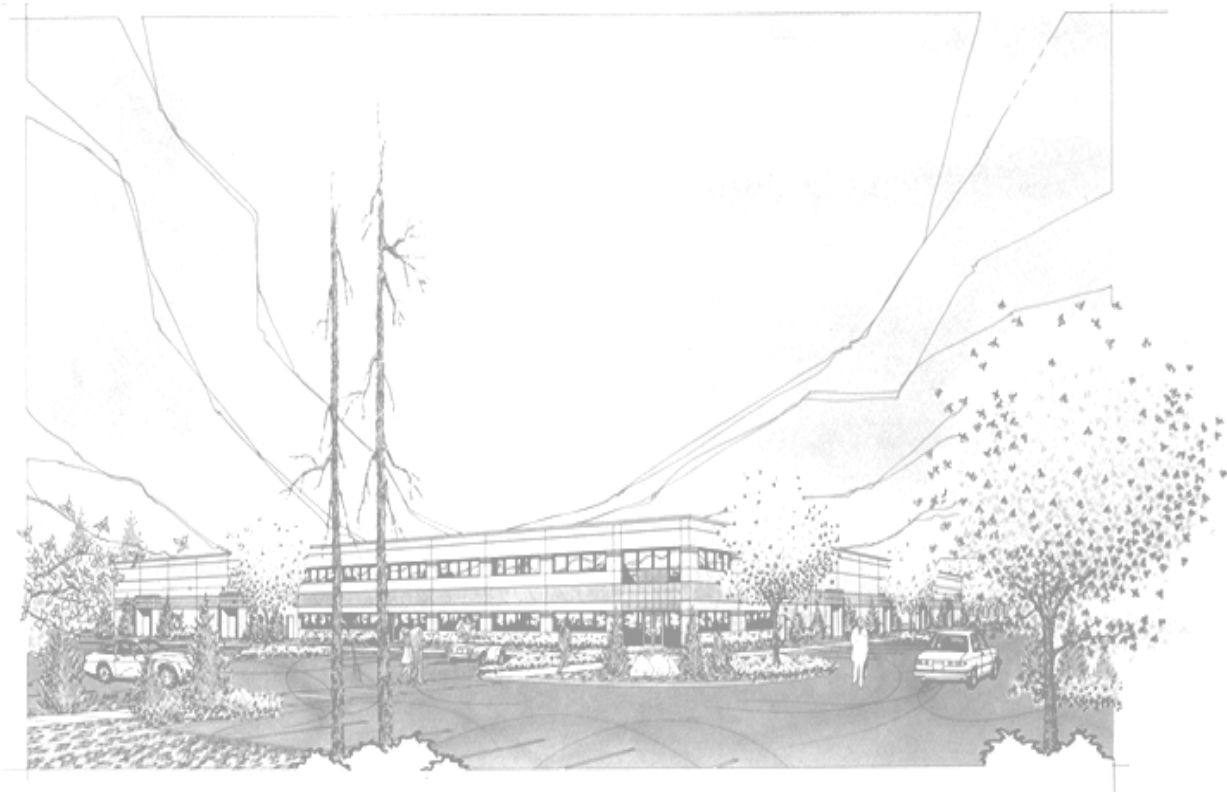




**Installation, Operation, Maintenance, & Troubleshooting**  
**Model: DI-48, Drop-In Griddle**



**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.**

**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> |

# TABLE OF CONTENTS

| <b>CHAPTER</b>                            | <b>PAGE</b> |
|---|-------------|
| 1. TABLE OF CONTENTS.....                 | 3           |
| 2. READ FIRST.....                        | 4           |
| 3. EQUIPMENT DESCRIPTION.....             | 6           |
| 4. UNPACKING.....                         | 7           |
| 5. INSTALLATION.....                      | 8           |
| 6. INITIAL START-UP.....                  | 10          |
| 7. OPERATION.....                         | 11          |
| 8. CLEANING & MAINTENANCE PROCEDURES..... | 12          |
| 9. TROUBLESHOOTING.....                   | 13          |
| 10. PARTS LISTS.....                      | 14          |
| 11. WIRING DIAGRAMS.....                  | 15          |
| 12. WARRANTY.....                         | 17          |

**CAUTION:** THE GRIDDLE IS EXTREMELY HEAVY. 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 GRIDDLE WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE GRIDDLE.



**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 on top of the control box. The griddle 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.



