







**Installation,
Operation, and
Maintenance Instructions
Range Top with Convection Oven**

**Model RT30S (CF)
RT30A-208VCF**

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

DANGER	POTENTIALLY HAZARDOUS SITUATION, WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH.	
WARNING	POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.	
CAUTION	POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY.	
NOTICE	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.

Model #:	Purchased From:
Serial #:	Location:
Date Purchased:	Date Installed:
Purchase Order #:	For Service, Call:

Table of Contents

Chapter	Page
TABLE OF CONTENTS.....	3
READ FIRST	4
EQUIPMENT DESCRIPTION.....	6
UNPACKING	7
INSTALLATION	8
INITIAL START-UP.....	11
OPERATION.....	12
MAINTENANCE & CLEANING PROCEDURES	15
TROUBLE SHOOTING.....	16
PARTS LIST	18
WIRING DIAGRAM.....	20

CAUTION	<p>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.</p> <p>ANY STAND, COUNTER OR OTHER DEVICE ON WHICH RANGE WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE RANGE. SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.</p>
DANGER	<p>THIS APPLIANCE MUST BE GROUNDED AT THE TERMINAL PROVIDED. FAILURE TO GROUND THE APPLIANCE COULD RESULT IN ELECTROCUTION AND DEATH.</p>
WARNING	<p>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.</p>



NOTICE	<p>The data plate is located on the right side of the oven. The range voltages, 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.</p> <p>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.</p> <p>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.</p>
---------------	--



CAUTION	<p>ALWAYS KEEP THE AREA NEAR THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS AND DO NOT OBSTRUCT FLOW OF COMBUSTION OR VENTILATION AIR.</p> <p>KEEP FLOOR IN FRONT OF EQUIPMENT CLEAN AND DRY. IF SPILLS OCCUR, CLEAN IMMEDIATELY TO AVOID THE DANGER OF SLIPS OR FALLS.</p>
WARNING	<p>KEEP WATER AND SOLUTIONS OUT OF CONTROLS. NEVER SPRAY OR HOSE CONTROL CONSOLE, ELECTRICAL CONNECTIONS, ETC.</p>
CAUTION	<p>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.</p>



NOTICE	<p>Never leave a chlorine sanitizer in contact with stainless steel surfaces longer than 10 minutes. Longer contact can cause corrosion.</p>
---------------	--



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.



CAUTION

USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY STAR 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 switches per individual French Plate.

Oven

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 Star 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.

CAUTION

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.

ANY STAND, COUNTER OR OTHER DEVICE ON WHICH RANGE WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE RANGE. SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.



Remove range from skid and place in intended location.

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.



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 R30S (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 R30S 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.

Reversing the door

1. Disconnect the 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
3	2	50313-031	HINGE PIN WELDMENT
4	2	EH-267	EH HINGE COVER
5	2	73201-19	Bronze Bearing - Flanged 620C0 x 500D x 500
6	2	73201-01	Bronze Thrust Bearing 40500 x 500D x .125
7	2	20109-05	SCRW SIS 1/4-20 X 3/4 FLT HD PHIL
8	8	20109-15	10-32x1/2 PM PHIL 18-8 Stainless Screw
9	1	EH-189-1	BOTTOM HINGE PLATE ASSY
10	1	CR20-148	UPPER HINGE COVER FOR EH
11	1	EH-285-1	EH HINGE - TOP - FOR SVC KIT
12	1	EH-286-1	EH HINGE - BOTTOM - FOR SVC KIT

INSERT BEARINGS (ITEMS "5") INTO THE HINGES (ITEMS "1" & "2") AS SHOWN THEN REAM WITH A 5/16 REAMER.

