



# ELECTRIC CHEESEMELTER

124CMW, 136CMW, 148CMW

## Installation and Operation Instructions

2M-60803-1 REV D (07-23)



124CMW shown

These appliances are intended to be used for commercial applications, for example; in kitchens for restaurants, canteens, hospitals, and in commercial enterprises such as bakeries, butcheries, etc., but not for continuous mass production of food.

## 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.

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

## **TABLE OF CONTENTS**

CHAPTER	PAGE
TABLE OF CONTENTS	
READ FIRST	
EQUIPMENT DESCRIPTION	
UNPACKING	7
INSTALLATION	
OPERATION	11
MAINTENANCE & CLEANING PROCEDURES	13
TROUBLESHOOTING	14
WIRING DIAGRAMS	16-17
EXPLODED VIEWS	18-19
PARTS LISTS	20-22

## IMPORTANT READ FIRST IMPORTANT

EACH UNIT IS EXTREMELY HEAVY. FOR SAFE HANDLING, INSTALLER SHOULD OBTAIN HELP AS NEEDED, OR EMPLOY APPROPRIATE MATERIAL 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 THE CAUTION: MELTER WILL BE LOCATED MUST BE DESIGNED TO SUPPORT

THE WEIGHT OF THE MELTER.

CAUTION: SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK

WHEN CUT.

CAUTION:

NOTICE:

NOTICE:

THIS APPLIANCE MUST BE GROUNDED AT THE TERMINAL DANGER: PROVIDED. FAILURE TO GROUND THE APPLIANCE COULD

RESULT IN ELECTROCUTION AND DEATH.

INSTALLATION OF THE UNIT MUST BE DONE BY PERSONNEL QUALIFIED TO WORK WITH ELECTRICITY AND PLUMBING.

WARNING: IMPROPER INSTALLATION CAN CAUSE INJURY TO PERSONNEL

AND/OR DAMAGE TO EQUIPMENT. UNIT MUST BE INSTALLED IN

ACCORDANCE WITH ALL APPLICABLE CODES.

The data plate is located on the left side of unit towards the front. The melter 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 electric cheese melter must be installed more NOTICE: than 12 inches above any cooking surface and never

above any open burners or charbroilers.

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.

During the first few hours of operation you may notice a small amount of smoke coming off the melter, and a faint odor from the smoke. This is

NOTICE: melter, and a faint odor from the smoke. This is normal for a new melter and will disappear after the

first few hours of use.

CAUTION: ALWAYS KEEP THE AREA NEAR THE APPLIANCE

FREE FROM COMBUSTIBLE MATERIALS.

KEEP FLOOR IN FRONT OF EQUIPMENT CLEAN CAUTION: AND DRY. IF SPILLS OCCUR, CLEAN IMMEDIATELY,

TO AVOID THE DANGER OF SLIPS OR FALLS.









HIGH VOLTAGE















### IMPORTANT READ FIRST IMPORTANT

KEEP WATER AND SOLUTIONS OUT OF CONTROLS.

WARNING: NEVER SPRAY OR HOSE CONTROL CONSOLE, ELECTRICAL

CONNECTIONS.

MOST CLEANERS ARE HARMFUL TO THE SKIN, EYES, MUCOUS

MEMBRANES AND CLOTHING. PRECAUTIONS SHOULD BE

CAUTION: TAKEN TO WEAR RUBBER GLOVES, GOGGLES OR FACE SHIELD AND PROTECTIVE CLOTHING. CAREFULLY READ THE WARNING

AND FOLLOW THE DIRECTIONS ON THE LABEL OF THE

CLEANER TO BE USED.

Never leave a chlorine sanitizer in contact with stainless steel

NOTICE: 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 agent

directory or call the factory at 800-264-7827, or www.langworld.

com for the service agent nearest you.

BOTH HIGH AND LOW VOLTAGES ARE PRESENT

INSIDE THIS APPLIANCE WHEN THE UNIT IS

WARNING: PLUGGED/WIRED INTO A LIVE RECEPTACLE. BEFORE

REPLACING ANY PARTS, DISCONNECT THE UNIT

FROM THE ELECTRIC POWER SUPPLY.

USE OF ANY REPLACEMENT PARTS OTHER THAN

THOSE SUPPLIED BY LANG OR THEIR AUTHORIZED

CAUTION: DISTRIBUTORS CAN CAUSE BODILY INJURY TO THE

OPERATOR AND DAMAGE TO THE EQUIPMENT AND

WILL VOID ALL WARRANTIES.













#### **EQUIPMENT DESCRIPTION**

### Lang Electric Cheese Melter:

#### **Exterior Construction**

The melter dimensions are 19.5" (49.5cm) High, 16.5" (42cm) Deep, 24", 36", 48" (61cm, 91cm, 122cm) wide dependent on the actual model number. The Sides, Bottom, and Rear wall are constructed stainless steel. The melter cavity is insulated with high temperature insulation for efficiency and reduced heat loss.

#### **Interior Construction**

The interior dimension are 9.5" (24cm) High, 14.5" (37cm) Deep, 21.25", 32", 45.25" (54cm, 81.25cm, 115cm) wide dependent on the actual model number. The interior of the melter has one rack that can be placed in 4 different positions. The interior of the melter has a weight sensitive micro-switch for quick and easy activation.

#### **Technical**

The Cheese Melter operates on either 208V or 240V. This must be specified when ordering. Space required from bottom is 4" (12"-22" from heated source), 0" from back and 28", 40", or 52" wide.

