

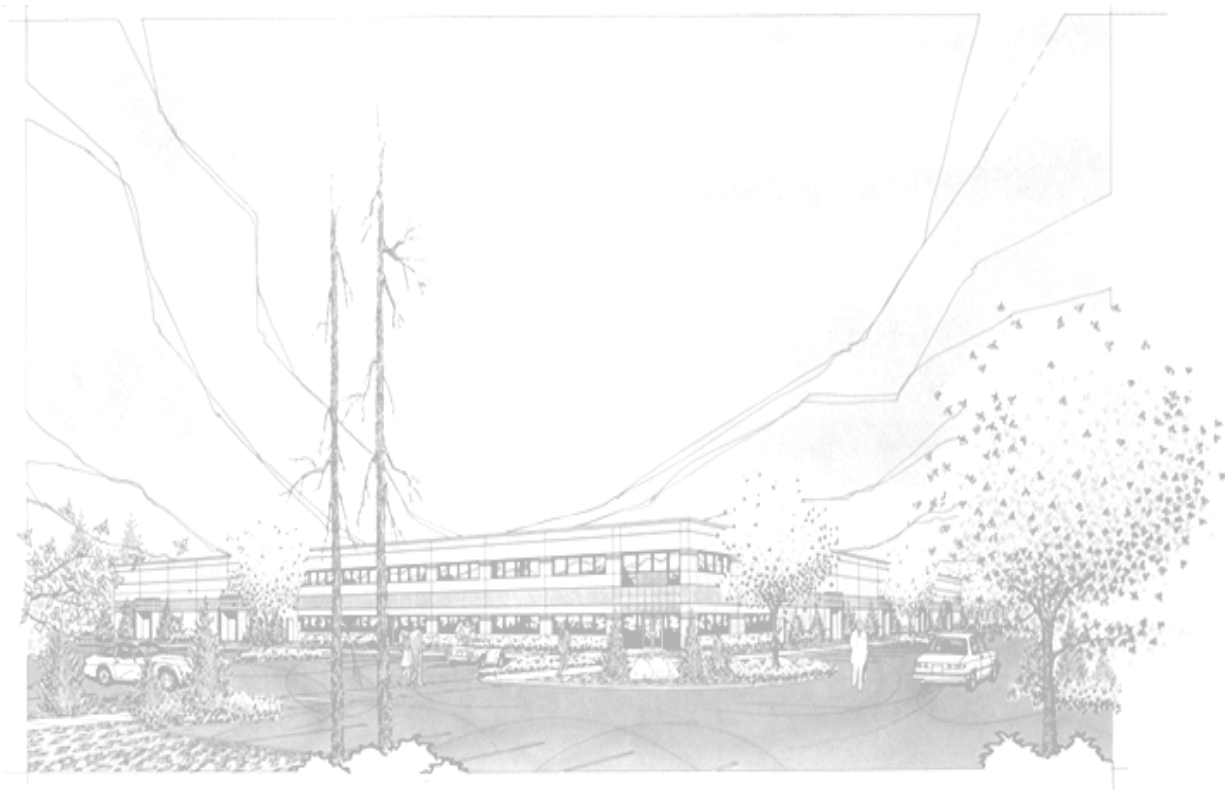
# **Lang**



## **Installation, Operation, Maintenance, & Troubleshooting**

**Model: CLSH-S** 440V Electric Cruise Line Salamander

**Serial:**



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

**FOR YOUR SAFETY**

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

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

**NOTICE: THIS EQUIPMENT IS APPROVED FOR INSTALLATION ONLY ON VESSELS GREATER THAN 65 FEET IN LENGTH, IN ACCORDANCE WITH USCG REGULATIONS IN TITLE 46 CFR 110-113. ANY WIRING USED IN THE INSTALLATION OF THIS APPLAANCE MUST BE STRANDED COPPER.**

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**IMPORTANT****READ FIRST****IMPORTANT**

**CAUTION:** THE SALAMANDER WEIGHS 250 LBS. (113.40 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.



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



**CAUTION:** 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. 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 panel of the unit. The Salamander 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.



