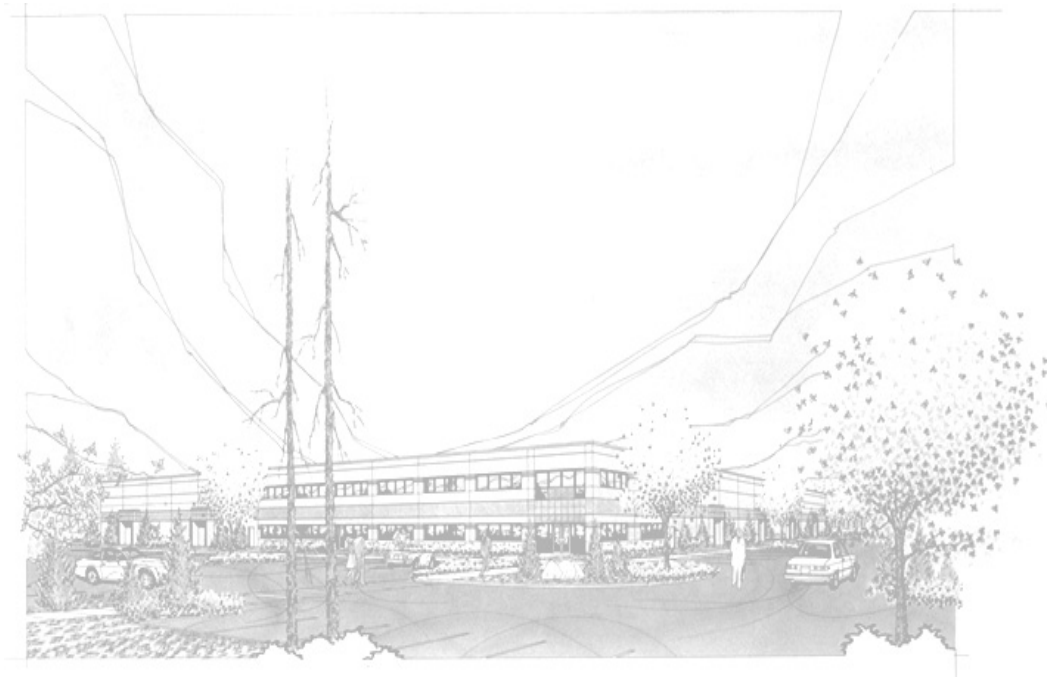








## Installation, Operation, & Maintenance Manual

**Model: CR30 (AP), 30" Range Top / Convection Oven with Accu-Plus Controls**

**Model: CR30 (PT), 30" Range Top / Convection Oven with Platinum Controls**



**THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE. READ, UNDERSTAND AND FOLLOW THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS MANUAL.**

<b><u>DANGER</u></b>	POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH.	
<b><u>WARNING</u></b>	POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.	
<b><u>CAUTION</u></b>	POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY.	
<b><u>NOTICE</u></b>	Helpful operation and installation instructions and tips are present.	

**FOR YOUR SAFETY**

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

**POST IN A 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, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.**

<b>Model #:</b>	<b>Purchased From:</b>
<b>Serial #:</b>	<b>Location:</b>
<b>Date Purchased:</b>	<b>Date Installed:</b>
<b>Purchase Order #:</b>	<b>For Service, Call:</b>

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<b><u>CAUTION</u></b>	EACH UNIT WEIGHS 412 POUNDS (186.9 kg). 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.
<b><u>CAUTION</u></b>	ANY STAND, COUNTER OR OTHER DEVICE ON WHICH RANGE WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE RANGE.
<b><u>CAUTION</u></b>	SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.
<b><u>DANGER</u></b>	<b>THIS APPLIANCE MUST BE GROUNDED AT THE TERMINAL PROVIDED. FAILURE TO GROUND THE APPLIANCE COULD RESULT IN ELECTROCUTION AND DEATH.</b>
<b><u>WARNING</u></b>	<b>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.</b>
<b><u>NOTICE</u></b>	The data plate is located on the right side of the oven. The range 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.
<b><u>NOTICE</u></b>	The installation of any components such as a vent hood, grease extractors or fire extinguisher systems must conform to their applicable National, State and locally recognized installation standards.
<b><u>NOTICE</u></b>	During the first few hours of operation you may notice a small amount of smoke coming from the range and a faint odor from the smoke. This is normal for a new range and will disappear after the first few hours of use.
<b><u>CAUTION</u></b>	ALWAYS KEEP THE AREA NEAR THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS AND DO NOT OBSTRUCT FLOW OF COMBUSTION OR VENTILATION AIR.
<b><u>CAUTION</u></b>	KEEP FLOOR IN FRONT OF EQUIPMENT CLEAN AND DRY. IF SPILLS OCCUR, CLEAN IMMEDIATELY TO AVOID THE DANGER OF SLIPS OR FALLS.
<b><u>WARNING</u></b>	<b>KEEP WATER AND SOLUTIONS OUT OF CONTROLS. NEVER SPRAY OR HOSE CONTROL CONSOLE, ELECTRICAL CONNECTIONS, ETC.</b>
<b><u>CAUTION</u></b>	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 WARNINGS AND FOLLOW THE DIRECTIONS ON THE LABEL OF THE CLEANER TO BE USED.
<b><u>NOTICE</u></b>	Never leave a chlorine sanitizer in contact with stainless steel surfaces longer than 10 minutes. Longer contact can cause corrosion.



**NOTICE**

Service on this or any other LANG appliance must be performed by qualified personnel only. Consult your authorized service station directory or contact the factory at 1-800-224-LANG (5264) or [www.langworld.com](http://www.langworld.com) for the service station 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.**



**CAUTION**

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



# EQUIPMENT DESCRIPTION

## **Exterior / Interior Construction**

The range exterior dimensions are 30" Wide (76.2 cm), 35.25" High (89.5 cm), 28.5" Deep (72.4 cm).

The Top, Front, Back, and Sides are constructed of stainless steel with an aluminized bottom.

The oven door comes standard with a window.

The door handle is constructed of Polycarbonate.

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

The oven cavity dimensions are 15" Wide (38.1 cm), 20" High (50.8 cm), 21" Deep (53.3 cm).

The oven is designed for five shelves and comes with five Chrome Plated Racks.

The interior of the oven is constructed of stainless steel.

## **Operation**

The oven is a forced air convection oven with a vented oven cavity.

