YOUR SAFETY:**  
DO NOT STORE OR USE GASOLINE  
OR OTHER FLAMMABLE VAPORS OR  
LIQUIDS IN THE VICINITY OF  
THIS OR ANY OTHER  
APPLIANCE

**WARNING:**  
IMPROPER INSTALLATION, ADJUSTMENT,  
ALTERATION, SERVICE OR MAINTENANCE  
CAN CAUSE PROPERTY DAMAGE, INJURY,  
OR DEATH. READ THE INSTALLATION,  
OPERATING AND MAINTENANCE  
INSTRUCTIONS THOROUGHLY  
BEFORE INSTALLING OR  
SERVICING THIS EQUIPMENT

PLEASE READ ALL SECTIONS OF THIS MANUAL  
AND RETAIN FOR FUTURE REFERENCE.

THIS PRODUCT HAS BEEN CERTIFIED AS  
COMMERCIAL COOKING EQUIPMENT AND  
MUST BE INSTALLED BY PROFESSIONAL  
PERSONNEL AS SPECIFIED.

INSTALLATION AND ELECTRICAL CONNECTION  
MUST COMPLY WITH CURRENT CODES:  
IN CANADA - THE CANADIAN ELECTRICAL  
CODE PART 1 AND / OR LOCAL CODES.  
IN USA - THE NATIONAL ELECTRICAL CODE  
ANSI / NFPA - CURRENT EDITION.

ENSURE ELECTRICAL SUPPLY CONFORMS WITH  
ELECTRICAL CHARACTERISTICS SHOWN ON  
THE RATING PLATE.

Users are cautioned that maintenance and repairs must be performed by a Garland authorized service agent using genuine Garland replacement parts. Garland will have no obligation with respect to any product that has been improperly installed, adjusted, operated or not maintained in accordance with national and local codes or installation instructions provided with the product, or any product that has its serial number defaced, obliterated or removed, or which has been modified or repaired using unauthorized parts or by unauthorized service agents. For a list of authorized service agents, please refer to the Garland web site at <http://www.garland-group.com>. The information contained herein, (including design and parts specifications), may be superseded and is subject to change without notice.

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## **IMPORTANT INFORMATION**

**WARNING:**

**This product contains chemicals known to the state of California to cause cancer and/or birth defects or other reproductive harm. Installation and servicing of this product could expose you to airborne particles of glass wool/ceramic fibers. Inhalation of airborne particles of glass wool/ceramic fibers is known to the state of California to cause cancer.**

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# SPECIFICATIONS

## Model Description

All models are 55 1/2" wide x 36" deep (1410mm x 914mm)

MODEL	HEIGHT	DESCRIPTION
E2001	51" (1295mm)	Single Deck Bake Oven
E2011	66" (1676mm)	Double Deck Bake Oven
E2111	66" (1676mm)	Triple Deck Bake Oven
E2005	51" (1295mm)	Single Deck Roast Oven
E2055	67" (1702mm)	Double Deck Roast Oven
E2555	78" (1981mm)	Triple Deck Roast Oven
E2015	63" (1800mm)	One Bake and One Roast Combination Oven
E2115	70" (1778mm)	Two Bake and One Roast Combination Oven
E2155	74" (1879mm)	One Bake and Two Roast Combination Oven

## Loading Charts

LOADING CHART									
Model	Total Kw Loading 240V & 208V	Nominal Amperes Per Phase							
		3 Phase						Single Phase	
		240V			280V			240V	208V
		X	Y	Z	X	Y	Z		
E2001	6.2	11	15	23	12.5	17.3	26	26	30
E2011	12.4	32	26	32	37	30	37	52	60
E2111	18.6	45	45	45	51.5	51.5	51.5	77.5	90
E2005	6.2	11	15	23	12.5	17.3	26	26	30
E2055	12.4	32	26	32	37	30	37	52	60
E2555	18.6	45	45	45	51.5	51.5	51.5	77.5	90
E2015	12.4	32	26	32	37	30	37	52	60
E2115	18.6	45	45	45	51.5	51.5	51.5	77.5	90
E2155	18.6	45	45	45	51.5	51.5	51.5	77.5	90

# INTRODUCTION

Your new equipment should be given regular care and maintenance. Periodic inspections by your dealer or a qualified service agency are recommended.

This product has been certified as commercial cooking equipment and must be installed by professional personnel as specified.

## Uncrating

Carefully remove unit from crate or carton. All packing material should be removed from units. On stainless steel units the protective material covering the stainless steel should be removed.

After uncrating, immediately check the equipment for visible signs of shipping damage.

If such damage has occurred, do not refuse shipment, but contact the shipper and file the appropriate freight claims.

## Rating Plate

When corresponding with the factory or your local authorized factory service center regarding service problems or replacement parts, be sure to refer to the particular unit by the correct model number (including the prefix and suffix letters and numbers) and the warranty serial number. The serial plate is attached to the inside of the control panel of the lower oven section contains this information.

Before attempting the electrical connection, the rating plate should be checked to ensure that the unit's electrical characteristics and the supply characteristics agree.

# INSTALLATION

## Clearances

The 2000 E series ovens must be installed with a minimum of zero (0") clearance to the sides and back to walls of combustible material.