#### Receiving the Melter

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 melter 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**

**CAUTION:** 

The melter will arrive completely assembled inside a wood frame and strapped to a skid. Cut the straps and remove the wood frame.

THE UNIT 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.

ANY STAND, COUNTER OR OTHER DEVICE ON WHICH **CAUTION:** 

THE MELTER WILL BE LOCATED MUST BE DESIGNED

TO SUPPORT THE WEIGHT OF THE MELTER.

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

WHEN CUT.

Remove the Melter from skid and place in intended location.







#### INSTALLATION

THIS APPLIANCE MUST BE GROUNDED AT THE TERMINAL DANGER: PROVIDED. FAILURE TO GROUND THE APPLIANCE COULD

RESULT IN ELECTROCUTION AND DEATH.

THIS APPLIANCE MUST BE GROUNDED AT THE TERMINAL PROVIDED. FAILURE TO GROUND THE APPLIANCE COULD **DANGER:** 

RESULT IN ELECTROCUTION AND DEATH.

The electric cheese melter must be installed more

NOTICE: than 12 inches above any cooking surface and never

above any open burners or charbroilers.

The data plate is located on the left side of unit towards the front. The melter voltage, wattage, serial number, wire size, and clearance specifications are

NOTICE: 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, fire extinguisher systems,

must conform to their applicable National, State and

locally recognized installation standards.

HIGH VOLTAGE

HIGH

VOLTAGE







#### WALL MOUNT UNITS

NOTICE:

The unit back is not attached to the machine. It is packaged loose behind the cheese-melter. The screws used to attach the back to the cheese-melter are screwed into the rear edge of the machine.

Split the back into two pieces; note the pre-drilled holes in one panel. This is the wall-mounting bracket.

Fasten the wall-mounting bracket to the wall using pre-drilled holes. Use suitable lag screws or anchor fasteners to secure panel to the wall with the offset at the top. Make certain that the mounting bracket is level.

Remove the screws from the rear of the cheese-melter; screw the stainless steel portion of the back to the cheese-melter with the offset at the top.

Lift the cheese-melter and hang it on the wall-mounted bracket.

Replace the screws around the edge of the back. Must be mounted 12 to 22 inches above any cooking surface.

Install the Heat Shield on the bottom of the unit.

This unit cannot be mounted above a charbroiler.

#### **INSTALLATION CONT'D**

#### **COUNTER TOP**

Split the back into two pieces.

Remove the screws from the rear of the cheese-melter; screw the stainless steel portion of the back to the cheese-melter with the offset at the top.

Reinstall the two back halves together and replace the screws around the edge.

When installing on a counter the legs must be installed before using the unit, as they will provide the required clearance for the bottom of the unit.

Place the unit in location, and level using leg adjustments.

Observe minimum clearances at all times.

#### **ELECTRICAL**

Electrical service routing may be made through either of two 1 1/4-inch knockouts provided. One may be found along the bottom edge of the back panel. The second knockout is located on the bottom of the unit.

Reference the Data Plate on the left side of the unit for amperage, voltage and phase requirements. Insure that the power supply is sufficient to meet the units power needs. Check your local or national electrical code for fuse or circuit breaker requirements.

#### **PHASING**

All model numbers 124CM and 136CM are shipped single phase. 148CM is shipped three-phase and can be converted to single phase by moving wire #3 to L1.

#### **ELEMENT REPLACEMENT**

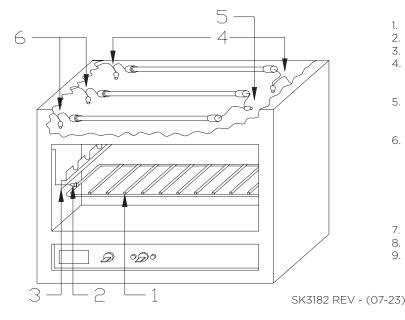
CAUTION: ALWAYS KEEP THE AREA NEAR THE APPLIANCE FREE FROM COMBUSTIBLE MATERIALS.

1

The electric cheese melter must be installed more NOTICE: than 12 inches above any cooking surface and never

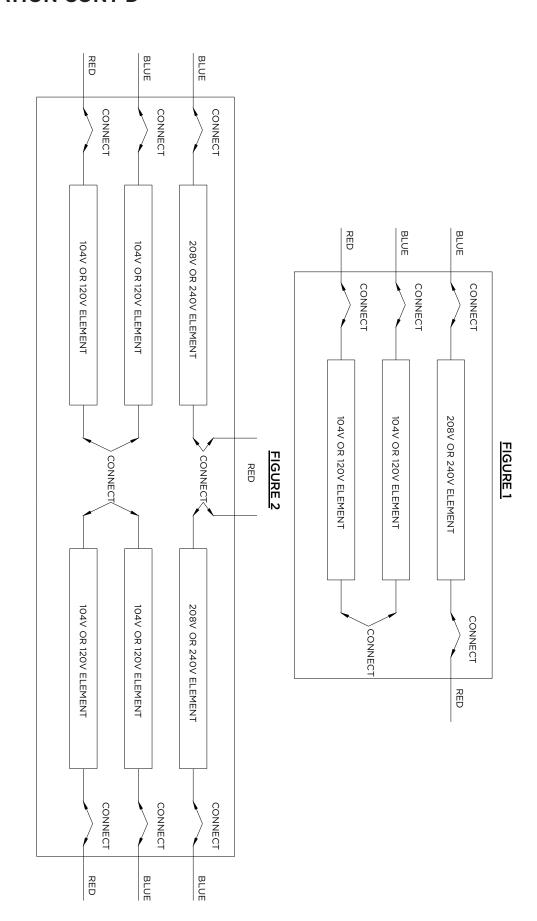
above any open burners or charbroilers.





