

Lang[®]

**Electric Cruise Line
Double Broiler**

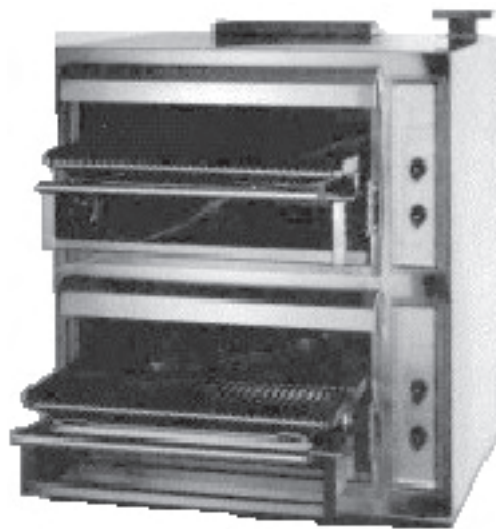
w/ Oven Base

CLB36S-2-440V

CL36B2OLF440

**Installation and
Operation
Instructions**

2M-W1281 Rev.B 10/26/2011



CLB36S-2-440V



Lang[®] Lang[®] Lang[®] Lang[®]

SAFETY SYMBOL



These symbols are intended to alert the user to the presence of important operating and maintenance instructions in the manual accompanying the appliance.

RETAIN THIS MANUAL FOR FUTURE REFERENCE NOTICE

Using any part other than genuine Star factory supplied parts relieves the manufacturer of all liability.

Star reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

Due to periodic changes in designs, methods, procedures, policies and regulations, the specifications contained in this sheet are subject to change without notice. While Star International Holdings Inc., Company exercises good faith efforts to provide information that is accurate, we are not responsible for errors or omissions in information provided or conclusions reached as a result of using the specifications. By using the information provided, the user assumes all risks in connection with such use.

MAINTENANCE AND REPAIRS

Contact your local authorized service agent for service or required maintenance.

Please record the model number, serial number, voltage and purchase date in the area below and have it ready when you call to ensure a faster service.

Model No. _____

Serial No. _____

Voltage _____

Purchase Date _____

Authorized Service Agent Listing

Reference the listing provided with the unit

or

for an updated listing go to:

Website: www.star-mfg.com
E-mail Service@star-mfg.com

Service Help Desk

Business Hours: 8:00 am to 4:30 p.m. Central Standard Time

Telephone: (314) 678-6303

Fax: (314) 781-2714

E-mail Parts@star-mfg.com
Service@star-mfg.com
Warranty@star-mfg.com

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NOTICE: Service on this, or any other, LANG appliance must be performed by qualified personnel only. Consult your LANG authorized service agent directory or call the factory at 314-678-6315, or WWW.LANGWORLD.COM for the service agent nearest you.

SPECIFICATIONS:

Model No.	Height x Width x Depth	Clearance from combustable surface	Weight		Freight Class
			Actual	Shipping	
ECOD-AT	25.0" x 38.0" x 45.2" 635mm x 966mm x 1148mm	Side: 6" (153mm) Back: 6" (153mm) Floor: 6" (153mm)	380 lbs. 173 kg	430 lbs. 195 kg	70
ECOF-AT	25.0" x 38.0" x 38.2" 635mm x 966mm x 970mm		360 lbs. 164 kg	410 lbs. 186 kg	
ECOD-AT ECODL-AT	50.0" x 38.0" x 45.2" 1270mm x 966mm x 1148mm		820 lbs. 373 kg	870 lbs. 395 kg	
ECOF-AT ECOFL-AT	50.0" x 38.0" x 38.2" 1270mm x 966mm x 970mm		780 lbs. 355 kg	830 lbs. 377 kg	

Model No	Volts AC - Hz	Total kW	Amps - 3Ph	Amps - 1Ph
Single Stack ECOD-AT ECOF-AT	208 - 50/60	11.7	37.1	56.1
	240 - 50/60		28.8	48.6
	440 - 50/60		17.1	N/A
	480 - 50/60		16.1	N/A
Double Stack ECOD-AT, ECODL-AT ECOF-AT, ECOFL-AT	208 - 50/60	23.3	74.2	112.1
	240 - 50/60		57.7	97.2
	440 - 50/60		34.2	N/A
	480 - 50/60		32.2	N/A

Figure 2

CAUTION: THE BROILER WEIGHS 850 LBS. (385.56 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 BROILER WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE BROILER (850 LBS.).