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



**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.



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

**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 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.



### **Lang Model: DI-48** **Electric Drop-In Griddle**

#### **Exterior**

- The Griddle dimensions are 52" (132cm) Wide, 26" (66cm) Deep, and 5 3/8" (13.65cm) High.
- The Sides, Bottom, and Rear are constructed of stainless steel.
- The griddle surface is constructed of 1" thick highly polished steel to reduce hot and cold spots, recovery problems, and ensured even heat through out the griddle.

#### **Control Box**

- The Control box dimensions are 26" (66cm) Wide, 4" (10cm) Deep, and 7 1/8 (18cm) High.
- The Sides, Bottom, and Rear walls are constructed of stainless steel.

#### **Controls**

The DI-48 Griddle comes standard with two 550° thermostats.

# UNPACKING

## Receiving the Griddle

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 griddle 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.

## Un-crating

The griddle 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 GRIDDLE IS EXTREMELY HEAVY. 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 GRIDDLE WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE GRIDDLE.

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

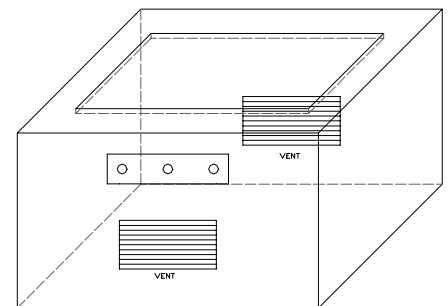
Remove griddle from skid and place in intended location.

## Cabinet Preparation

Cabinet Base must have cross air ventilation. It does not matter if it is on the ends or sides.

If vents are not installed, the controls may overheat rendering the griddle inoperative.

For best results provide a knockout for the control panel a minimum of 12-inches away from the element boxes on the griddle.



# 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 top of the control box. The griddle 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.

## Installing Griddle into Cabinet

Turn the griddle over, taking care not to kink the thermostat capillary tubes.

Set the griddle on the table that it is to be installed in (leaving a hole big enough to slip the control panel through).

Insert the control panel through the hole and out the control opening of the cabinet.

The hole must be a minimum of 12" from the griddle and such that the control box can come out of the cabinet 18" for serviceability.

Lower the griddle plate to sit flat in the table opening.

## 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**).

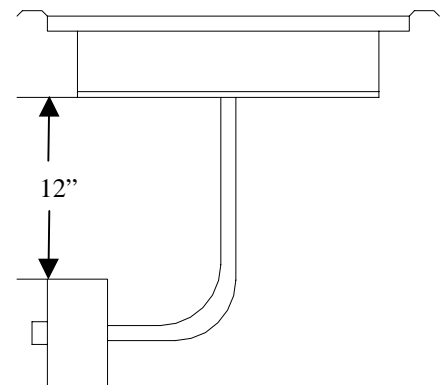
A power connection box is provided for power connection.

This box must be installed a minimum of 18 inches away from the heating elements in the cabinet box.

All electrical connections can be made at this box.

The range can now be connected to power.

**CAUTION:** BE SURE THE POWER SUPPLY VOLTAGE MATCHES THE VOLTAGE SPECIFIED ON THE NAMEPLATE LOCATED ON THE TOP OF THE CONTROL BOX

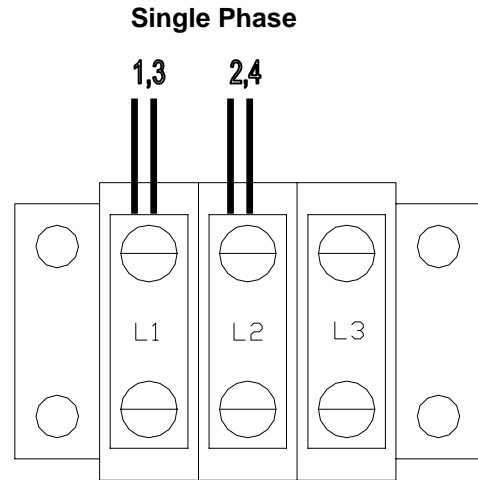
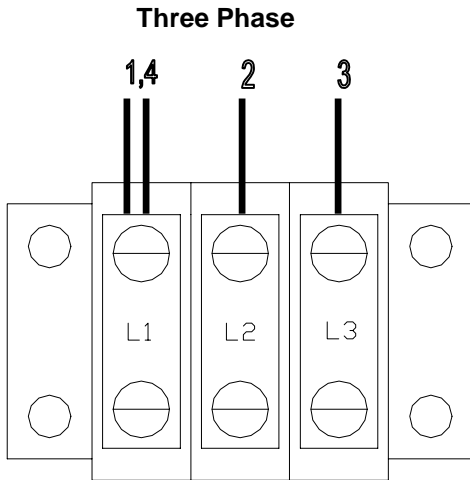