- Disconnect from power and remove shelf.
- 2. Remove three screws from each heater bracket.
- Remove brackets.
- 4. Install the rear quartz heater (white end caps) to the power leads on both rear sides of the unit using the ceramic wire nuts provided.
- 5. The middle and front quartz heaters (red or brown end caps) are wired together (in series) using the ceramic wire nuts provided.
- The middle and front quartz heaters are each connected to a power lead using the ceramic wire nuts provided. On 124 and 136 units, this connection will be on the left. On 148 units, these connections will be on the left for the left set of elements, and on the right for the right set of elements.
- 7. Replace brackets removed in step 3.
- 8. Replace shelf removed in step 1.
- Reconnect to power. Turn power on and check for proper operation

## **INSTALLATION CONT'D**



SK3183 REV - (07-23)

#### **GENERAL**

The Lang Electric Cheese-melter can be used to poach, sauté and brown. In addition to melting cheese on sandwiches, French onion soup, hot apple pie and casseroles, it may be used for finishing Italian, Mexican and au gratin dishes utilizing less energy than conventional broilers.

The product is heated with infrared energy provided by quartz heaters. The rack is counterbalanced so that maximum heat is supplied only when the product is placed in the rack.

Although the heating elements are not directly controlled to regulate heat, the exposure of the product to heat is adjustable. Heat adjustment may be obtained by raising and lowering the rack position. The shelf positions provide a choice of cooking positions for a variety of applications. The top position is very hot, and can be used for quick browning and toasting, with the heat decreasing at each lower position.

In order to change positions, simply slide the rack in and out of the slots provided. Make sure that the end of the rack engages the sliding mechanism located on the right front corner.

#### **CONTROLS**

Controls are located on the front panel and consist of the following items:

- Power Switch: A toggle switch used to turn the unit on and off.
- **Heat Switch:** This toggle switch allows the unit to be operated in either automatic or constant modes.
  - Automatic: When selected with no product on the rack, the unit is in an idle condition. Placing a product on the rack will energize the elements providing heat to the product.
  - Constant: When this mode is selected the elements are energized at all times whether or not a product has been placed on the rack. This mode should be used during peak times only, as it will shorten the life span of the elements.
- Side Switch: Allows the use of the Left side only, or Both sides. This switch is found on Lang Model 148CM Cheese-melters only.

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

!

KEEP FLOOR IN FRONT OF EQUIPMENT CLEAN AND CAUTION: DRY. IF SPILLS OCCUR, CLEAN IMMEDIATELY, TO

AVOID THE DANGER OF SLIPS OR FALLS.

!

#### OPERATION CONT'D

#### **OPERATING Do's and Don'ts**

#### DO:

Insure all dishes placed in the cheese-melter are oven safe.

Pre-heat pans in the cheese-melter or on a stove.

Turn products halfway through cooking, as needed.

Use the unit in Automatic as much as possible, use Constant during peak periods.

#### DON'T:

Do not use the cheese-melter as a cooking or baking device, it is best suited for finishing dishes immediately prior to serving.

Do not use the unit to heat or thaw chilled or frozen product.

Do not place aluminum foil on the rack or bottom shelf. This will reflect heat and expose components to unnecessary high temperatures.

Do not move rack from one position to another without hand protection.

#### TYPICAL OPERATION

#### AUTOMATIC MODE

When the mode select switch is placed in "AUTOMATIC" and the power switch is moved to the "ON" position, power is applied to all of the elements.

The power switch energizes a contactor that connects the elements to the incoming power leads. Because the elements are connected in series, all elements have power applied. With all elements connected in the circuit, the rear element appears dimly lighted and the front elements appear not energized. In the "AUTOMATIC" mode, the elements are activated to provide full heat only when product is placed on the rack. Placing product on the rack causes the shelf to tilt down, activating a micro switch via the sliding actuator connected to the right front corner of the rack.

Closing the micro switch energizes a 2-pole heating contactor causing both sets of contactor points to close. One set of contactor points is connected in parallel with the rear element. This connection, when activated, changes the circuit resistance/electrical configuration.

Electrically this presents an alternate current path by shorting across the rear element. The effect is that the front and middle elements energize, while appearing to de-energize the rear element. Front and middle elements now have voltage applied for their rated operating level. For 208-volt and 240-volt units, the voltage to these elements is 104 and 120-volts, respectively.

#### **CONTINUOUS MODE**

In this mode of operation, the heat contactor is energized at all times. Movement of the rack does not energize or de-energize the elements. The rear element does not light or heat at any time. The front and middle elements are energized at all times.

#### **MAINTENANCE & CLEANING**

WARNING: KEEP WATER AND SOLUTIONS OUT OF CONTROLS. NEVER

SPRAY OR HOSE CONTROL CONSOLE.

