

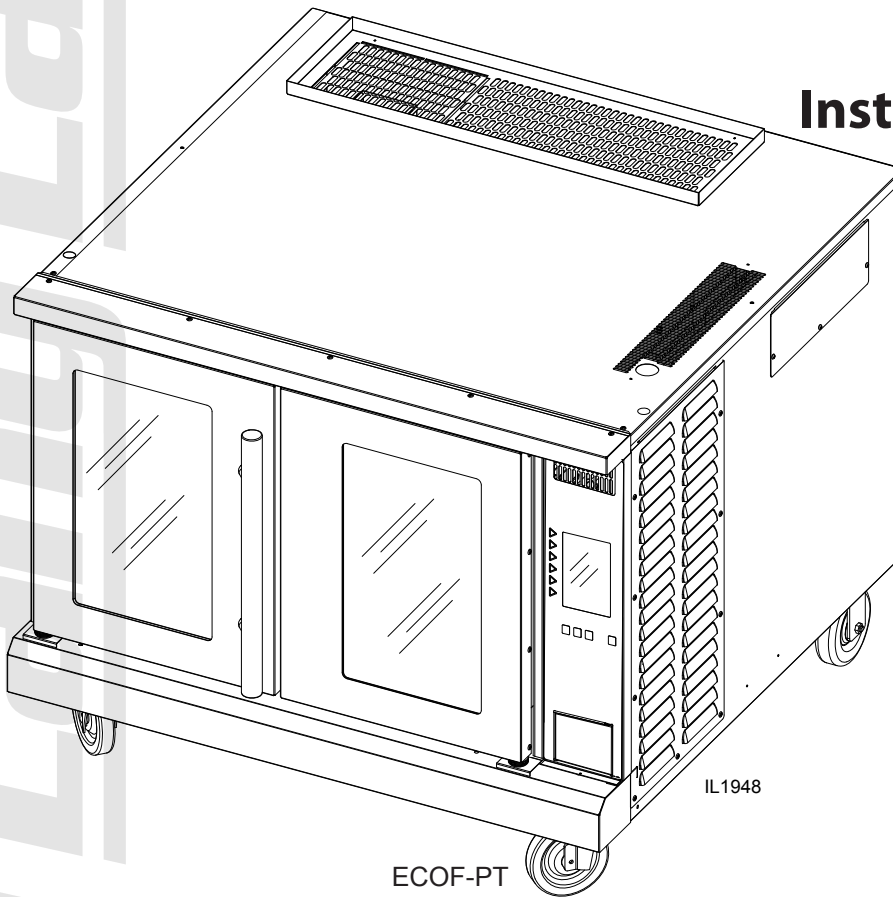


# ELECTRIC FULL SIZE COMPUTERIZED CONVECTION OVEN

ECOD-PT  
ECOF-PT

## Installation and Operation Instructions

2M-W487 Rev.B 1/8/2010



IL1948

ECOF-PT

## SAFETY SYMBOL



These symbols are intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

### FOR YOUR SAFETY

**DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINTIY OF THIS OR ANY OTHER APPLIANCE.**

### POST IN PROMINENT LOCATION

**INSTRUCTIONS TO BE FOLLOWED IN THE EVENT USER SMELLS GAS. THIS INFORMATION SHALL BE OBTAINED BY CONSULTING YOUR LOCAL GAS SUPPLIER. AS A MINIMUM, TURN OFF THE GAS AND CALL YOUR GAS COMPANY AND YOUR AUTHORIZED SERVICE AGENT. EVACUATE ALL PERSONNEL FROM THE AREA.**

### WARNING

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



### WARNING

**RISK OF FIRE OR ELECTRIC SHOCK  
DO NOT OPEN**



**WARNING, TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE CONTROL PANEL. NO USER-SERVICABLE PARTS INSIDE. REPAIRS SHOULD BE DONE BY AUTHORIZED SERVICE PERSONNEL ONLY.**

### NOTICE

Using any part other than genuine Lang factory supplied parts relieves the manufacturer of all liability.

Lang reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Lang exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

## MAINTENANCE AND REPAIRS

Contact your local dealer for service or required maintenance. Please record the model number, serial number, voltage and purchase & Installation Information in the area below and have it ready when you call to ensure a faster service.

Model No.: \_\_\_\_\_

Purchased From: \_\_\_\_\_

Serial No.: \_\_\_\_\_

Location: \_\_\_\_\_

Voltage: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

1-Phase or 3 Phase: \_\_\_\_\_

Installed Date: \_\_\_\_\_



## **PROBLEMS, QUESTIONS or CONCERNS**

Before you proceed consult you authorized Lang service agent directory  
or  
Call the Lang Technical Service & Parts Department at (314) 678-6315.

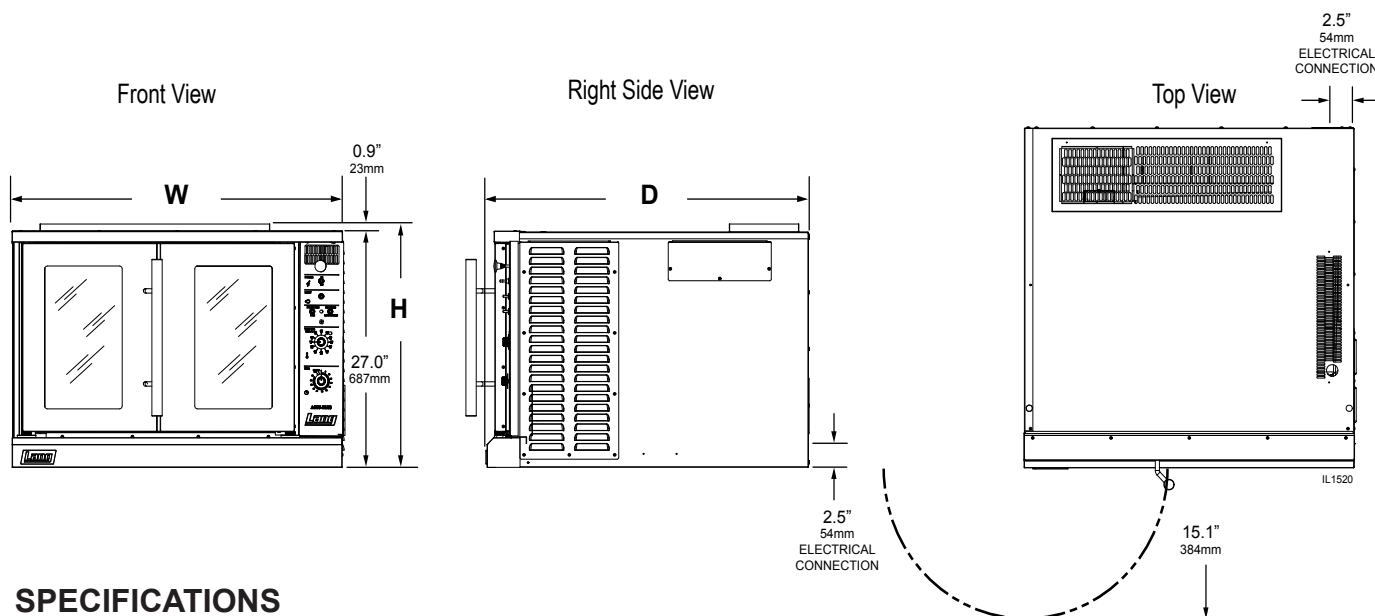
### **TABLE OF CONTENTS**

Specifications . . . . .	4
Equipment Description . . . . .	5
Unpacking . . . . .	6
Installation	
Leg Installation . . . . .	7
Leg Pad Adapter Installation . . . . .	8
Stacking the Oven. . . . .	9
Ventilation & Clearance . . . . .	10
Electrical Connection . . . . .	11
Oven Voltage . . . . .	11
Initial Start-Up	
Pre-Power On . . . . .	12
Power On . . . . .	12
General Operation & Programming	
Control Panel . . . . .	13
Typical Operation Sequence . . . . .	13
Hints & Suggestions. . . . .	14
Loading . . . . .	14
Pace Timers. . . . .	15
Program Enable Buttons . . . . .	16 - 19
Maintenance	
Cleaning . . . . .	20
Troubleshooting	
Symptoms / Possible Causes / Test. . . . .	21
Wiring Diagram	
208/240VAC . . . . .	22
480, 380VAC . . . . .	23
220/380VAC & 240/415VAC. . . . .	24
Exploded View & Parts List . . . . .	25-31

**NOTICE** Service on this or any other Lang appliance must be performed by qualified personnel only. Consult your Lang Authorized Service Agent Directory. You can call our toll free number (314) 678-6315 or visit our website [www.langworld.com](http://www.langworld.com) for the service agent nearest you.

## SPECIFICATIONS

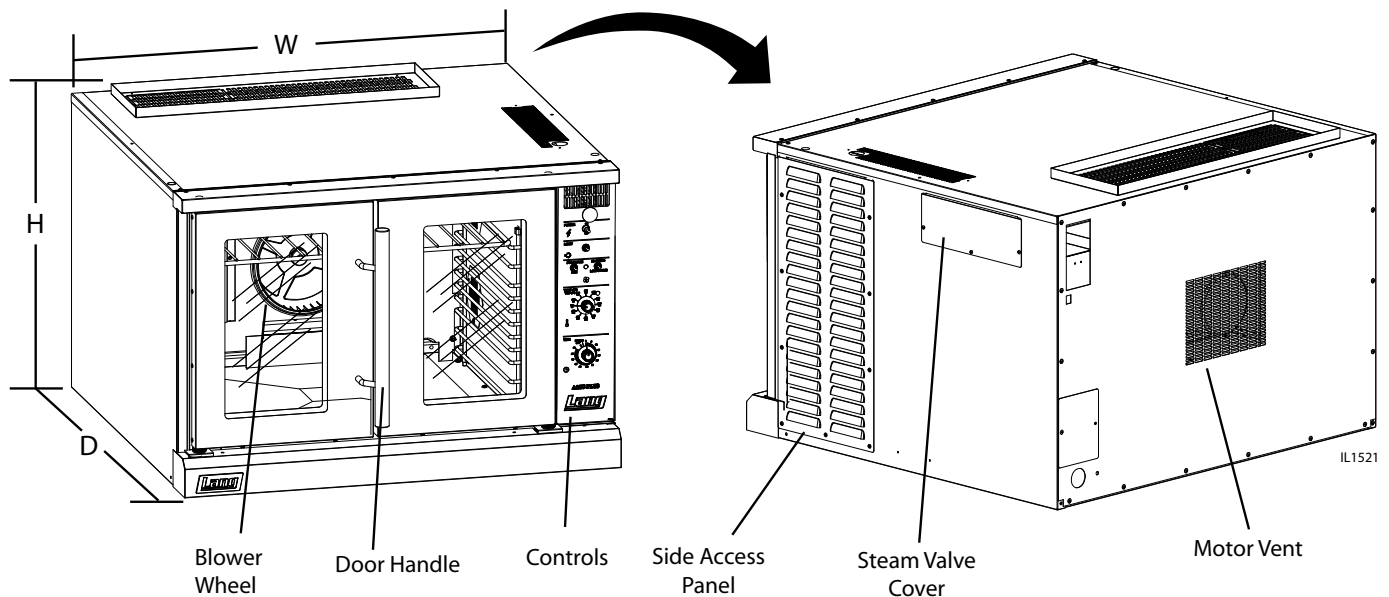
Model	Height x Width x Depth (without optional stand)	Clearance from combustible surface	Weight		
			Installed	Shipping	Freight Class
<b>ECOF</b>	27.9" x 40.1" x 39.1" 708mm x 1019mm x 994mm	Side:6", Back: 6", Floor: 6"	380 lbs. (173 kg)	420lbs (191 kg)	70
<b>ECOD</b>	27.9" x 40.1" x 46.0" 708mm x 1019mm x 1168mm	Side:6", Back: 6", Floor: 6"	460 lbs. (209 kg)	500lbs (227 kg)	70



## SPECIFICATIONS

MODEL	VOLTS AC	Hz.	MOTOR AMPS	PHASE	AMPS 3PH/ NEUTRAL	KW TOT.	AMPS 1 PH	SUPPLY WIRE 1 PH	L1	L2	L3	WIRE 3 PH
ECOF-PT2/4MF	240/415	50		3PH-4 WIRE	17.8	11.5			17.8	15.3	15.3	12
ECOD-PT	208	50/60	3.3					6	6	2.7	2.7	8
	240								4.2	3.7	3.7	10
ECOF-PT	208								6	2.7	2.7	8
	240								4.2	3.7	3.7	10
ECOF-PT-MF	208								6	2.7	2.7	8
	240								4.2	3.7	3.7	10
ECOF-PT-NT	208								6	2.7	2.7	8
	240								4.2	3.7	3.7	10
ECOF-PT480MF	480	60	3						15.6	15.6	10.5	14
ECOF-PT480NT									15.6	15.6	10.5	14
ECOF-PT-480V									15.6	15.6	10.5	14

## EQUIPMENT DESCRIPTION



### Exterior Construction

The oven exterior dimensions are 40" (100 cm) Wide, 27" (67.5 cm) High, 38" (95 cm) Deep. The Top, Front, Back, and Sides are constructed of stainless steel with an aluminized bottom.

The oven doors come standard with double pane windows.

The door handle is constructed of Stainless Steel and Phenolic Tubing.

