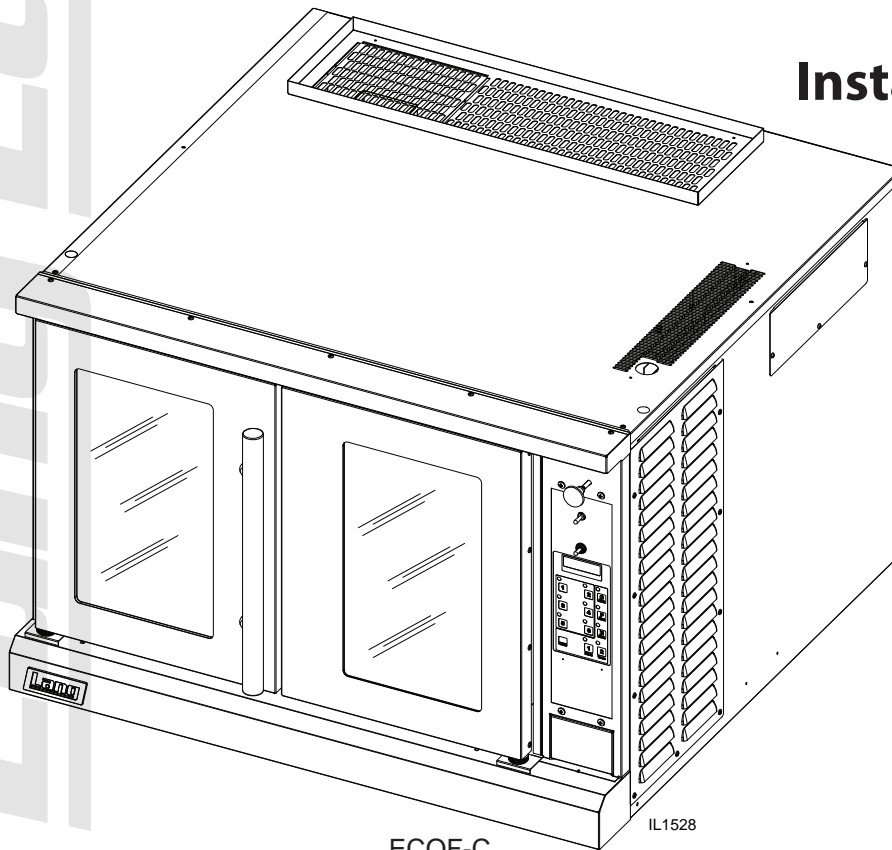


Lang[®]

ELECTRIC FULL SIZE COMPUTERIZED CONVECTION OVEN ECOF-C

Installation and Operation Instructions

2M-W490 Rev.C 7/08/08



ECOF-C



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 VICINTY 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.

Star 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 Star Manufacturing 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 1-800-807-9054.

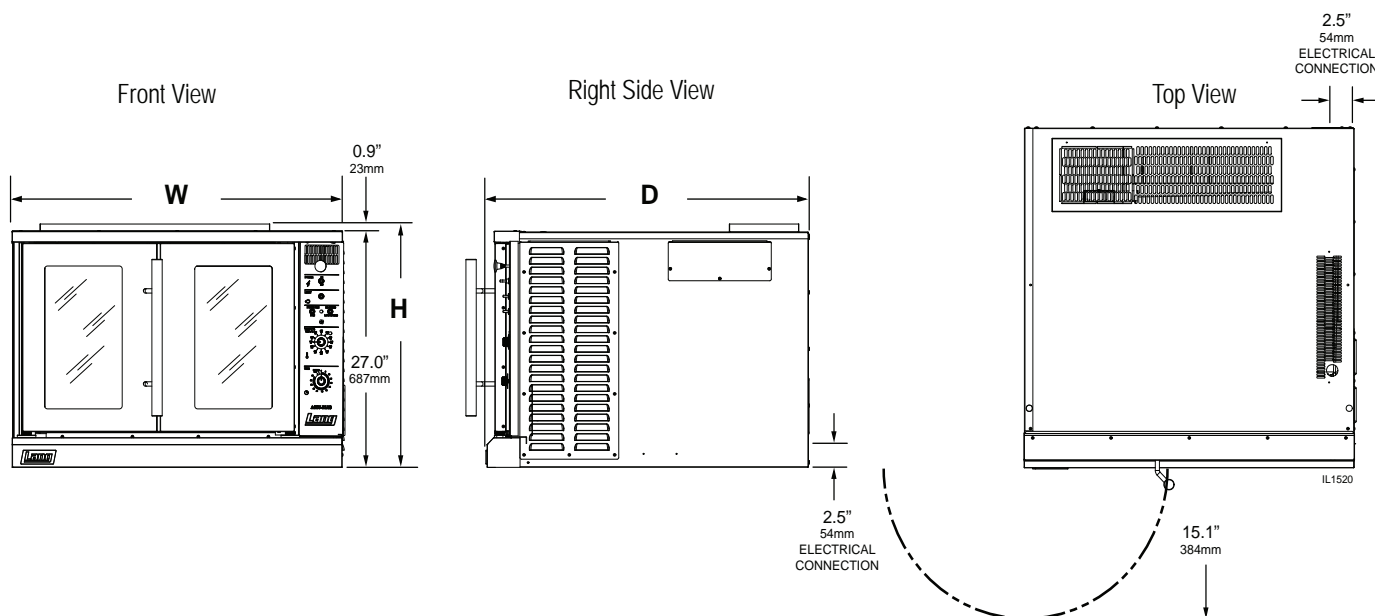
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NOTICE Service on this or any other Lang appliance must be performed by qualified personnel only. Consult your Lang Authorized Service Agent Directory. You can call our toll free number 1-800-807-9054 or visit our website WWW.STAR-MFG.COM for the service agent nearest you.

SPECIFICATIONS

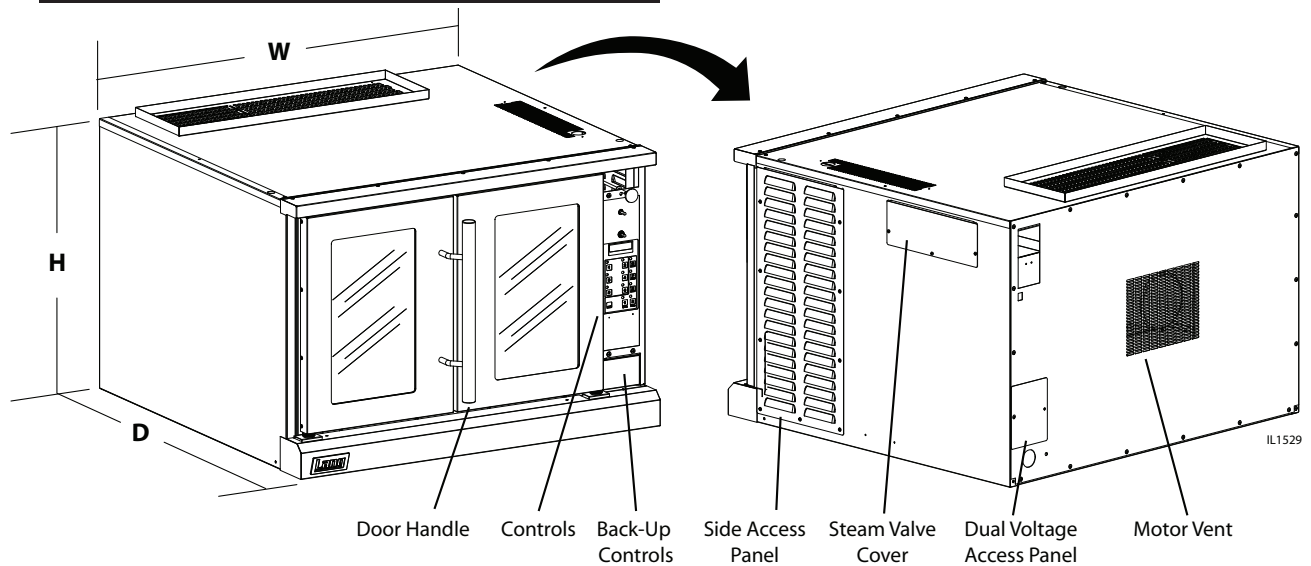
Model	Height x Width x Depth (without optional stand)	Clearance from combustible surface	Weight		
			Installed	Shipping	Freight Class
ECOF	27.9" x 40.1" x 39.1" 708mm x 1019mm x 994mm	Side: 6", Back: 6", Floor: 6"	380 lbs. (173 kg)	420lbs (191 kg)	70