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

## **Controls**

### **Range Top**

Hot tops: One 850°F thermostat per section.

Griddle: One 450°F thermostat per section.

French Plate: One 6-heat switch per individual French Plate.

### **Oven (Accu-Plus)**

Easy to use manual control knobs.

Solid-state design.

Pulse and two-speed fan.

### **Oven (Platinum)**

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**

Range operates as shipped on 208V or 240V (single or three phase) or 480V (three phase). See data plate for electrical specifications.

The range can be shipped with a power cord and plug attached, but must be specified upon ordering.

Floor space required is 42" Wide (106.7 cm), 32.5" Deep (82.6 cm).

The range weighs 412 lb (186.9 kg).

## Receiving the Range




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 loss or damage which 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 Lang Manufacturing Company. File your claim with the carrier.**

## Location

Prior to un-crating, move the range 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 range will arrive completely assembled inside a wood frame and strapped to a skid. Cut the straps and remove the wood frame.

<b><u>CAUTION</u></b>	<b>EACH UNIT WEIGHS 412 POUNDS (186.9 kg). 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.</b>	
<b><u>CAUTION</u></b>	<b>ANY STAND, COUNTER OR OTHER DEVICE ON WHICH RANGE WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE RANGE.</b>	
<b><u>CAUTION</u></b>	<b>SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.</b>	

Remove Range from skid and place in intended location.

# INSTALLATION

## **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 on the right hand side of 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 and fire extinguisher systems must conform to their applicable National, State and locally recognized installation standards.**



## **Range Installation**

The Range will come pre-assembled with the casters already installed.

## **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 at the range back directly behind the control compartment. A grounding lug is provided at the rear service entrance.

The CR30 (PT) may have been purchased with a cord & plug kit. This kit includes a 48" cord with a NEMA L15-30P plug.

## **Range Voltage**

The Lang Model CR30 range operates as shipped on either 208V or 240V (single or three phase) and 480V (three phase). Amperages, KW rating and phasing can be found in the wiring diagram section of this manual.



# INSTALLATION CONT'D

## Reversing the door

1. Disconnect oven from power.
2. Remove the top and bottom door hinge covers (4) by removing the two 10-32 phillips head screws (8).
3. Remove the top door hinge bracket (1) from the oven by removing the two 1/4-20 phillips head screws (7). The hinge should slide off of the door pin. This will now be your right hand lower hinge.
4. Lift the door off of the bottom pin and set it aside.
5. Remove the bottom door hinge bracket (2) by removing the two 1/4-20 phillips head screws (7). This will now be your upper right hand hinge.
6. Remove the lower hinge mounting plate (9) by pulling it from behind the leg pad adapter on the bottom of the oven.
7. Remove the two phillips head screws in the bottom right corner of the oven where the new hinge will be placed.
8. Slide the hinge mounting plate (9) into place and mount the hinge bracket (this should be your old upper hinge) using two 1/4-20 (7) phillips head screws.
9. Remove the two phillips head screws in the upper right corner of the oven where the new hinge will be placed.
10. Rotate the door 180° and slide the door pin into the bottom hinge bracket.
11. Slide the upper door hinge (1) onto the upper door pin and screw into place using two 1/4-20 phillips head screws.
12. Place the top and bottom door hinge covers (4) back on the oven using two 10-32 phillips head screws (8).

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	EH-265	EH HINGE - TOP
2	1	EH-266	EH HINGE - BOTTOM
3	2	50313-031	HINGE PIN WELDMENT
4	2	EH-267	EH HINGE COVER
5	2	70201-19	Bronze Bearing - Flanged .625OD x .500ID x .500
6	2	70201-01	Bronze Thrust Bearing .625OD x .500ID x .125
7	2	20109-43	SCRW S/S 1/4-20 X 3/4 FLTHD PHIL
8	8	20109-15	10-32x1/2 PN PHL 18-8 Stainless Screw
9	1	EH-198	HINGE MOUNT PLATE - LOWER
10	2	20306-02	1/4-20 AVK (AKS4-420-165)

**INSERT BEARINGS (ITEMS "5") INTO THE HINGES (ITEMS "1" & "2") AS SHOWN THEN REAM WITH A .508 REAMER.**

	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES:	MATERIAL PART #:	MATERIAL TYPE:	BLANK DIMS.:	X	BLANK AREA:	54 in
	TOLERANCES ARE: DECIMALS .005 ANGLES ±.5° .XX = 1.03 .XXX = 1.015	DWN. BY: DLG / DWN. DATE: 09-10-03 / REV. BY: DLG / REV. DATE: 09-25-03 / CHK. BY:	CHK. DATE:	CAD FILE: 50313-030	SHEET 1	OF 1	DWG. NO: 50313-030
DESCRIPTION: EH HINGE REPLACEMENT KIT							

## **Ventilation and Clearances**

Standard minimum clearance from combustible construction is as follows.

4" from side

4" from back

6" from floor

These ranges may be set directly, without legs, on a curbed base or **non-combustible** floor.

If the range is set without legs on a **non-combustible** floor or a curbed base, maintain a 4-inch back clearance.

If the range 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 range on the right hand side (control panel side).

**Do not** install the range closer than 12 inches from an uncontrolled heat source (char-broiler, oven, etc.) on the right side.

### **CAUTION**

**ALWAYS KEEP THE AREA NEAR THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS AND DO NOT OBSTRUCT FLOW OF COMBUSTION OR VENTILATION AIR.**



## **Pre-Power On**

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

- The door opens and closes freely.
- All racks are in the oven correctly.
- All packing materials have been removed from the inside of the oven.
- All shipping preservatives have been removed from the range top surface

## **Power On**

### **Oven**

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.

### **Hot Plates**

To "dry out" the Hot Plate, set the thermostat dial at 250°F and turn on the power switch. Allow unit to cycle at least 15 minutes at this heat level. Reset the thermostat to 350°F and allow the same time. Then reset the thermostat to 450°F and allow the same time. Continue doing this until you reach 850°F, then allow the unit to maintain this temperature for a minimum of 4 hours. More time may be required if the unit operates in a moist environment.

If the unit is out of use for three or more days, a one-hour preheat schedule should be used, especially when exposed to high humidity and/or cool temperatures.