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



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



**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:** 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](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 AND DAMAGE TO THE EQUIPMENT AND WILL VOID ALL WARRANTIES.



## **3.1 Receiving the Salamander**

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.

## **3.2 Location**

Prior to un-crating, move the Salamander as near 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.

## **3.3 Un-crating**

The Salamander will arrive completely assembled inside a wood frame covered by cardboard box and strapped to a skid. **Remove the cardboard cover, cut the straps and remove the wood frame.**

**CAUTION:** THE SALAMANDER WEIGHS 250 LBS. (113.40 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.



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



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



Remove Salamander 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. 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 panel of the unit. The Salamander 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.



## 4.1 Electrical Connection

For single deck installations, electrical connection must be made behind the control compartment. For double deck installations, electrical connection must be made behind the control compartment in the cabinet base. 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: CAS STD. C22.1).

Supply wire size must be large enough to carry the amperage load for the number of appliances being installed. Wire size information can be found on the data plate.

## 4.2 Electrical Specifications

TOTAL KW	NOMINAL AMPS PER LINE (440V, SINGLE PHASE)
6.00	13.64

## INITIAL START UP

### **5.1 Initial Start-up**

Before the initial use of the Salamander, the unit must be wiped down thoroughly with a dry rag to remove any oils used in manufacturing. Note: There may be a small amount of smoke from the unit for the first couple of hours of use. This is the result of manufacturing oils burning off and not cause for alarm.

## OPERATION

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

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



### **6.1 Salamander Controls**

The controls are located on the front, right side of the unit. There is one three-position control knob. The settings are: Low, High and Off.

The Salamander rack is adjustable. There are four rack positions available. To set the position, put the product on the rack, push the lever down and forward into one of the positions.



## CLEANING

### 7.1 After-Meal 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.



Empty crumb tray daily or when 1/3 full. It is easily removed for washing.

Clean exterior of the Salamander with hot water and a non-chlorinated cleanser to maintain a gleaming appearance.

### 7.2 Daily Cleaning

The Salamander should be thoroughly cleaned at least once a day (in addition to the normal after-meal cleaning) to insure against the accumulation of foreign material. Keep the inside of the Salamander and metal deck clean.

# TROUBLESHOOTING

## 9.1 Symptoms

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

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 Tests Section 9.2. Refer to Possible Cause and Test columns to identify test procedures.

Symptom	Possible Cause
Salamander will not heat	<ul style="list-style-type: none"><li>Failed element</li><li>Failed control switch</li></ul>
Product burning	<ul style="list-style-type: none"><li>Product is cooked too long</li></ul>

## 9.2 Tests

### NOTICE:

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### 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.**

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



Possible Cause	Test
Product is cooked too long	<ul style="list-style-type: none"><li>No test available; operational condition</li></ul>
Failed control switch	<ul style="list-style-type: none"><li>Check poles on switch for continuity</li></ul>
Failed element	<ul style="list-style-type: none"><li>Remove the wires and check for continuity across the element</li></ul>