SPECIFICATIONS

Star Number	Previous Model	VOLTS AC	Oven Qty	H _z	MOTOR AMPS	PHASE	AMPS 3PH / NEUTRAL	KW TOT.	SUPPLY WIRE 1 PH	L1	L2	L3	SUPPLY WIRE 3 PH
ECOF-C-CN	ECCO-LMDR-C	208V	1	50/60	3.3	1/3		11.5	6 GA.	6.0	2.7	2.7	8 GA.
			2			1/3		23	1 GA.	8.8	8.8	5.5	4 GA.
		240V	1			1/3		11.5	6 GA.	4.2	3.7	3.7	10 GA.
			2			1/3		23	2 GA.	7.8	7.8	7.3	4 GA.
ECOF-2/4CECN	ECCO-LMDRHEC	240/415V	1	50	2	3	17.3	11.5		17.3	15.3	15.3	12
ECOF-C2/3VCN	ECCO-LMDR-G	220/380V	1	50		3PH-4 WIRE	16.8	9.9		16.8	14.1	14.1	12
ECOF-C2/4VCN	ECCO-LMDR-J	240/415V	1	50		3PH-4 WIRE	17.8	11.5		17.8	15.3	15.3	12
ECOF-C380VCN	ECCO-LMDR-K	380	1	50		3		11.5		19.7	19.7	12.2	12.0
ECOF-C480VCN	ECCO-LMDR-U	480V	1	60		3		11.5		15.6	15.6	10.5	14

EQUIPMENT DESCRIPTION



Exterior Construction

The oven exterior dimensions are listed in the Specification Section. The Top, Front, Back, and Sides are constructed of heavy duty 430 stainless steel, with an attractive No. 4 finish.

The ovens simultaneous-opening heavy duty doors come standard with double pane windows.

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

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

Interior Construction

The dimensions of the oven cavity are 29" (73.66cm) Wide, 20" (50.8cm) High, and 21" (53.34cm) Deep.

The oven is designed for three shelves and comes with three Chrome-plated racks.

The interior air deflection baffle is constructed of stainless steel.

Operation

The ECOF ovens are forced air convection ovens with a vented oven cavity.

The air is driven by a 1/3 HP fan motor.

Controls

Pre-Programmable Product Selections

Independent Shelf Timers for each Shelf.

Shelf Compensation Timing for uniform baking.

Manual Over-ride mode with a back-up thermostat.

Technical

Oven shipped voltage specific for on either 208 or 240-volt (single or three phase), 380 or 480V (3-Ph).

The oven can be shipped with a Power Cord and Plug attached, but must be specified upon ordering (part number is listed in the Parts List portion of this manual).

Floor space required is 44" (111.75cm) Wide, 40" (101.6cm) Deep.

The oven weighs 430 lb. (195.37 Kilograms).

The ovens are stackable and can include stacking kit if requested.

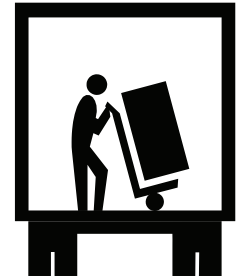
NOTICE

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 420 or 500 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.

DANGER

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.

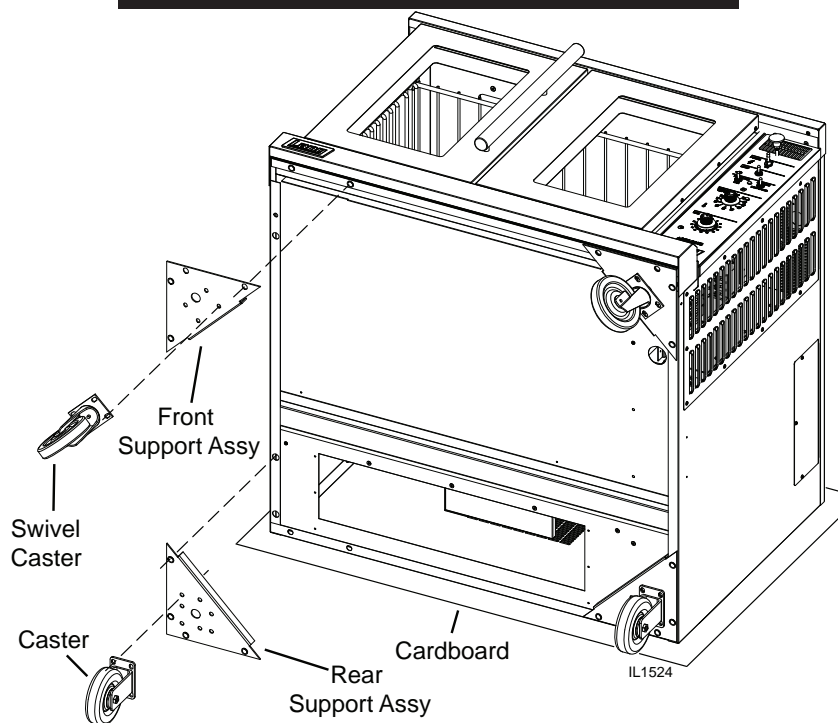
NOTICE

The data plate is located above the control panel behind the screen mesh. 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.

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



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.

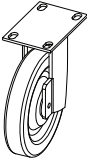
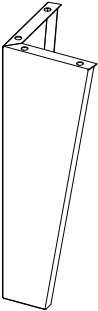
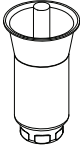
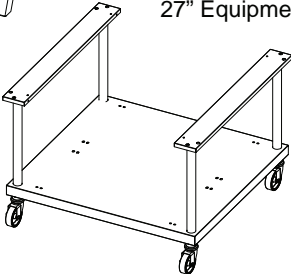
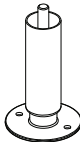
Single Oven

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.

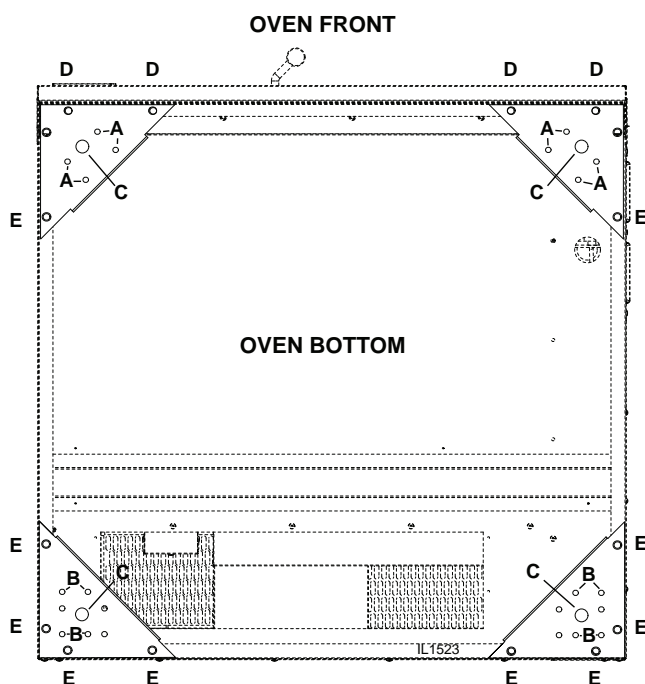
27" Leg Installation

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>	

INSTALLATION cont.



Above: Bottom on unit showing the placement of the leg adapters

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.

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.

INSTALLATION cont.