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 behind the access cover to the right of the unit. The broiler 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 314-678-6315, or www.langworld.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 LANG OR THEIR AUTHORIZED DISTRIBUTORS CAN CAUSE BODILY INJURY TO THE OPERATOR AND DAMAGE TO THE EQUIPMENT AND WILL VOID ALL WARRANTIES.



UNPACKING

3.1 Receiving the Broiler

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 broiler 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 broiler is packaged on a pallet, wrapped in plastic to protect from moisture and surrounded by a wooden frame. Remove the wood crating carefully. Improper use of tools can result in damage to the equipment. Remove and discard plastic wrap. Remove and discard desiccant bags placed inside broiler cavity.

The broiler rack frame and rack are secured for shipping purposes and for safety, and should remain secured until unit is at its final location.

Legs, where applicable, are packed inside broiler cavity or cabinet base and should remain there until unit is at the final installation location.

The unit can be safely lifted from bottom with forklift or straps. Use extreme care and follow proper safety procedure regardless of method used and be aware of gravity center, especially with banks of multiple units.



- CAUTION:** THE BROILER WEIGHS 850 LBS. (385.56 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 BROILER WILL BE LOCATED MUST BE DESIGNED TO SUPPORT THE WEIGHT OF THE BROILER (850 LBS.).
- CAUTION:** SHIPPING STRAPS ARE UNDER TENSION AND CAN SNAP BACK WHEN CUT.

Remove broiler 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 behind the access cover to the right of the unit. The range voltage, wattage, serial number, wire size, and clearance specifications are on the data plate. This information should be carefully read and understood before proceeding with the installation.



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

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 appliance being installed. Wire size information can be found on the data plate.

4.2 Broiler Voltage

The Lang Model CLB36S-2-440 & CL36B2OLF440 can be operated on 440 Volts.

INITIAL START UP

5.1 PRE-POWER ON

Initial Start-up

Before the initial use of the broiler, the unit must be wiped down thoroughly with a dry rag, to remove any oils used in manufacturing. Also the unit must be thoroughly allowed to dry itself out. This is done by setting the thermostat to 350°F. Allow the range oven to heat until all vapor and condensation has been eliminated. For best results allow the oven to thoroughly dry out. Allow 8 to 12 hours for this process. Note: There may be a small amount of smoke from the unit for the first couple of hours of use, this is normal.

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 Broiler Controls

The controls are located on the right side of the unit. There are two switches. One on top and one on bottom. The top one controls the front half of the broiler, while the bottom one controls the rear half. There are three positions on each switch: Low, Off, & High.

The broiler rack is adjustable. There are three 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 each 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 broiler with hot water and a mild detergent to maintain a gleaming appearance.

7.2 Daily Cleaning

The broiler should be thoroughly cleaned at least once a week in addition to the normal daily cleaning to insure against the accumulation of foreign material. Keep the inside of the broiler 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 the TEST section and locate the Possible Cause then refer to test to identify test procedures.

SYMPTOM	POSSIBLE CAUSE
Broiler will not heat	<ul style="list-style-type: none">Failed elementFailed 2 heat switch
Product burning	<ul style="list-style-type: none">Product is cooked too long

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">No test available, operational condition
Failed 2 heat switch	<ul style="list-style-type: none">Check poles on switch for continuity
Failed element	<ul style="list-style-type: none">Remove the wires and check for continuity across the element

CAUTION:

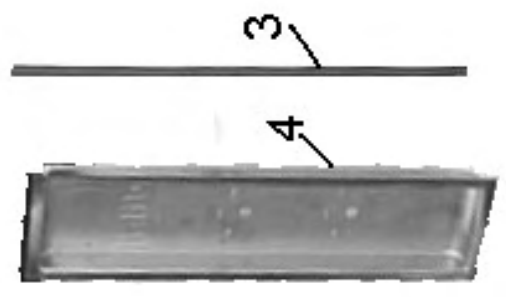
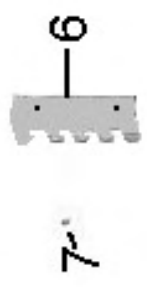
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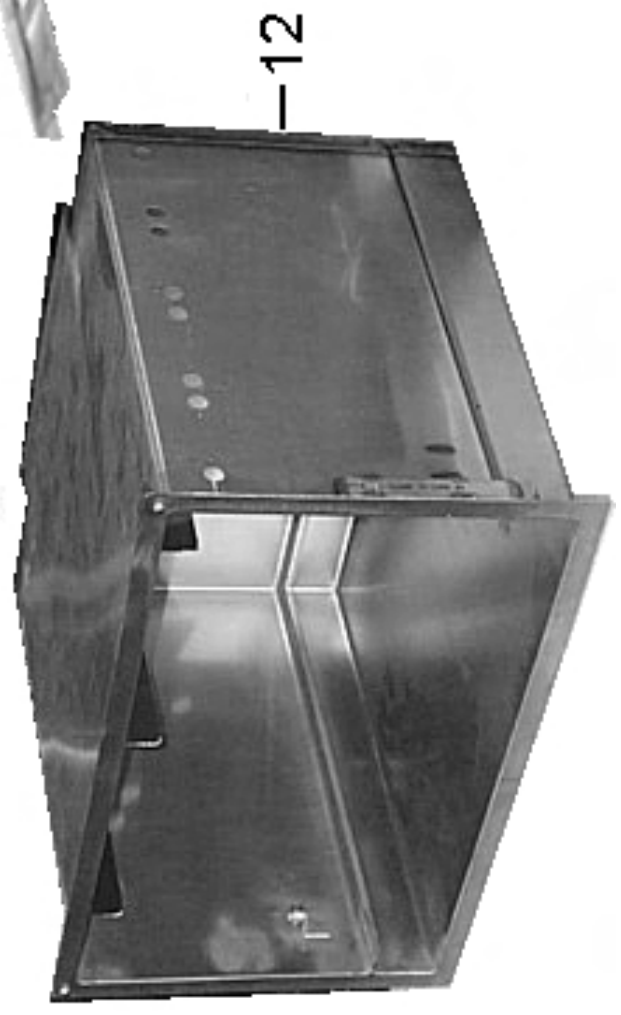
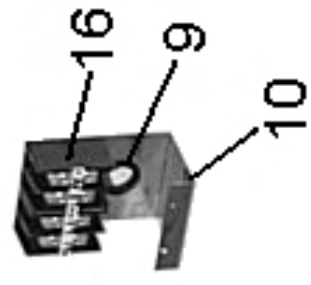