WARNING

MOST CLEANERS ARE HARMFUL TO THE SKIN, EYES, MUCOUS MEMBRANES AND CLOTHING. PRECAUTIONS SHOULD BE TAKEN TO WEAR

CAUTION: RUBBER GLOVES, GOGGLES OR FACE SHIELD AND

PROTECTIVE CLOTHING. CAREFULLY READ THE WARNING AND FOLLOW THE DIRECTIONS ON THE

LABEL OF THE CLEANER TO BE USED.

Never leave a chlorine sanitizer in contact with

stainless steel surfaces longer than 10 minutes.

Longer contact can cause corrosion.



#### Cleaning

NOTICE:

- Always start with a cold melter.
- The stainless exterior can easily be cleaned using warm water and mild detergent.

Do not use caustic cleaners.

- Always follow the cleaner manufacturer's instructions when using any cleaner.
- The melter rack and interior may be cleaned using warm water and mild detergent.

Do not use caustic cleaners.

- **Do Not** attempt to clean heater tubes, damage can occur from improper cleaning.
- **Do Not** spray cleaning solutions into cooking chamber.
- Always apply these cleaners when the melter is cold and 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 melter.

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 causes refer to the TEST section and locate the Possible Cause then refer to test to identify test procedures.

SYMPTOM	POSSIBLE CAUSE		
Melter will not heat	<ul> <li>Incorrect voltage</li> <li>Defective power switch</li> <li>Defective contactor</li> <li>Defective heat switch</li> <li>Defective element</li> <li>Defective rack switch</li> </ul>		

NOTICE:

CAUTION:

Service on this, or any other, LANG appliance must be performed by qualified personnel only. Consult your authorized service agent directory or call the factory at 800-264-7827, or www.langworld. com for the service agent nearest you.



BOTH HIGH AND LOW VOLTAGES ARE PRESENT

INSIDE THIS APPLIANCE WHEN THE UNIT IS

WARNING: 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
Incorrect Voltage	<ul> <li>Confirm that voltage is correct*</li> <li>Confirm that Melter is phased correctly*</li> </ul>
Defective Power Switch	Check switch for proper operation*
Failed Contactor	<ul> <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>
Defective Selector Switch	Check switch for proper operation*
Failed Element	Confrim that elements are getting correct voltage and have continuity*
Defective Rack Switch	<ul> <li>Confirm that plunger rod can move up and down easily</li> <li>Confirm that switch has correct voltage*</li> </ul>

USE OF ANY REPLACEMENT PARTS OTHER THAN

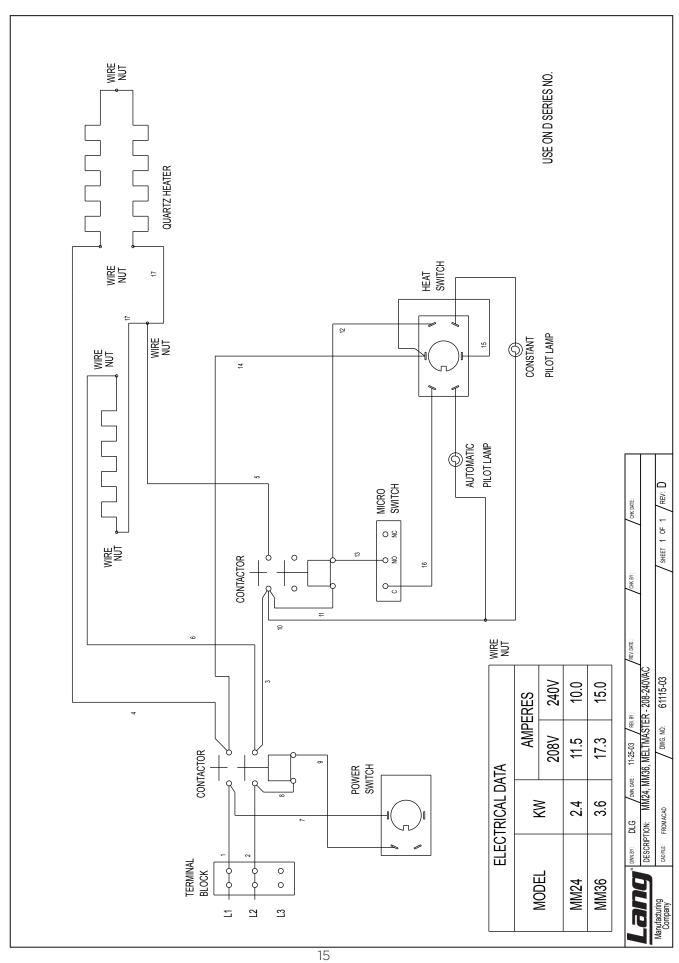
THOSE SUPPLIED BY LANG OR THEIR AUTHORIZED DISTRIBUTORS CAN CAUSE BODILY INJURY TO THE