Stacking the Ovens

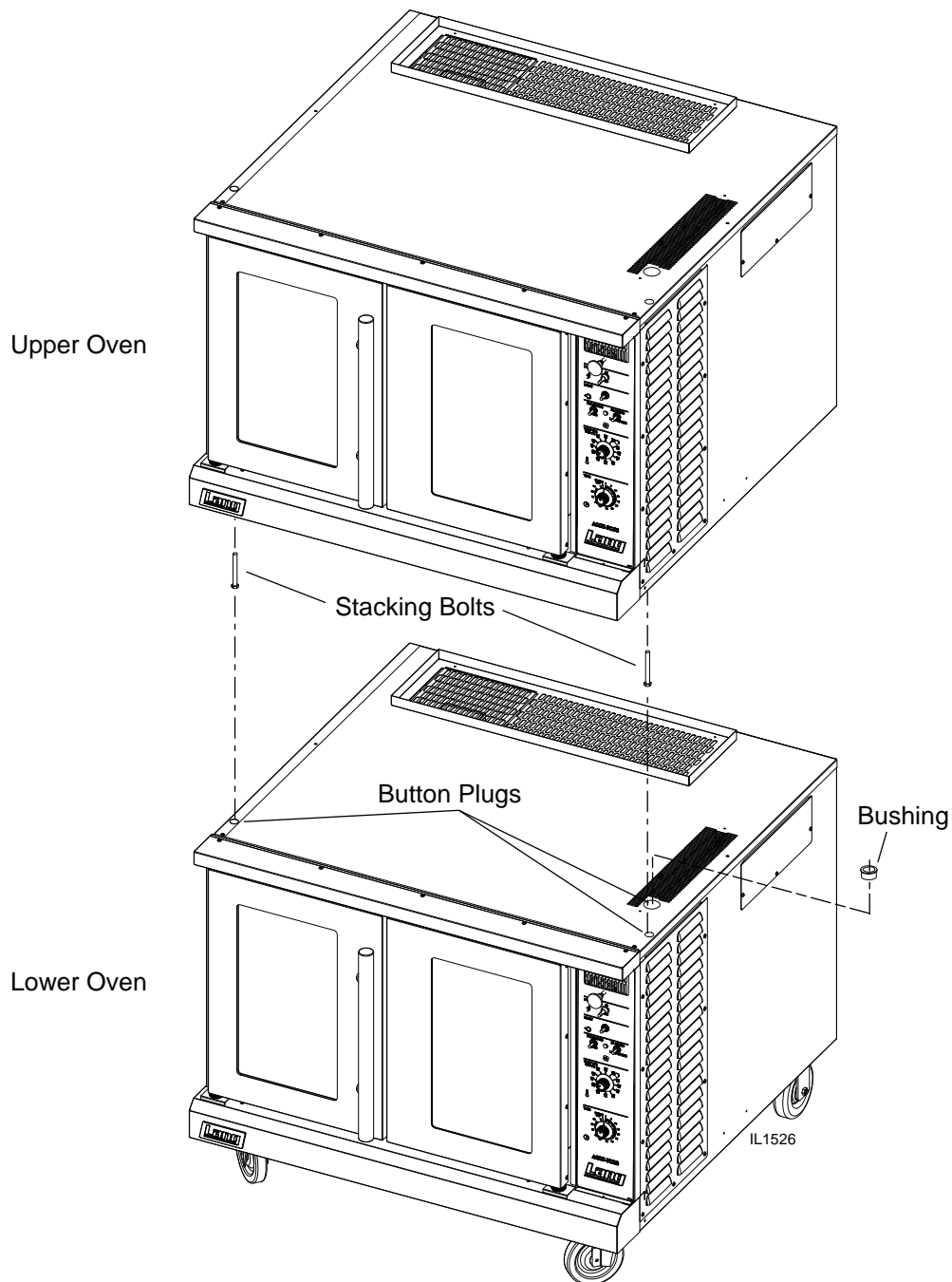
Remove all the plug buttons from the top of the lower oven.

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 two screws securing the access cover on the back of the unit, and remove. There you will find a switch, move it to the position matching your electrical service (208V or 240V). Earlier models required you to remove the jumper wire located under the control compartment behind the bottom trim piece.

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 2E-60101-67*). This kit includes a 48" cord with a NEMA L15-50P plug and is for 208/240V units ONLY (480V applications use PS-60101-68). In stacked situations each unit needs to have separate cord & plug assemblies, contact Lang Parts & Service at 1-800-807-9054 to order.

Oven Voltage

The Lang Model ECOF ovens can be operated on 208, 240-volt (single or three phase), or 380/440/480V (three phase only) source. The Amp draw, KW rating, and phasing can be found in specification section of this manual.



WARNING

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WARNING

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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.

The oven will automatically say “preht” and begin heating.

Once the oven has reached pre-programmed temp display will read “ready”.

Product may now be placed in the oven.

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.

ECOF-C Control Panel

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

Vent Knob: When open, allows moisture to escape the cooking chamber, allowing a dryer bake.
(*ex: crispy fries*)

Lights: Turns interior lights on.

Power: Turns the oven on and off

Status Display: Displays the oven status (preheat, ready, done) and is the count down timer.

Shelf Timers: 1 : Top Left, 2: Top Right
3: Middle Left, 4: Middle Right
5: Bottom Left, 6: Bottom Right

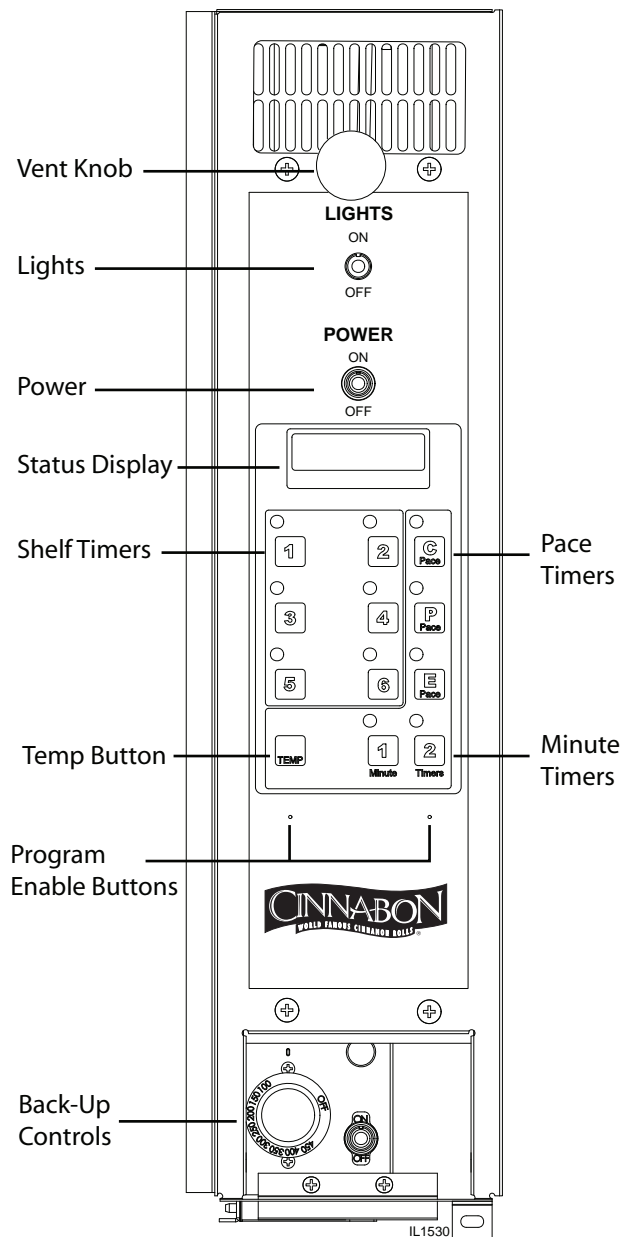
Pace Timers: Labeled C, P, and E these buttons are adjustable from one to thirty minutes.

Minute Timers: There are two "Minute" timers:
"1" is programmed for one minute,
"2" is programmed for two minutes.

Temp Button: When pressed this button will display the current temperature inside the cooking chamber.

Program Enable Buttons: Hidden buttons that allow the times of the shelf position buttons to be set.

Back-Up Controls: These controls give you the basic operation of the unit, until the primary electronic controls are operational.



ACCU-PLUS

General Operation & Programming cont.

Status Display

The Status Display informs the operator of the oven's condition.

- Preht:** Stands for PREHEAT. The oven is on and adjusting to the preprogrammed temperature (350°F).
- Ready:** The oven has reached the preset temperature and is waiting for product to be loaded into the oven.
- Cool:** The oven's internal temperature is below what is programmed.
- Hot:** The oven's internal temperature is above what is programmed.
- Done:** The time has expired for that program and the product is finished.
- Help:** There is a fault in the control system; the computer will not operate until service is performed.

Control Panel Buttons

Shelf Buttons: Place the product into the oven on one of the six shelf positions. Close the oven doors. Press the shelf position button that corresponds to the shelf position once for "C" product, twice for "P" product, three times for "E" product, or four times for off. A beeper will sound once the product is done and "done" will be displayed. Press the flashing shelf to cancel the beeper.

Minute and Pace Timers: The "1" button is preset to one minute, the "2" button is preset to two minutes, and the "Pace" buttons are adjustable from one to thirty minutes. Press the button once to start the timer. The display will read out the programmed time and then revert to the previous read out. The timers will countdown internally. Time remaining can be recalled by pressing the button again.

Canceling a timer: Any timer can be cancelled at any time. Press and hold the timer to be cancelled until "cancel" appears in the display.

Programming

Pace Timers: The pace timers can be set at any time. Press and hold the "PACE" button for three seconds. The display will read out the set time then begin to flash. Press the "1" minute button to increase the time, or the "2" minute button to decrease the time. Once the corrected time is set, press and hold the "PACE" button for three seconds to exit the programming mode.

Program Enable Buttons: The control cannot be put into the programming mode if any of the timers are running. The two blue dots above the "CINNABON" logo are the program enable buttons. Press the left dot then the right dot within 3 seconds to put the control into a programming mode. Once the shelf position buttons are set, press the left dot then the right dot within 3 seconds to exit the programming mode. There will be no beeper sound when the buttons are pressed.

Shelf Position Buttons: Put the control into the programming mode. Press the shelf button to be adjusted once for "C" product, twice for "P" product, or three times for "E" product. The display will read out "00:00" then begin to flash. Press the one-minute timer button to increase the time, or the two-minute timer button to decrease the time. Once the correct time is set move on to another shelf position button or exit the programming mode.

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.

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.

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.