PARTS LIST**CLB36S-2-440V**

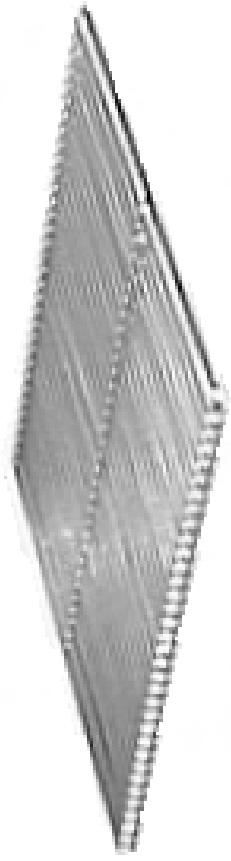
October 26, 2011, Rev B

Item #	Part Number	Description	Qty
1	#N/A	#N/A	1
2	J9-CLB-226	PAN - BROILER	2
3	1M-72602-04	GSKTTPEHITMP1/2X1/16X10YD	132
4	J9-CLB-225	SWITCH PANEL - CLB	2
5	2E-30304-W32	SWT 2 HEAT 32 AMP	4
6	J9-CLB-319	RACK ADJUSTMENT - BROILER	2
7	2C-20111-09	SCRW HXHD CAP 10-32X1/2	68
8	J9-CLB-212	FRONT HOOD - BROILER	2
9	2K-70801-02	SNAP BUSH 1 3/8 SB1375-16	2
10	J9-CLB-224	TERMINAL BLOCK MOUNT -	1
11	J9-CLB-218	HEAT SHIELD - BROILER	3
12	J9-CLB-001	BROILER CAN ASSY	2
13	OB-CLB-309	ELEMENT HOLDER - BROILER	6
14	2N-11100-11	ELE BROILR CLS 440V	8
	2N-11050-29	ELMNT 36OVEN 480V	2
	2N-11050-30	ELMNT 36OVEN 480V	2
15	J9-CLB-427	ELEMENT HEAT SHIELD -	4
16	2E-30500-11	TRM BLOCK 2 PLE LG 175AMP	2
17	2C-20303-08	NUT HX SS 10-24	64
18	2C-20203-06	WASHER S/S 5/16 SAE FLAT	64
19	2C-20111-25	SCRW HXHD CAP 1/4-20X1.25	12
20	J9-CLB-310	BEARING WASHER - BROILER	12
21	2P-70202-03	BEARING BROILER/FAB ONLY	12
22	2P-CLB-401	BEARING BRACKET SLEVE -	12
23	2C-20301-29	NUT HEX ACORN 1/4-20 S/S	8
24	J9-CLB-002	CARRIAGE ASSY	2
25	J9-CLB-420	HEAT SHIELD ASSY -	2
26	J9-CLB-425	HEAT SHIELD #2 - BROILER	2
27	2B-50200-80	RACK HEAVY DUTY CLB	2
28	J9-CLB-220	REAR FIREWALL DOUBLE -	1
29	J9-CLB-320	CAN WIRE SUPPORT	2
30	J9-CLB-331	MAIN STACK ASSY DOUBLE	1
31	J9-CLB-210	BACK DOUBLE - BROILER	1
32	J9-CLB-211	VENT TRIM - BROILER	2
33	J9-CLB-244	PANEL VENT ASSY - BROILER	1
34	J9-CLB-243	PANEL VENT TOP - BROILER	1
35	2E-CLB-502	WIRE HARNESS DOUBLE	1
36	2E-30304-W32	SWT 2 HEAT 32 AMP	4





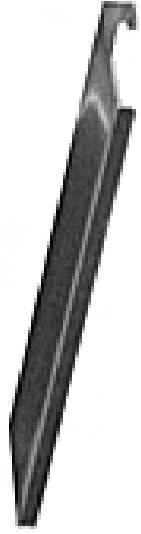
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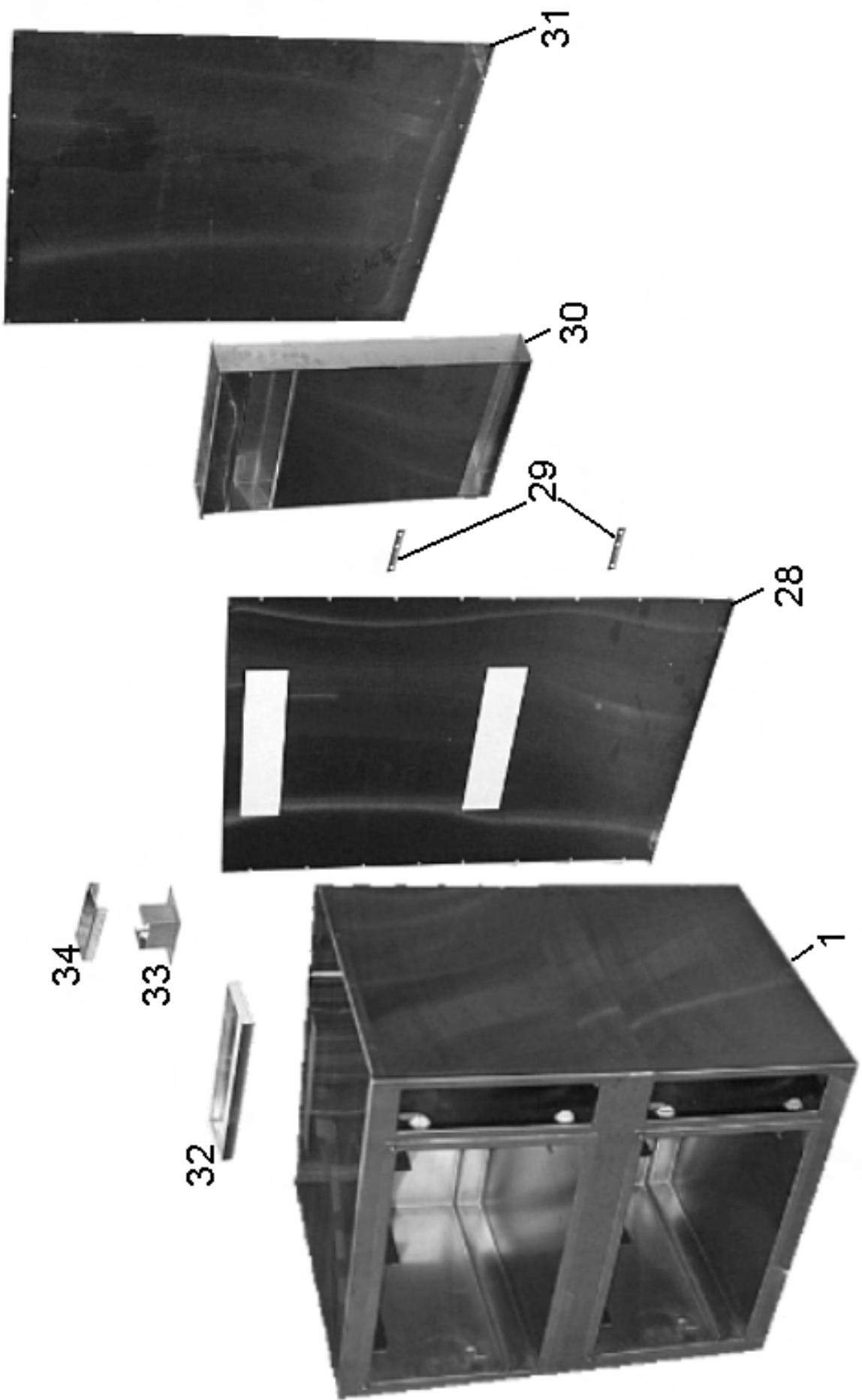


