Manufacturers of Bakery and Foodservice Equipment

MODELS LMO-E-P, LMO-E-S, LMO-G-P & LMO-G-S

MINI ROTATING RACK OVEN
INSTALLATION, OPERATION & MAINTENANCE MANUAL

<u>GAS OVENS</u>: POST IN A PROMINENT LOCATION, THE INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE SMELL OF GAS IS DETECTED. THIS INFORMATION CAN BE OBTAINED FROM THE LOCAL GAS SUPPLIER

RETAIN THIS MANUAL FOR FUTURE REFERENCE

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READ FIRST

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

This LBC Rotisserie was manufactured to rigid standards. The appliance has been tested and is listed by Intertek Testing Services (ETL Semko) and meets applicable safety and sanitation standards.

A) The **responsibility of the manufacturer** is to supply suitable, comprehensive instructions and recommendations for proper operation and maintenance.

B) All operations, maintenance and repair of this or any LBC Bakery Equipment appliance must be performed by properly trained and qualified personnel, and all such operations, maintenance and repair must be performed in a diligent manner. It is the **responsibility of the owner/operator** to ensure proper training and diligence of any person coming into contact with either the subject units or the output (product, fumes or otherwise) of the subject units. It is the **responsibility of the owner/operator** to ensure that the subject units are installed and operated in accordance with OSHA Standard 1910.263.

C) A regular periodic program of cleaning, inspection and maintenance must be established and comprehensive maintenance records maintained. It is the **sole responsibility of the owner/operator** to establish, schedule and enforce the frequency and scope of these programs in keeping with recommended practice and with due consideration given to actual operating conditions.

D) The appliance must be operated within limits which will not exceed its working limits. It is the **responsibility of the user** to operate this appliance in accordance with the rules and limits described in this manual and the published product specification sheet, and in accordance with the directions and instructions of the owner/operator of the appliance or employer, and in accordance with applicable federal, state and local laws and ordinances.

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LIGHTING and SHUTDOWN – GAS OVENS

Lighting Instructions

Daily use

1. Press the “Power” button to turn the oven on. Close the oven door.
2. Set the oven temperature to the desired operating temperature by pressing the up or down arrow buttons next to the “Set Temperature” display.

After Long-term shut-down

1. Turn on the gas supply to the oven.
2. Lift the gas valve access door located below the control panel. Switch the gas valve “ON.”

Shut-Down Instructions

Daily Use

1. Press the “Power” button to turn the oven off.

Long-term shut-down

1. Lift the gas valve access door located below the control panel and switch the gas valve to “OFF” position.
2. Turn off the gas supply to the oven.

CONDITIONS of INSTALLATION (Part 1 of 2)

LBC Bakery Equipment shall, for a fee contingent on site location and provided the conditions of installation are met, provide a factory-authorized service agency to install the LBC Rotisserie. The job site must be ready for the installation before LBC Bakery Equipment or its authorized agent arrives. If the installation site is not properly prepared or if there are construction delays, the customer shall be responsible for all expenses incurred during this delay. All expenses resulting from job delay or extension, for reasons beyond the control of LBC Bakery Equipment, shall be the responsibility of the customer. Installation shall be conducted during normal business hours. This installation is for a single trip. **Start-up and training are not included.**

IN ALL CASES, THE ELECTRICAL, WATER AND DRAIN CONNECTIONS AND VENTILATION MUST MEET ALL FEDERAL, STATE AND LOCAL CODES OR ORDINANCES.

It is the **responsibility of the owner/operator** to do the following:

A. Secure all required permits and meet all local code requirements.
B. Ensure the installation site is cleared and ready for installation before the authorized installer arrives on site. The site shall be smooth and level.
C. Provide electrical utilities within five (5) feet of the installation location per the specifications provided by LBC Bakery Equipment
D. Provide licensed trades person to make the final electrical and water connections.
E. Provide adequate ventilation, including vented hoods and associated roof penetrations.
F. Remove all packing materials, crates, etc. resulting from the installation.
G. Provide any sheet metal work required by local codes or otherwise to bridge gaps between appliance and adjacent walls or other building structures.