WHEN CHANGES SPECIFIED
CONSULT THE JIB & NOTES

TOLERANCES ARE:
DIMENSIONS IN INCHES
FRACTIONS DECIMALS MILLIMETERS
1/16 ± .005
1/32 ± .003
3/16 ± .004
1/8 ± .003
3/16 ± .004
1/4 ± .005

DESCRIPTION: EH & ECOH HINGE REPLACEMENT KIT

MODEL: EHS

SHEET 1 OF 1

DWG NO: 50313-030

REV: C

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, and 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, and 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.

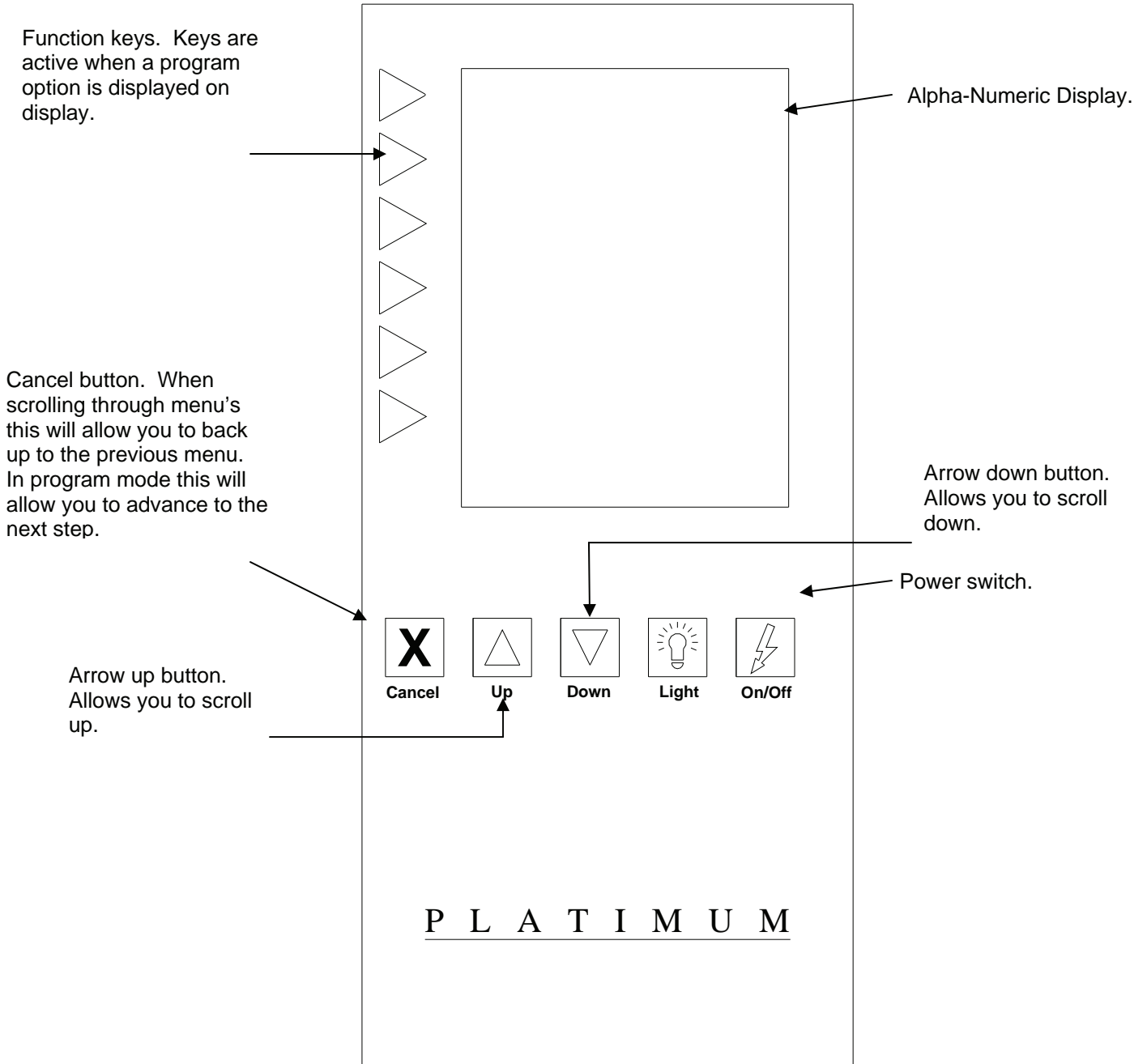
NOTICE

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.