The oven cavity is insulated with high temperature insulation for efficiency and reduced heat loss.

### Interior Construction

The oven cavity dimensions are 29" (72.5 cm) Wide, 20" (50.84 cm) High, 21" (53.38 cm) Deep.

The interior of the oven is constructed of porcelainized stainless steel.

### Operation

The ECOD-PT oven is a forced air convection oven with a vented oven cavity. The air is driven by a 1/3 HP fan motor.

### Controls

Icon driven (touch) panel allows for easy operation. Complete computerized controls. Pre-Programmable product selections. Independent shelf timers for each shelf. Load control through use of Cooking Curves. Shelf compensation for uniform baking. Solid state temperature sensing and controls. Dual speed fan. Manual override controls.

### Technical

The ECOD-PT oven operates on either 208/240V or 480V. **This must be specified when ordering.**

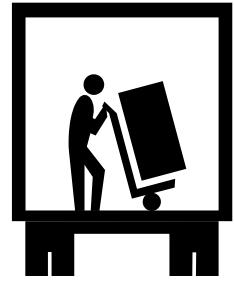
Floor space required is 48" (122.6 cm) wide, 44" (112.5 cm) deep. The oven weighs 430 lbs.

**NOTICE**      The data plate is on the back side of the oven above the power cord. The oven voltage, wattage, serial number, wire size, and clearance specifications are on the data plate. This information should be carefully read and understood before proceeding with the installation.

## UNPACKING

### Receiving the Oven

Upon receipt, check for freight damage, both visible and concealed. Visible damage should be noted on the freight bill at the time of delivery and signed by the carrier's agent. Concealed loss or damage means it does not become apparent until the merchandise has been unpacked. If concealed loss or damage is discovered upon unpacking, make a written request for inspection by the carrier's agent within 15 days of delivery. All packing material should be kept for inspection. Do not return damaged merchandise to Star Manufacturing Company. File your claim with the carrier.



### Location

Prior to un-crating, move the oven as near to its intended location as practical. The crating will help protect the unit from the physical damage normally associated with moving it through hallways and doorways.

### Un-crating

The oven will arrive completely assembled inside a wood frame and strapped to a skid. Cut the straps and remove the wood frame.

The oven can now be removed from the skid.



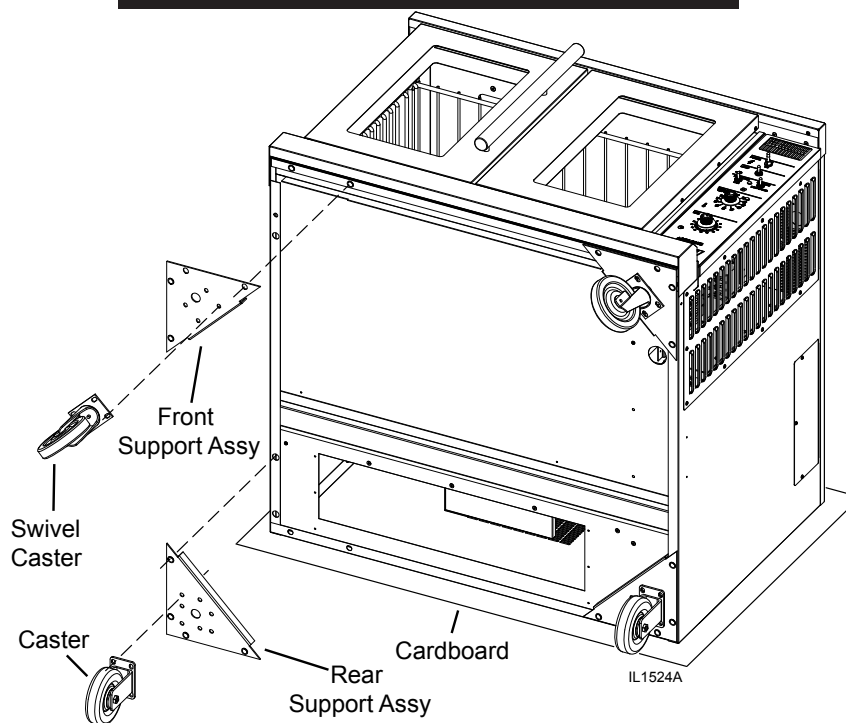
**CAUTION**

**EACH UNIT WEIGHS 430 LBS. FOR SAFE HANDLING, INSTALLER SHOULD OBTAIN HELP AS NEEDED, OR EMPLOY APPROPRIATE MATERIALS HANDLING EQUIPMENT (SUCH AS A FORKLIFT, DOLLY, OR PALLET JACK) TO REMOVE THE UNIT FROM THE SKID AND MOVE IT TO THE PLACE OF INSTALLATION.**

**ANY STAND, COUNTER OR OTHER DEVICE ON WHICH OVEN WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE OVEN.**

**SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.**

# INSTALLATION



**Above:** typical leg and caster installation.  
**Below:** accessory options, legs, casters & equipment carts sold separately. Follow installation instructions with the each specific kit.

## Leg Installation

Legs are available separately for both the single and double deck installations. Single deck installations require a 27-inch leg or equipment cart. Double deck installations require 6-inch legs or casters. All these are available separately.

Place some cardboard on the ground and with assistance carefully lay the unit on its back. In stacked

The adjustable feet may be screwed in or out as necessary to level the oven. A torpedo level placed on an oven rack will assist in leveling the oven.

## Double-Stack Ovens

To install the 6-inch legs, adj. feet or casters on the lower unit, follow the Leg Pad instructions in the following section or in the instructions included with the leg pads.

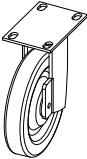
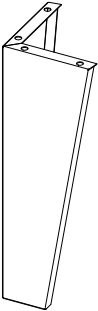
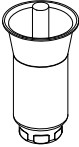
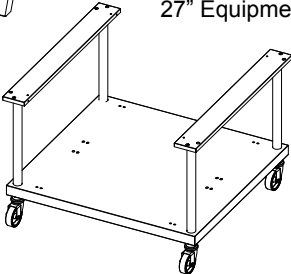
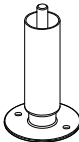
## Single Oven

To install 27" legs or cart to your unit, place the unit laying on its back onto a piece of cardboard. Be sure to read all instructions & follow the instructions provided with the kit.

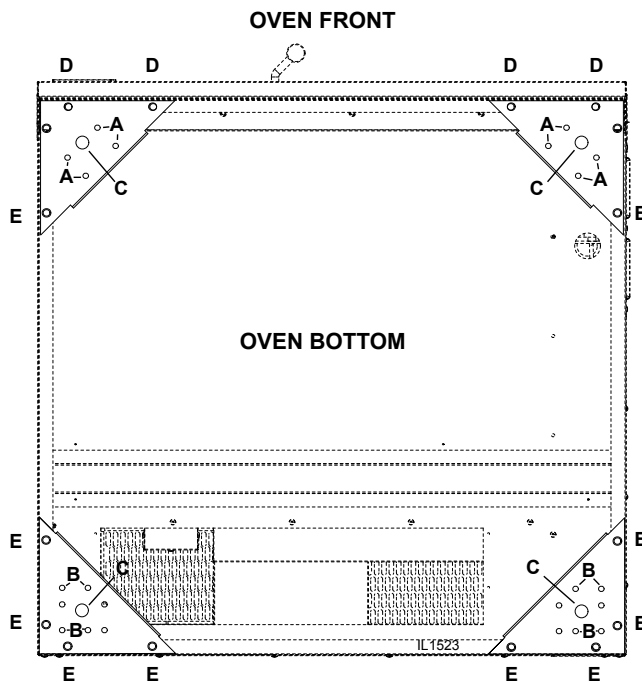
## 27" Leg Installation

With unit in position, fasten the two legs to the front corner pads then to the oven's front corners using the four 5/16 inch bolts provided in the leg kit. *See leg pad adapter illustration to determine differences between front & rear support assemblies.*

Lift the oven onto its front legs and block the back up using one of the 27-inch legs set upside down in the center rear of the oven body. Install the third 27-inch leg onto the oven body on the control side rear. Gently lift the oven rear, remove the temporary support leg & install it on the last rear corner.

Accessory Options	
Stacked Units	Single Units
 <p>Caster Sets</p>	 <p>27" Leg Set (marine also)</p>
 <p>6" Adj. Leg Sets</p>	 <p>27" Equipment Cart</p>
 <p>6" Adj. Bolt Down Leg Sets (marine only)</p>	<p>IL1525</p>

## INSTALLATION cont.



**Above:** Bottom on unit showing the placement of the leg adapters and their hole assignment.

### Leg Pad Adapter

Identify the front and rear leg adapters (the front adapters have two threaded inserts, the rear has four). The leg adapters are included with each specific accessory kit.

#### Leg to Adapter Installation:

Install the leg's threaded stud through the hole in the adapter labeled "C" with the bent flange of the adapter facing away from the leg.

Screw the 3/4-inch nut supplied in the adapter kit onto the leg stud and tighten.

Secure to oven using hardware provided.

#### Caster to Adapter Installation:

Place the swivel caster against the front leg pad adapter with the flange of the adapter facing away from the caster.

Install the four 5/16 inch bolts through the caster base and the adapter holes labeled "A" then install the 5/16 inch nuts with washer and lock washers.

Place the rigid casters against the rear leg adapter with the flange of the adapter facing away from the caster.

Align the caster to the holes in the adapter labeled "B". NOTE: There are two sets of "B" holes set at 90° from the each other. One set will create a left rear adapter and the other set will create a right rear adapter.

Install four 5/16-inch bolts through the caster base and the adapter holes labeled "B" then install 5/16-inch nuts with lock washers and flat washers.

#### Adapter to Oven Installation:

Gently tip the oven onto its back. Place the front leg adapter into the front corners of the oven.

The holes without the threaded inserts face the front of the oven and the flange on the adapter points toward the bottom of the oven.

The edge of the leg adapter with the threaded insert slips under the flange on the oven side, while the edge without the inserts sits on top of the threaded angle on the oven front.

Install two 3/8-inch bolts with lock washers and flat washers through the front holes "D" in the leg adapter and into the threaded inserts on the oven.

Thread one 3/8-inch bolt with lock washer and flat washer into the rear threaded hole labeled "E" on each of the leg adapters.

The forward threaded hole on the front leg adapter does not get a bolt installed.

Place the rear leg adapters into the rear corners of the oven so that the adapter is under the flange of the oven side and back.

**NOTE:** If installing a caster place the adapter on the oven so that the casters roll forward.

Install for 3/8-inch bolts with lock washers and flat washers through the holes labeled "E" in the flange of the oven and into the threaded inserts of the leg adapter.



## INSTALLATION cont.

### Stacking the Ovens

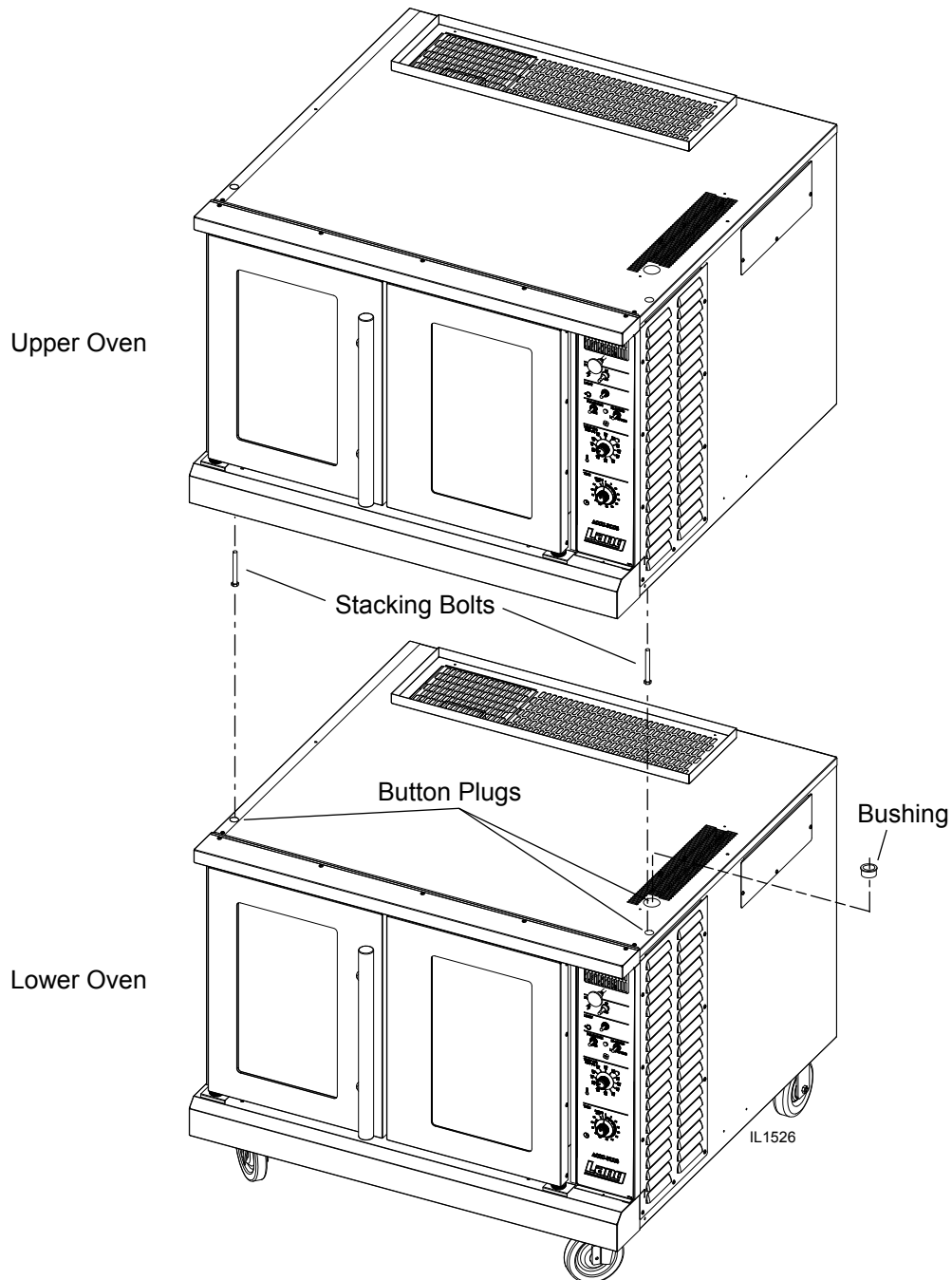
Remove all the plug buttons from the top of the lower oven.