### **French Plates**

To "dry out" the French Plate, set the six-heat switch to the first setting and turn on the power switch. Allow unit to cycle at least 15 minutes at this heat level. Reset the six-heat switch to position 2 and allow the same time. Reset the six-heat switch to position 3 and allow the same time. Continue doing this until you reach position 6, then allow the unit to maintain the temperature for a minimum of 4 hours. More time may be required if the unit operates in a moist environment.

If the unit is out of use for three or more days, a one-hour preheat schedule should be used, especially when exposed to high humidity and/or cool temperatures.

### **Griddles**

To "dry out" the Griddle, set the thermostat to 250°F and turn on the power switch. Allow the unit to cycle at least 15 minutes at this heat level. Reset the thermostat to 350°F and allow the same time. Reset the thermostat to 450° and allow the unit to maintain the temperature for a minimum of 4 hours. More time may be required if the unit operates in a moist environment.

If the unit is out of use for three or more days, a one-hour preheat schedule should be used, especially when exposed to high humidity and/or cool temperatures.

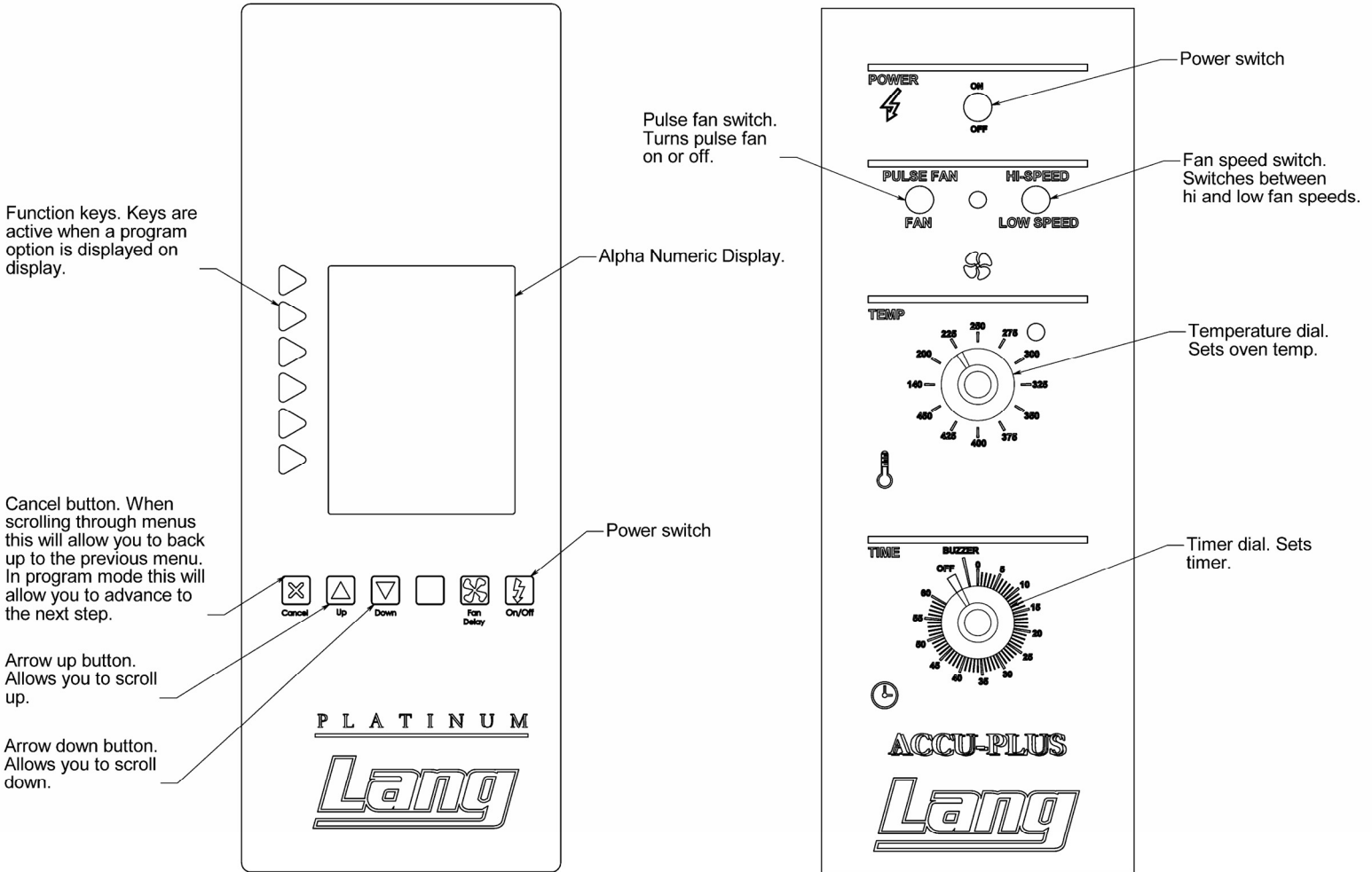
## **NOTICE**

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



# OPERATION

## Oven



## Typical Operation Sequence (Platinum)

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

## 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.

Lowering the oven temperature will result in a more even 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.

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.

## Loading

When loading and unloading the oven, stage products and racks so the oven doors are 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. This may create an uneven bake.

Load each shelf evenly. Spaces should be maintained equally between the pan and oven walls, front and back.

Space pans evenly within the oven.

Do not overload pans. This may create an uneven bake.

### CAUTION

**ALWAYS KEEP THE AREA NEAR THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS AND DO NOT OBSTRUCT FLOW OF COMBUSTION OR VENTILATION AIR.**



### CAUTION

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



## RANGE TOP




Various top arrangements are available, depending on specific model purchased:

**12" x 24" Hot Plate.** Controlled by high temperature thermostats. Temperature ranges from 0°-850°F. Recommended for stock pots and heavy kettle work.

**Round French Plates.** Controlled by indicating type 6-heat switch. Temperature ranges from 0°-750°F. Recommended for light duty sauce pans and small stockpots. Not Recommended for heavy stockpots, heavy urns kettles.

**18" x 24" Grill Plates.** Controlled by thermostats. Temperature ranges from 0°-450°F. Recommended for all heavy and light frying. Set the thermostat dial at the desired temperature. The red pilot light will be on until the desired temperature is reached. The pilot light indicates when the plate is heating.