Initial Start Up cont'd.

Oven



Typical Operation Sequence

Control	Indicator
Press the On/Off switch.	Control panel comes on; "LANG, Run Oven, Time Date Program" is displayed
Select "Run Oven" .	Products that can be baked are displayed
Select product button next to Icon desired.	"Preheating to XXXF" is displayed
<i>Beeper sounds briefly.</i>	"Ready" is indicated
Select product to start.	Product selection for that temperature is displayed
Select product to start.	"Select shelf" is displayed.
Press product button next to desired shelf.	Icon chosen will be displayed and the countdown will begin
<i>Beeper sounds continuously.</i>	"DONE" is displayed, press button and remove product from the 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 will be shortened and cooking temperatures 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.

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 stockpots 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 and Cleaning

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.	
NOTICE	Never leave a chlorine sanitizer in contact with stainless steel surfaces longer than 10 minutes. Longer contact can cause corrosion.	

Cleaning

- Always start with a cold range.
- The stainless exterior can easily be cleaned using a 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 blower wheel.
- The oven racks, rack slides and interior may be cleaned using oven cleaner.
- Discoloration or heat tint may be removed using carbon release oven cleaner.
- Rub in the direction of the metal's grain.

Troubleshooting

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	No power to 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 Failed Element
Oven motor will not run	Power Switch is not "ON" Product not selected Failed Transformer Failed Contactor Failed Motor Failed Circuit board
Product burning	Failed Probe Failed Circuit board
Product under done	Failed Probe Failed Circuit board
Hotplate will not heat	No power to Unit Defective Thermostat Defective element
French plate will not heat	No power to Unit Failed 6-heat switch Failed element
Griddle plate will not heat	No power to Unit Failed Thermostat Failed element

Troubleshooting cont'd.

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.



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	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*

Range Top

Possible Cause	Test
Failed thermostat	Verify calibration*
Failed element	Remove the wires and check for continuity across the element*
Failed 6-heat switch	Call factory or consult service manual for proper tests