Remove the stacking kit from the oven compartment of one oven and install the 1 1/4-inch plastic bushing into the top of the lower oven.

Tip the top oven backwards and install two 3/8-inch socket head bolts, found in the stacking kit, into the two front leg holes that match the holes in the top of the lower oven. Install the socket head bolts with the heads of the bolt pointing away from the oven.

Lift the top oven and gently set on top of the lower oven so that the heads of the socket head bolts nest into the holes in the top of the lower oven.

**NOTE:** Each unit must have separate electrical connections



## INSTALLATION continued

### Ventilation and Clearances

Standard minimum clearance from combustible construction is as follows.

4" from side

4" from back

6" from floor

- These ovens may be set directly, without legs, on a curbed base or non-combustible floor.
- If the oven is set without legs on a non-combustible floor or a curbed base, maintain a 4-inch back clearance.
- If the oven is set directly against a non-combustible back wall, maintain a 6-inch clearance to the floor.
- Do not install the oven closer than 4 inches from another oven on the right hand side (control panel side).
- Do not install the oven closer than 12 inches from an uncontrolled heat source (char broiler etc.) on the right side.
- Keep the area free & clear of combustible material, and do not obstruct the flow of combustion or ventilation air.
- The installation of any components such as a vent hood, grease extractors, and/or fire extinguisher systems, must conform to the applicable nationally recognized installation standards.

**NOTICE**      **The installation of any components such as a vent hood, grease extractors, fire extinguisher systems, must conform to their applicable National, State and locally recognized installation standards.**

## INSTALLATION continued

### Electrical Connection

The electrical connection must be made in accordance with local codes or in the absence of local codes with NFPA No. 70 latest edition (in Canada use: CSA STD. C22.1).

The electrical service entrance is provided by a 1 1/4-inch knockout in the bottom right front corner of each oven, or at the oven back directly behind the control compartment. Grounding lugs are provided at both the front and rear service entrances.

The 208/240-volt oven is a dual voltage oven and is shipped from the factory as 208 volt. The oven must be field converted to operate on a 240-volt power supply. To convert the oven to 240 volt, remove the jumper wire located under the control compartment behind the bottom trim piece. As well as changing the transformer input wire to the 240V, color on the primary side of transformer (see illustration below).

With 380V, 440V & 480-volt installations check to be sure that the motor rotates in a clockwise direction as viewed from the front of the oven. To reverse the motor rotation, switch any two incoming power supply leads and recheck the rotation.

Supply wire size must be large enough to carry the amperage load for the number of ovens being installed. Wire size information can be found on the oven DATA PLATE or in the specifications section on page 4..

208/240V ovens can be installed on both single and three-phase supplies and is shipped from the factory for three-phase. To phase the oven to match the power supply, follow the charts on the wiring diagram located at the back of the manual.

Certain units are provided with or can be purchased with a Cord & Plug kit (*Part number 9Q-ECOF-CK*). This kit includes a 48" cord with a NEMA L15-50P plug and is for 208/240V units ONLY. In stacked situations each units needs to have separate cord & plug assemblies.

### Oven Voltage

The Lang Model ECOF & ECOD ovens can be operated on 208, 240-volt (single or three phase), or 240/415, 480V (three phase only) source. The Amp draw, KW rating, and phasing can be found in specification section of this manual.



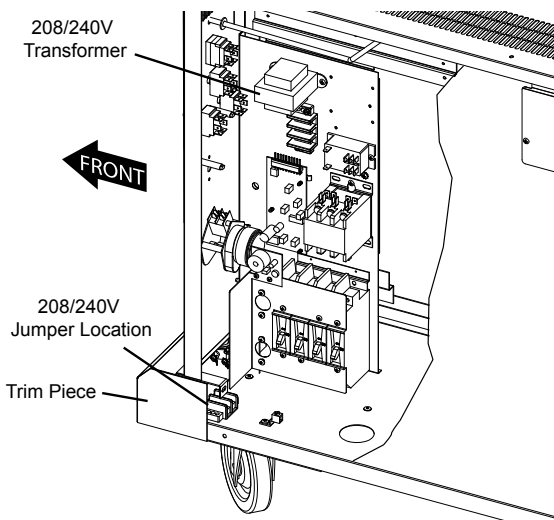
**WARNING**

**THIS APPLIANCE MUST BE GROUNDED AT THE TERMINAL PROVIDED. FAILURE TO GROUND THE APPLIANCE COULD RESULT IN ELECTROCUTION AND DEATH.**



**WARNING**

**INSTALLATION OF THE UNIT MUST BE DONE BY PERSONNEL QUALIFIED TO WORK WITH ELECTRICITY AND PLUMBING. IMPROPER INSTALLATION CAN CAUSE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT. UNIT MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES.**



*Left: 208/240V Dual Volatage units are shipped as 208V and must be field converted to 240V.*

## INITIAL START UP

### Pre-Power On

After the oven is installed and connected to power, prior to turning on, verify the following:

- The doors open and close freely.
- All racks are in the oven correctly.
- All packing materials have been removed from the inside of the oven.

### Power On

Once oven has been turned on verify that the blower wheel is spinning freely in a clockwise position and that the elements are heating properly.

Confirm that both thermostat knob and timer knob move freely and that the timer beeps..

**NOTICE**      **During the first few hours of operation you may notice a small amount of smoke coming off the oven, and a faint odor from the smoke. This is normal for a new oven and will disappear after the first few hours of use.**

## General Operation & Programming

Convection ovens constantly circulate air over and around the product. This strips away the thin layer of moisture and cool air from around the product allowing heat to penetrate more quickly.

Cooking times can be shortened and cooking temperatures can be reduced.

To convert standard deck oven recipes, reduce the temperature 50° degrees and the time by 25%.  
Make minor adjustments as necessary.

Always weigh your product. This will give you a more consistent size, color and quality.

Check the product near the end of the initial cooking.

Do not open the oven door during baking, as this will change the baking characteristics of the oven and make it difficult to determine a final program.

If the product is overdone on the outside and underdone on the inside, reduce the baking temperature.

If the product is pulling away from the edge of the pan, the temperature is too high or the cooking time too long.

A convection oven is a mechanical piece of equipment. The same control settings will always give the same results. If the results vary, problems may be because of changes in the product preparation.

### ECOH-PT Control Panel

The control panel consists of the following items. Detailed operational descriptions are given later this section.

**Power Switch:** Turns the oven on and off

**Function Keys:** Keys are active when a program option is displayed on the display adjacent to that key.

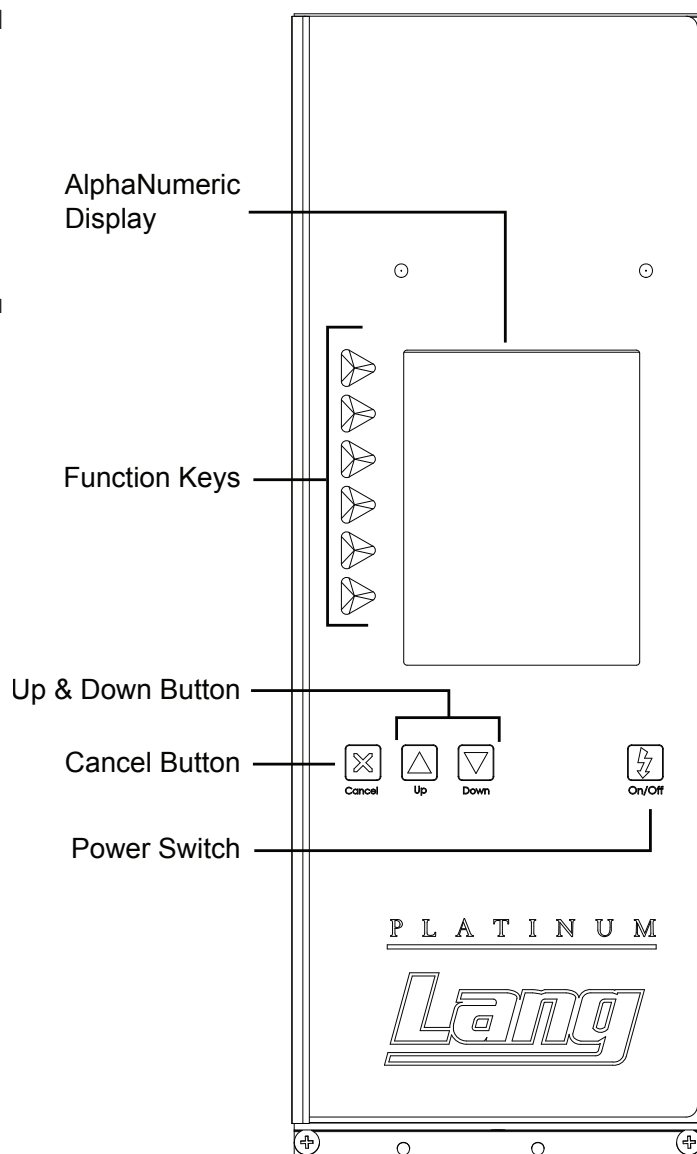
**Up & Down Buttons:** Allows you to scroll through the programming selections.

**Cancel:** When scrolling through menus this will allow you to back up to the previous menu. In program mode this will allow you to back up to the previous step.

**Alpha Numeric Display:** Visual interface.

### Typical Operation Sequence

ACTION	RESULT
Press the on switch.	Control panel comes on; display says <b>"LANG, Run Oven, Time Date Program"</b> .
Select <b>"Run Oven"</b> .	Display will show a list of product to choose.
Select Product button next to Icon desired.	Display says <b>"Preheating to XXXF"</b> .
Beeper sounds briefly.	Display says <b>"Ready"</b>
Select Product to start.	Display shows possible product selection for that temperature.
Select Product to start..	Display says, <b>"Select shelf"</b>
Press Product button next to desired shelf.	Display will show icon chosen and begin to count down.
Beeper sounds continuously.	Display shows <b>"DONE"</b> , press button and remove product from that shelf.
Oven is ready for another product.	



IL1476

PLATINUM

## General Operation & Programming cont.

### Hints & Suggestions

Convection ovens constantly circulate air over and around the product. This strips away the thin layer of moisture and cool air from around the product allowing heat to penetrate more quickly.

Cooking times can be shortened and cooking temperatures can be reduced.

To convert standard deck oven recipes, reduce the temperature 50 degrees and the time by 25%. Make minor adjustments as necessary.

The lower the oven temperature the more even the bake.

Always weigh your product. This will give you a more consistent size, color and quality.

Check the product near the end of the initial cooking cycle by turning on the oven light and looking through the oven door windows.

Do not open the oven doors during baking as this will change the baking characteristics of the oven and make it difficult to determine a final program.

If the product is overdone on the outside and underdone on the inside, reduce the baking temperature.

If the product is pulling away from the edge of the pan, the temperature is too high or the cooking time too long.

The convection is a mechanical piece of equipment. The same control settings will always give the same results. If the results vary, problems may be because of product preparation.

Opening the vent will allow moisture to escape the cooking chamber during part or all of the cooking process. This will allow a more crispy product, example: french fries, fish, crispy crusts. Close the vent for dough products like cinnamon rolls, breads. This is something to experiment with to determine what is best for your specific menu.

### Loading

Here are some things to remember when loading your oven.

- When loading and unloading the oven, stage products and racks so the oven door is opened for the least amount of time.
- Be sure that racks are level within the oven.
- Bent or warped pans can greatly affect the evenness of the cook or bake.
- If using baker's parchment, be sure the parchment does not blow over the product. That will create an uneven bake.
- Load each shelf evenly. Spaces should be maintained equally between the pan and oven walls, front and back.
- Do not overload pan's this will create an uneven bake.
- For best baking results, load the oven from the center out during random loading.



### CAUTION

**ALWAYS KEEP THE AREA NEAR THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS.**

**KEEP FLOOR IN FRONT OF EQUIPMENT CLEAN AND DRY. IF SPILLS OCCUR, CLEAN IMMEDIATELY, TO AVOID THE DANGER OF SLIPS OR FALLS.**

# PLATINUM

[illegible]

er as shown here.

Icon	No.	Description
	80	Sandwich on Hoagie, Option 2
	81	Sausage
	82	Scone
	83	Seafood
	84	Square
	85	Star
	86	Triangle
	87	Vegetable
	88	
	89	Vegetable
	90	Birthday Cake

## Platinum PROGRAMMING

### Platinum PROGRAMMING

When using the Platinum Control Panel follow these simple steps.