## MAINTENANCE & CLEANING

<b><u>WARNING</u></b>	<b>KEEP WATER AND SOLUTIONS OUT OF CONTROLS. NEVER SPRAY OR HOSE CONTROL CONSOLE, ELECTRICAL CONNECTIONS, ETC.</b>	
<b><u>CAUTION</u></b>	<b>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.</b>	
<b><u>NOTICE</u></b>	<b>Never leave a chlorine sanitizer in contact with stainless steel surfaces longer than 10 minutes. Longer contact can cause corrosion.</b>	

### **Cleaning**

- Always start with a cold range.
- The stainless exterior can easily be cleaned using Lang Mfg. Prime Shine (72804-41) oven 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 blower wheel.
- The oven racks, rack slides and interior may be cleaned using Lang Mfg. Foam Deluxe (72804-36) oven cleaner.
- Discoloration or heat tint may be removed using Lang Mfg. Carbon Release (72804-32) oven cleaner.
- Rub in the direction of the metal's grain.

## Symptoms

What follows is a chart of Symptoms and Possible Causes to aid in diagnosing faults with the appliance.

Refer to the Symptom 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 the Test section.

## Oven

Symptom	Possible Cause
Display will not come on	<ul style="list-style-type: none"> <li>• No power to outlet</li> <li>• Failed power cord or plug</li> <li>• Contrast needs to be adjusted</li> <li>• Failed display board</li> </ul>
Oven will not heat	<ul style="list-style-type: none"> <li>• Power Switch is not “ON”</li> <li>• Product not selected</li> <li>• Failed Transformer</li> <li>• Failed Probe</li> <li>• Failed Circuit board</li> <li>• Failed Contactor</li> <li>• Failed Over-temperature Thermostat</li> <li>• Failed Element</li> </ul>
Oven motor will not run	<ul style="list-style-type: none"> <li>• Power Switch is not “ON”</li> <li>• Product not selected</li> <li>• Failed Transformer</li> <li>• Failed Contactor</li> <li>• Failed Motor</li> <li>• Failed Circuit board</li> </ul>
Product burning	<ul style="list-style-type: none"> <li>• Failed Probe</li> <li>• Failed Circuit board</li> </ul>
Product under done	<ul style="list-style-type: none"> <li>• Failed Probe</li> <li>• Failed Circuit board</li> </ul>

## Range Top

Hotplate will not heat	<ul style="list-style-type: none"> <li>• No power to Unit</li> <li>• Defective Thermostat</li> <li>• Defective element</li> </ul>
French plate will not heat	<ul style="list-style-type: none"> <li>• No power to Unit</li> <li>• Failed 6-heat switch</li> <li>• Failed element</li> </ul>
Griddle plate will not heat	<ul style="list-style-type: none"> <li>• No power to Unit</li> <li>• Failed Thermostat</li> <li>• Failed element</li> </ul>

# TROUBLESHOOTING CONT'D

## NOTICE

Service on this, or any other, LANG appliance must be performed by qualified personnel only. Consult your authorized service station directory or call the factory at 1-800-224-LANG (5264), or WWW.LANGWORLD.COM for the service station 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.**



## TESTS

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

### Oven

Possible Cause	Test
Failed Probe	<ul style="list-style-type: none"> <li>• Check probe for proper resistance*</li> </ul>
Failed Circuit board	<ul style="list-style-type: none"> <li>• Confirm that Circuit board is getting correct voltage and putting out correct voltage*</li> </ul>
Failed Transformer	<ul style="list-style-type: none"> <li>• Check both Primary and Secondary coils for correct voltage*</li> </ul>
Failed Contactor	<ul style="list-style-type: none"> <li>• Remove the wires from the contactor coil and check for continuity across the contactor coil connection*</li> <li>• Ensure the contactor moveable points move freely up and down*</li> </ul>
Failed Motor	<ul style="list-style-type: none"> <li>• Confirm that motor is getting correct voltage*</li> </ul>
Failed or disconnected safety thermostat	<ul style="list-style-type: none"> <li>• Check across the thermostat connectors for continuity*</li> </ul>
Failed Element	<ul style="list-style-type: none"> <li>• Confirm that Elements are getting correct voltage and have continuity*</li> </ul>

### Range Top

Possible Cause	Test
Failed thermostat	<ul style="list-style-type: none"> <li>• Verify calibration*</li> </ul>
Failed element	<ul style="list-style-type: none"> <li>• Remove the wires and check for continuity across the element*</li> </ul>
Failed 6-heat switch	<ul style="list-style-type: none"> <li>• Call factory or consult service manual for proper tests</li> </ul>