CAUTION

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



Parts List

June 18, 2010, Rev.A

RT30 RANGE TOP			
Part No.	Description	Qty	Application
2B-50200-34	RACK HALF SIZE OVENS	5	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2B-50200-83	RACK SLIDE EHS	2	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-30301-02	SWT MICRO #2HLT-5 UNIMAX	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-30303-06	SWT TOG ON-ON DPDT BLK	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-30304-09	SWTROT 6 HEAT+OFF208/240V	2	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, RT30G-208VCF, R30CPTG208CF, RT30G-240VCF, RT30G-480VCF, R30CPTG480CF
2E-30500-07	TRM BLOCK 3PLELRGE 125AMP	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF
2E-30500-08	TRM BLOCK 2 POLE SMALL 95	1	RT30D-208VCF, R30CPTD208CF, RT30D-240VCF, RT30D-480VCF, R30CPTD480CF, RT30F-208VCF, R30CPTF208CF, RT30G-208VCF, R30CPTG208CF, RT30G-240VCF, RT30G-480VCF, R30CPTG480CF
2E-30500-09	TRM BLOCK 3 POLE SMALL 95	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-30503-01	TRM BLOCK 24 POS QK CON	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-30600-02	RELAY 240VAC 3FORMC FLNG	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-30700-06	CONTC3POLE35A24VAC50/60HZ	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-30701-05	CONTC 2POLE 30A 24VAC P &	3	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-31200-02	LUG GROUNDING UL APPROVED	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-31200-08	LUG GROUNDING TWO HOLE	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-31400-04	XFRMR 480/240VAC 100VA	1	R30CPTG480CF
2E-31400-07	XFORMR120-208-240/24V40VA	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-31400-26	XFORMR 208-240/24-12 40VA	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2E-31800-01	CB 250V50A 1 POLE CRLNGSW	6	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF
2E-31800-04	CB 480V 50A 3 POLE	1	R30CPTG480CF
2E-41100-12	SENSOR EHS OVEN 450 DEG	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2J-31601-01	PILOT LT 250V 6LEAD BLK	1	RT30D-208VCF, R30CPTD208CF, RT30D-240VCF, R30CPT480CF, R30CPTF208CF, RT30G-208VCF, R30CPTG208CF, RT30G-240VCF
2J-31601-01	PILOT LT 250V 6LEAD BLK	2	RT30C-208VCF, RT30C-208VKR, R30DPTC208CF, RT30F-208VCF
2J-31601-02	PILOT LT 480V 6LEAD BLK	1	RT30D-480VCF, RT30G-480VCF, R30CPTG480CF
2J-31601-02	PILOT LT 480V 6LEAD BLK	2	RT30F-480VCF
2J-40102-25	DSPLY 320X240 DB170-001	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2J-40102-26	MAIN BOARD, MDL.CA170-001	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2N-11010-34	HOTPLATE 208V 5000W CAST	4	RT30C-208VCF, RT30C-208VKR, R30DPTC208CF, R30CPT208CF, RT30D-240VCF, RT30D-480VCF

Parts List

June 18, 2010, Rev.A