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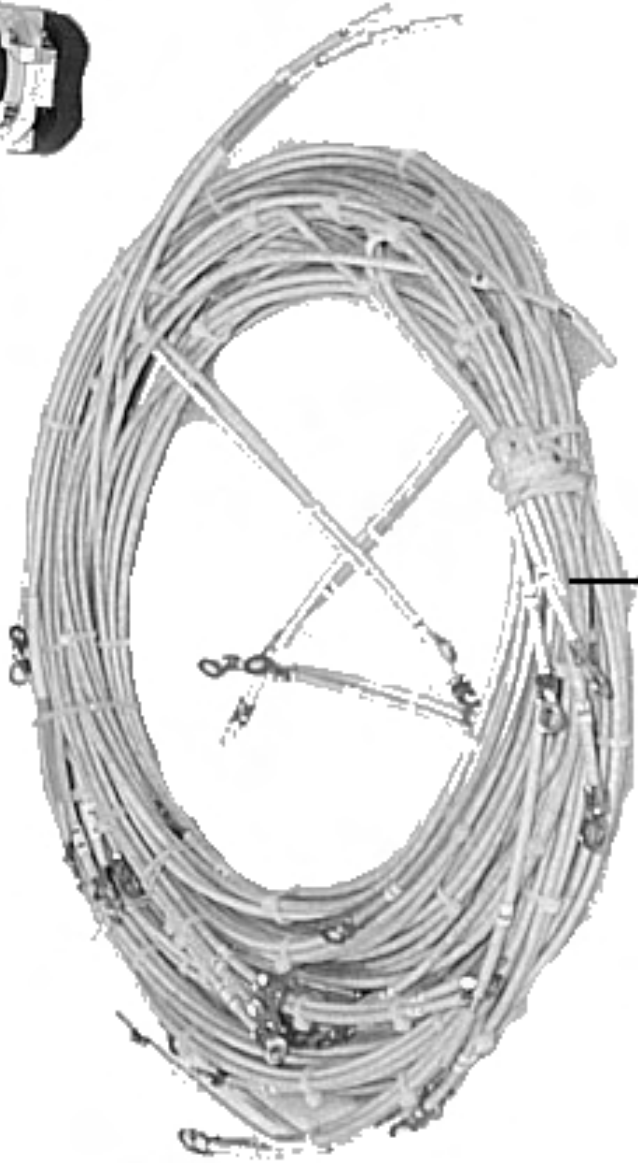