## CAUTION

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# PARTS LIST

## Oven

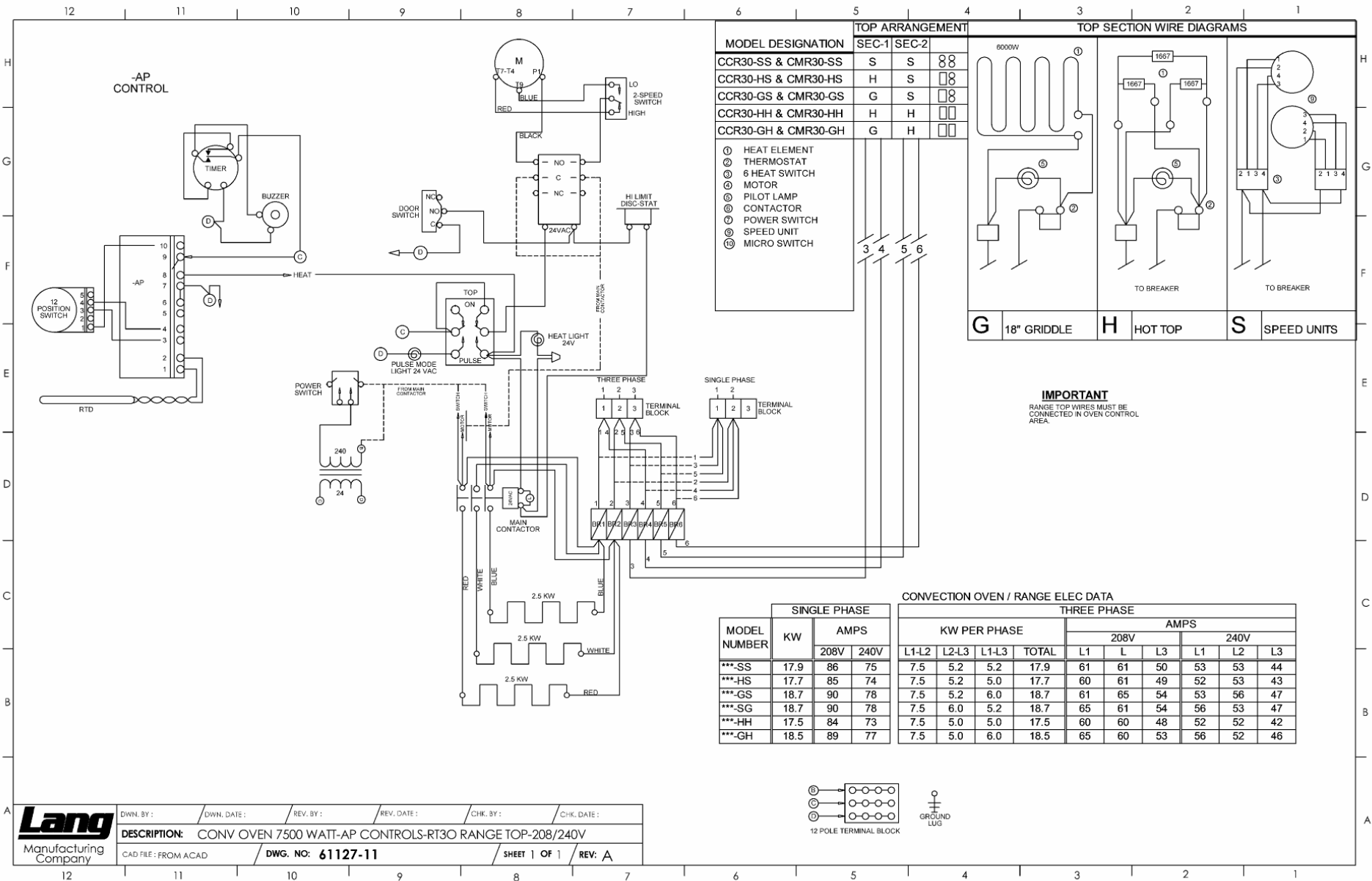
Description	Part No.
Element Oven, 208 Volt, 7500 Watts	11090-20
Element Oven, 240 Volt, 7500 Watts	11090-21
Element Oven, 480 Volt, 7500 Watts	11090-22
Motor 1/3 HP 480 Volt 2 Speed	30200-16
Motor 1/3 HP 208/240 Volt 2 Speed	30200-17
Cooling Fan	30200-46
Switch Toggle On-Off	30303-06
Thermostat Safety 490°F Open	60102-102
Thermostat 450°F Oven	30402-27
Terminal Block 3 Pole	30501-02
Terminal Block 24 Position Quick Disconnect	30503-01
Relay 240 VAC	30600-02
Contactor 3 Pole 24 VAC (Heat)	30700-06
Contactor 2 Pole 24 VAC (Motor)	30701-05
Cable Ribbon Assembly	31110-13
Transformer 480/240 VAC	31400-04
Transformer 120-208-240/24 VAC	31400-07
Transformer 240/12 VAC	31400-26
Circuit Breaker 250V 50A 1 Pole	31800-01
Circuit Breaker 480V 50A 3 Pole	31800-04
Circuit Board Display	40102-25
Circuit Board Microprocessor	40102-26
Probe Temperature Sensor	41100-12
Oven Rack	50200-34
Oven Rack Slide	50200-83
Door Handle 11 1/2" Long Black "T" Style	50800-12
Complete Door Assembly	51100-53
Baffle	60101-621
Door Magnet	60102-147
Top Panel	60102-136
Rear Panel	60102-1361
Right Hand Panel	60102-1364
Switch Micro Convection Oven Door (Before V-27971 & After W-48418 and all reversible doors)	51100-18
Switch, Plunger Oven Door (Between V-27971 & W-48418, except for reversible doors)	30301-11
Door Seal	60102-97
Panel Label, Purple Plus	60101-7662
Door Hinge Assembly, Upper and Lower	50313-030
Knob Thermostat 450°F Oven	70701-28
Window Assembly, Oven Door	71301-04
Blower Wheel	71500-06
Blower Wheel (Steam Units)	51100-60
Wiring Harness, Element	EH-550
Wiring Harness, Power Switch	EH-554
Wiring Harness, High Voltage Control	EH-551
Wiring Harness, Low Voltage Control	EH-553

# PARTS LIST

## Range Top

<b>Description</b>	<b>Part No.</b>
Griddle Element, 208 Volt	11030-45
Griddle Element, 240 Volt	11030-46
Griddle Element, 480 Volt	11030-47
Hot Plate Element, 208 Volt	11010-341
Hot Plate Element, 240 Volt	11010-351
Hot Plate Element, 480 Volt	11010-361
French Plate Element, 208 Volt	11120-12
French Plate Element, 240 Volt	11120-13
French Plate Element, 480 Volt	11120-14
French Plate Frame Assembly	50800-82
Griddle Thermostat, 450°F	30402-08
Hot Plate Thermostat, 850°F	30402-23
French Plate Six-heat Switch	30304-09
Knob, Griddle Thermostat, 450°F	70701-16
Knob, Hot Plate Thermostat, 850°F	70701-35
Knob, French Plate, Six-heat Switch	70701-41
Indicator Light, 240 Volt	31601-01
Indicator Light, 480 Volt	31601-02
Element Pan Assembly	50200-92