# INSTALLATION CONT'D

| Total<br>K.W.<br>Conn | Three Phase |      |      |          |      |      |          |      |      | Single Phase |       |
|-----------------------|-------------|------|------|----------|------|------|----------|------|------|--------------|-------|
|                       | 208 Volt    |      |      | 240 Volt |      |      | 480 Volt |      |      | 208 V        | 240 V |
|                       | L1          | L2   | L3   | L1       | L2   | L3   | L1       | L2   | L3   | L1           | L2    |
| 12.0                  | 50.0        | 28.8 | 28.8 | 43.3     | 25.0 | 25.0 | 21.7     | 12.5 | 12.5 | 57.7         | 50.0  |

## Phasing



## INITIAL START UP

Prior to putting any griddle into full time operation at normal cooking temperatures, it must be thoroughly "seasoned" or dried out. Moisture absorption in the closed spaces, in the insulation and even inside the heating elements can cause future trouble if not properly treated.

Before seasoning the griddle it is first necessary to remove the shipping preservative from the griddle surface. To do this set add a mild detergent to hot water and wash the griddle plate. Rinse with a damp sponge and dry with a clean rag.

To "season" the griddle, set the thermostat dial to 300°. Allow unit to cycle once. Apply a thin coat of high-grade, non-salted vegetable oil to the griddle surface. Rub the oil into the griddle surface with the flat side of a spatula or a towel. Re-coat any dry spots that appear then wait two minutes and wipe off any excess oil. Repeat these steps at 350°, 400°, 450°, 500°, and 550°.

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



**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.



The griddle is provided with two thermostats for controlling the middle two feet of the griddle surface. The outside one-foot of the griddle is not directly heated.

All cooking should be done on the middle two feet of the griddle surface. All holding should be done on outside one foot of the griddle.

The thermostats are provided with indicator lights that will go off when the griddle section reaches the set temperature.

Turn the thermostat dials to the desired cooking temperature and allow the indicator to cycle on and off a minimum of three times before beginning to cook.

If the product is loaded directly over the griddle thermostat the elements will react much quicker and the unit will heat up faster. If the product is loaded to the sides of the griddle thermostat then the reaction time for the elements to come on will be slightly delayed.

Turn the thermostat dial to the off position at the end of the shift.

## 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.



The griddle should be thoroughly cleaned at least once a week in addition to the normal daily cleaning to insure against the accumulation of foreign material.

**NOTICE:** Any cleaner used should be marked: “SAFE ON ALUMINUM”.



Electric equipment is inherently clean and sanitary, but may become unsanitary if dirt is allowed to accumulate on it. Take advantage of the clean, sanitary features of electric equipment, give it the regular attention that it deserves the same as any other highly perfected machinery, to insure best results and continued high operating efficiency.

## CALIBRATION

### Calibration Check

- Place thermometer or thermocouple in the center of griddle.
- Set thermostat to 350°.
- Allow the griddle to Preheat for at least half an hour.
- Note cycle on temperatures and cycle off temperatures for 3 cycles. (Red indicator light indicates when oven is calling for heat)
- After 3 cycles average the temperature. ( Add all six temperatures and divide by 6)

### Calibration Adjustment

- A 1/16” flat blade screwdriver with a 2” shaft is required to make adjustments on the thermostat.
- Maintain the oven temperature at 350°.
- Without turning the thermostat, remove the knob.
- Locate the adjustment screw at the base of the shaft and insert the screwdriver.
- Grasp the shaft and turn the screwdriver. Counter clockwise to increase and clockwise to decrease (1/8 of a turn will move the temperature 5-7 ° in either direction).
- Reinstall the oven knob and recheck the oven temperature.