Installation of this equipment must be performed by an authorized service representative. Prior to installation verify that all electrical and gas supplies coincide with the manufacturers data label located on the right side below the service panel.

Inspection and Uncrating

Upon receipt of shipments, all packages should be inspected, and all visible or concealed damages noted and signed for on the bill of lading. Any other damages should be reported to the carrier within 10 days. Freight damages are the responsibility of the consignee.

All orders for replacement products resulting in freight damages will be processed under LBC's standard terms. Any reimbursement or credit is the responsibility of the freight carrier.

Carefully unpack the oven and place it in a work area as near to the final installation position as possible.

CONDITIONS of INSTALLATION (Part 2 of 2)

The LMO oven ships with the following items please inspect your shipment to ensure that these items were included.

- LMO Oven Rack
- Decorative hood front, sides and back pieces

If moving the oven through a 36" door opening it will be necessary to remove the oven door, door latch, door hinges decorative valance and the rear panel.

Location

This appliance is **not intended for outdoor use**. This appliance is **not intended for residential use**. This appliance is intended for commercial use in locations suitable for use as listed in this manual.

Clearances to combustible and non-combustible construction: 0" from back, sides and top.

This appliance is suitable for installation on combustible floors.

Installation Codes

For US Installation: The LMO oven must be installed in accordance with all State and local codes as well as the National Electrical Code, ANSI/NFPA-70 (latest edition). Gas ovens must be installed in accordance with the National Fuel Gas Code, ANSI-Z223-1/NFPA 54 (latest edition).

For Canadian installation: The LMO oven must be installed in accordance with all local codes. Gas ovens must be installed in accordance with the CAN/CGA-B149.1 National Gas Installation Code

Gas Ovens: The appliance and its individual shutoff valve must be disconnected form the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi.

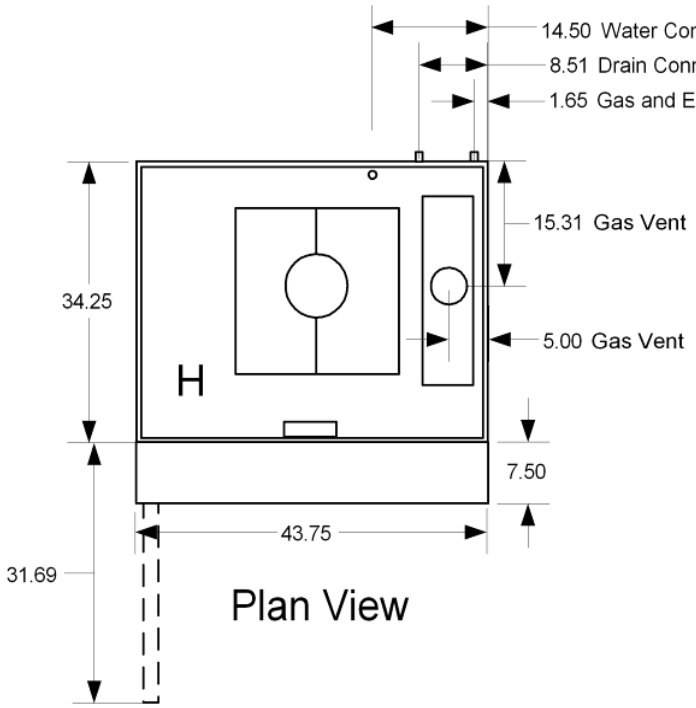
Gas Ovens: The appliance must be isolated from gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi.