# WIRING DIAGRAM 208/240V AP



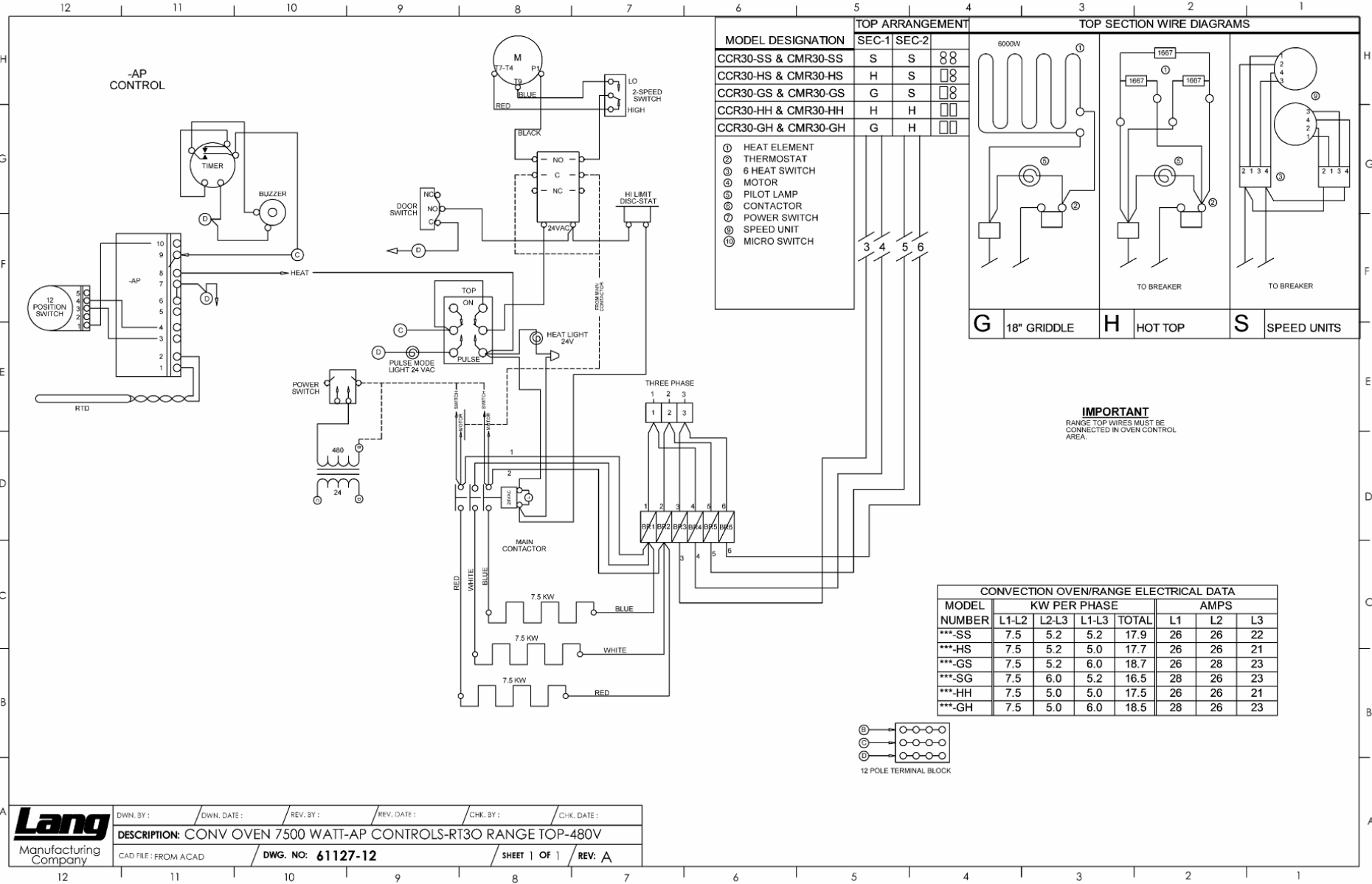
**Lang Manufacturing Company**

DWN. BY: / DWN. DATE: / REV. BY: / REV. DATE: / CHK. BY: / CHK. DATE:

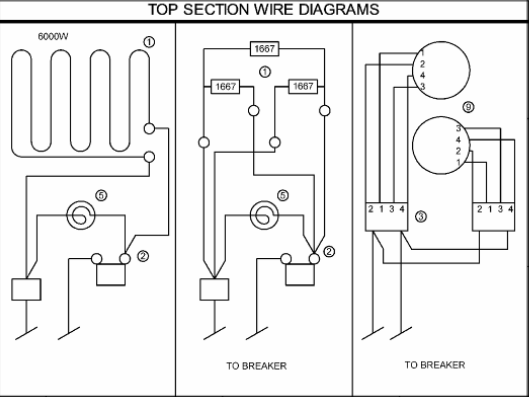
DESCRIPTION: CONV OVEN 7500 WATT-AP CONTROLS-RT30 RANGE TOP-208/240V

CAD FILE: FROM ACAD / DWG. NO: 61127-11 / SHEET 1 OF 1 / REV: A

# WIRING DIAGRAM 480V AP



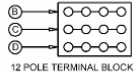
MODEL DESIGNATION	TOP ARRANGEMENT	
	SEC-1	SEC-2
CCR30-SS & CMR30-SS	S	S
CCR30-HS & CMR30-HS	H	S
CCR30-GS & CMR30-GS	G	S
CCR30-HH & CMR30-HH	H	H
CCR30-GH & CMR30-GH	G	H



- ① HEAT ELEMENT
- ② THERMOSTAT
- ③ 6 HEAT SWITCH
- ④ MOTOR
- ⑤ PILOT LAMP
- ⑥ CONTACTOR
- ⑦ POWER SWITCH
- ⑧ SPEED UNIT
- ⑩ MICRO SWITCH