## Symptoms

What follows is a chart of Symptoms, Possible Causes, and Remedy's 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 and the Remedy to column for possible solutions.

| SYMPTOM                 | POSSIBLE CAUSE  |
|-------------------------|---|
| Griddle will not heat   | <ul style="list-style-type: none"> <li>• No power to Unit</li> <li>• Defective Thermostat</li> <li>• Defective element</li> </ul> |
| Product is under cooked | <ul style="list-style-type: none"> <li>• No power to Range</li> <li>• Thermostat out of calibration</li> </ul>                    |
| Product is burning      | <ul style="list-style-type: none"> <li>• Thermostat out of calibration</li> </ul>   |

## TESTS

**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.

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 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> |

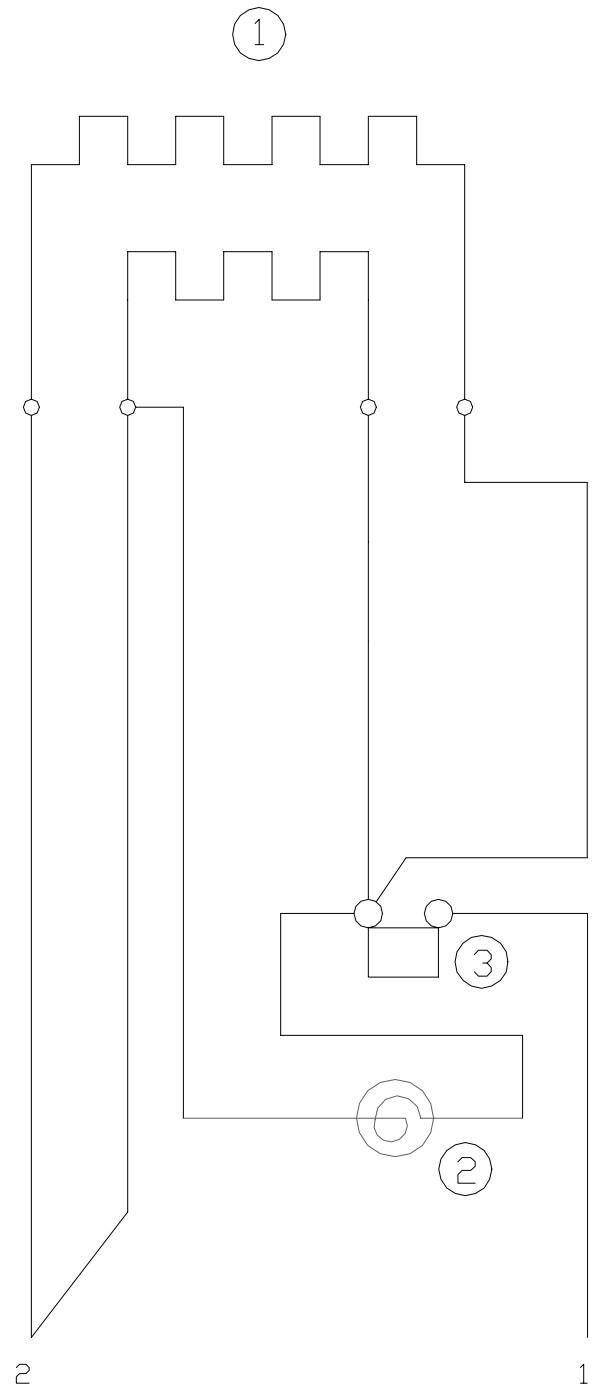
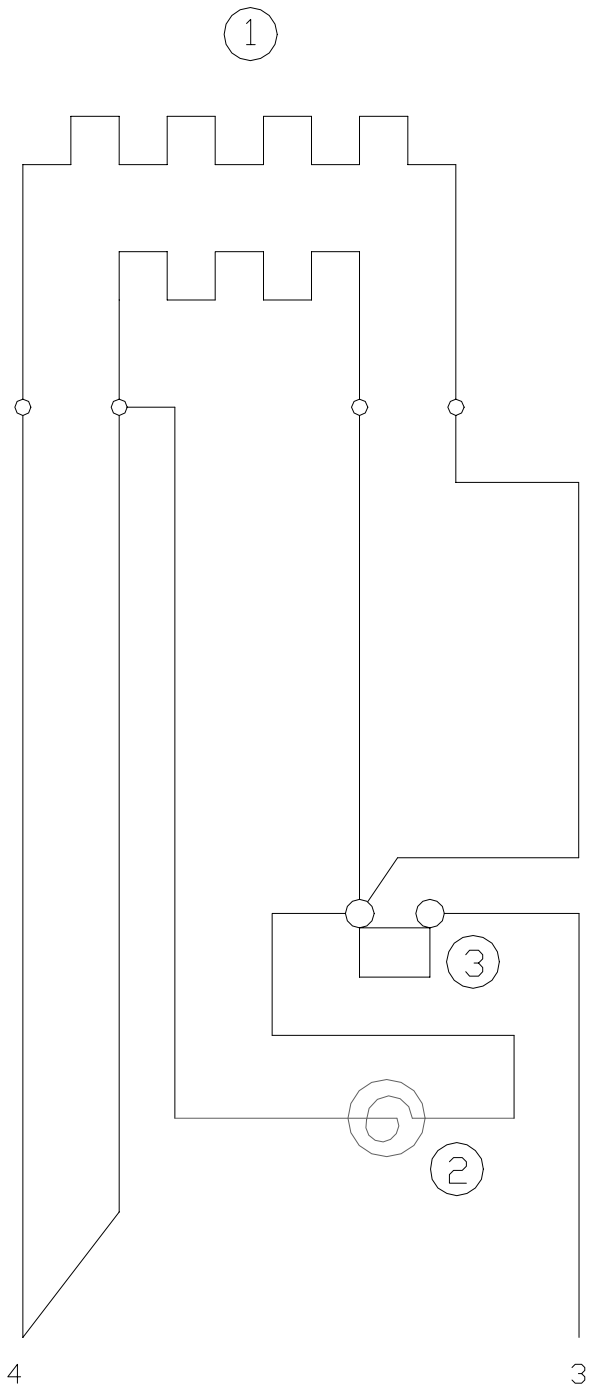
**CAUTION:** USE OF ANY REPLACEMENT PARTS OTHER THAN THOSE SUPPLIED BY LANG OR THEIR AUTHORIZED DISTRIBUTORS CAN CAUSE BODILY INJURY TO THE OPERATOR AND DAMAGE TO THE EQUIPMENT AND WILL VOID ALL WARRANTIES.