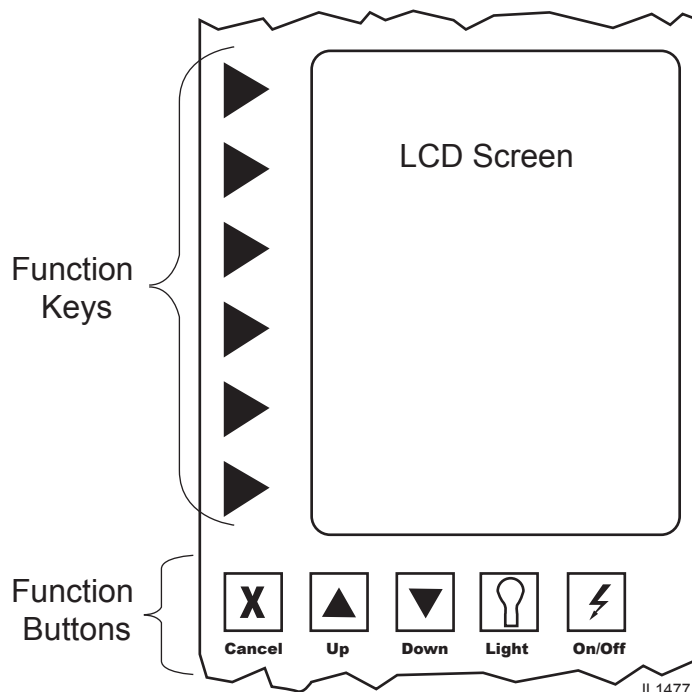
**Function Keys:** Are active when selecting an option that is displayed on the LCD Screen.

#### Function Buttons:

**Cancel:** During Program Mode it will take you to the next step, otherwise it will take you back to the previous menu.

**Up & Down:** Will move you through the selections/settings displayed on the LCD Screen which will be used when programming your specific requirements. (Example: access codes, temperature settings, cooking time, curve, fan speed etc.)

**On/Off:** Main Power Switch



#### Programming Step Contents:

- Step 7 Select Product Icon,
- Step 8 Select Product Name,
- Step 9 Select Product Temperature,
- Step 10 Select Tier Cook Time,
- Step 11 Select Cooking Curve,
- Step 12 Select Fan Speed,
- Step 15 Continue To Next Tier

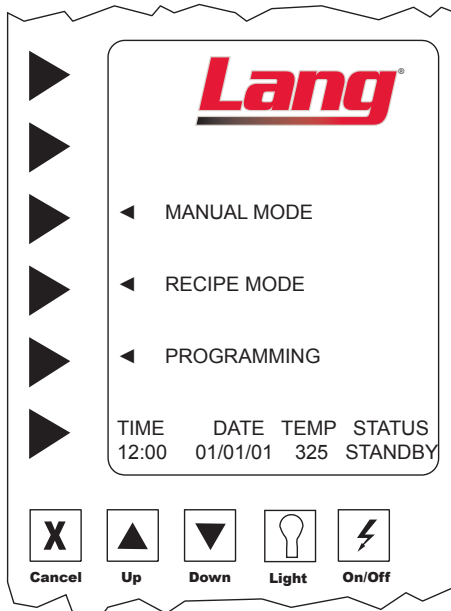
**Cooking Curve:** Cooking curve is a programmable function that adjusts the cooking time to compensate for planned times when the oven temperature would be lower than the programmed temperature. (i.e. temperature losses during loading and unloading). Cooking Curve 40%, is the most commonly used. Cooking Curve settings from 0% (no time adjustment) to 100% (max time adjustment) are available. As a general rule the longer the cooking time the lower the cooking curve, the shorter the cooking time the higher the cooking curve.

**Pulse Fan Function:** A Fan Pulse Rate setting allows the fan to be programmed to cycle on and off at regular intervals during the period in the cooking cycle when there is no heat applied. (The computer will not allow the fan to be OFF whenever the heat is ON).

**Tier Cooking:** "Tiered" programming is the ability to change the cooking temperature or fan function while cooking. (i.e. some products may require high heat and the fan to be LO for the first half of the cooking cycle. Tier 1 would be programmed with the Heat up and the fan LO and Tier 2 would then be programmed with the heat lowered and the fan HI for the remainder of the cycle.)

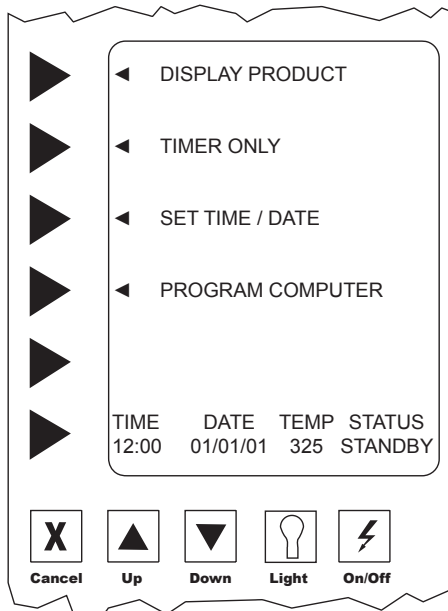
Multiple shelf baking function is disabled when using Tier Baking programs.



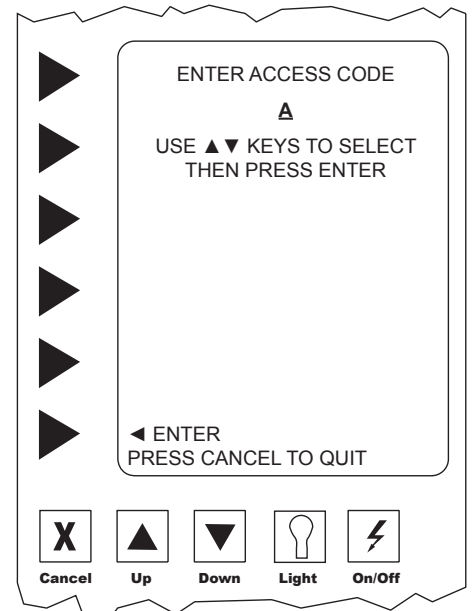


Step 1. Turn power switch on. If the oven is on, press cancel until the above screen is displayed.

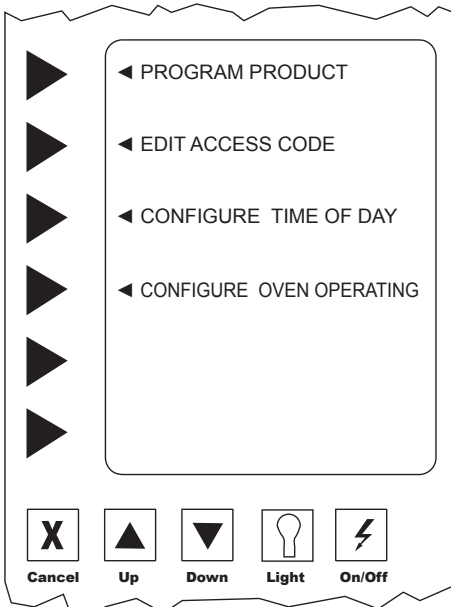
Step 2. Select **TIME/DATE/PROGRAM**



Step 3 Select **PROGRAM COMPUTER**

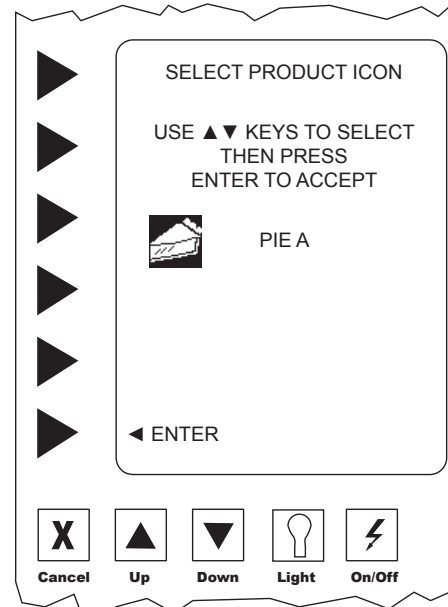


Step 4 Using the ▲▼ arrows, enter access code "A B C D E F" hitting **ENTER** after each letter.



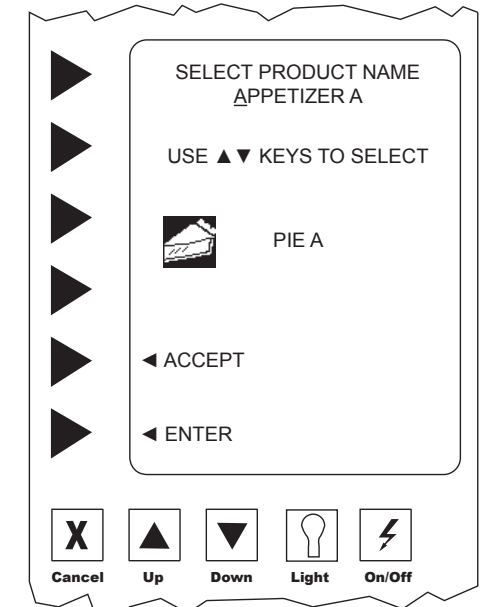
Step 5 Select **PROGRAM PRODUCTS** then

Step 6 Select **CREATE NEW PRODUCTS**



Step 7 **Select Product Icon,**  
This is the first screen in creating a product program. Press ▲▼ until you find a icon which resembles your product.  
Select **ENTER** to accept the icon and move to the next screen.

**Note:** Refer to the Chart on page 13 for a selection of icons available.

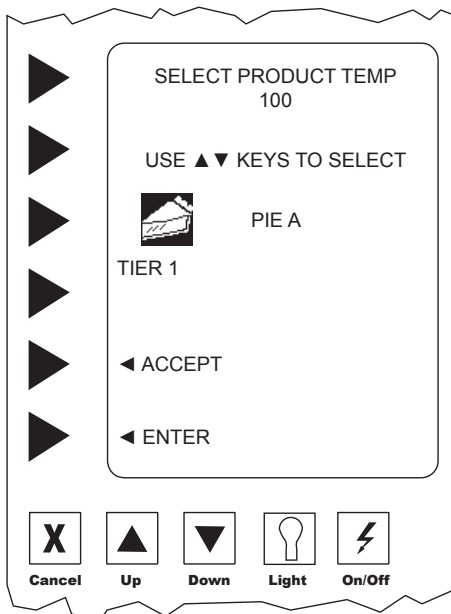


Step 8 **Select Product Name,**  
This is where you enter the name of the product into the computer. Using the ▲▼ keys type over the default name, blank space is before the A and after the 9.

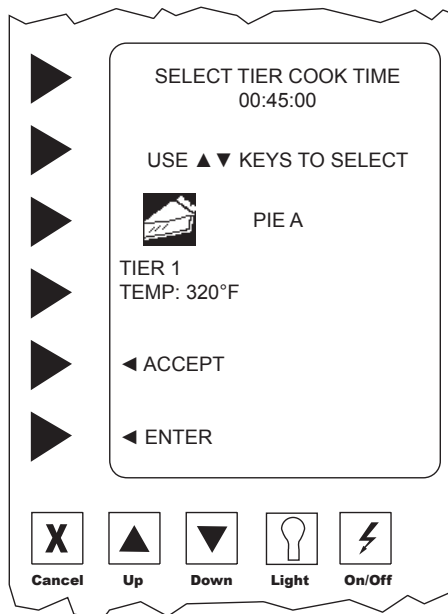
Select **ACCEPT** to continue.

**Note:** Curser must be moved past the last digit to save the entire entry.

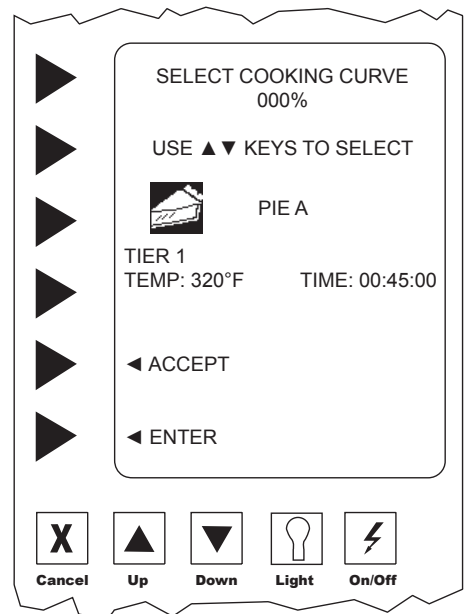
## Platinum PROGRAMMING



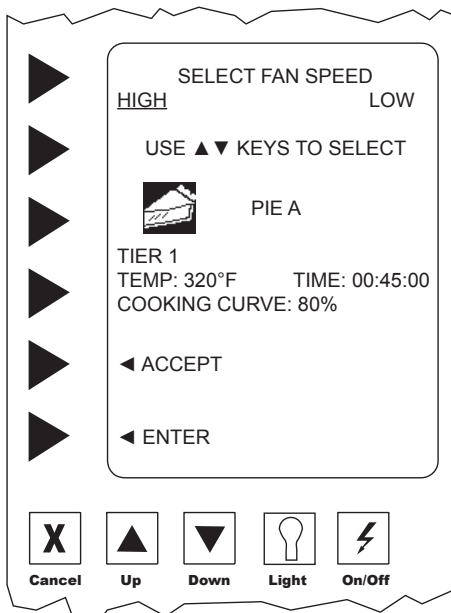
**Step 9 Select Product Temperature,**  
Press the ▲▼ to select the first digit, then press **ENTER** to move to the next digit. It will automatically move to the next screen after the third digit.