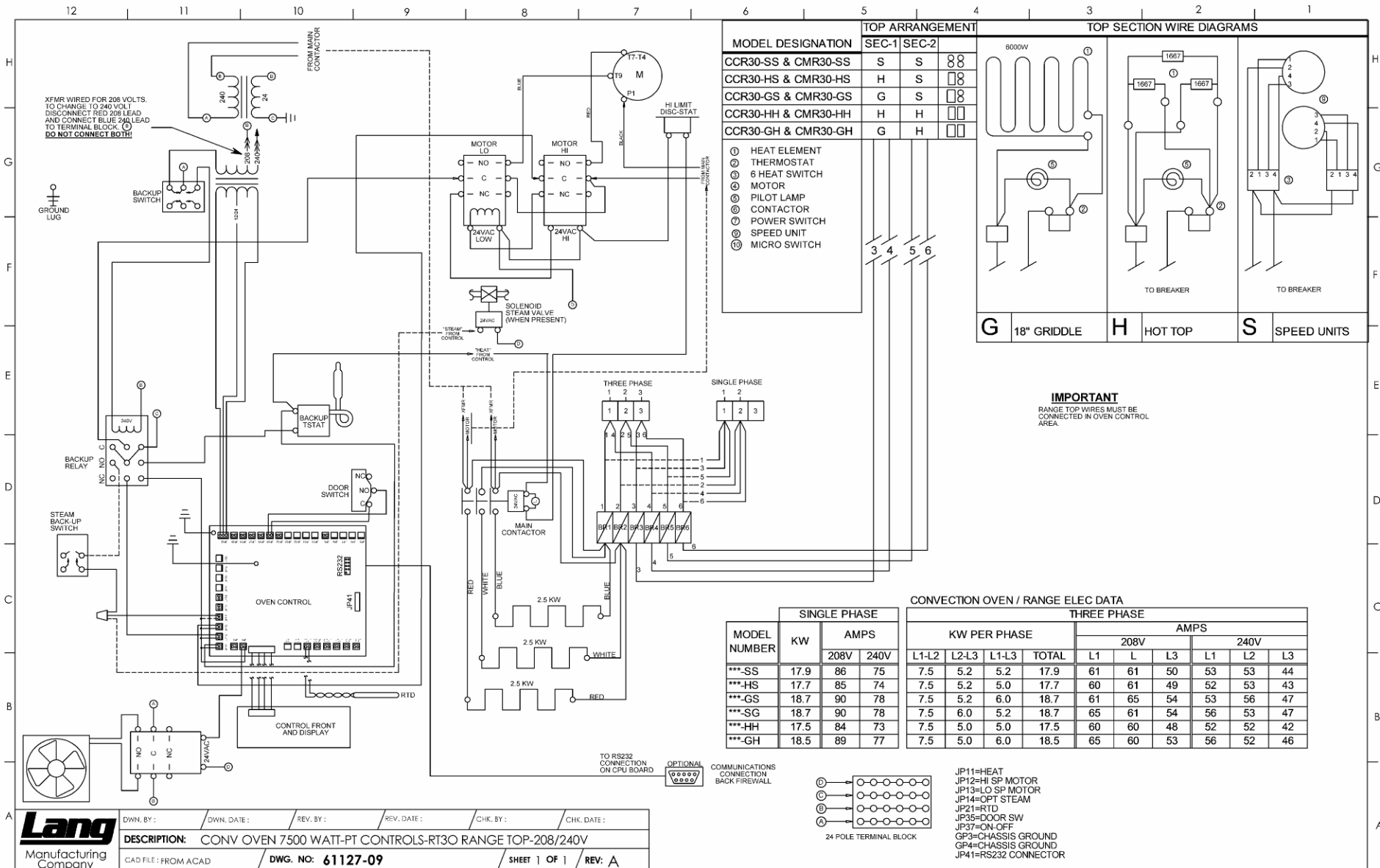
**IMPORTANT**  
RANGE TOP WIRES MUST BE CONNECTED IN GIVEN CONTROL AREA.

MODEL NUMBER	KW PER PHASE				AMPS		
	L1-L2	L2-L3	L1-L3	TOTAL	L1	L2	L3
***-SS	7.5	5.2	5.2	17.9	26	26	22
***-HS	7.5	5.2	5.0	17.7	26	26	21
***-GS	7.5	5.2	6.0	18.7	26	28	23
***-SG	7.5	6.0	5.2	16.5	28	26	23
***-HH	7.5	5.0	5.0	17.5	26	26	21
***-GH	7.5	5.0	6.0	18.5	28	26	23

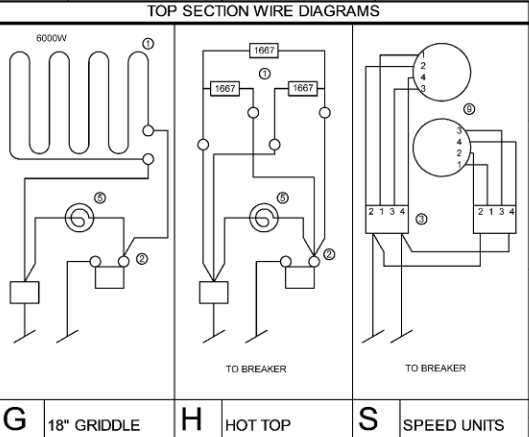


**Lang** Manufacturing Company  
 DWN. BY: / DWN. DATE: / REV. BY: / REV. DATE: / CHK. BY: / CHK. DATE:  
**DESCRIPTION: CONV OVEN 7500 WATT-AP CONTROLS-RT30 RANGE TOP-480V**  
 CAD FILE: FROM ACAD / DWG. NO: **61127-12** / SHEET 1 OF 1 / REV: A

# WIRING DIAGRAM 208/240V PT



MODEL DESIGNATION	TOP ARRANGEMENT	
	SEC-1	SEC-2
CCR30-SS & CMR30-SS	S	S
CCR30-HS & CMR30-HS	H	S
CCR30-GS & CMR30-GS	G	S
CCR30-HH & CMR30-HH	H	H
CCR30-GH & CMR30-GH	G	H



**IMPORTANT**  
RANGE TOP WIRES MUST BE CONNECTED IN OVEN CONTROL AREA

MODEL NUMBER	KW	SINGLE PHASE		CONVECTION OVEN / RANGE ELEC DATA									
		AMPS		THREE PHASE			THREE PHASE			THREE PHASE			
		208V	240V	KW PER PHASE			AMPS			AMPS			
				L1-L2	L2-L3	L1-L3	TOTAL	L1	L	L3	L1	L2	L3
***-SS	17.9	86	75	7.5	5.2	5.2	17.9	61	61	50	53	53	44
***-HS	17.7	85	74	7.5	5.2	5.0	17.7	60	61	49	52	53	43
***-GS	18.7	90	78	7.5	5.2	6.0	18.7	61	65	54	53	56	47
***-SG	18.7	90	78	7.5	6.0	5.2	18.7	65	61	54	56	53	47
***-HH	17.5	84	73	7.5	5.0	5.0	17.5	60	60	48	52	52	42
***-GH	18.5	89	77	7.5	5.0	6.0	18.5	65	60	53	56	52	46