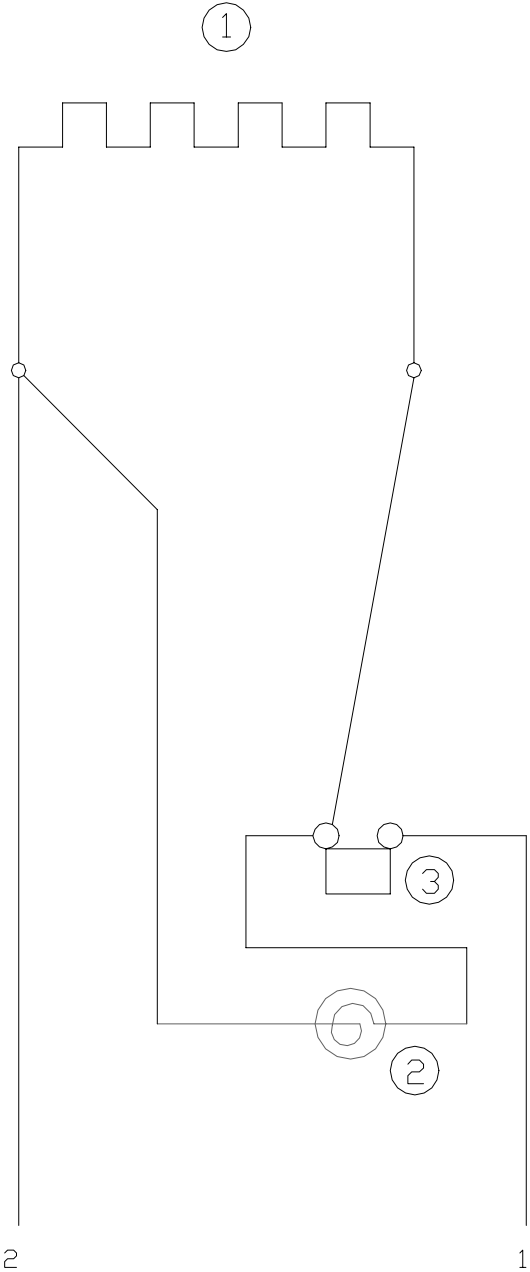
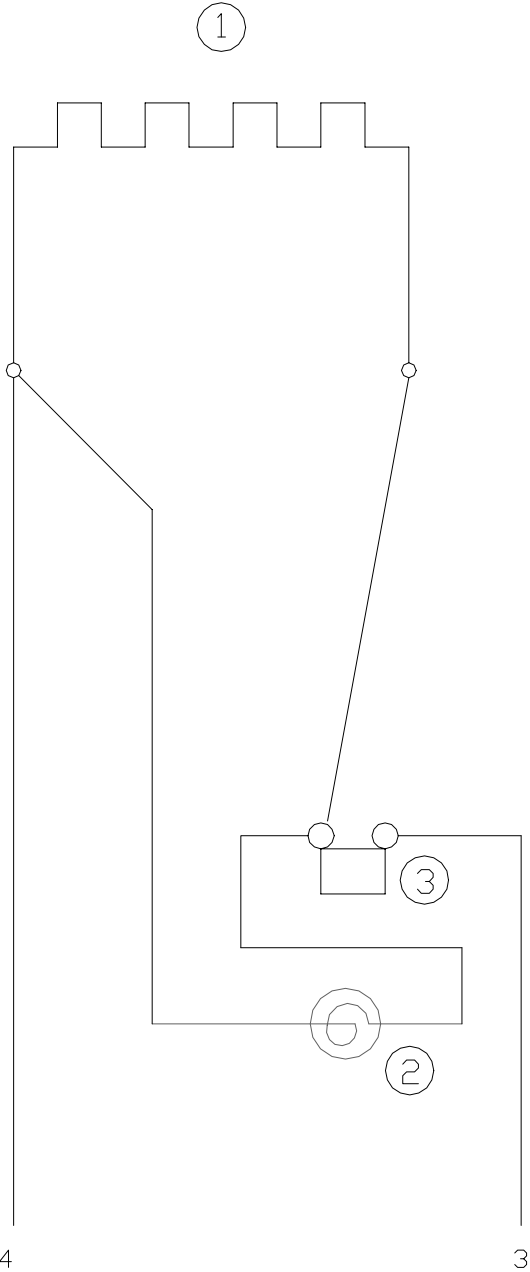
## PARTS LIST