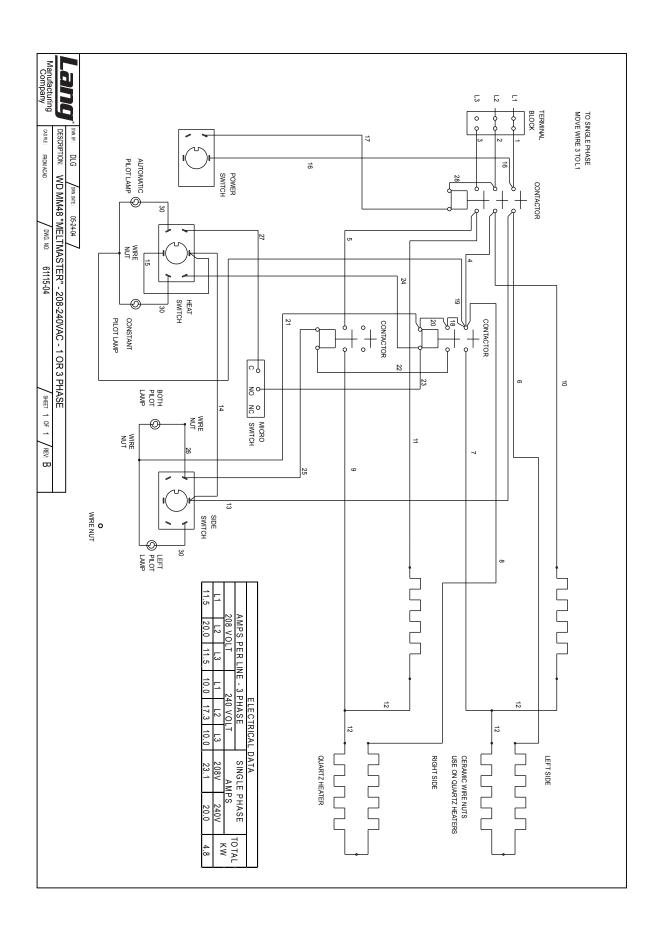
OPERATOR AND DAMAGE TO THE EQUIPMENT AND

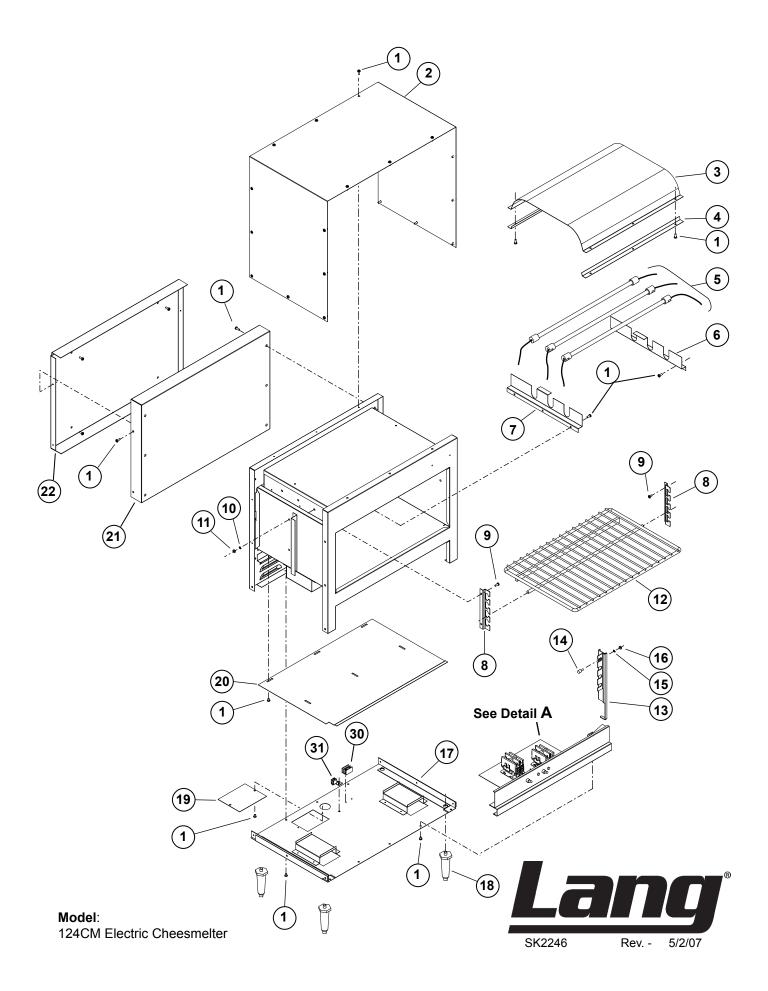
WILL VOID ALL WARRANTIES.