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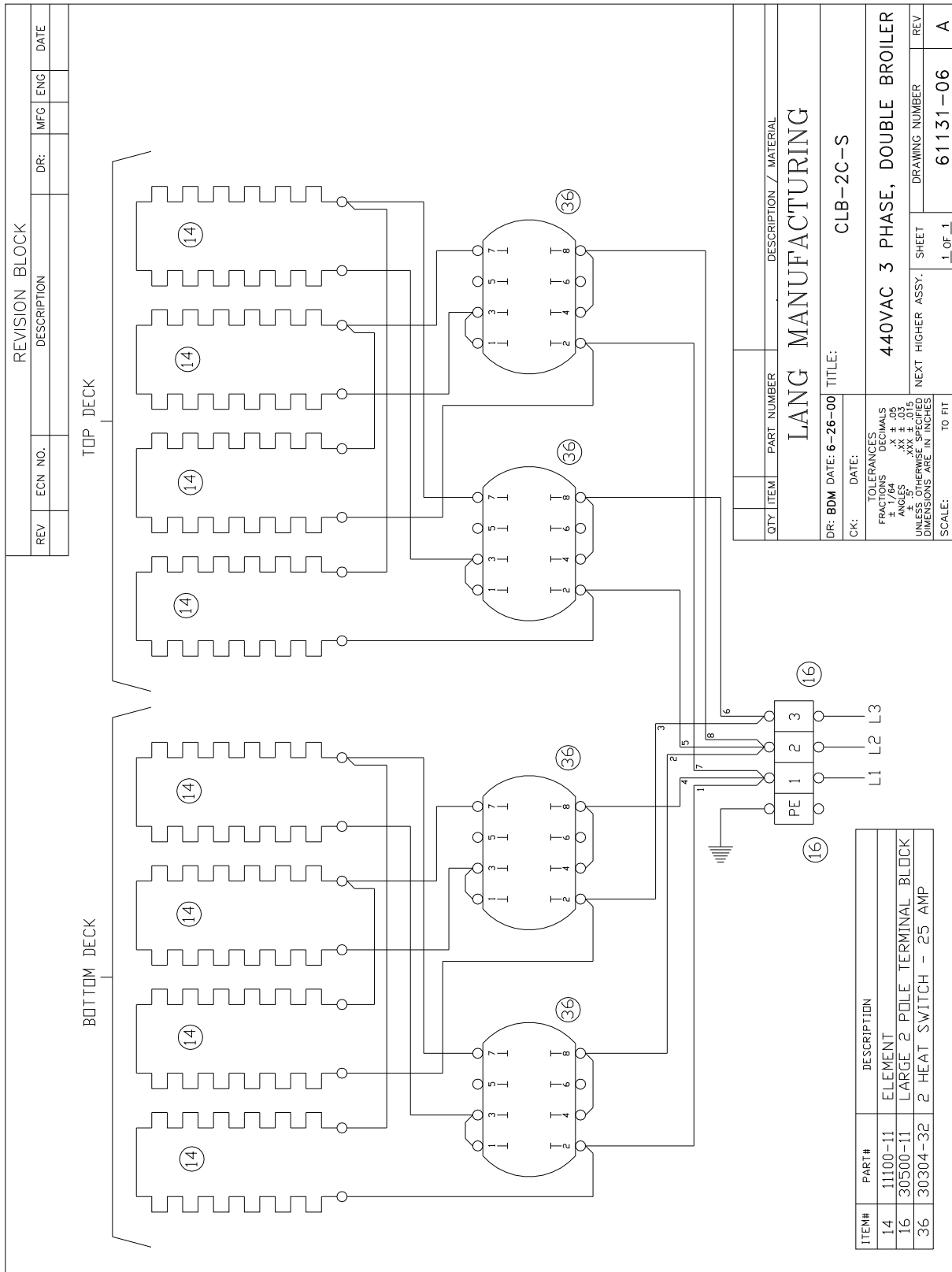


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WIRING DIAGRAM



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