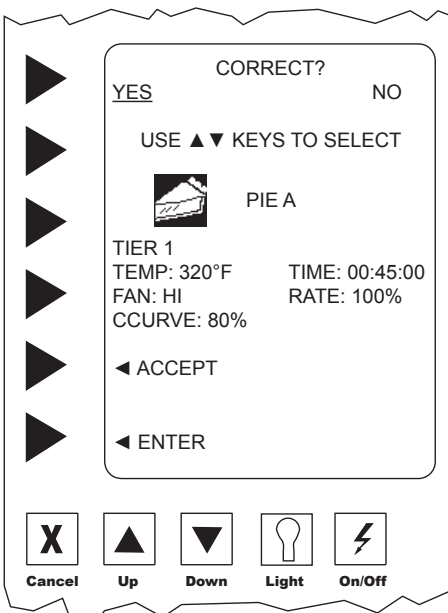
**Step 10 Select Tier Cook Time,**  
Time is entered in hours:minutes:seconds.  
The maximum is 12:59:59.  
Select **ENTER** to move the cursor to the place you want to enter the number.  
Select **ACCEPT** to continue.



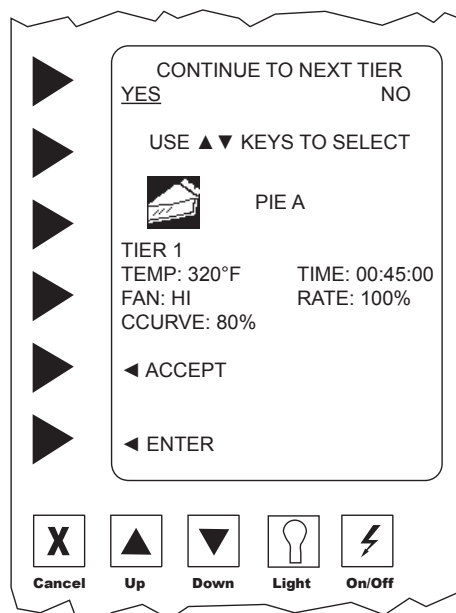
**Step 11 Select Cooking Curve,**  
press ▲▼ to select the numbers, press the **ENTER** to move the cursor to the next space.  
Cooking Curve may be any number between 0% and 100%.  
Select **ACCEPT** to continue.



**Step 12 Select Fan Speed,**  
Press the ▲▼ to move the cursor between the HIGH and LO settings.  
Press **ENTER** to make your selection and move to the next screen.



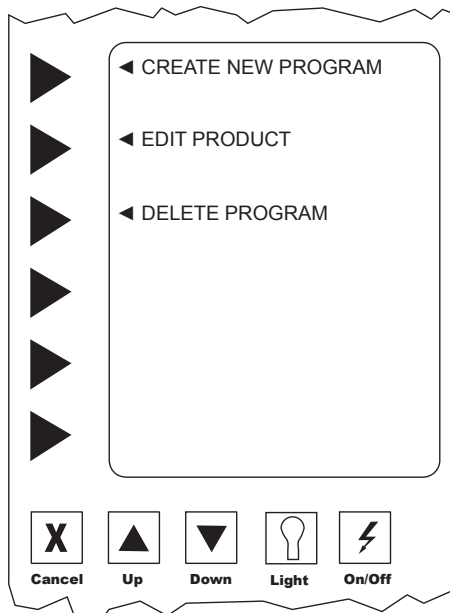
**Step 13 Correct**  
The computer is asking if the display is correct. If any part of the program is incorrect press ▲▼ **NO**, and you will be taken back to Step 7.  
Selecting **YES** will advance the screen.



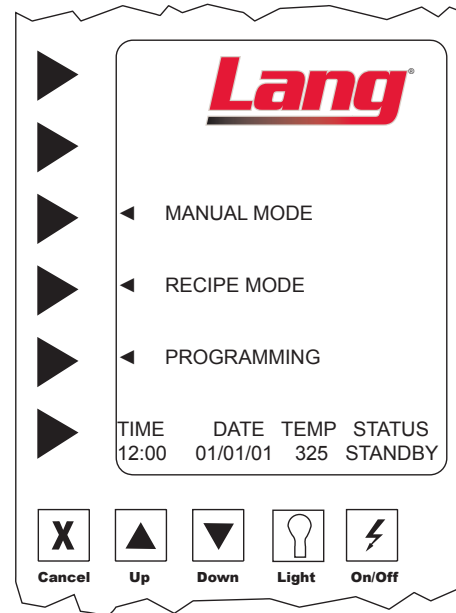
## Step 15 Continue To Next Tier

The cursor automatically appears on **NO**. Select **ENTER** or **ACCEPT** to end programming or

move the cursor **▲▼** to **YES**. This will allow you to enter another tier to this program, repeating steps 6 - 14 to program second tier.



Step 16 After programming the last tier, the computer will automatically advance the screen to program more products. If no other products need to be programmed, select **CANCEL** three times to advance screen to the boot up screen.



## Step 17 Boot-up Screen

You may now preheat the oven for any product you have programmed.

## Step 18 Select MANUAL OR RECIPE MODE

## Troubleshooting

### Symptoms & Possible Causes

The following are charts of Symptoms and Possible Causes to aid in diagnosing faults with your unit.

Refer to the symptoms column to locate the type of failure then to the Possible Cause for the items to be checked.

To test for a possible cause refer to test to identify test procedures. Test indicated with an “\*” should be done by a Lang factory authorized service representative.

Symptom	Possible Cause
Display will not come on	No power to cord outlet
	Oven unplugged from outlet
	Failed power cord or plug
	Contrast needs to be adjusted
	Failed display board
Oven will not heat	Power Switch is not “ON”
	Product not selected
	Failed Transformer
	Failed Probe
	Failed Circuit board
	Failed Contactor
	Failed Over-temperature Thermostat
Oven motor will not run	Failed Element
	Power Switch is not “ON”
	Product not selected
	Failed Transformer
	Failed Contactor
	Failed Motor
	Failed output on circuit board.
Product burning	Product is cooked too long
	Failed Probe
	Failed Circuit board
Product under done	Product is not cooking long enough
	Failed Probe
	Failed Circuit board

Possible Cause	Test
Product is cooked too long	No test available, operational condition
Failed Probe	Check probe for proper resistance*
Failed Circuit board	Confirm that Circuit board is getting correct voltage and putting out correct voltage*
Failed Transformer	Check both Primary and Secondary coils for correct voltage*
Failed Contactor	Remove the wires from the contactor coil and check for continuity across the contactor coil connection*
	Ensure the contactor moveable points move freely up and down*
Failed Motor	Confirm that motor is getting correct voltage*
Failed or disconnected safety thermostat	Check across the thermostat connectors for continuity*
Failed Element	Confirm that Elements are getting correct voltage and have continuity*

**NOTICE** If an item on the list is followed by an asterisk (\*), the work should be done by a Lang factory authorized service representative.



**USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY LANG OR THEIR AUTHORIZED DISTRIBUTORS CAN CAUSE BODILY INJURY TO THE OPERATOR AND DAMAGE TO THE EQUIPMENT AND WILL VOID ALL WARRANTIES.**

**NOTICE** Service on this or any other Lang appliance must be performed by qualified personnel only. Consult your Lang Authorized Service Agent Directory. You can call our toll free number (314) 678-6315 or visit our website [www.langworld.com](http://www.langworld.com) for the service agent nearest you.



**BOTH HIGH AND LOW VOLTAGES ARE PRESENT INSIDE THIS APPLIANCE WHEN THE UNIT IS PLUGGED/WIRED INTO A LIVE RECEPTACLE. BEFORE REPLACING ANY PARTS, DISCONNECT THE UNIT FROM THE ELECTRIC POWER SUPPLY.**

## MAINTENANCE

- Oven interiors should be wiped down daily and thoroughly cleaned weekly using warm water and mild detergent. **DO NOT use caustic cleaners.**
- The appliance should be thoroughly checked at six-monthly intervals by a qualified technician (heating unit, mechanical stability, corrosion...) with particular emphasis on all control and safety devices.

## CLEANING

- Always start with a cold oven.
- The stainless exterior can easily be cleaned using stainless steel cleaner.
- Always follow the cleaner manufacturer's instructions when using any cleaner.
- Care should be taken to prevent caustic cleaning compounds from coming in contact with the fan wheel.
- The oven racks, rack slides, may be cleaned outside the oven cavity using oven cleaner.
- Using any harsh chemicals will result in the removal of the ETC coating and etching of the porcelain below it. The oven interior should only be cleaned using a mild soap and a non metal scouring pad. **DO NOT use caustic cleaners.**
- Always apply stainless steel cleaners when the oven is cold and rub in the direction of the metal's grain.



### WARNING

**KEEP WATER AND SOLUTIONS OUT OF CONTROLS. NEVER SPRAY OR HOSE CONTROL CONSOLE, ELECTRICAL CONNECTIONS, ETC.**



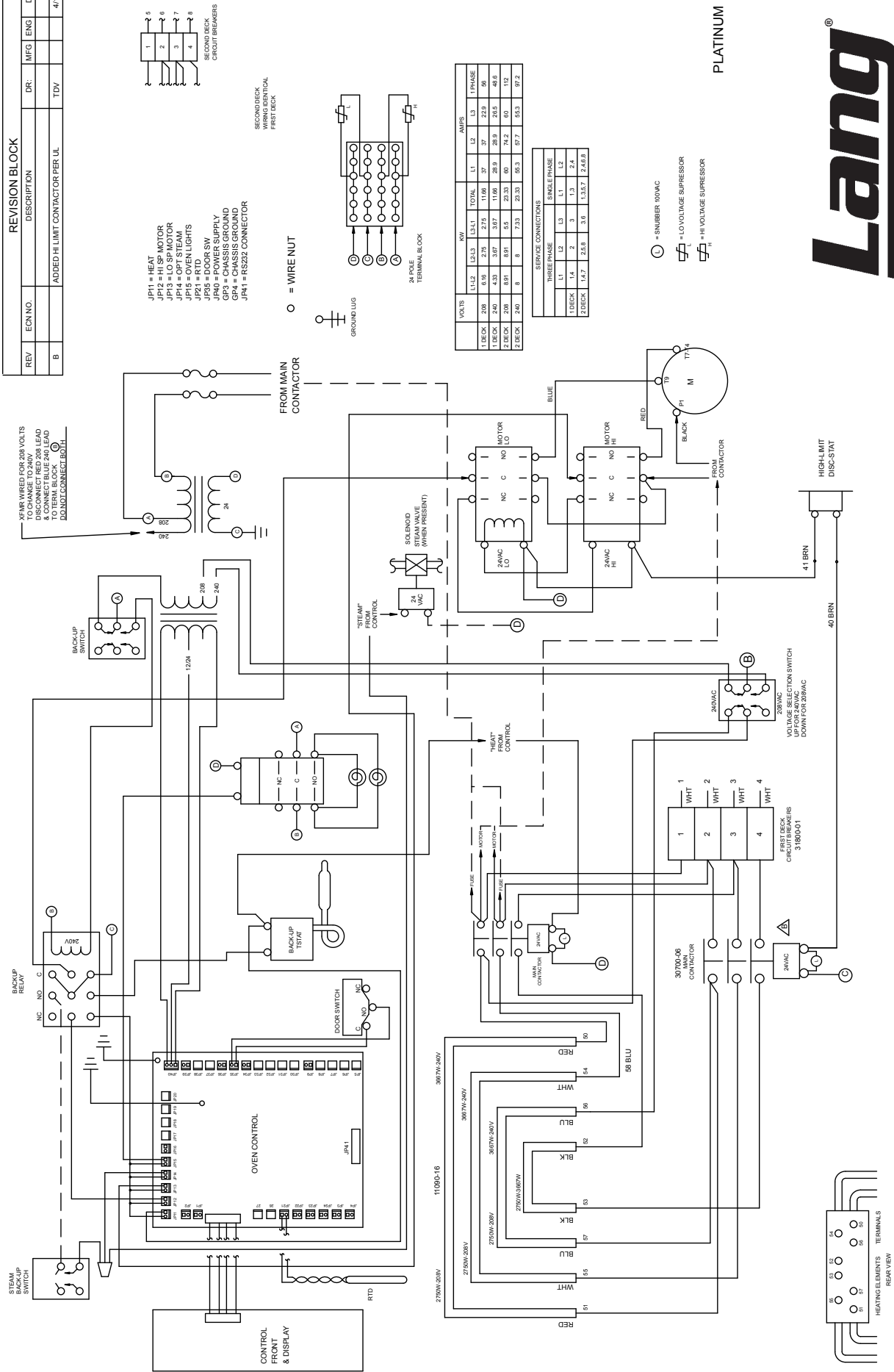
### CAUTION

**MOST CLEANERS ARE HARMFUL TO THE SKIN, EYES, MUCOUS MEMBRANES AND CLOTHING. PRECAUTIONS SHOULD BE TAKEN TO WEAR RUBBER GLOVES, GOGGLES OR FACE SHIELD AND PROTECTIVE CLOTHING.**