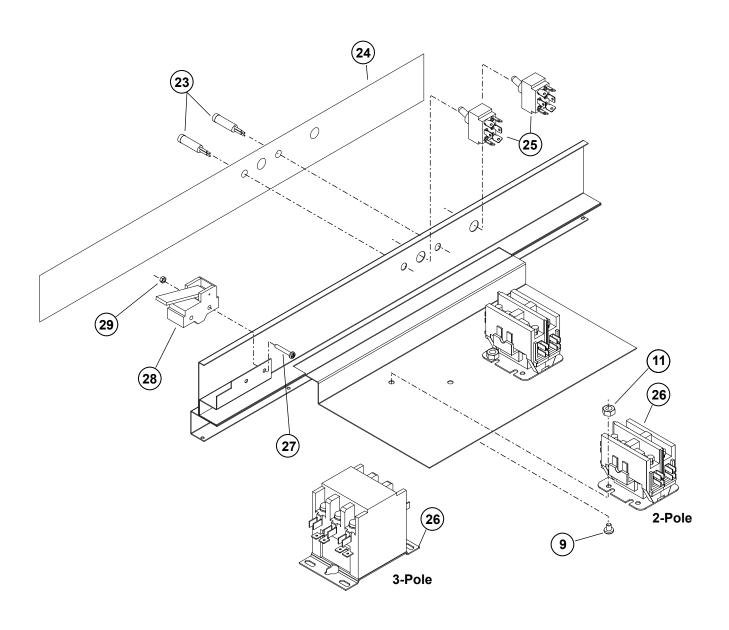


14









Detail A

#### Model:

124CM Electric Cheesmelter - Control Panel Assembly



## MODEL 124CM Electric Cheesemelter

Key Number	Part Number	Number Per Unit	Description an	d Model Designation
			SCRW SM PLT 10 X .5 PHLSL BODY WRAP 2'ALL REFLECTOR 2'ALL REFLECTOR ANGLE 2' & 4' QTZ HTR 208V/1200W 2FT  QTZ HTR 104V/1200W 2FT  QTZ HTR 240V/1200W 2FT  QTZ HTR 120V/1200W 2FT  LAMP SUPPORT BOTTOM L.H. LAMP SUPPORT BOTTOM R.H. SHELF PIVOT 2-3-4 FT  SCRW MS PLT 10-32 X .375  WSHR LOCK #10 STD SPLIT  NUT HEX 10-32 PLTD  RACK MELTER 24  RACK SLIDE WELDMENT 5/16  SCRSHLDR HEXHD  WSHR PLT 5/16 LOCK SPLIT  NUT HEX 5/16-18 PLTD  2' BOTTOM SPOTWELD  LEG 4 SS MM, GRID, FRYER  ACCESS PANEL  BOTTOM INS. SUP. 2'  BACK 2'  WALL BRACKET 2'  PILOT LT 250V 6LEAD BLK  CONTROL PANEL MM+2 36  SWT TOG ON-ON DPDT BLK  CONTC2POL35A208-240V50/60  SCRW RND MS 6-32X1 PLTD  MICRO SWITCH ASSY  NUT HEX 6-32 PLTD  TERMINAL BLOCK  GROUNDING LUG  INSULATION KIT  LAMP GUARD 24"  CORD SET, 14/3 208V	124CM-208V & 240V, CMWOC-208  ALL 124CM-208V, CMPT-208V, CMW-208V, CMWOC-208 124CM-208V, CMPT-208V, CMW-208V, CMWOC-208 124CM-240V, CMPT-240V, CMW-230/240V 124CM-240V, CMPT-240V, CMW-230/240V ALL ALL ALL ALL ALL ALL ALL ALL ALL AL

IMPORTANT: WHEN ORDERING, INCLUDE MODEL AND SERIAL NUMBER

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



MODEL \_\_\_\_136CM Electric Cheesemelter

Key	Part Number	Number Per			
Number	Number	Unit	Description and Model Designation		
1	2C-20103-02	4	SCRW SM PLT 10 X .5 PHLSL	136CM-208V & 240V, CMW-208V & 240V, CMWTF-208	
2	J9-MM-175	1	BODY WRAP 3	ALL	
3	J9-MM-178	1	REFLECTOR 3	ALL	
4	J9-MM-180	2	REFLECTOR ANGLE 3	ALL	
5	K9-11160-17	1	QTZ HTR 208V/1800W 3FT	136CM-208V & 208VBB, CMPT-208V, CMW-208V, CMWTF-208	
	K9-11160-21	2	QTZ HTR 104V/1800W 3FT	136CM-208V & 208VBB, CMPT-208V, CMW-208V, CMWTF-208	
	K9-11160-18	1	QTZ HTR 240V/1800W 3FT	136CM-240V, CMPT-240V, CMW-230/240V	
	K9-11160-22	2	QTZ HTR 120V/1800W 3FT	136CM-240V, CMPT-240V, CMW-230/240V	
6	J9-MM-141	1	LAMP SUPPORT BOTTOM L.H.	ALL	
7	J9-MM-142	1	LAMP SUPPORT BOTTOM R.H.	ALL	
8	J9-MM-166	2	SHELF PIVOT 2-3-4 FT	ALL	
9	2C-20101-24	16	SCRW MS PLT 10-32 X .375	ALL	
10	2C-20202-07	4	WSHR LOCK #10 STD SPLIT	ALL	
11	2C-20301-15	4	NUT HEX 10-32 PLTD	ALL	
12	2B-50200-14	1	RACK MELTER 36	ALL	
13	J9-MM-167-1	1	<b>RACK SLIDE WELDMENT 5/16</b>	ALL	
14	2C-20106-02	1	SCRSHLDR HEXHD	ALL	
15	2C-20202-05	1 1	WSHR PLT 5/16 LOCK SPLIT	ALL	
16	2C-20301-13	1 1	NUT HEX 5/16-18 PLTD	ALL	
17	J9-MM-144	1	3 BOTTOM SPOTWELD	ALL	
18	2A-Z0314	4	LEG 4 SS MM, GRID, FRYER	136CM-208V & 208VBB & 240V, CMPT-208V & 240V	
19	J9-MM-153	1	ACCESS PANEL	ALL	
20	J9-MM-164	1	BOTTOM INS. SUP. 3	ALL	
21	J9-MM-183	1	BACK 3	136CM-208V & 240V, CMW-208V & 240V, CMWTF-208	
22	J9-MM-186	1	WALL BRACKET 3	136CM-208V & 240V, CMW-208V & 240V, CMWTF-208	
23	2J-31601-01	2	PILOT LT 250V 6LEAD BLK	ALL	
24	2M-60700-03	1	CONTROL PANEL MM+2 36	ALL	
25	2E-30303-06	2	SWT TOG ON-ON DPDT BLK	ALL	
26	2E-30701-03	2	CONTC2POL35A208-240V50/60	ALL	
27	2C-20101-17	2	SCRW RND MS 6-32X1 PLTD	ALL	
28	J9-GM-219	1	MICRO SWITCH ASSY	ALL	
29	2C-20301-10	2	NUT HEX 6-32 PLTD	ALL	
30	2E-30500-08	1	TRM BLOCK 2 PL SM 95AMP	ALL	
31	2E-31200-02	1	GROUNDING LUG	ALL	
NI	2H-60106-50	2	INSULATION KIT	ALL	
NI	2B-50201-03	1	LAMP GUARD 36"	ACCESSORY	