Symptoms	Possible Cause	Possible Cause	Test
Power indicator is not lit	No power to cord outlet	Product is cooked too long	No test available, operational condition
	Oven unplugged from outlet	Failed Probe	Check probe for proper resistance*
	Failed power cord or plug	Failed Circuit board	Confirm that Circuit board is getting correct voltage and putting out correct voltage*
	Failed power switch	Failed Transformer	Check both Primary and Secondary coils for correct voltage*
	Failed indicator light	Failed Contactor	Remove the wires from the contactor coil and check for continuity across the contactor coil connection*
Oven will not heat	Power switch is not “ON”		Ensure the contactor moveable points move freely up and down*
	Failed transformer	Failed Motor	Confirm that motor is getting correct voltage*
	Failed probe	Failed or disconnected safety thermostat	Check across the thermostat connectors for continuity*
	Failed circuit board	Failed Element	Confirm that Elements are getting correct voltage and have continuity*
	Failed contactor		
	Failed over-temperature thermostat		
Oven motor will not run	Failed element		
	Power switch is not “ON”		
	Failed transformer		
	Failed contactor		
Product burning	Failed motor		
	Product is cooked too long		
	Failed probe		
Product is under done	Failed circuit board		
	Product is not cooked long enough		
	Failed probe		
	Failed circuit board		

NOTICE

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



CAUTION

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 1-800-807-9054 or visit our website WWW.STAR-MFG.COM for the service agent nearest you.

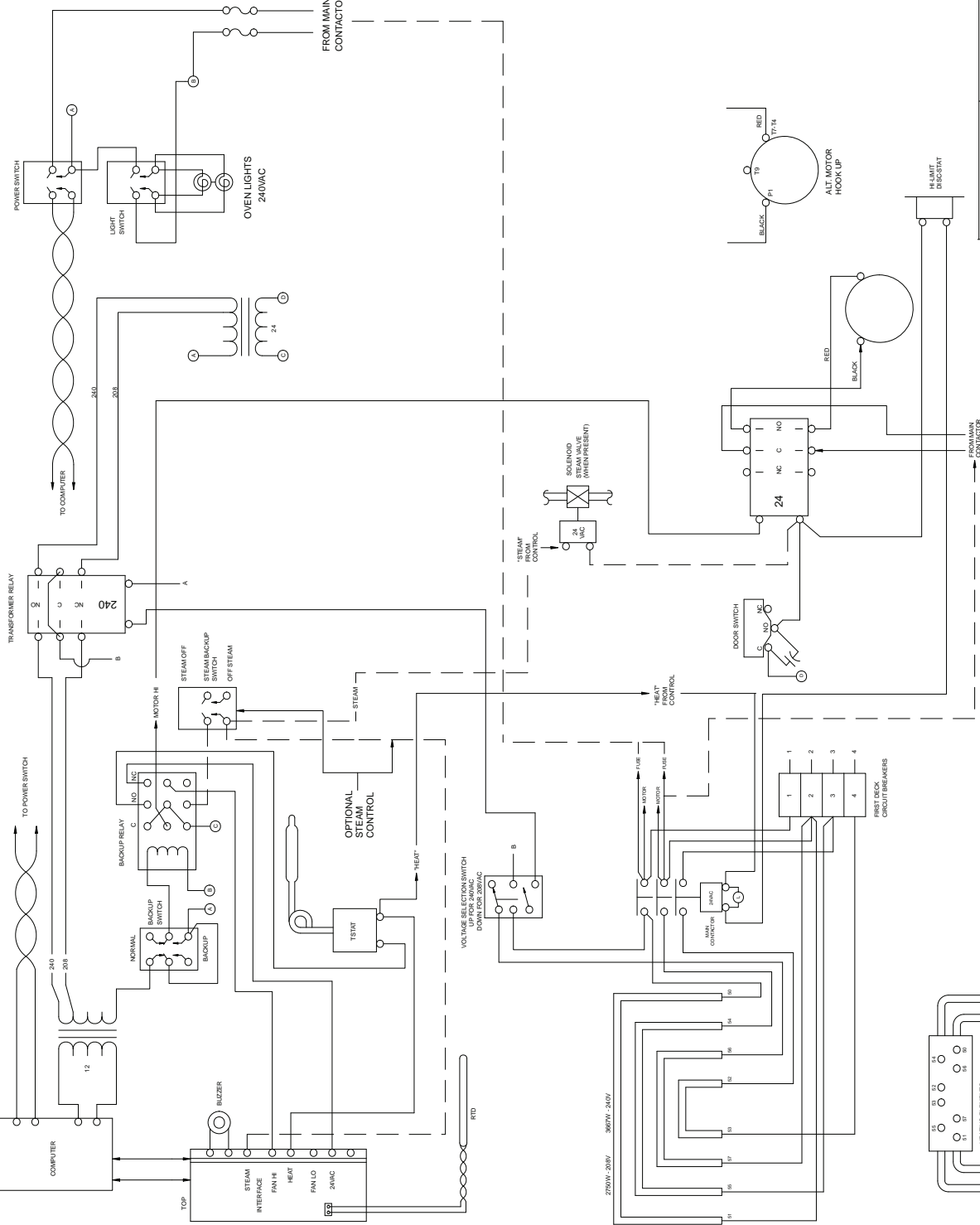


WARNING

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.

REVISION BLOCK					
REV	ECN NO.	DESCRIPTION		DR.	DATE
D		INSTALL TRANSFORMER RELAY		DLG	06-06-01

-C & C-STM CONTROL



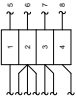
VOLTS	11.12	13.12	15.11	TOTAL	L1	L2	L3	1 PHASE
100K	4.16	2.70	2.70	11.66	27	27	22.3	86
150K	4.16	2.70	2.70	11.66	27	27	22.3	86
200K	4.16	2.70	2.70	11.66	27	27	22.3	86
250K	4.16	2.70	2.70	11.66	27	27	22.3	86
300K	4.16	2.70	2.70	11.66	27	27	22.3	86
350K	4.16	2.70	2.70	11.66	27	27	22.3	86
400K	4.16	2.70	2.70	11.66	27	27	22.3	86
450K	4.16	2.70	2.70	11.66	27	27	22.3	86
500K	4.16	2.70	2.70	11.66	27	27	22.3	86
550K	4.16	2.70	2.70	11.66	27	27	22.3	86
600K	4.16	2.70	2.70	11.66	27	27	22.3	86
650K	4.16	2.70	2.70	11.66	27	27	22.3	86
700K	4.16	2.70	2.70	11.66	27	27	22.3	86
750K	4.16	2.70	2.70	11.66	27	27	22.3	86
800K	4.16	2.70	2.70	11.66	27	27	22.3	86
850K	4.16	2.70	2.70	11.66	27	27	22.3	86
900K	4.16	2.70	2.70	11.66	27	27	22.3	86
950K	4.16	2.70	2.70	11.66	27	27	22.3	86
1000K	4.16	2.70	2.70	11.66	27	27	22.3	86

SERVICE CONNECTIONS					
THREE PHASE			SINGLE PHASE		
1	2	3	1	2	3
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
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100	100	100	100	100	100