**CAREFULLY READ THE WARNING AND FOLLOW THE DIRECTIONS ON THE LABEL OF THE CLEANER TO BE USED.**

**NEVER LEAVE A CHLORINE SANITIZER IN CONTACT WITH STAINLESS STEEL SURFACES LONGER THAN 10 MINUTES. LONGER CONTACT CAN CAUSE CORROSION.**

REVISION BLOCK					
REV	ECON NO.	DESCRIPTION	DR:	MFG	ENG
B		ADDED H-LIMIT CONTACTOR PER UL	TDV		
					4/1/09

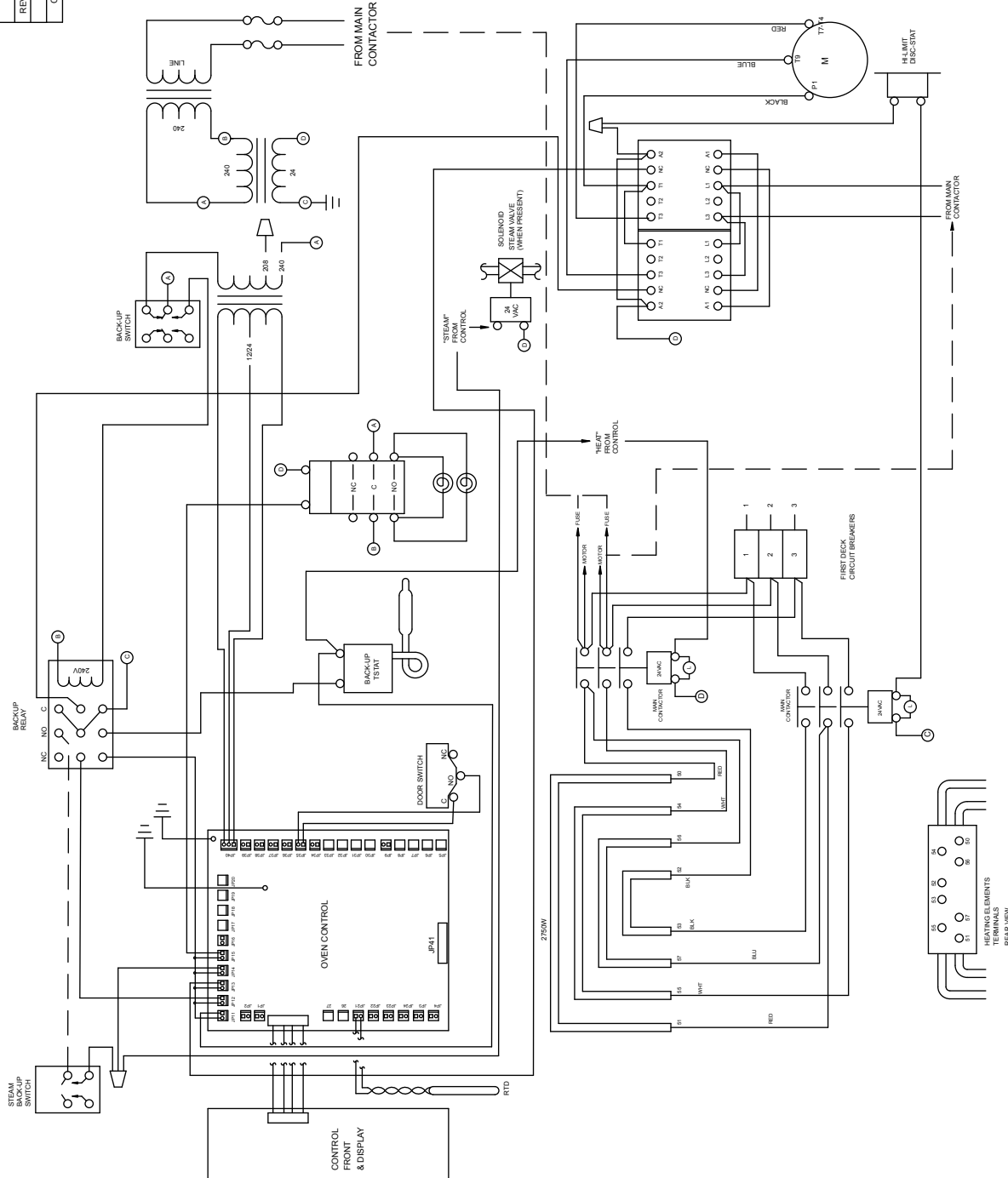


2M-61111-143, Rev. B, 4/1/09

REVISION BLOCK					
REV	ECN NO.	DESCRIPTION	DR	MFG	ENG
C	7129	ADDED HI LIMIT CONTACTOR PER UL	JMM		6-12-09

JP11 = HEAT  
 JP12 = HI SP MOTOR  
 JP13 = LO SP MOTOR  
 JP14 = OPT STEAM  
 JP15 = OVEN LIGHTS  
 JP21 = RTD  
 JP35 = DOOR SW  
 JP40 = POWER SUPPLY  
 GP3 = CHASSIS GROUND  
 GP4 = CHASSIS GROUND  
 JP41 = RS232 CONNECTOR

L = 10V SUPPRESSOR  
 H = 10V SUPPRESSOR  
 L = 100V SUPPRESSOR



VOLTS	KW	1 L1,2	1 L2,3	1 L3,1	TOTAL	L1	L2	L3	1 PHASE
1 DECK 480	6.0	2.7	2.7	11.5	16.8	15.8	10.0	10.0	N/A
1 DECK 300	6.0	2.7	2.7	11.5	19.7	19.7	17.2	17.2	N/A
2 DECK 480	8.7	8.7	8.7	26.0	26.8	31.6	29.8	29.8	N/A
2 DECK 300	8.7	8.7	8.7	26.0	32.1	36.5	32.1	32.1	N/A

SERVICE CONNECTIONS					
THREE PHASE			SINGLE PHASE		
1	2	3	1	2	3
1 DECK	1	2	3	N/A	N/A
2 DECK	1-6	2-4	3-5	N/A	N/A

## PLATINUM

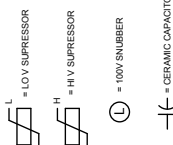
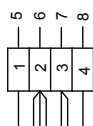
**Lang**

**Model: ECCO-PT, 480, 380VAC**

**2M-61111-153, Rev. C, 6/12/09**

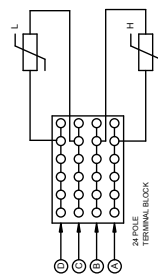
REVISION BLOCK					
REV	ECN NO.	DESCRIPTION	DR	MFG	ENG
C	7831	ADDED HI LIMIT CONTACTOR PER UL	JMM		
					5-4-09

- JP11 = HEAT  
 JP12 = HI SP MOTOR  
 JP13 = LO SP MOTOR  
 JP14 = OPT STEAM  
 JP15 = OVEN LIGHTS  
 JP16 = DOOR SW  
 JP17 = POWER SUPPLY  
 GP3 = CHASSIS GROUND  
 GP4 = CHASSIS GROUND  
 JP41 = RS232 CONNECTOR



SECOND DECK  
FIRST DECK

SECOND DECK  
CIRCUIT BREAKERS



220/380-3 PH 4 WIRE 50 OR 60 HZ

	VOLTS			KILOWATTS			AMPS		
	L1-N	L2-N	L3-N	TOTAL	L1	L2	L3	N	
1 DECK	3.7	3.1	3.1	9.9	16.6	14.1	14.1	16.6	
2 DECK	4.3	3.6	3.6	11.5	20.9	20.7	20.7	20.9	

240/415-3 PH 4 WIRE 50 OR 60 HZ

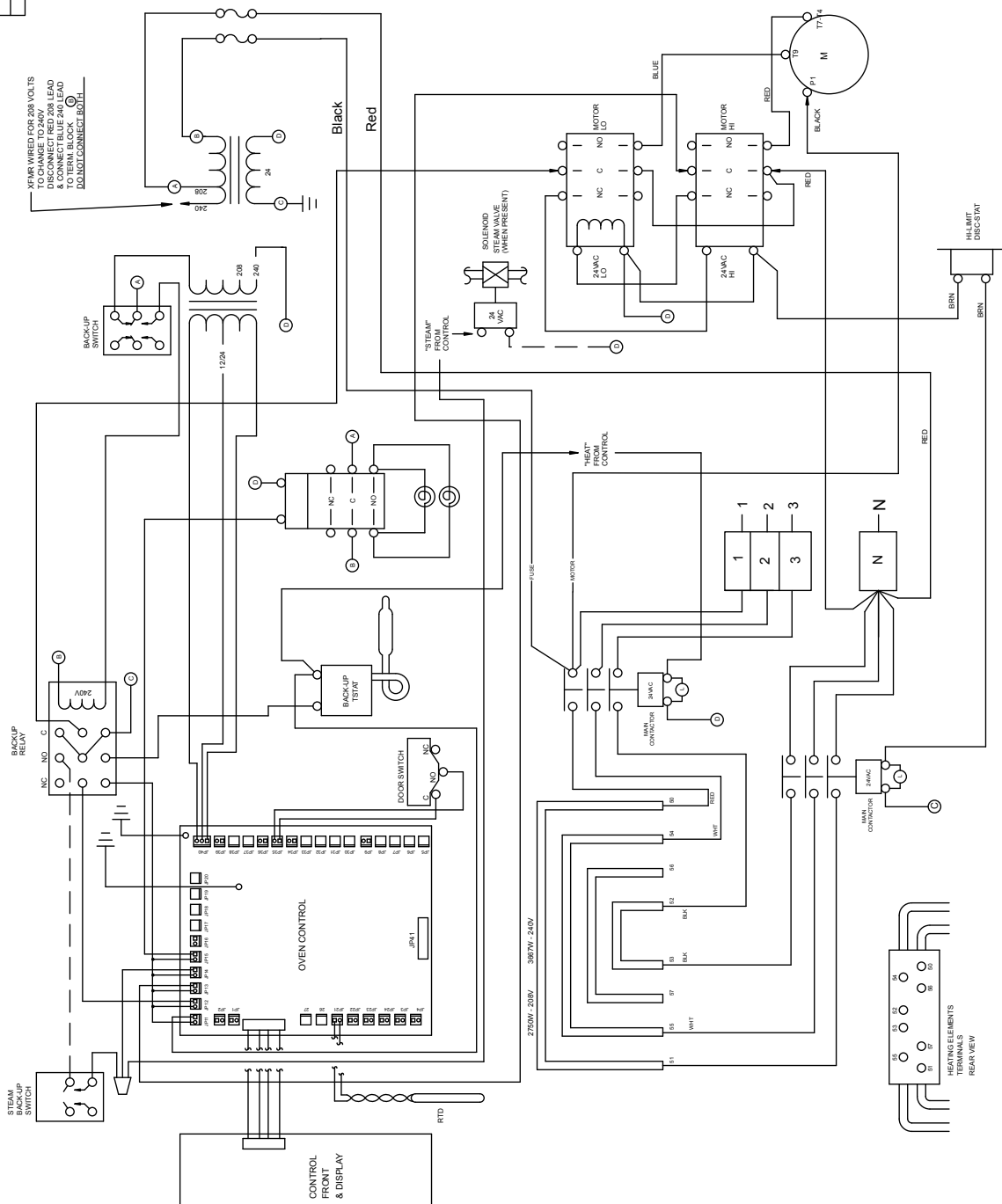
	VOLTS			KILOWATTS			AMPS		
	L1-N	L2-N	L3-N	TOTAL	L1	L2	L3	N	
1 DECK	4.3	3.7	3.7	11.7	17.8	15.3	15.3	17.8	
2 DECK	8	8	8	24	33.1	30.6	30.6	33.1	