## Assembly Instructions

1. Open the bottom section of the crate and the leg crate. Proceed with oven assembly as follows:
  - a. Fasten legs to base using 1/4" hex head bolts, locking washers and nuts provided.
  - b. Ensure the insulation is evenly spread and in the proper position on the top of the lower unit.
  - c. Place an 1" x 4" x 60" (22mm x 100mm x 1525mm) long piece of lumber across the rear top of the oven to prevent the stacks from misaligning.
  - d. Raise the center of top oven section up and on to the lower oven section, sliding the oven section forward until the main sides of the section engage behind the oven front.
    - e. Remove the piece of lumber and lower the rear of the oven section into position.
    - f. Secure the left and right outside front corners of the oven section using No. 1-24 x 1/2" flat head bolts supplied.
    - g. Secure the oven backs using six 10-1/2" truss head sheet metal screws.
2. To connect the section feed wires to the main oven terminal block, refer to the wiring diagram attached to the main terminal block.
3. With the oven(s) in the desired position, use a spirit level and level unit four ways: across front and back, and down left and right edges.
4. When two pizza ovens (2001P) are stacked, remove the top louvers on the bottom oven. Assemble as illustrated in instructions found with the stacking plates.

# INSTALLATION Continued

DO NOT under any circumstances; connect the vent stack of the oven directly to the flue pipe or a vent system. If this is done, it seriously decreases the efficiency and will cause uneven heating of the section. If an outside flue connection must be made, a suitable hood placed 12" (305mm) above the oven flue must be provided to prevent direct suction of the air through the oven sections.

## Steam Injection (Optional Extra)

Steam is often used for baking of hard rolls, French bread, Vienna bread and other hard crust breads. The steam provided inside the oven is a cloud of atmospheric steam or water vapor.

One quarter broiler h.p. for each bake deck is required at the steam inlet of the deck. It is important that the steam provided to the oven is lower pressure (3 lbs. To 5 lbs per square inch), (2100 kg/m<sup>2</sup> to 3500 kg/m<sup>2</sup>) and condensate must be drained from the steam line before it enters the oven.

The steam will be sufficiently saturated at this pressure to provide the vapor cloud effect that is needed to cover the top of the product.

When steam is required in the deck, it is recommended that the steam valve at the deck is only open a half-turn for 3 to 5 seconds. The time will be determined by the operator. Allowing too much steam to enter the oven will produce a soggy product.

## Electrical Connections

The installation and connection should comply with current codes. In Canada - The Canadian Electrical Code Part 1 and/or local codes. In the U.S.A. - The National Electrical Code ASNA/NFPA - current edition.

Before attempting the electrical connection, the rating plate should be checked to ensure that the unit's electrical characteristics and the supply characteristics agree.

The unit has been wired as specified on the factory order and the rating plate is stamped with the information. If it is necessary to change the phase, refer to the wiring diagram attached to the main terminal block, or refer to the rating plate.

Electrical connection may be made through the knockout at the rear of bottom of the unit to the terminal block located directly behind the switch panel on the main bottom. Hinge switch panel open.

For the supply connection use suitable wire for 60° C.

## Break-In Procedure

It is strongly recommended that the 2000 Series ovens supplied with core plates be put through a break-in period to eliminate possible warpage of the core plates caused by moisture absorption.

This action need only be carried out once providing the ovens are used daily, however, if the ovens are left idle for an extended period of time allowing the core plates to absorb moisture, the following procedure must be again carried out.

Turn the top and bottom heat selector switched to HI, set the thermostat to 300°F (149°C) maximum and allow the oven to operate (without any product in the oven), for approximately 8 hours.

# OPERATION AND MAINTENANCE

Top and bottom heating units are each operated by a three heat heavy duty reversible switch. An oven thermostat with pilot light is also provided. The thermostat maintains the temperature and the switches determine the source of the heat.

- 1 Turn the top heating unit to HIGH.
- 2 Turn the bottom heating unit to HIGH.
3. Set the oven thermostat to the desired temperature. The pilot light will now come ON.
4. When the desired temperature is reached, the pilot light will go OFF. At this time the top heating unit switch may be turned OFF or set as desired.
- 5 The bottom heating unit switch may be left at HIGH or adjusted as desired.

## Thermostat Calibration

All electric ovens are equipped with snap action thermostats. Field calibration is seldom necessary and should not be resorted to unless experience with cooking results definitely provides that the control is not maintaining the temperature to which the dial is set. To check the oven temperature when calibrating, use only a reliable mercury thermometer or preferably an oven pyrometer.

1. Place the thermocouple of the test instrument or reliable mercury thermometer in the center of the oven.

2. Turn oven temperature control dial to 400°F (204°C). In order to allow the oven temperature to stabilize, the oven control must be allowed to cycle twice before taking a test reading
3. Check temperature reading control just as it cycles 'OFF' as indicated by the cycling pilot. If the temperature does not read within 15°F (8°C) of the dial setting, recalibrate as follows
4. Carefully remove the thermostat dial, not disturbing the dial setting.
5. Hold the dial shaft steady and with a screwdriver, turn the calibration screw, located inside the dial shaft clockwise to decrease and counter-clock wise to increase the temperature. I.E. 1/4 turn = 35°F (19.5°C).
6. Replace the thermostat dial and repeat steps 1 through 3 to verify that the correct adjustment has been made.

## Cleaning of Core Plates

1. Set the thermostat dial to 550°F (288°C) at the end of the cooking day and allow to cycle for one hour.
2. When the oven has cooled the residue will have carbonized and can be removed by sweeping with a stiff wire brush.
3. Stubborn residue can be loosened with a scraper.

 **Garland**<sup>®</sup>