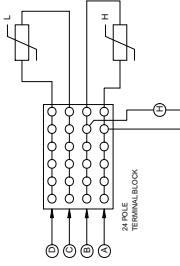
GROUND LUG



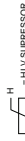
SECOND DECK
ELECTRICAL
FIRST DECK



24V
TERMINAL BLOCK



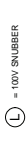
= 10V SNUBBER



= 600V SNUBBER



= 10V SNUBBER



= CERAMIC CAPACITOR

DWG. NO. 6111-127

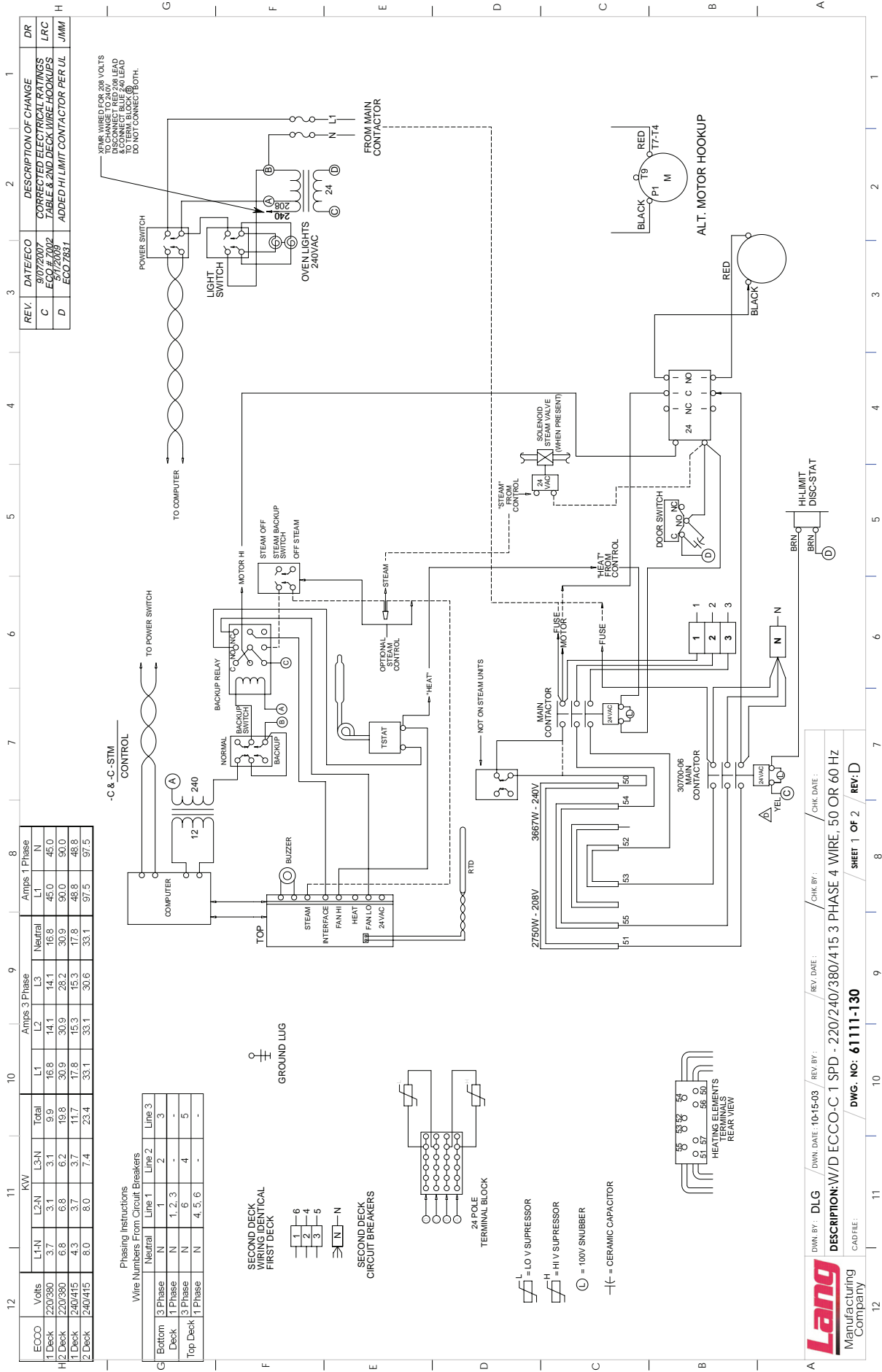
REV. DATE: 7-13-95

DESCRIPTION: WID ECCC-C-STM 1 SPD - 208/240V

SHEET 1 OF 1 / REV D

Lang

A Division of Star Mfg. Int'l, Inc.



REV	DATE/ECO	DESCRIPTION OF CHANGE	DR
C	9/07/2007	CORRECTED ELECTRICAL RATINGS	LRC
D	10/17/2007	TABLE & 2ND DECK WIRE HOOKUPS	JMM
D	10/17/2007	ADDED HI LIMIT CONTACTOR PER UL	JMM

ECCO	Volts	KVA				Amps 3 Phase				Amps 1 Phase			
		L1-N	L2-N	L3-N	Total	L1	L2	L3	Neutral	L1	L2	L3	N
1 Deck	220/380	3.7	3.1	3.1	9.9	16.8	14.1	14.1	16.8	45.0	45.0	45.0	
2 Deck	220/380	6.8	6.8	6.2	19.8	30.9	30.9	28.2	30.9	90.0	90.0	50.0	
1 Deck	240/415	4.3	3.7	3.7	11.7	17.8	15.3	15.3	17.8	48.8	48.8	48.8	
2 Deck	240/415	8.0	8.0	7.4	23.4	33.1	33.1	30.6	33.1	97.5	97.5	97.5	

Phasing Instructions				
Wire Numbers From Circuit Breakers				
Bottom Deck	Line 1	Line 2	Line 3	Neutral
1 Phase	N	1	2	3
3 Phase	N	1, 2, 3	-	-
Top Deck	Line 1	Line 2	Line 3	Neutral
1 Phase	N	4, 5, 6	-	-

SECOND DECK WIRING IDENTICAL FIRST DECK				
Line 1	Line 2	Line 3	Neutral	Ground
1	2	3	4	5
6	7	8	9	10

SECOND DECK CIRCUIT BREAKERS				
Line 1	Line 2	Line 3	Neutral	Ground
1	2	3	4	5
6	7	8	9	10

GROUND LUG				
Line 1	Line 2	Line 3	Neutral	Ground
1	2	3	4	5
6	7	8	9	10

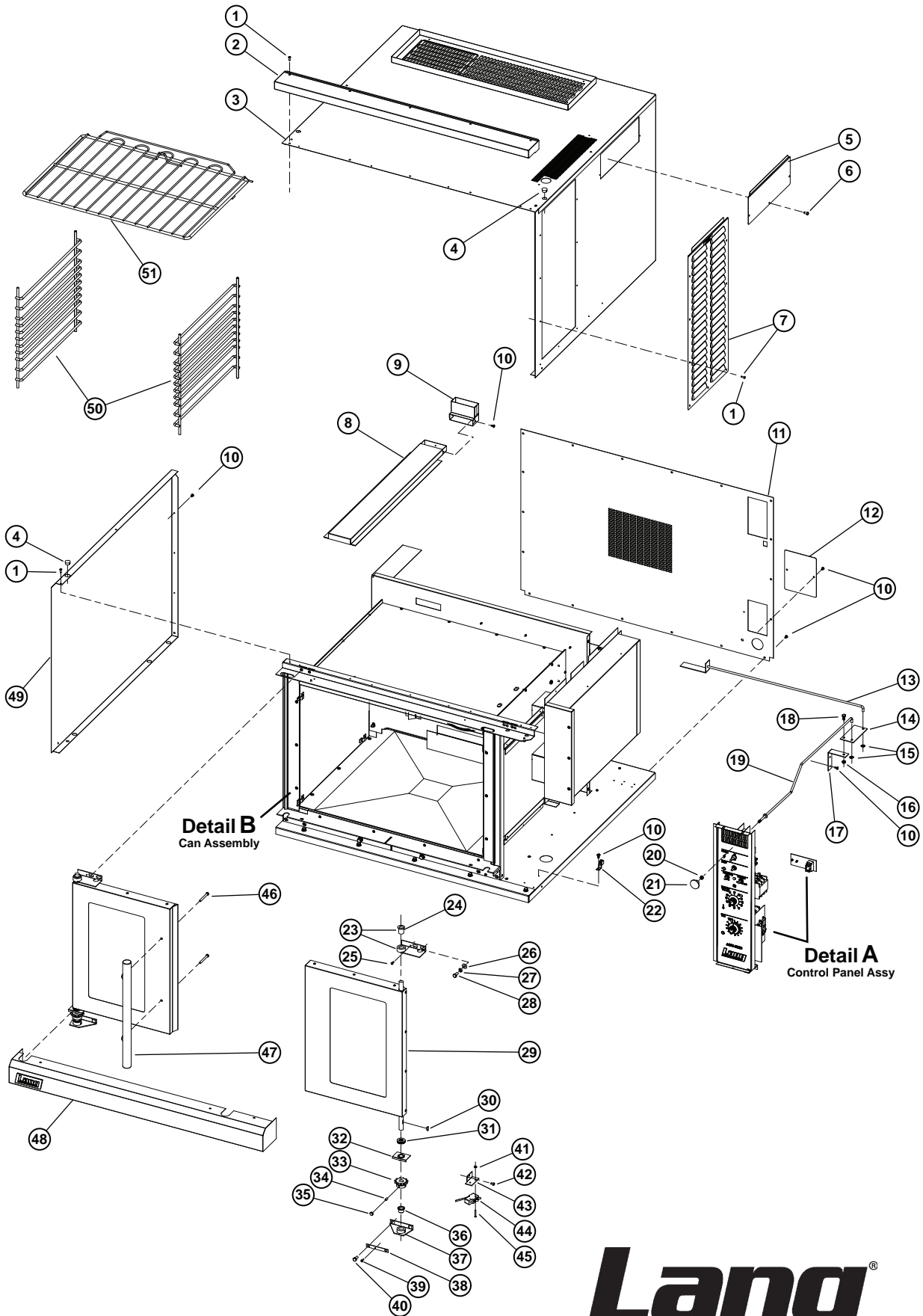
24 POLE TERMINAL BLOCK				
Line 1	Line 2	Line 3	Neutral	Ground
1	2	3	4	5
6	7	8	9	10

HEATING ELEMENTS REAR VIEW				
Line 1	Line 2	Line 3	Neutral	Ground
1	2	3	4	5
6	7	8	9	10