2N-11030-45	ELMNT GRID 18 RANGE 208V	1	RT30D-208VCF, R30CPTD208CF, R30CPTD480CF, RT30F-208VCF, RT30G-208VCF, R30CPTG208CF
2N-11030-46	ELMNT GRID 18 RANGE 240V	1	RT30D-240VCF, RT30G-240VCF
2N-11030-47	ELMNT GRID 18 RANGE 480V	1	RT30D-480VCF, RT30G-480VCF, R30CPTG480CF
2N-11030-55	ELE GRD 30 RNGE 208V5.5KW	2	RT30F-208VCF, R30CPT208CF
2N-11030-58	ELE GRD 30 RNGE 480V5.5KW	2	RT30F-480VCF
2N-11090-22	ELE EHS OVN 480VAC 7.5KW	1	R30CPTG480CF
2N-11090-23	ELMNT EHS OVEN 208VAC 5.0	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2N-11090-23	ELMNT EHS OVEN 208VAC 5.0	1	R30CPTG208VCF
2N-11120-12	ELMNT TK 208V 2600W	2	RT30D-208VCF, R30CPTD208CF, R30CPTD480CF, RT30F-208VCF, RT30G-208VCF, R30CPTG208CF
2N-11120-13	ELMNT TK 240V 2600W	2	RT30D-240VCF, RT30G-240VCF
2N-11120-14	ELMNT TK 480V 2600W	2	RT30D-480VCF, RT30G-480VCF, R30CPTG480CF
2P-51001-12	SPRNGCOMPRSN.665IDX1.4LNG	3	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2P-51001-19	SPRING SWT DR HINGE EHS	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2P-51003-01	SPRING LEAF FOR EGO TK	2	RT30D-208VCF, R30CPTD208CF, RT30D-240VCF, RT30D-480VCF, R30CPTD480CF, RT30F-208VCF, R30PTF208CF, R30CPTG208CF, R30CPTG480CF
2P-70201-01	BRNZBR.505IDX.8750DX.175	2	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2P-70201-19	BRNZBRFLN1/2IDX5/8ODX3/8	2	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2P-72900-04	CSTER RIGID 3,5/16W TRD.	2	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2P-72901-17	CSTR SWVL W/BRK 35/16TRD	2	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2Q-71301-04	WINDOW ASSY 9-5/8X16-5/8	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2R-50800-12	DOOR T HANDLE 11 1/2 LNG	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2R-70700-01	KNOB BLNK UNIVERSAL BLACK	2	RT30C-208VCF, RT30C-208VKR, RT30D-240VCF, RT30D-480VCF, RT30F-480VCF
2R-70700-01	KNOB BLNK UNIVERSAL BLACK	3	RT30D-208VCF, R30DPTC208CF, R30DPTC480CF, RT30F-208VCF, R30PTF208CF, RT30G-208VCF, RT30G-240VCF, RT30G-480VCF
2R-70700-01	KNOB BLNK UNIVERSAL BLACK	4	RT30CPTD208CF, R30CPTG208CF, R30CPTG480CF
2R-70702-08	DIAL PLT 450° 72C/T	2	RT30F-480VCF
2R-70702-34	DIAL PLT 6-HEAT SWITCH	2	RT30D-240VCF
2T-30401-09	STAT FXD 500 DEG OPEN	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2T-30402-08	STAT ADJ 450o 72 C/T	1	RT30D-208VCF, R30CPTD208CF, RT30D-240VCF, RT30D-480VCF, R30CPTD480CF, R30CPTF208CF, RT30G-208VCF, R30CPTG208CF, RT30G-240VCF, RT30G-480VCF, R30CPTG480CF
2T-30402-08	STAT ADJ 450o 72 C/T	2	RT30F-208VCF
2T-30402-23	STAT ADJ 850o 48C/T NAK	2	RT30C-208VCF, RT30C-208VKR, RT30D-208VCF, R30DPTC208CF, R30CPTD208CF, RT30D-240VCF, RT30D-480VCF
2T-30402-27	STAT ADJ 450 DEG 48 PILOT	1	R30DPTC208CF, R30CPTD208CF, R30CPTG208CF, R30CPTG480CF
2U-30200-16	MTR 1/3HP 460V/1/60HZ 2SP	1	R30CPTG480CF
2U-30200-17	MTR 1/3HP208/240V1PH2SPD	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF

Parts List

June 18, 2010, Rev.A

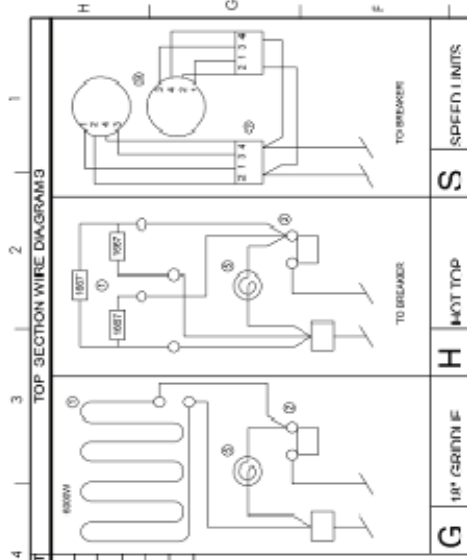
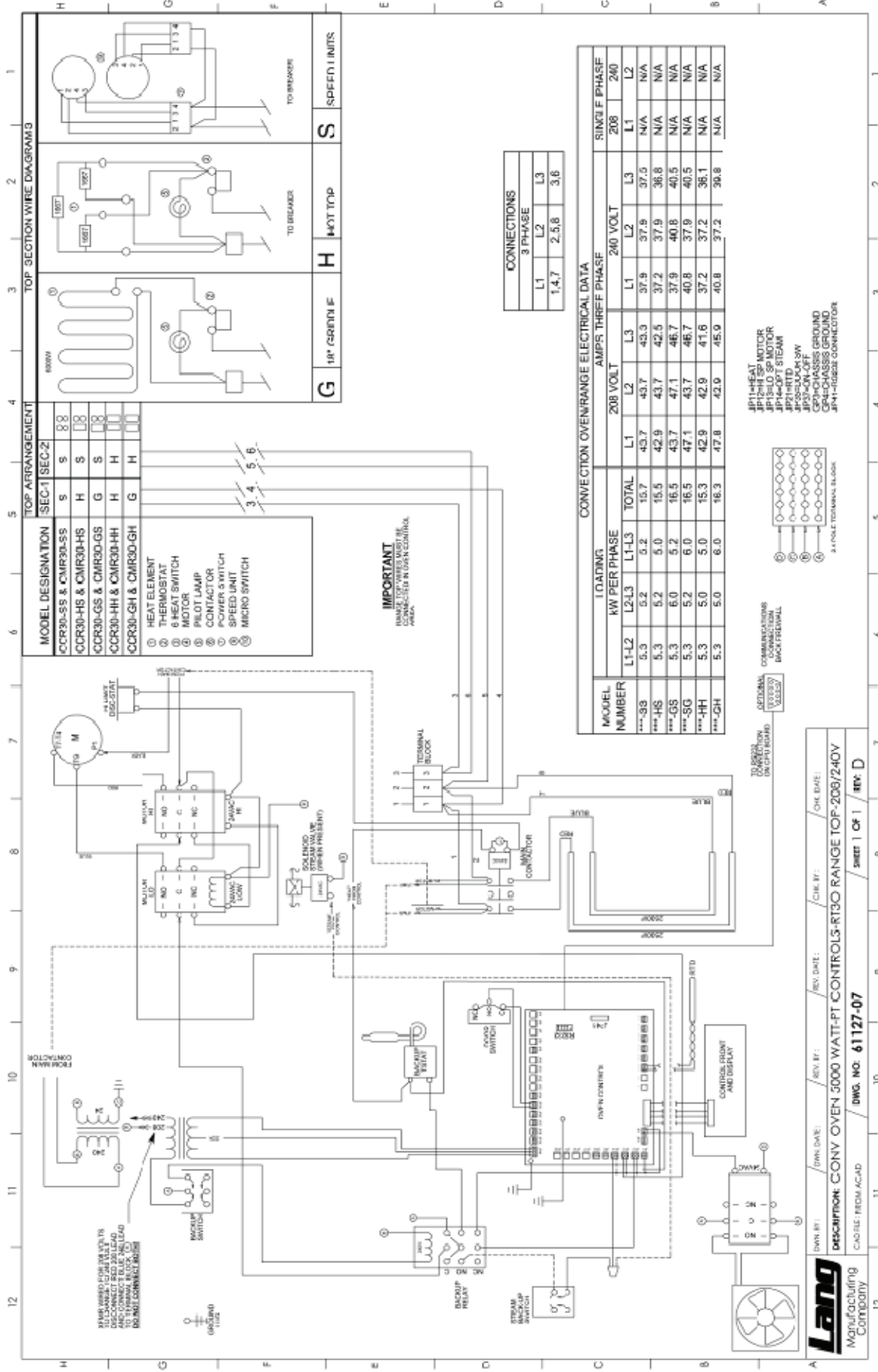
2U-30200-46	MTR W/FAN AXIAL 220VAC70C	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
2U-71500-06	BLOWER WHEEL EHS OVEN	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
N9-32-560-1	WRD TOP 208V 30GRID MOD	1	RT30F-208VCF, R30CPTF208CF
N9-32-332	3 INCH SPREADER-PLATE	2	RT30C-208VCF, RT30C-208VKR, R30DPTC208CF, R30CPT208CF, RT30D-240VCF, RT30D-480VCF
N9-32-550	WRD TOP 208V 2 HOT TOP	1	RT30C-208VCF, RT30C-208VKR, R30DPTC208CF, R30CPT208CF, RT30D-240VCF, RT30D-480VCF
P9-50300-82-2	EGOPLTE FRMEASY PHANT 32/	1	RT30D-208VCF, R30CPTD208CF, RT30D-240VCF, RT30D-480VCF, R30CPTF208CF, RT30G-208VCF, R30CPTG208CF, RT30G-240VCF, RT30G-480VCF, R30CPTG480CF
P9-50300-83	EGO FRNCH HT PLTE FRME SS	1	RT30D-208VCF, R30CPTD208CF, RT30D-240VCF, RT30D-480VCF, R30CPTF208CF, RT30G-208VCF, R30CPTG208CF, RT30G-240VCF, RT30G-480VCF, R30CPTG480CF
P9-70701-38-1	KNOB 850o D PHANTOM	2	RT30C-208VCF, RT30C-208VKR, R30DPTC208CF, R30CPT208CF, RT30D-240VCF, RT30D-480VCF, R30CPTF208CF
P9-70701-41	KNOB ASSY 6 HEAT EGOTK	2	RT30G-208VCF, R30CPTG208CF, RT30G-240VCF, RT30G-480VCF, R30CPTG480CF
P9-CR30-260	SPOT SMALL DRAWER	1	RT30C-208VCF, RT30C-208VKR, RT30D-208VCF, R30DPTC208CF, R30CPTD208CF, RT30D-240VCF, RT30D-480VCF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
P9-CR30-850-1	WRD TOP 208V 2SPD&18TALL	1	RT30D-208VCF, R30CPTG208CF
P9-CR30-851-1	WRD TOP 240V 2SPD&18TALL	1	RT30D-240VCF, RT30G-240VCF