| <b>DESCRIPTION</b>  | <b>PART NO.</b> |
|---|-----------------|
| Griddle Element 208 / 240Volt O/S 4500 Watts / 6000 Watts | 11030-29        |
| Griddle Element 208 Volt I/S 1491 Watts                   | 11030-30        |
| Griddle Element 480 Volt 5991 Watts                       | 11030-31        |
| Thermostat 550° F 48" Capillary Tube                      | 30402-07        |
| Knob Thermostat 550°                                      | 70701-15        |
| Indicator Lamp 240Volt                                    | 31601-01        |
| Terminal Block 3-Pole                                     | 30500-09        |

# WIRING DIAGRAM 208 VOLT



**WIRING DIAGRAM 240 / 480 VOLT**





***Lang Manufacturing Limited Warranty  
to Commercial Purchasers\*  
(Domestic U.S., Hawaii, &  
Canadian Sales only.)***

Lang Manufacturing Equipment (“Lang Equipment”) has been skillfully manufactured, carefully inspected and packaged to meet rigid standards of excellence. Lang warrants its Equipment to be free from defects in material and workmanship for (12) twelve consecutive months, with the following conditions and subject to the following limitations.

**I.** This parts and labor warranty is limited to Lang Equipment sold to the original commercial purchaser/users (but not original equipment manufacturers), at its original place of installation, in the continental United States, Hawaii and Canada.

Quartz elements are warranted for ninety(90) days from the date of installation.

**II.** Damage during shipment is to be reported to the carrier, is not covered under this warranty, and is the sole responsibility of purchaser/user.

**III.** Lang, or an authorized service representative, will repair or replace, at Lang’s sole election, and Lang Equipment, including but not limited to, safety valves, gas and electric components, found to be defective during the warranty period. As to warranty service in the territory described above, Lang will absorb labor and portal to portal transportation costs (time & mileage) for the first (12) twelve months from the date of installation or eighteen (18) months from date of shipment from Lang Manufacturing, which ever comes first.

**IV.** This warranty does not cover routine general maintenance, periodic adjustments, as specified in operating instructions or manuals, and consumable parts such as quartz elements, or labor costs incurred for removal of adjacent equipment or objects to gain access to Lang Equipment. This warranty does not cover defects caused by improper installation, abuse, careless operation, or improper maintenance of equipment.

**V.** THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL LANG BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.

**VI.** Lang Equipment is for commercial use only. If sold as a component of another(OEM) manufacturer’s equipment, or if used as a consumer product, such Equipment is sold AS IS and without any warranty.