DESCRIPTION: W/D ECCO-C 1 SPD - 220/240/380/415 3 PHASE 4 WIRE, 50 OR 60 HZ				
CHK DATE:	CHK BY:	REV DATE:	REV BY:	DESCRIPTION
10-15-03	DLG	10-15-03	DLG	DESCRIPTION: W/D ECCO-C 1 SPD - 220/240/380/415 3 PHASE 4 WIRE, 50 OR 60 HZ

SHEET 1 OF 2				
DWG. NO: 61111-130				
REV: D				

Lang Manufacturing Company				
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ECOF Main Assembly

Lang[®]

SK2366

Rev

4/21/2008

PARTS LIST

July 8, 2008, Rev C

Model No: ECOF-C Main Assembly Commercial Cinnabon Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description
1	2C-20102-04	7	SCRW PHD ST 8-32X.5 PLTD ECOF
2	Q9-ECCO-230-1	1	TOP PANEL ASSEMBLY ECOF
3	Q9-ECCO-176-2	1	BODY SPOTWELD STD. ECOF
4	2P-70901-06	2	PLGBTNBLKPLSTC 5/8DP625 ECOF
5	Q9-ECCO-176-4	1	STM VALVE COVER ECOF
6	2C-20102-08	3	SCRW PHD ST 8-32X.375 ECOF
7	Q9-60102-904	1	ACCESS COVER - ECCO/GCCO ECOF
8	Q9-ECCO-124	1	TOP VENT SPOTWELD ECOF
9	Q9-ECCO-128	1	DAMPER BODY SPOTWELD ECOF
10	2C-20103-02	13	SCRW SM PLT 10 X .5 PHLSL ECOF
11	Q9-ECCO-182-3	1	BODY BACK S/S W/MOTOR ECOF
12	Q9-ECCO-182-4	1	BODY BACK S/S COVER ECOF
13	Q9-ECCO-133	1	DAMPER ROD B WELD ECOF
14	Q9-ECCO-137	1	DAMPER PIVOT ECOF
15	2C-20602-02	1	TINNERMAN CLIP 1/4 ECOF
16	2C-20301-20	1	NUT LOCK STOVER 1/4-20 ECOF
17	Q9-ECCO-136	1	DAMPER BRACKET ANGLE ECOF
18	2C-20104-41	6	SCRW MACH. 1/4-20X5/8 H/H ECOF
19	Q9-ECCO-131	1	DAMPER ROD A WELD ECOF
20	2C-20303-01	4	NUT HX SS 1/4-20 ECOF
21	2R-70701-25	1	KNOB DAMPER BLACK PLAIN ECOF
22	2E-31200-02	1	LUG GROUNDING UL APPROVED ECOF
24	2P-70201-07	2	BRNZ BR FLN 5/8IDX3/4ODX1 ECOF
25	2C-20115-01	78	SCRW S/S 8-32X1/2 P/H S/T ECOF
26	2C-20203-03	20	WSHR FLT SS 5/16 USS ECOF
27	2C-20204-06	14	WSHR S/S 5/16 SPLIT LOCK ECOF
28	2C-20111-07	14	SCRW SCKTHD 5/16-18X5/8 ECOF
29	Q9-50312-43	1	RH DOOR ASSY E/GCCO ECOF
29	Q9-50312-44	1	LH DOOR ASSY E/GCCO ECOF
30	2C-71802-01	1	KEY WOODRUFF 3/16 X 5/8 ECOF
31	2C-20201-15	5	WSHR FLT 960-C-1016 PLTD ECOF
32	Q9-50312-67	1	PIVOT BEARING ASSY ECOF
33	2P-73000-03	1	SST SPRKT40B11 5/8 BORE ECOF
34	2C-20105-04	1	SCRW SET 1/4-20X1/2 ECOF
35	2C-20301-07	1	NUT ACORN 1/4-20 PLTD ECOF
36	2P-70201-06	2	BRNZBRFLN5/8IDX3/4ODX5/8 ECOF
37	Q9-50312-41	1	BEARING BRACKET ASSY ECOF
38	Q9-GCCO-185-4	2	HINGE BRACKET RETAINER ECOF
39	2C-20115-01	78	SCRW S/S 8-32X1/2 P/H S/T ECOF
40	2C-20111-07	14	SCRW SCKTHD 5/16-18X5/8 ECOF
41	2C-20301-10	2	NUT HEX 6-32 PLTD ECOF
42	2C-20102-12	4	SCRW PHD ST 10-32X3/8 ECOF
43	Q9-ECCO-145-1	1	MICRO SWITCH BRACKET ECOF
44	2E-30301-02	1	SWITCH, MICRO ECOF
45	2C-20101-17	2	SCRW RND MS 6-32X1 PLTD ECOF
46	2C-20104-50	2	SCRW HXHD 1/4-28X2-1/4 ECOF
47	Y9-50312-05	1	HANDLE ASSY 1 HANDLE ECOF
48	Q9-60102-1092	1	BOTTOM PANEL ECCO ECOF
49	Q9-ECCO-176-6	1	L/H BODY SIDE ECOF
50	2B-50200-36	2	RACK SLIDE CINNABON OVEN ECOF-C
51	2B-50200-20	3	RACK ECCO/GCCO OVEN ECOF

**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.



Star Manufacturing International, Inc.

PARTS LIST

July 8, 2008, Rev C

Model No: ECOF-C Main Assembly
Commercial Cinnabon Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description
NI	Q9-ECCOPLMDR-C	1	PANEL ECCO 208/240V ECOF-C-CN
NI	Q9-ECCOPLMDR-G	1	PANEL ECCO 220/380V ECOF-C2/3VCN
NI	Q9-ECCOPLMDR-H	1	PNELECCOCINNABONCE220/380 ECOF-2/4CECN
NI	Q9-ECCOPLMDR-J	1	PANEL ECCO 240/415V ECOF-C2/4VCN
NI	Q9-ECCOPLMDR-K	1	PANEL ECCO 380V CINNABON ECOF-C380VCN
NI	Q9-ECCOPLMDR-U	1	PANEL ECCO 480V CINNABON ECOF-C480VCN
	ACCESSORY		
NI	2E-60101-67	AR	CORD-ECCO, 208/240, CINNABN 208/240V
NI	2E-60101-101	AR	CORD IEC309 EH CE 380V CE
NI	PS-60101-68	AR	CORD KIT 480V 480V

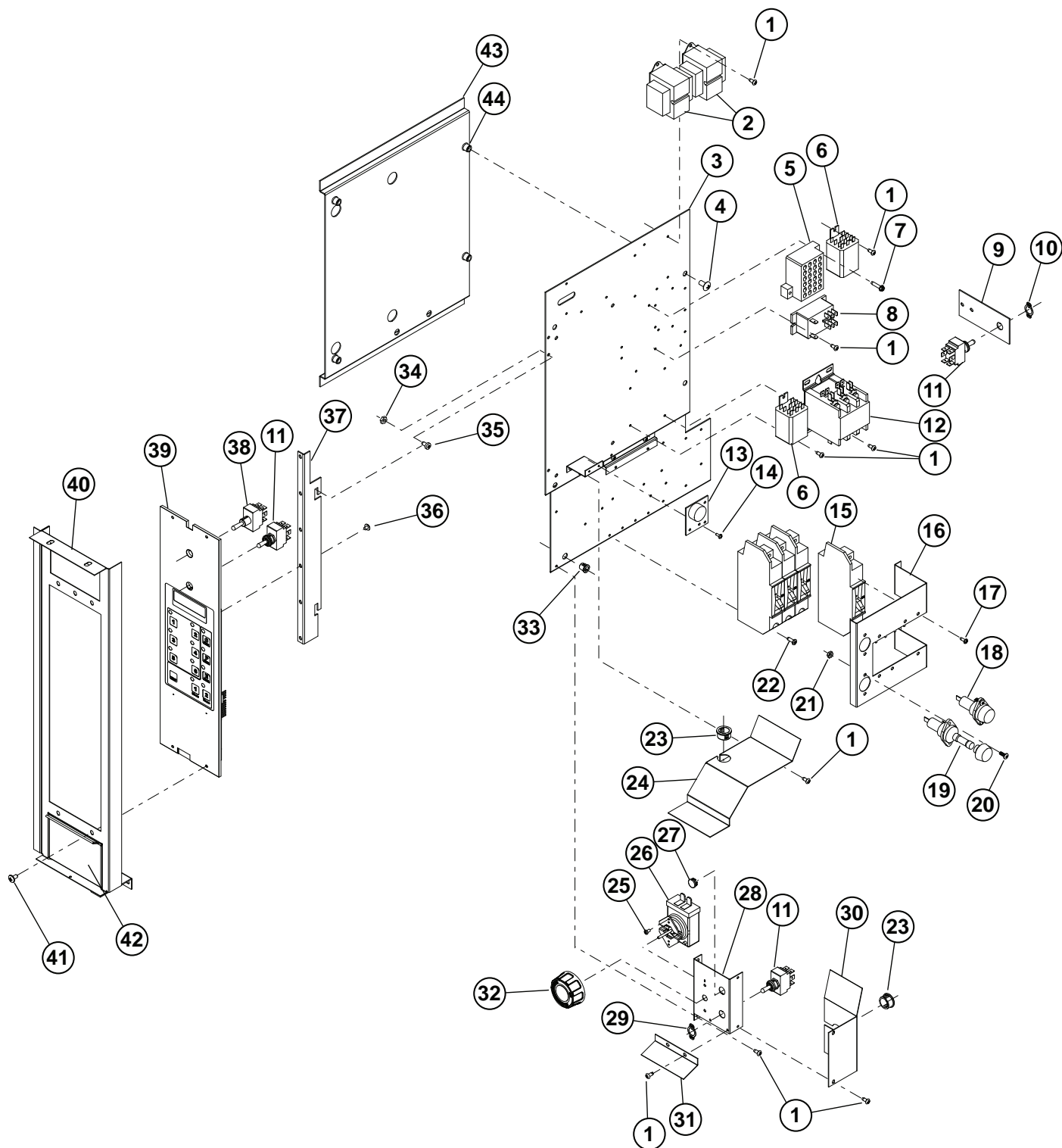
IMPORTANT: WHEN ORDERING, SPECIFY VOLTAGE OR TYPE GAS DESIRED
INCLUDE MODEL AND SERIAL NUMBER