P9-CR30-852-1	WRD TOP 480V 2SPD&18TALL	1	RT30D-480VCF, R30CPTD480CF, RT30G-480VCF, R30CPTG480CF
Q9-EH-550	HRNSS EH-PP&PT PWER@ELE	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
Q9-EH-551	HARNESS EH-PP -PT HIGH V	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
Q9-EH-553	HARNESS EH-PP&PT LOW V	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
Q9-EH-554	HARNESS EH-PP POWER SW.	1	R30DPTC208CF, R30CPTD208CF, R30CPTF208CF, R30CPTG208CF, R30CPTG480CF
ECOH CONVECTION OVENS			
Part No.		Qty	Application
2B-50200-34	RACK HALF SIZE OVENS	5	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2B-50200-83	RACK SLIDE EHS	2	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-30301-02	SWT MICRO #2HLT-5 UNIMAX	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-30303-06	SWT TOG ON-ON DPDT BLK	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-30500-07	TRM BLOCK 3PLELRGE 125AMP	1	ECOHPT208CFR
2E-30500-09	TRM BLOCK 3 POLE SMALL 95	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-30503-01	TRM BLOCK 24 POS QK CON	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-30600-02	RELAY 240VAC 3FORMC FLNG	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-30700-06	CONTC3POLE35A24VAC50/60HZ	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-30701-05	CONTC 2POLE 30A 24VAC P &	3	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-31200-02	LUG GROUNDING UL APPROVED	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF

Parts List

June 18, 2010, Rev.A

2E-31200-08	LUG GROUNDING TWO HOLE	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-31400-04	XFRMR 480/240VAC 100VA	1	ECOH-PT480CF
2E-31400-07	XFORMR120-208-240/24V40VA	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-31400-26	XFORMR 208-240/24-12 40VA	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-31800-01	CB 250V50A 1 POLE CRLNGSW	6	ECOHPT208CFR
2E-31800-04	CB 480V 50A 3 POLE	1	ECOH-PT480CF
2E-41100-12	SENSOR EHS OVEN 450 DEG	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-41500-01	VARIST V47ZA1 OR V56ZA2	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-41500-02	VARIST 230V DC MOV	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-41800-02	PCB GUIDE 6675 6.675 LG	2	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2E-60101-75	EHS CORD KIT BK/DENNY'S	1	ECOHPT208CFC, ECOH-PT208CF
2J-40102-25	DSPLY 320X240 DB170-001	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2J-40102-26	MAIN BOARD, MDL.CA170-001	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2J-40102-51	CIRBD FILTER	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2J-40601-40	RES 270 OHM 1/2W 5% CF	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2N-11090-22	ELE EHS OVN 480VAC 7.5KW	1	ECOH-PT480CF
2N-11090-23	ELMNT EHS OVEN 208VAC 5.0	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT208CF
2P-51001-12	SPRNGCOMPRSN.665IDX1.4LNG	2	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2P-51001-19	SPRING SWT DR HINGE EHS	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2P-70201-01	BRNZBR.505IDX.8750DX.175	2	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2P-70201-19	BRNZBRFLN1/2IDX5/8ODX3/8	2	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2Q-71301-04	WINDOW ASSY 9-5/8X16-5/8	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2R-50800-12	DOOR T HANDLE 11 1/2 LNG	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2R-70700-01	KNOB BLNK UNIVERSAL BLACK	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2T-30402-27	STAT ADJ 450 DEG 48 PILOT	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF
2U-30200-16	MTR 1/3HP 460V/1/60HZ 2SP	1	ECOH-PT480CF
2U-30200-17	MTR 1/3HP208/240V1PH2SPD	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT208CF
2U-30200-46	MTR W/FAN AXIAL 220VAC70C	1	ECOHPT208CFR, ECOHPT208CFC, ECOH-PT480CF, ECOH-PT208CF

Wiring Diagram 208/240



MODEL DESIGNATION

MODEL DESIGNATION	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

LEGEND:

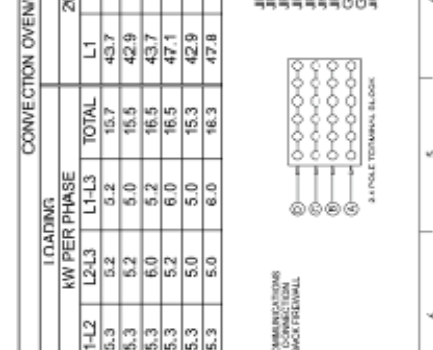
- ① HEAT ELEMENT
- ② THERMOSTAT
- ③ HEAT SWITCH
- ④ MOTOR
- ⑤ PILOT LAMP
- ⑥ CONTACTOR
- ⑦ POWER SWITCH
- ⑧ SPEED LIMIT
- ⑨ MICRO SWITCH

CONNECTIONS

3 PHASE			
L1	L2	L3	
1.4.7	2.5.8	3.6	

CONVECTION OVEN-RANGE ELECTRICAL DATA

MODEL NUMBER	KW PER PHASE			AMPS THREE PHASE			SINGLE PHASE			
	L1-L2	L1-L3	L2-L3	L1	L2	L3	L1	L2	L3	
***-SB	5.3	5.2	5.2	15.7	43.7	43.7	37.9	37.9	37.9	N/A
***-HS	5.3	5.0	5.0	15.5	42.9	43.7	37.2	37.9	36.8	N/A
***-GS	5.3	6.0	5.2	16.5	43.7	47.1	37.9	40.8	40.5	N/A
***-SG	5.3	5.2	6.0	16.5	47.1	43.7	40.8	37.9	40.5	N/A
***-HH	5.3	5.0	5.0	15.3	42.9	41.6	37.2	36.1	36.1	N/A
***-GH	5.3	5.0	6.0	16.3	47.8	45.0	40.8	37.2	36.8	N/A



STAR INTERNATIONAL HOLDINGS INC. COMPANY
Star - Holman - Lang - Wells - Bloomfield - Toastmaster
10 Sunnen Drive, St. Louis, MO 63143 U.S.A.
(800) 807-9054 (314) 781-2777
Parts & Service (800) 807-9054
www.star-mfg.com