### CAUTION:

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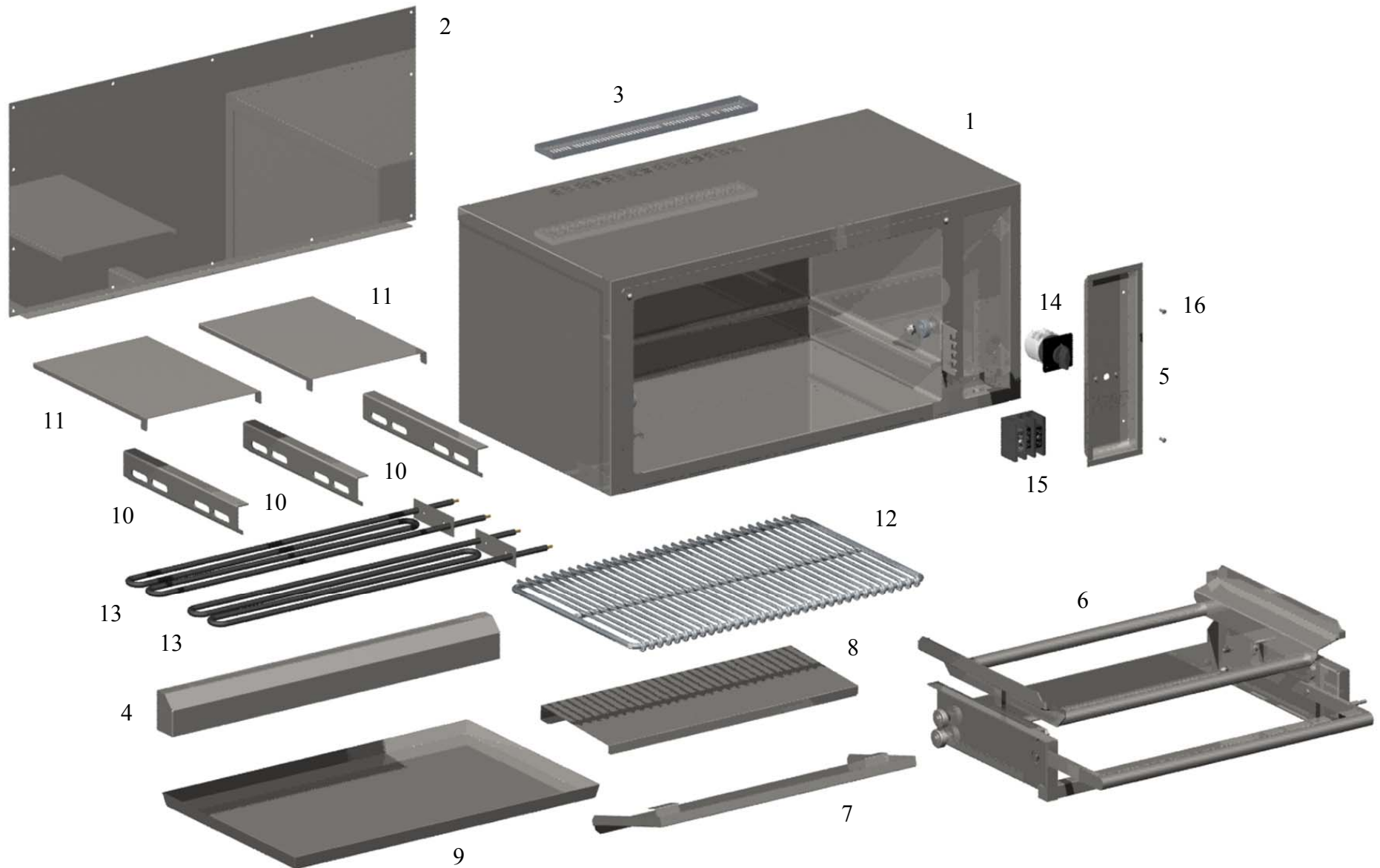