PAGE 2
OF 2

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



Star Manufacturing International, Inc.



ECOF-C Cinnabon Controller Panel

PARTS LIST

July 8, 2008, Rev C

Model No: ECOF-C Cinnabon Control Panel Assembly Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description
1	Q9-ECCOPLMDR-C	1	PANEL ECCO 208/240V ECOF-C-CN
	Q9-ECCOPLMDR-G	1	PANEL ECCO 220/380V ECOF-C2/3VCN
	Q9-ECCOPLMDR-H	1	PNELECCOCINNABONCE220/380 ECOF-2/4CECN
	Q9-ECCOPLMDR-J	1	PANEL ECCO 240/415V ECOF-C2/4VCN
	Q9-ECCOPLMDR-K	1	PANEL ECCO 380V CINNABON ECOF-C380VCN
	Q9-ECCOPLMDR-U	1	PANEL ECCO 480V CINNABON ECOF-C480VCN
	2C-20102-08	24	SCRW PHD ST 8-32X.375 ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-H
	2C-20102-08	27	SCRW PHD ST 8-32X.375 ECCOPLMDR-K, ECCOPLMDR-U
2	2C-20102-08	30	SCRW PHD ST 8-32X.375 ECCOPLMDR-U
	2E-31400-04	1	XFORMR 480/240VAC 100VA ECCOPLMDR-K
	2E-31400-17	1	XFORMR 380/240VAC 10VA ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K
	2E-31400-26	2	XFORMR 208-240/24-12 40VA ECCOPLMDR-H
3	2E-31400-28	2	XFORMR208-240/24VCT 40VA ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
	Q9-ECCO-224-3	1	PANEL SUPPORT C,P,PP ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
4	2C-20101-11	4	SCRW THD MS 1/4-20X1/2 ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
5	2E-30503-01	1	TRM BLOCK 24 POS QK CON ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
6	2E-30600-02	1	RELAY 240VAC 3FORMC FLNG ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K
7	2E-30600-07	1	RELAY 240VAC FLANGE MNT ECCOPLMDR-H
	2C-20102-05	2	SCRW HXHD ST 8-32X.75 ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
8	2E-30701-05	1	CONTC 2POLE 30A 24VAC P & ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
9	2E-30701-05	2	CONTC 2POLE 30A 24VAC P & ECCOPLMDR-C, ECCOPLMDR-H
	Q9-ECCO-275-1	1	SWITCH BRACKET ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K
10	2E-30303-09	1	SWT PLATE HI/LOW ECCOPLMDR-G, ECCOPLMDR-H
11	2E-30303-06	3	SWT TOG ON-ON DPDT BLK ECCOPLMDR-J
11	2E-30303-19	3	SWT TOG ON-ON DPDT BLK ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
	2E-30700-06	1	CONTC3POLE35A24VAC50/60HZ ECCOPLMDR-H
	2E-30700-06	2	CONTC3POLE35A24VAC50/60HZ ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
	2E-30702-02	2	CONTC 4POLE 24V 25FLA CE ECCOPLMDR-H
13	Q9-40102-17-1	1	BUZZER BOARD ASSY PHANTOM ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
	2C-20103-06	2	SCRW SM PLT 6 X 3/8 PHL ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
15	2E-31800-01	4	CB 250V50A 1 POLE CRLNGSW ECCOPLMDR-C
	2E-31800-04	1	CB 480V 50A 3 POLE ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
	2E-31800-08	4	CB 250/415V 50A 1 POLE CE ECCOPLMDR-H

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Star Manufacturing International, Inc.

PARTS LIST

July 8, 2008, Rev C

Model No: ECOF-C Cinnabon Control Panel Assembly Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description	
16	Q9-ECCO-225-1	1	CIRCUIT BREAKER HOLDER	ECCOPLMDR-H
	Q9-ECCO-226	1	FUSE MOUNT C 208-240V	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J
17	Q9-ECCO-226-1	1	FUSE MOUNT C 480V	ECCOPLMDR-K, ECCOPLMDR-U
	2C-20102-06	6	SCRW PHD ST 6-32X3/8 PLTD	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
18	2E-30901-08	2	FUSE HLDR FOR SC FUSE	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
19	2E-30900-10	2	FUSE 15AMP 300V (SC-15)	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
20	2C-20101-52	4	SCRW RHD MS 8-32 X 1/2	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
21	2C-20301-11	4	NUT HEX 8-32 PLTD	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
22	2C-20102-04	3	SCRW PHD ST 8-32X.5 PLTD PHILP	ECCOPLMDR-U
	2C-20102-04	5	SCRW PHD ST 8-32X.5 PLTD PHILP	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K
23	2K-70801-04	1	SNAP BUSH 3/4 SB750-10	ECCOPLMDR-K
	2K-70801-04	2	SNAP BUSH 3/4 SB750-10	ECCOPLMDR-C
24	2K-70801-04	3	SNAP BUSH 3/4 SB750-10	ECCOPLMDR-G, ECCOPLMDR-H
	Q9-ECCO-223-4	1	BARRIER (A & C MODEL	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
25	2C-20101-77	2	SCRW MS PLT 6-32 X .25	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
26	2T-30402-27	1	STAT ADJ 450 DEG 48 PILOT	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
27	2T-30402-37	1	STAT ADJ450 DEG48 PILT	ECCOPLMDR-H
	2P-70903-09	1	PLG BTN PLTD MTL 7/16	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
28	Q9-ECCO-275	1	STAT BRACKET	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
29	2E-30303-10	1	SWT PLATE ON/OFF IND	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
30	Q9-ECCO-276	1	BARRIER	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
30	Q9-ECCO-276-1	1	BARRIER #2 - CE	ECCOPLMDR-H
31	Q9-ECCO-277	1	DEAD FRONT W/BACKUP STAT	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
32	P9-70701-58	1	KNOB ASSY 450° D CELCIUS	ECCOPLMDR-H
	Y9-70701-16	1	KNOB ASSY 450o A	ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-U
	Y9-70701-19-1	1	KNOB 450° D PHANTOM	ECCOPLMDR-K

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Star Manufacturing International, Inc.

PARTS LIST

July 8, 2008, Rev C

Model No: ECOF-C Cinnabon Control Panel Assembly Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description
33	2K-70801-03	1	SNAP BUSH 3/8 SB375-4 BLK ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H ECCOPLMDR-J, ECCOPLMDR-U
34	2K-70801-03	2	SNAP BUSH 3/8 SB375-4 BLK ECCOPLMDR-K
	2C-20301-15	2	NUT HEX 10-32 PLTD ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
35	2C-20102-12	2	SCRW PHD ST 10-32X3/8 ECCOPLMDR-K, ECCOPLMDR-U
35	2C-20102-12	3	SCRW PHD ST 10-32X3/8 ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H ECCOPLMDR-J
36	2C-20101-51	6	SCRW MS PLT 8-32 X .1875 ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
37	Q9-ECCO-221-2	1	FRONT PANEL HOLDER C,P,PP ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
38	2E-30303-16	1	SWT TOG ON-ON BLK MOM ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
39	Q9-40102-60-1	1	CIRBD CPU/FRT PANEL CINN ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
40	Q9-ECCO-273-1	1	CONTROL FRONT-C W/BACK UP ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
41	2C-20101-24	4	SCRW MS PLT 10-32 X .375 ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
42	Q9-ECCO-278	1	SWITCH DOOR ASSY ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
43	Q9-ECCO-221	1	SLIDE ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
44	2C-20306-02	4	AVK CAD 1/4-20 1ST GRP ECCOPLMDR-C, ECCOPLMDR-G, ECCOPLMDR-H, ECCOPLMDR-J, ECCOPLMDR-K, ECCOPLMDR-U
NI	2E-30500-07	0.5	TRM BLOCK 3PLELRGE 125AMP ECCOPLMDR-G, ECCOPLMDR-J
NI	2E-30500-15	1	TRM BLOCK 4 POLE 115AMP ECCOPLMDR-H
NI	2E-31200-09	1	LUG GROUNDING CE 1 ECCOPLMDR-H
NI	2K-70801-01	3	SNAP BUSH 7/16 SB437-5 ECCOPLMDR-G, ECCOPLMDR-J