IMPORTANT: WHEN ORDERING, INCLUDE MODEL AND SERIAL NUMBER

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



## MODEL 148CM Electric Cheesemelter

Key	Part	Number Per			
Number	Number	Unit	Description and Model Designation		
1	2C-20103-02	4	SCRW SM PLT 10 X .5 PHLSL	148CM-208V & 240V, CMW-208V & 240V, CMWTF-208	
2	J9-MM-176	1	BODY WRAP 4	ALL	
3	J9-MM-177	1	REFLECTOR 2	ALL	
4	J9-MM-179	4	REFLECTOR ANGLE 2 & 4	ALL	
5	K9-11160-15	2	QTZ HTR 208V/1200W 2FT	148CM-208V, CMPT-208V, CMW-208V, CMWTF-208	
	K9-11160-19	4	QTZ HTR 104V/1200W 2FT	148CM-208V, CMPT-208V, CMW-208V, CMWTF-208	
	K9-11160-16	2	QTZ HTR 240V/1200W 2FT	148CM-240V, CMPT-240V, CMW-240V	
	K9-11160-20	4	QTZ HTR 120V/1200W 2FT	148CM-240V, CMPT-240V, CMW-240V	
6	J9-MM-141	2	LAMP SUPPORT BOTTOM L.H.	ALL	
7	J9-MM-142	2	LAMP SUPPORT BOTTOM R.H.	ALL	
8	J9-MM-166	2	SHELF PIVOT 2-3-4 FT	ALL	
9	2C-20101-24	16	SCRW MS PLT 10-32 X .375	ALL	
10	2C-20202-07	4	WSHR LOCK #10 STD SPLIT	ALL	
11	2C-20301-15	4	NUT HEX 10-32 PLTD	ALL	
12	2B-50200-15	1	RACK MELTER 48	ALL	
13	J9-MM-167-1	1	RACK SLIDE WELDMENT 5/16		
14	2C-20106-02	1	SCRSHLDR HEXHD	ALL	
15	2C-20202-05	1	WSHR PLT 5/16 LOCK SPLIT	ALL	
16	2C-20301-13	1	NUT HEX 5/16-18 PLTD	ALL	
17	J9-MM-145	1	4 BOTTOM SPOTWELD	ALL	
18	2A-Z0314	4	LEG 4 SS MM, GRID, FRYER	148CM-208V & 240V, CMPT-208V & 240V	
19	J9-MM-153	1	ACCESS PANEL	ALL	
20	J9-MM-165	1	BOTTOM INS. SUP. 4	ALL	
21	J9-MM-184	1	BACK 3	148CM-208V & 240V, CMW-208V & 240V, CMWTF-208	
22	J9-MM-187	1	WALL BRACKET 4	148CM-208V & 240V, CMW-208V & 240V, CMWTF-208	
23	2J-31601-01	4	PILOT LT 250V 6LEAD BLK	ALL	
24	2M-60700-04	1	CONTROL PANEL MM+2 48	ALL	
25	2E-30303-06	3	SWT TOG ON-ON DPDT BLK	ALL	
26	2E-30701-03	2	CONTC2POL35A208-240V50/60		
	2E-30700-03	1	CONTC 3POLE 40A 208/240VAC	ALL	
27	2C-20101-17	2	SCRW RND MS 6-32X1 PLTD	ALL	
28	J9-GM-219	1	MICRO SWITCH ASSY	ALL	
29	2C-20301-10	2	NUT HEX 6-32 PLTD	ALL	
30	2E-30500-09	1	TERMINAL BLOCK	ALL	
31	2E-31200-02	1	GROUNDING LUG	ALL	
NI	2H-60106-50	2	INSULATION KIT	ALL	
NI	2B-50201-04	2	LAMP GUARD 24"	ACCESSORY	

IMPORTANT: WHEN ORDERING, INCLUDE MODEL AND SERIAL NUMBER

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





Star Manufacturing International Inc.

10 Sunnen Dr. St. Louis, MO 63143

Phone: (314) 781-2777 FAX: (314) 781-2714

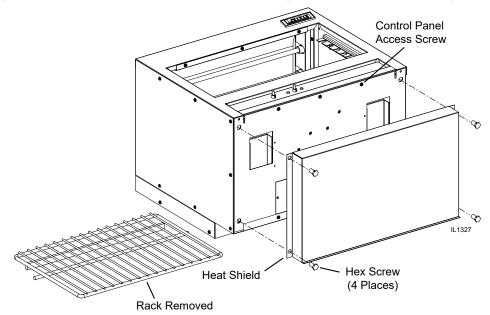
Installation Instructions

2M-60100-64 Rev. - A 5/10/07

## **Heat Shield Mounting Instructions**

#### Installation

- 1. Turn off cheesemelter and unplug from electrical outlet.
- 2. Remove the rack from the inside of the cheesemelter.
- 3. Position the cheesemelter with the front facing up.
- 4. Place the heat shield against the bottom of the cheesemelter with the opening at the back of the unit and align the screw holes.