SERVICE CONNECTIONS				
THREE PHASE				
1 DECK	2 DECK	1	2	3
		L1	L2	L3
		N		

PLATINUM

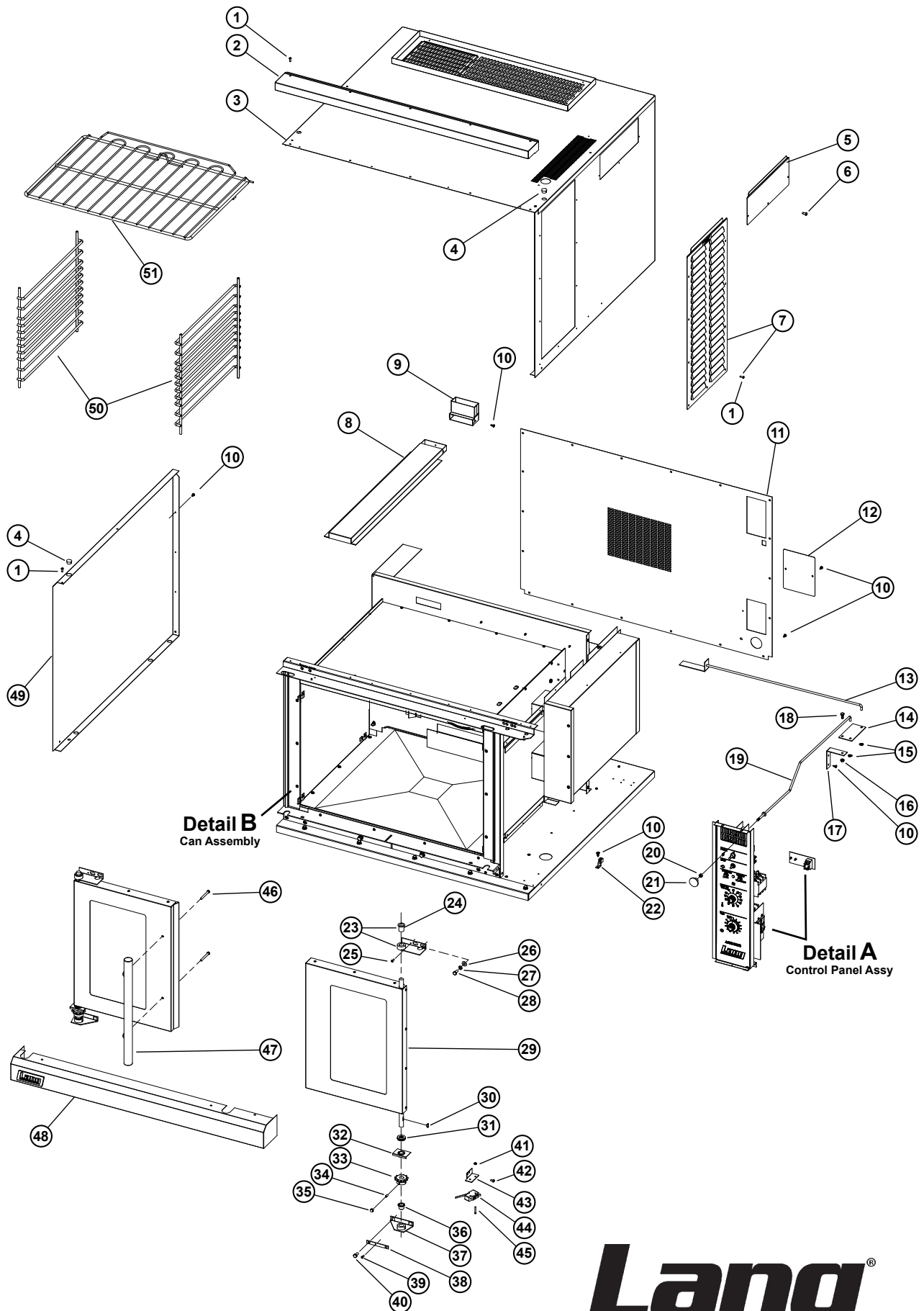
**Lang**

2M-61111-161, Rev. C, 5/4/09



Model: ECCO-PT, 220/380VAC & 240/415VAC





ECOF Main Assembly

# PARTS LIST

November 17, 2009

## Model No: ECOF & ECOD Main Assembly Commercial & Marine Full Size Electric Convection Oven

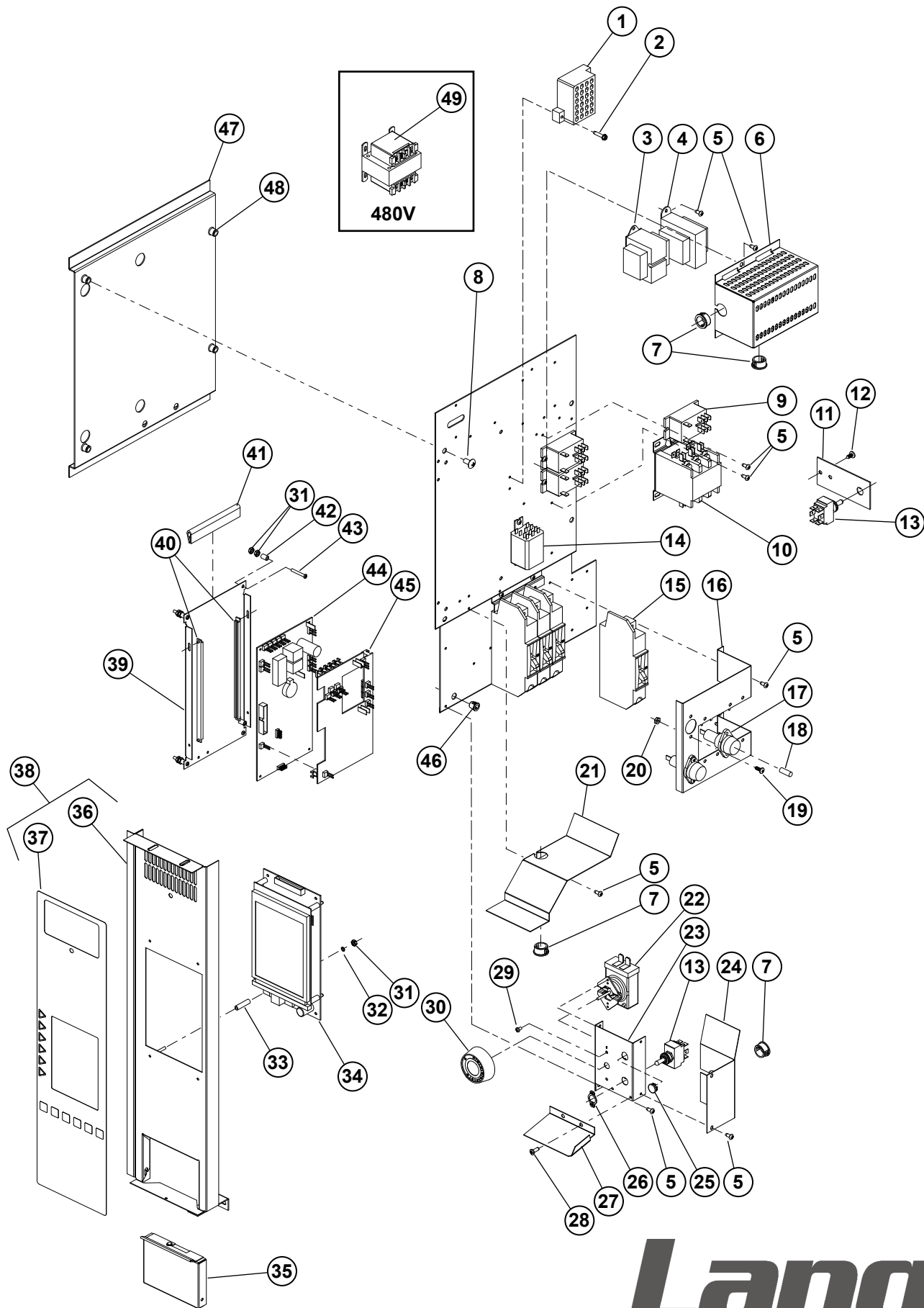
Key Number	Part Number	Qty Per	Description
1	2C-20102-04	33	SCRW PHD ST 8-32X.5 PLTD ECOF-ECOD
2	Q9-ECCO-230-1	1	TOP PANEL ASSEMBLY ECOF-ECOD
3	Q9-ECCO-176-2	1	BODY SPOTWELD STD. ECOF
4	2P-70901-06	2	PLGBTNBLKPLSTC 5/8DP625 ECOF-ECOD
5	Q9-ECCO-176-4	1	STM VALVE COVER ECOF-ECOD
6	2C-20102-08	27	SCRW PHD ST 8-32X.375 ECOF-ECOD
7	Q9-60102-904	1	ACCESS COVER - ECCO/GCCO ECOF-ECOD
8	Q9-ECCO-124	1	TOP VENT SPOTWELD ECOF
9	Q9-ECCO-128	1	DAMPER BODY SPOTWELD ECOF
10	2C-20103-02	3	SCRW SM PLT 10 X .5 PHLSL ECOF-ECOD
11	Q9-ECCO-182-3	1	BODY BACK S/S W/MOTOR ECOF-ECOD
12	Q9-ECCO-182-4	1	BODY BACK S/S COVER ECOF-ECOD
13	Q9-ECCO-133	1	DAMPER ROD B WELD ECOF-ECOD
14	Q9-ECCO-437	1	DAMPER PIVOT ECOF-ECOD
15	2C-20602-02	1	TINNERMAN CLIP 1/4 ECOF-ECOD
16	2C-20301-20	1	NUT LOCK STOVER 1/4-20 ECOF-ECOD
17	Q9-ECCO-136	1	DAMPER BRACKET ANGLE ECOF-ECOD
18	2C-20104-41	6	SCRW MACH. 1/4-20X5/8 H/H ECOF-ECOD
19	Q9-ECCO-131	1	DAMPER ROD A WELD ECOF
20	2C-20303-01	4	NUT HX SS 1/4-20 ECOF-ECOD
21	2R-70701-25	1	KNOB DAMPER BLACK PLAIN ECOF-ECOD
22	2E-31200-02	1	LUG GROUNDING UL APPROVED ECOF-ECOD
24	2P-70201-07	2	BRNZ BR FLN 5/8IDX3/4ODX1 ECOF-ECOD
25	2C-20115-01	78	SCRW S/S 8-32X1/2 P/H S/T ECOF-ECOD
26	2C-20203-03	20	WSHR FLT SS 5/16 USS ECOF-ECOD
27	2C-20204-06	14	WSHR S/S 5/16 SPLIT LOCK ECOF-ECOD
28	2C-20111-07	14	SCRW SCKTHD 5/16-18X5/8 ECOF-ECOD
29	Q9-50312-43	1	RH DOOR ASSY E/GCCO ECOF-ECOD
29	Q9-50312-44	1	LH DOOR ASSY E/GCCO ECOF-ECOD
30	2C-71802-01	2	KEY WOODRUFF 3/16 X 5/8 ECOF-ECOD
31	2C-20201-15	10	WSHR FLT 960-C-1016 PLTD ECOF-ECOD
32	Q9-50312-67	2	PIVOT BEARING ASSY ECOF-ECOD
33	2P-73000-03	2	SST SPRKT40B11 5/8 BORE ECOF-ECOD
34	2C-20105-04	1	SCRW SET 1/4-20X1/2 ECOF-ECOD
35	2C-20301-07	1	NUT ACORN 1/4-20 PLTD ECOF-ECOD
36	2P-70201-06	4	BRNZBRFLN5/8IDX3/4ODX5/8 ECOF-ECOD
37	Q9-50312-41	1	BEARING BRACKET ASSY ECOF-ECOD
38	Q9-GCCO-185-4	2	HINGE BRACKET RETAINER ECOF-ECOD
39	2C-20115-01	4	SCRW S/S 8-32X1/2 P/H S/T ECOF-ECOD
40	2C-20111-07	4	SCRW SCKTHD 5/16-18X5/8 ECOF-ECOD
41	2C-20301-10	2	NUT HEX 6-32 PLTD ECOF-ECOD
41	2C-20301-10	2	NUT HEX 6-32 PLTD ECOF-ECOD
41	2C-20301-10	13	NUT HEX 6-32 PLTD ECOF-ECOD
42	2C-20102-12	4	SCRW PHD ST 10-32X3/8 ECOF-ECOD
43	Q9-ECCO-145-1	1	MICRO SWITCH BRACKET ECOF-ECOD
44	2E-30301-02	1	SWITCH, MICRO ECOF-ECOD
45	2C-20101-17	2	SCRW RND MS 6-32X1 PLTD ECOF-ECOD
46	2C-20104-50	2	SCRW HXHD 1/4-28X2-1/4 ECOF-ECOD
47	Y9-50312-05	1	HANDLE ASSY 1 HANDLE ECOF-ECOD
48	Q9-60102-1092	1	BOTTOM PANEL ECCO ECOF-ECOD
49	Q9-ECCO-176-6	1	L/H BODY SIDE ECOF
49	Q9-ECCO-177-1	1	L/H BODY SIDE DEEP ECOD
50	2B-50200-93	2	RACK SLIDE 11 POS ECOF
50	2B-50200-94	2	RACK SLIDE 11 POS E&GCCO-T ECOD
51	2B-50200-20	5	RACK ECCO/GCCO OVEN ECOF
51	2B-50200-31	5	RACK ECO DEEP OVEN ONLY ECOD
NI	Q9-ECCOPPT-C	1	PANEL ECCO 208/240V ECOF-PT, ECOD-PT
NI	Q9-ECCOPPT-U	1	PANEL ECCO 480V PLATIMUN ECOF-PT-480V

**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED  
INCLUDE MODEL AND SERIAL NUMBER**

PAGE 1  
OF 1

Some items are included for illustrative purposes only and in certain instances may not be available.