Model Number Coding

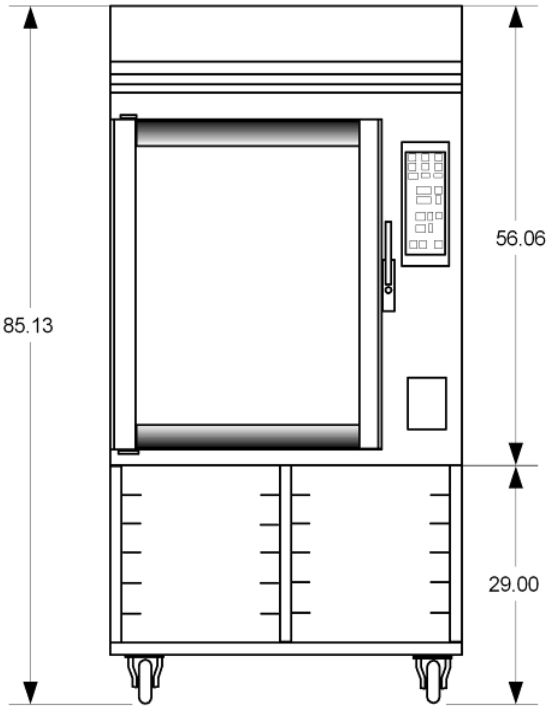
Electric Oven Number Format: LMO-E**X**-**Y**-**Z,** where **X** = rack size (use **6** for 6-pan rack, **8** for 8-pan rack), **Y** = voltage (use -**208** for 208V, **-240** for 240V and **-480** for 480V) and **Z** = base (use **-S** for stand, -**P** for proofer base). Example: LMO-E8-480-P is a 480V electric oven with an 8-pan rack and proofer base.

Gas Oven Number Format: LMO-G**X**-**Y**-**Z**, where **X** = rack size (use **6** for 6-pan rack, **8** for 8-pan rack), **Y** = gas type (use -**N** for natural gas, -**LP** for propane gas) and **Z** denotes the base (use **-S** for stand, -**P** for proofer base). Example: LMO-G6-N-S is a natural gas oven with a 6-pan rack and stand.