## PARTS LIST

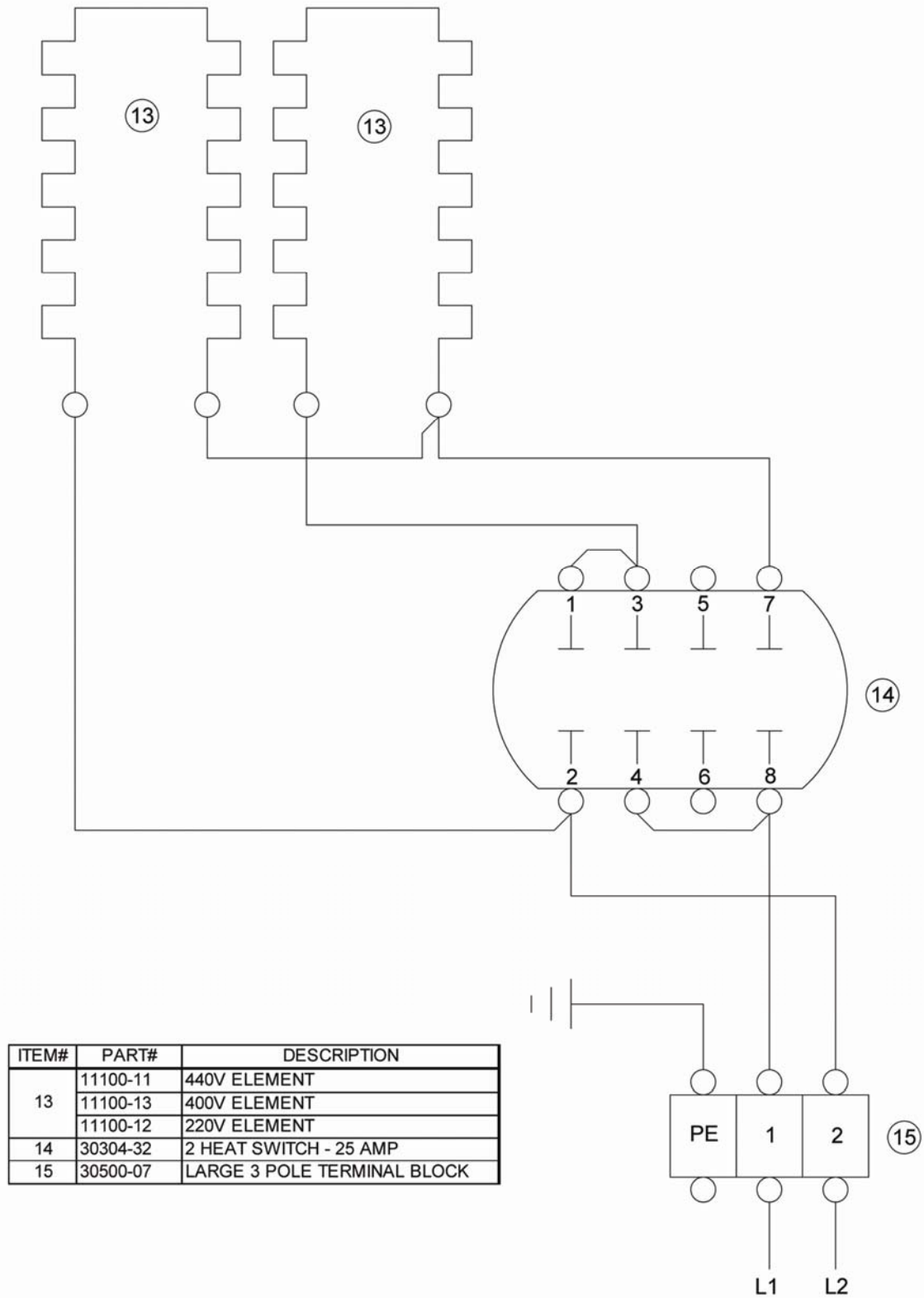
### 36S-SHM-UCLS

Item #	Description	Part Number	Qty
1	Body	N/A	1
2	Body Back	CLS-209	1
3	Vent Trim	CLS-211	1
4	Hood	CLB-212	1
5	Control Panel	CLS-225	1
6	Rack Carrier Assembly	CLS-714	1
7	Rack Drip Pan - Front	CLS-717	1
8	Rack Drip Pan - Rear	CLS-425	1
9	Grease Pane Assembly	CLS-226	1
10	Element Support	CLS-308	3
11	Heat Shield	CLS-427	2
12	Rack	50200-101	1
13	440V Element	11100-11	2
14	2 Heat Switch – 25 amp	30304-32	1
15	3 Pole Terminal Block – 125 amp	30500-07	1
16	Screw, 10-32 x .500 S/S Hex Head	20111-09	4
17	12 Gauge White Wire, UL10126, 150°C (Not Shown)	31101-02	9 FT
18	18 Gauge White Wire, UL10126, 150°C (Not Shown)	31101-03	4 FT
19	12 Gauge Tan Wire, UL5256, 250°C (Not Shown)	31102-02	13 FT

# EXPLODED VIEW



## WIRING DIAGRAM



## NOTES