- 5. Thread four (4) cap screws through the heat shield and into the cheesemelter.
- 6. Using a wrench, tighten the cap screws.

#### NOTE

After the heat shield unit has been installed, the control panel access screws will be visible and the opening will be at the back of the cheesemelter.

- 7. Set the cheesemelter upright.
- 8. Install the rack inside the cheesemelter.
- 9. Return the cheesemelter to operational condition.

#### LIMITED EQUIPMENT WARRANTY

Lang Manufacturing warrants to the original purchaser of new Lang products to be free from defects in material or workmanship, under normal and proper use and maintenance service as specified by Lang and upon proper installation and start-up in accordance with the instructions supplied with each Lang unit. Lang's obligation under this warranty is limited to a period of one [1] year beginning from the date of original installation. The warranty period begins upon the earlier of the date of original installation or up to six [6] months after the original shipment, from the factory, of the covered product. Defects that occur as a result of normal use, within the time period and limitations defined in this warranty, will at Lang' discretion have the parts replaced or repaired by Lang or a Langauthorized service agency.

#### THIS WARRANTY IS SUBJECT TO ALL LISTED CONDITIONS

Repairs performed under this warranty are to be performed by a Lang authorized service agency. Lang will not be responsible for charges incurred or service performed by non-authorized repair agencies. In all cases, the nearest Lang-authorized service agency must be used. Lang will be responsible for normal labor charges incurred in the repair or replacement of a warrantied product within 50 miles (80.5 km) of an authorized service agency. Time and expense charges for anything beyond that distance will be the responsibility of the owner. All labor will need to be performed during regular service hours. Any overtime premium will be charged to the owner. For all shipments outside the U.S.A. and Canada, please see the International Warranty for specific details. It is the responsibility of the owner to inspect and report any shipping damage claims, hidden or otherwise, promptly following delivery. No mileage or travel charges will be honored on any equipment that is deemed portable. In general, equipment with a cord and plug weighing less than 50 lb. (22.7 kg) is considered portable and should be taken or shipped to the closest authorized service agency, transportation prepaid.

#### CONTACT

Should you require any assistance regarding the operation or maintenance of any Lang Manufacturing; phone or email our service department. In all correspondence provide the model number and serial number of the unit needing service; include the voltage or gas type.

Normal Business Hours: 8:00 a.m. to 4:30 p.m. Central Telephone: 800-264-7827 Tech Service Option 2

Email: TechService@partstown.com

www.LangWorld.com

PRODUCTS	PARTS	LABOR
Lang Strato Series™ convection ovens	2 years	2 years
Lang convection oven doors (excluding hardware)	lifetime	2 years
Lang griddles	2 years	2 years
Chrome griddle surfaces [against peeling]	5 years	
Cast iron grates, burners and burner shields	1 year	
Original Lang parts sold to repair Lang equipment	90 days	
Lang Ranges	2 years	2 years
Lang Marine	2 years	2 years

#### WARRANTY EXCLUSIONS

#### THE FOLLOWING WILL NOT BE COVERED UNDER WARRANTY.

Lang's sole obligation under this warranty is limited to either repair or replacement parts, subject to the additional limitations detailed below. This warranty neither assumes nor authorizes any person to assume obligations other than those expressly covered by this warranty.

- Any product which has not been used, maintained, or installed in accordance with the directions published in the appropriate installation sheet and/or owner's manual, including incorrect gas or electrical connection. Lang is not liable for any unit which has been mishandled, abused, misapplied, subjected to harsh chemicals, modified by unauthorized personnel, damaged by flood, fire, or other acts of nature [or God], or which have an altered or missing serial number
- Installation, labor, and job checkouts, calibration of heat controls, air and gas burner/bypass/pilot adjustments, gas or electrical system checks, voltage and phase conversions, cleaning of equipment, or seasoning of griddle surface.
- Replacement of fuses or resetting of circuit breakers, safety controls, or reset buttons.
- Replacement of broken or damaged glass components, quartz heating elements, and light bulbs.
- Labor charges for all removable and consumable parts in gas charbroilers and hotplates, including but not limited to burners, grates, and radiants.
- Any labor charges incurred by delays, waiting time, or operating restrictions that hinder a service technician's ability to perform
- Replacement of parts that fail or are damaged due to normal wear
  or labor for replacement of parts that can be replaced during a daily
  cleaning routine, such as but not limited to silicone belts, PTFE nonstick sheets, control labels, knobs, bulbs, fuses, quartz heating
  elements, baskets, racks, and grease drawers.
- Any economic loss of business or profits.
- Non-OEM parts. Use of non-OEM parts without Lang's approval will void the warranty.
- Components that should be replaced when damaged or worn, but have been field-repaired instead [e.g. field-welded fry pots]
- Units exceeding one [1] year from original installation date.

#### **ADDITIONAL WARRANTIES**

 Specific/chain-specific equipment may have additional and/or extended warranties.

The foregoing warranty is in lieu of any, and all other warranties expressed or implied and constitutes the entire warranty.

Star - Holman - Lang - Wells - Toastmaster 265 HOBSON ST. SMITHVILLE, TN 37166 (800) 264-7827 www.star-mfg.com