ECOF-PT & ECOD-PT Platinum Controller Panel

# PARTS LIST

January 8, 2010, Rev B

## Model No: ECOF-PT & ECOD-PT PLATINUM CONTROL PANEL ASSEMBLY Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description
	Q9-ECCOPPT-C		PANEL ECCO 208/240V
	Q9-ECCOPPT-U		PANEL ECCO 480V
1	2E-30503-01	1	TRM BLOCK 24 POS QK CON
2	2C-20102-05	2	SCRW HXHD ST 8-32X.75
3	Y9-31400-26-1	1	XFORMER 208-240/24-12 40V
4	2E-31400-07	1	XFORMR120-208-240/24V40VA
5	2C-20102-08	27	SCRW PHD ST 8-32X.375
	2C-20102-08	35	SCRW PHD ST 8-32X.375
6	Q9-ECCO-224-2	1	TRANSFORMER COVER
7	2K-70801-04	3	SNAP BUSH 3/4 SB750-10
	2K-70801-04	6	SNAP BUSH 3/4 SB750-10
8	2C-20101-11	4	SCRW THD MS 1/4-20X1/2
9	2E-30701-05	3	CONTC 2POLE 30A 24VAC P &
	2E-30705-03	1	CONTC 2-SPD MTO ABB
10	2E-30700-06	1	CONTC3POLE35A24VAC50/60HZ
11	Q9-ECCO-275-1	1	SWITCH BRACKET
12	2C-20103-02	2	SCRW SM PLT 10 X .5 PHLSL
13	2E-30303-06	1	SWT TOG ON-ON DPDT BLK
	2E-30303-06	2	SWT TOG ON-ON DPDT BLK
14	2E-30600-02	1	RELAY 240VAC 3FORMC FLNG
15	2E-31800-01	4	CB 250V50A 1 POLE CRLNGSW
	2E-31800-04	1	CB 480V 50A 3 POLE
16	Q9-ECCO-226	1	FUSE MOUNT C 208-240V
	Q9-ECCO-226-1	1	FUSE MOUNT C 480V
17	2E-30901-08	2	FUSE HLDL FOR SC FUSE
18	2E-30900-10	2	FUSE 15AMP 300V (SC-15)
19	2C-20101-52	4	SCRW RHD MS 8-32 X 1/2
20	2C-20301-11	4	NUT HEX 8-32 PLTD
21	Q9-ECCO-223-4	1	BARRIER (A & C MODEL
22	2T-30402-27	1	STAT ADJ 450 DEG 48 PILOT
23	Q9-ECCO-275	1	STAT BRACKET
24	Q9-ECCO-276	1	BARRIER
25	2P-70903-09	1	PLG BTN PLTD MTL 7/16
26	2E-30303-10	1	SWT PLATE ON/OFF IND
27	Q9-ECCO-277-1	1	DEAD FRONT W/BACKUP STAT
28	2C-20102-04	4	SCRW PHD ST 8-32X.5 PLTD
29	2C-20101-77	2	SCRW MS PLT 6-32 X .25
30	Y9-70701-16	1	KNOB ASSY 450o A
31	2C-20301-10	13	NUT HEX 6-32 PLTD
32	2C-20205-02	4	.140#6IDX.2500DX.032
33	2A-20504-02	4	SPACER NYLON #6 1/4 X 1
34	2J-40102-25	1	DSPLY 320X240 DB170-001
35	Q9-ECCO-278	1	SWITCH DOOR ASSY - C
36	Q9-ECCO-218-32	1	PANEL ASSY - PT
37	2M-60301-119	1	SWITCH LBL E/GCCO
38	Q9-60101-882	1	CONTROL FRT W/LABEL
39	Q9-50307-47	1	CPU MOUNT
40	2E-41800-02	2	PCB GUIDE 6675 6.675 LG
41	Q9-EH-502-1	1	TRIMLOCK 4
42	2A-20501-01	5	SPCR FBR 1/4 OD #8 ID 3/8
43	2C-20101-17	4	SCRW RND MS 6-32X1 PLTD
44	2J-40102-W26	1	UNIVERSAL CPU PP/PT/EZO
45	2J-40102-51	1	CIRBD FILTER (not used w/ 2J-40102-W26)
46	2K-70801-03	1	SNAP BUSH 3/8 SB375-4 BLK

**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED  
INCLUDE MODEL AND SERIAL NUMBER**

PAGE 1  
OF 2

Some items are included for illustrative purposes only and in certain instances may not be available.



# PARTS LIST

January 8, 2010, Rev B

## Model No: ECOF-PT & ECOD-PT PLATINUM CONTROL PANEL ASSEMBLY Full Size Electric Convection Oven

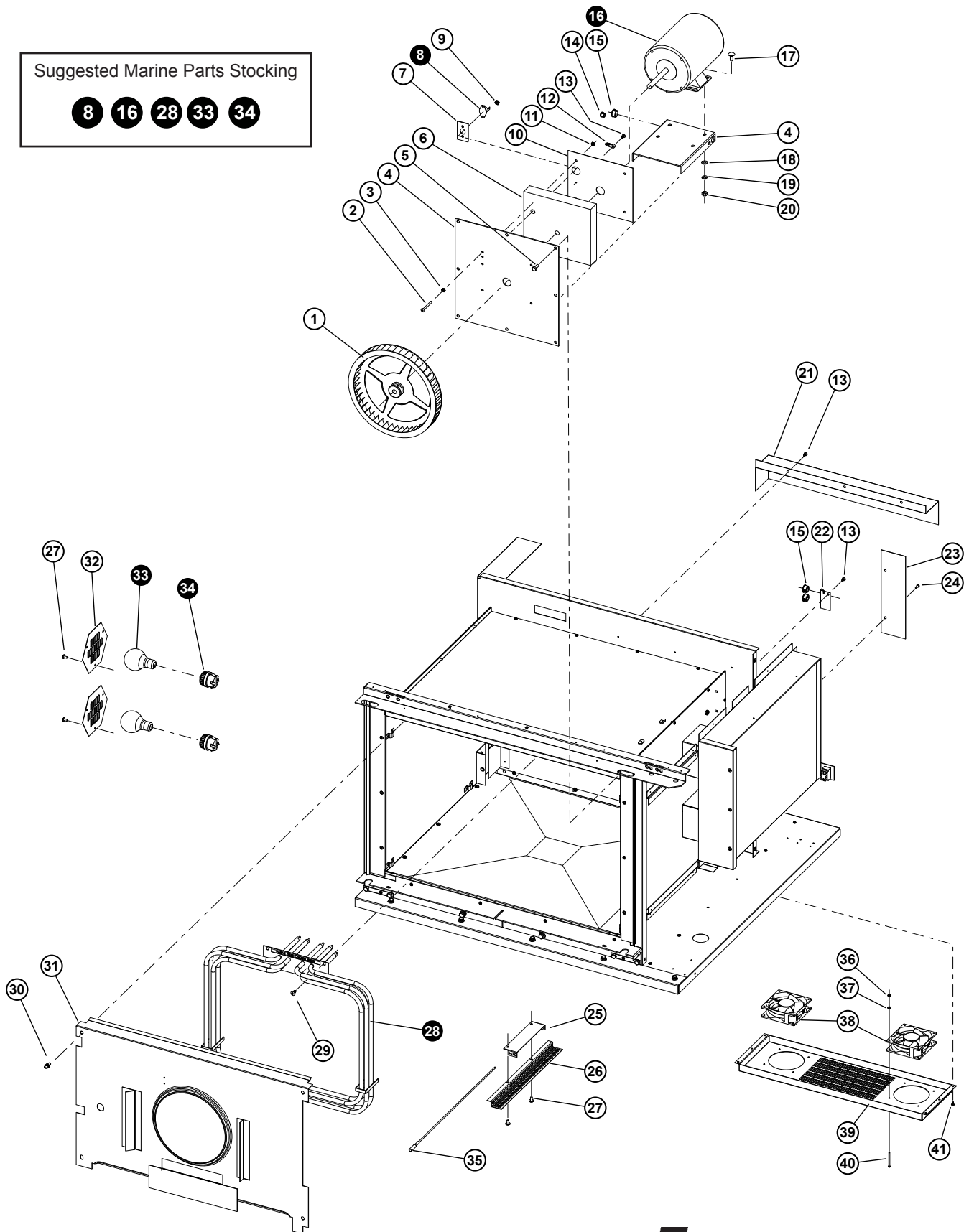
Key Number	Part Number	Qty Per	Description
47	Q9-ECCO-221	1	SLIDE ECCOPPT-C, ECCOPPT-U
48	2C-20306-02	4	AVK CAD 1/4-20 1ST GRP ECCOPPT-C, ECCOPPT-U
49	2E-31400-04	1	XFRMR 480/240VAC 10VA ECCOPPT-U
<b>IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED</b>			
<b>INCLUDE MODEL AND SERIAL NUMBER</b>			
Some items are included for illustrative purposes only and in certain instances may not be available.			

PAGE 2  
OF 2

***Lang***<sup>®</sup>

Suggested Marine Parts Stocking

8 16 28 33 34



**Detail B**

ECOF-PT: CAN & MOTOR ASSEMBLY

**Lang**<sup>®</sup>

SK2377

Rev. - 6/06/08

# PARTS LIST

January 8, 2010, Rev B

## Model No: ECOF & ECOD CAN & MOTOR ASSEMBLY Commercial & Marine Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description
1	2U-71500-05	1	BLOWER WHEEL ECCO/GCCO ECOF, ECOD
2	2C-20101-42	4	SCRW THD MS 10-24X2 PLTD ECOF, ECOD
3	2C-20301-09	12	NUT HEX 10-24 PLTD ECOF, ECOD
4	Q9-ECCO-168	1	MOTOR MOUNT WELD ECOF, ECOD
5	2C-20111-02	8	SCRW HXHD CAP 1/4-20X3/4 ECOF, ECOD
6	2H-ECCO-172	1	MOTOR INSULATION ECOF, ECOD
7	Q9-GCCO-166-2	1	SPACER - SAFETY STAT ECOF, ECOD
8	2T-30401-09	1	STAT FXD 500 DEG OPEN ECOF, ECOD
9	2C-20301-10	2	NUT HEX 6-32 PLTD ECOF, ECOD
10	Q9-GCCO-167	1	MOTOR SHIELD ECOF, ECOD
11	2C-20301-09	2	NUT HEX 10-24 PLTD ECOF, ECOD
12	2C-31900-03	1	CABLE STRAP 3/16X7 ECOF, ECOD
13	2C-20103-09	4	SCRW SM PLT 10 X .5 PHLSL ECOF, ECOD
14	2K-70801-01	2	SNAP BUSH 7/16 SB437-5 ECOF, ECOD
15	2K-70801-04	10	SNAP BUSH 3/4 SB750-10 ECOF, ECOD
16	2U-30200-16	1	MTR 1/3HP 460V/1/60HZ 2SP ECOF-PT-480V
	2U-30200-17	1	MTR 1/3HP208/240V1PH2SPD ECOF, ECOD
	2U-30200-53	1	MTR 1/3HP240/254V50HZ2SP ECOF-PT2/4MF
17	2C-20118-01	4	SCRW CARRAGE PLT 5/16X.75 ECOF, ECOD
18	2C-20201-09	4	WSHR PLT 5/16 FLAT SAE ECOF, ECOD
19	2C-20202-08	4	WSHR PLT 5/16 LOCK SPLIT ECOF, ECOD
20	2C-20301-06	4	NUT HEX 5/16-18 PLTD ECOF, ECOD
21	Q9-ECCO-122	1	ELEMENT TOP COVER ECOF, ECOD
22	Q9-GCCO-115-1	1	MOTOR WIRE HOLDER ECOF, ECOD
23	Q9-ECCO-123	1	ELEMENT SIDE COVER ECOF, ECOD
24	2C-20102-04	40	SCRW PHD ST 8-32X.5 PLTD ECOF, ECOD
25	Q9-GCCO-247	1	PROBE HOLDER [ECCO & ECOF, ECOD
26	Q9-50312-34	1	PROBE COVER ECCO/GCCO ECOF, ECOD
27	2C-20109-04	4	SCRW THD MS SS 10-32X3/8 ECOF, ECOD
28	2N-11090-16	1	ELE ECCO OVN 208/240V11KW ECOF-PT, ECOD-PT
	2N-11090-18	1	ELMNT ECCO 480V 11KW ECOF-PT-480V, ECOF-PT480MF, ECOF-PT480NT
29	2C-20103-02	8	SCRW SM PLT 10 X .5 PHLSL ECOF, ECOD
30	2C-20112-02	4	SCRWSHLDRTHUM 1/4-20X3/8 ECOF, ECOD
31	Q9-ECCO-163	1	REAR BAFFLE SPOTWELD ECOF, ECOD
	Q9-ECCO-163-1	1	REAR BAFFLE SPTOWELD-MRS ECOF-PT-MF, ECOF-PT2/4MF
32	Q9-GCCO-431	2	LIGHT RING - CORRECTIONAL ECOF, ECOD
33	2S-31603-04	2	LAMPS INC 250V 50W ECOF, ECOD
34	2E-31602-04	2	LAMP SKT SNAP-IN WHT ECOF, ECOD
35	2E-41100-08	1	SENSOR OVEN TEMP CONTROL ECOF, ECOD
36	2C-20301-10	8	NUT HEX 6-32 PLTD ECOF-PT-480MF, ECOF-PT-480NT
37	2C-20203-04	8	WSHR S/S #10 SAE 7/16OD FLAT ECOF-PT-480MF, ECOF-PT-480NT
38	2U-30200-46	2	MOTOR W/FAN AXIAL 220VAC ECOF-PT-480MF, ECOF-PT-480NT
39	Q9-ECCO-185	1	FAN SUPPORT BRACE ECOF-PT-480MF, ECOF-PT-480NT
40	2C-20109-14	8	SCRW S/S 6-32 X 2 R/H M/S ECOF-PT-480MF, ECOF-PT-480NT
41	2C-20103-02	6	SCRW SM PLT 10 X .5 PHLSL ECOF-PT-480MF, ECOF-PT-480NT

**IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED  
INCLUDE MODEL AND SERIAL NUMBER**

PAGE 1  
OF 1

Some items are included for illustrative purposes only and in certain instances may not be available.

**Lang**<sup>®</sup>

**STAR INTERNATIONAL HOLDINGS INC. COMPANY**

Star - Holman - Lang - Wells - Bloomfield - Toastmaster  
10 Sunnen Drive, St. Louis, MO 63143 U.S.A.