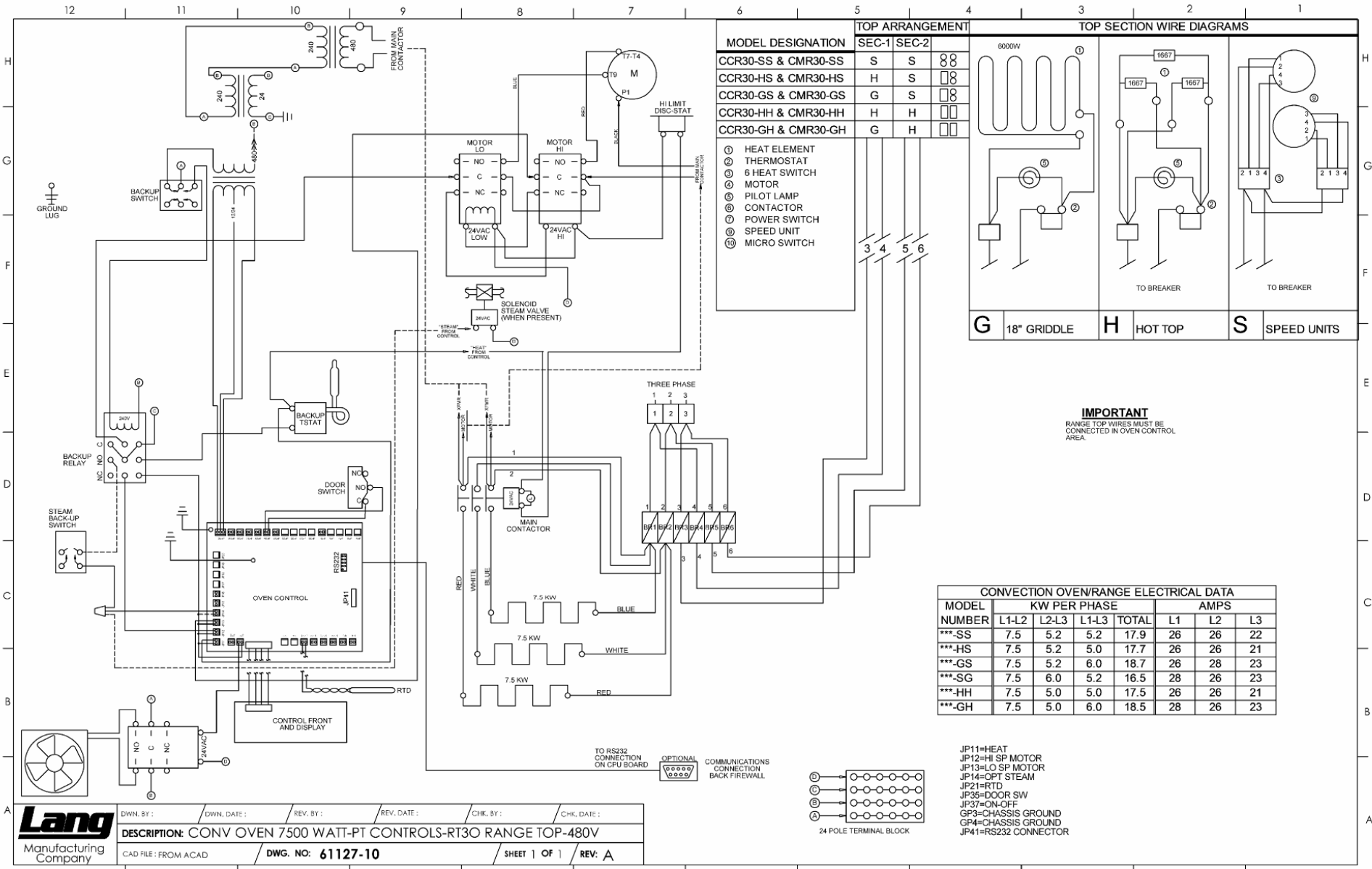
**Lang Manufacturing Company**

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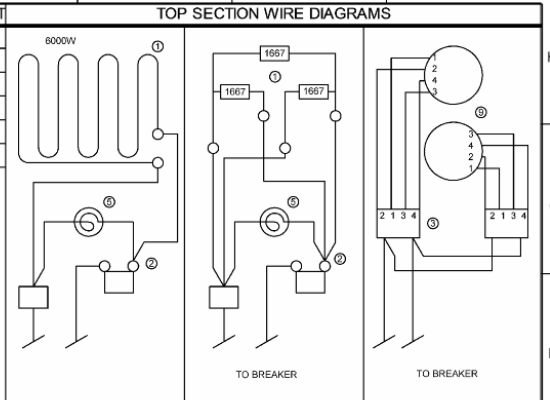
DESCRIPTION: CONV OVEN 7500 WATT-PT CONTROLS-RT30 RANGE TOP-208/240V

CAD FILE: FROM ACAD / DWG. NO: 61127-09 / SHEET 1 OF 1 / REV: A

# WIRING DIAGRAM 480V PT



MODEL DESIGNATION	TOP ARRANGEMENT	
	SEC-1	SEC-2
CCR30-SS & CMR30-SS	S	S
CCR30-HS & CMR30-HS	H	S
CCR30-GS & CMR30-GS	G	S
CCR30-HH & CMR30-HH	H	H
CCR30-GH & CMR30-GH	G	H

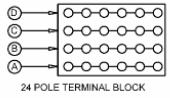


- ① HEAT ELEMENT
- ② THERMOSTAT
- ③ 6 HEAT SWITCH
- ④ MOTOR
- ⑤ PILOT LAMP
- ⑥ CONTACTOR
- ⑦ POWER SWITCH
- ⑧ SPEED UNIT
- ⑩ MICRO SWITCH

**IMPORTANT**  
RANGE TOP WIRES MUST BE CONNECTED IN OVEN CONTROL AREA.

MODEL NUMBER	KW PER PHASE				AMPS		
	L1-L2	L2-L3	L1-L3	TOTAL	L1	L2	L3
***-SS	7.5	5.2	5.2	17.9	26	26	22
***-HS	7.5	5.2	5.0	17.7	26	26	21
***-GS	7.5	5.2	6.0	18.7	26	28	23
***-SG	7.5	6.0	5.2	16.5	28	26	23
***-HH	7.5	5.0	5.0	17.5	26	26	21
***-GH	7.5	5.0	6.0	18.5	28	26	23

- JP11=HEAT
- JP12=HI SP MOTOR
- JP13=LO SP MOTOR
- JP14=OPT STEAM
- JP21=RTD
- JP35=DOOR SW
- JP37=ON-OFF
- GP3=CHASSIS GROUND
- GP4=CHASSIS GROUND
- JP41=RS232 CONNECTOR



DWN. BY: / DWN. DATE: / REV. BY: / REV. DATE: / CHK. BY: / CHK. DATE:  
**DESCRIPTION: CONV OVEN 7500 WATT-PT CONTROLS-RT30 RANGE TOP-480V**  
 CAD FILE: FROM ACAD / DWG. NO: **61127-10** / SHEET 1 OF 1 / REV: A