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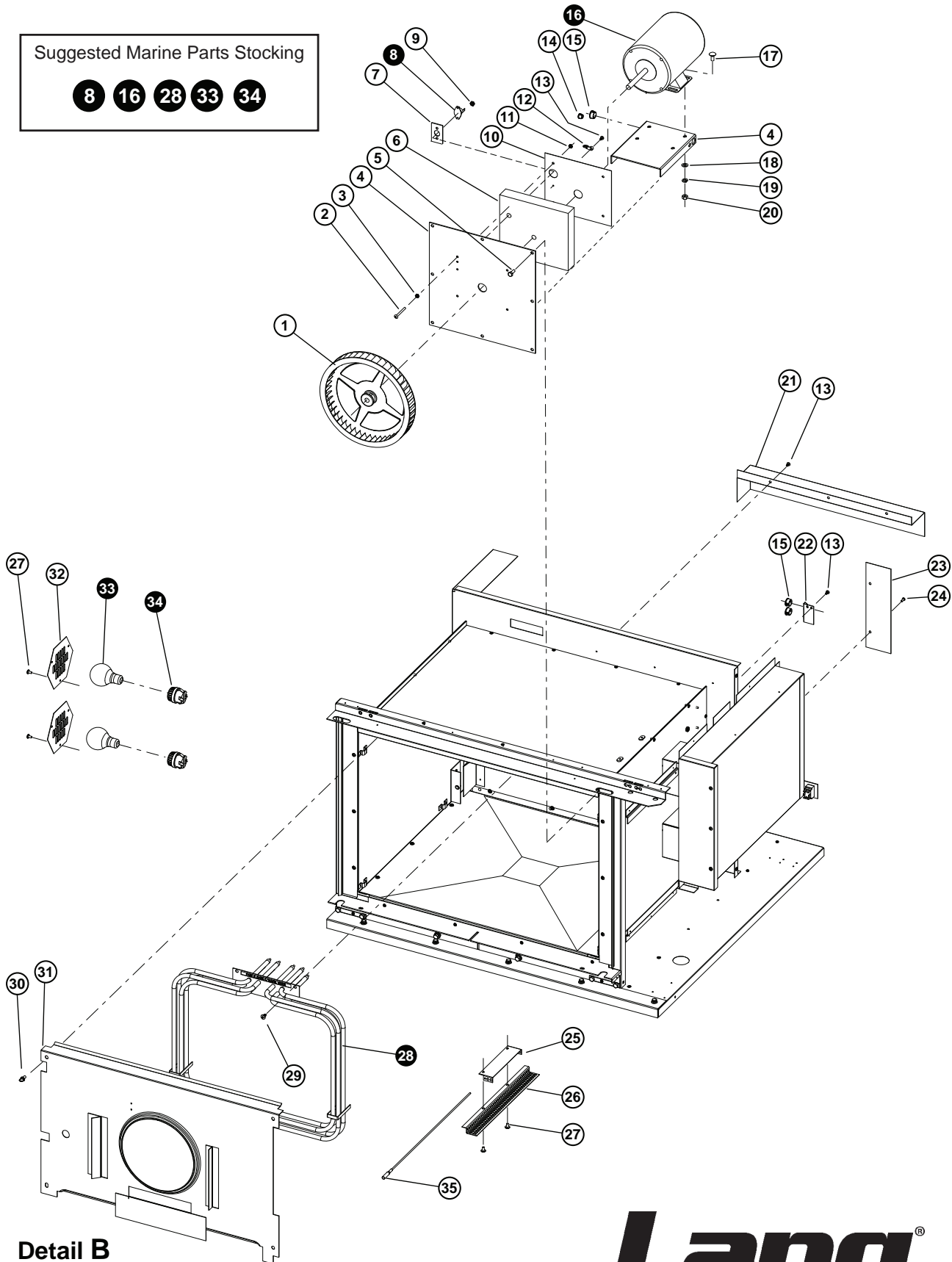
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Star Manufacturing International, Inc.

Suggested Marine Parts Stocking

8 16 28 33 34



Detail B

ECOF: CAN & MOTOR ASSEMBLY

Lang[®]

SK2367

Rev. A

6/03/08

PARTS LIST

July 8, 2008, Rev C

Model No: ECOF-C CAN & MOTOR ASSEMBLY Commercial Cinnabon Full Size Electric Convection Oven

Key Number	Part Number	Qty Per	Description
1	2U-71500-05	1	BLOWER WHEEL ECCO/GCCO ECOF
2	2C-20101-42	4	SCRW THD MS 10-24X2 PLTD ECOF
3	2C-20301-09	12	NUT HEX 10-24 PLTD ECOF
4	Q9-ECCO-168	1	MOTOR MOUNT WELD ECOF
5	2C-20111-02	8	SCRW HXHD CAP 1/4-20X3/4 ECOF
6	2H-ECCO-172	1	MOTOR INSULATION ECOF
7	Q9-GCCO-166-2	1	SPACER - SAFETY STAT ECOF
8	2T-30401-09	1	STAT FXD 500 DEG OPEN ECOF
9	2C-20301-10	2	NUT HEX 6-32 PLTD ECOF
10	Q9-GCCO-167	1	MOTOR SHIELD ECOF
11	2C-20301-09	12	NUT HEX 10-24 PLTD ECOF
12	2C-31900-04	10	CABLE STRAPS .10 X 8 ECOF-C-CN
13	2C-20103-02	13	SCRW SM PLT 10 X .5 PHLSL ECOF-C-CN
14	2K-70801-01	1	SNAP BUSH 7/16 SB437-5 ECOF
15	2K-70801-04	1	SNAP BUSH 3/4 SB750-10 ECOF
16	2U-30200-12	1	MTR 1/3HP 115/208-240 1PH ECOF-C-CN, ECOF-C2/3VCN, ECOF-C2/4VCN, ECOF-2/4CECN
	2U-30200-60	1	MTR 1/3HP380V1PH50HX2SP ECOF-C380VCN
	2U-30200-03	1	MTR 1/3HP 480V 3PH 60HZ ECOF-C480VCN
17	2C-20118-01	4	SCRW CARRAGE PLT 5/16X.75 ECOF
18	2C-20201-09	4	WSHR PLT 5/16 FLAT SAE ECOF
19	2C-20202-08	4	WSHR PLT 5/16 LOCK SPLIT ECOF
20	2C-20301-06	4	NUT HEX 5/16-18 PLTD ECOF
21	Q9-ECCO-122	1	ELEMENT TOP COVER ECOF
22	Q9-GCCO-115-1	1	MOTOR WIRE HOLDER ECOF
23	Q9-ECCO-123	1	ELEMENT SIDE COVER ECOF
24	2C-20102-04	7	SCRW PHD ST 8-32X.5 PLTD ECOF
25	Q9-GCCO-247	1	PROBE HOLDER [ECCO & ECOF
26	Q9-50312-34	1	PROBE COVER ECCO/GCCO ECOF
27	2C-20109-04	4	SCRW THD MS SS 10-32X3/8 ECOF
28	2N-11090-16	1	ELE ECCO OVN 208/240V11KW ECOF-C-CN, ECOF-C2/3VCN, ECOF-C2/4VCN, ECOF-2/4CECN
	2N-11090-30	1	ELE 415 440V11KW ECOF-C380VCN
	2N-11090-18	1	ELMNT ECCO 480V 11KW ECOF-C480VCN
29	2C-20103-02	13	SCRW SM PLT 10 X .5 PHLSL ECOF
30	2C-20112-02	4	SCRWSHLDRTHUM 1/4-20X3/8 ECOF
31	Q9-ECCO-163	1	REAR BAFFLE SPOTWELD ECOF
32	Q9-GCCO-431	2	LIGHT RING - CORRECTIONAL ECOF
33	2S-31603-04	2	LAMPS INC 250V 50W ECOF
34	2E-31602-04	2	LAMP SKT SNAP-IN WHT ECOF
35	2E-41100-08	1	SENSOR OVEN TEMP CONTROL ECOF
36	2C-20301-10	2	NUT HEX 6-32 PLTD ECOF
37	2C-20203-04	14	WSHR S/S #10 SAE 7/16OD FLAT ECOF

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