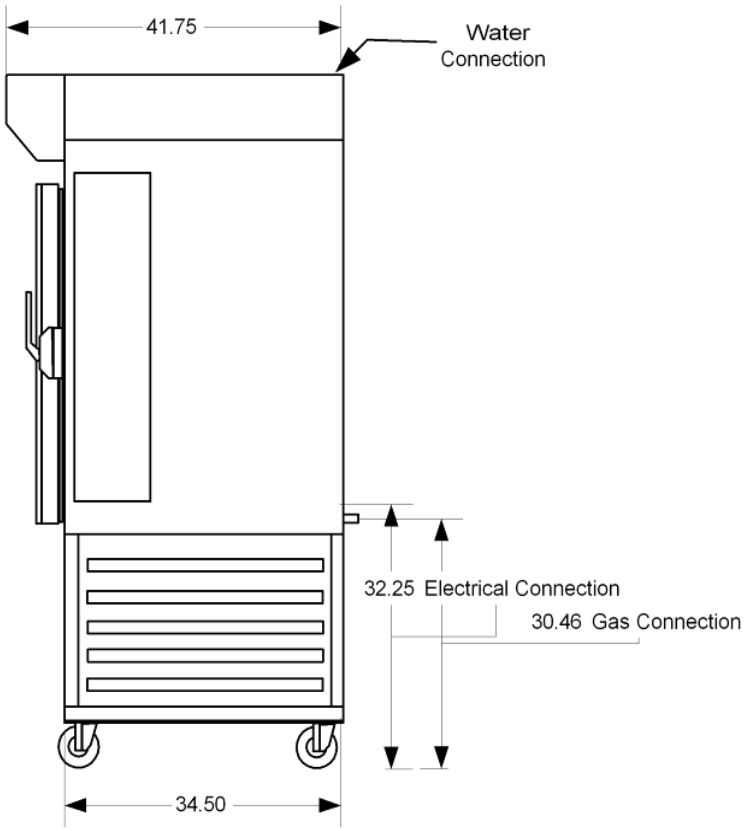
DIMENSIONS and UTILITY CONNECTIONS



Plan View



Front View



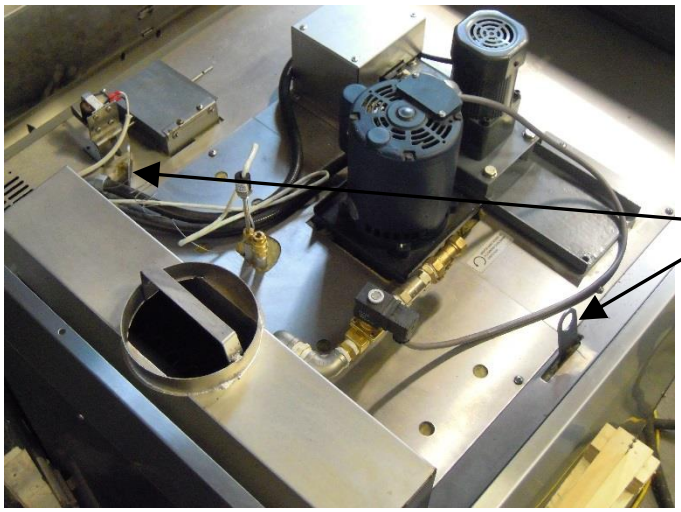
Side View

INSTALLATION (Part 1 of 6)

WARNING:
All gas ovens must be mounted on a stand or proofer base. DO NOT mount directly to a solid surface as the combustion air intake is from the bottom side of the oven.

Installing Casters

If your LMO oven is mounted on a stand, install casters using the supplied fasteners. With the oven still on the shipping pallet, slide forward and install the two front locking casters. Move the oven with stand forward again onto a pallet truck. Lift the oven with stand from the pallet and install the two rear casters. Lift the oven only at the lift points shown in illustration.



Lifting Points. Use adequate material handling equipment to lift the oven into place. NOTE: Oven weight is 1100 lbs.

Oven Location

WARNING:
Install oven on a surface adequate to support the weight of the appliance.

See the Dimensions and Utility Connections section of this manual for oven dimensions. Select a location with a smooth level surface and with adequate room to operate the appliance. If the oven mounting surface is not level, loosen the caster bolts and shim with washers above the caster plates until the oven is level. Re-tighten the caster bolts.

Gas Ovens: Gas Supply Connections

Verify that the gas type supplied to the oven matches the gas type listed on the oven's data label. The gas supply line must be at least the equivalent of 3/4" iron pipe. Ensure the pipes are free and clear of any dirt or obstruction. Corrugated lines must not be used.

Codes require installation of a gas shutoff valve in the gas line ahead of the oven.

INSTALLATION (Part 2 of 6)

See the Dimensions and Utility Connections section of this manual for gas connect point location. Connect the gas supply line to the 3/4" NPT gas connection located at the rear of the oven. If the oven is supplied with a flexible gas line, secure it to the oven and wall per the manufacturer's specifications.

Use only connectors that comply with the *Standard for Connectors for Movable Gas Appliances*, *ANZI Z21.69* or *Connectors for Movable Gas Appliances*, *CAN/CGA-6.16* with quick-disconnect devices that comply with the *Standard for Quick-Disconnect Devices for Use with Gas Fuel*, *ANZI Z21.41* or *Quick Disconnect Devices for Use with Gas Fuel*, *CAN 1-6.9.*

WARNING:
Gas supply connections and any pipe joint compound must be resistant to the action of natural and propane gases.

Check the incoming gas pressure before the gas valve. Pressure must remain between 5 to 14 inwc for natural gas and 11 to 14 inwc for propane gas - both with and without the burner firing.

Gas Ovens: Gas Type Conversion

1. Shut off the gas supply to the oven. Remove the bottom burner cover and the side access cover.
2. Disconnect the gas line at the top of the gas valve. Remove the four extended nuts at the bottom of the turner assembly. Lower the burner out of the oven.
3. Remove the 15 orifices and replace with the orifices listed on the burner/heat exchanger parts list in this manual. Use gas-approved Teflon tape to seal the orifices.
4. Replace the burner. Reconnect the gas line and replace the covers.
5. Check for leaks.
6. Operate the burner. Adjust the gas pressure to the correct pressure. Pressure must remain between 5 to 14 inwc for natural gas and 11 to 14 inwc for propane gas - both with and without the burner firing.
7. Apply proper labeling to indicate (a) the correct gas type and (b) the pressure requirements on the data plate and at the gas connection point.

Electrical Connections

WARNING:
This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with *National Electrical Code, ANSI/NFPA 70* or the *Canadian Electrical Code, CSA C22.2*, as applicable.

WARNING:
Gas Ovens: Do not connect oven to electrical supply until after gas connections have been made.

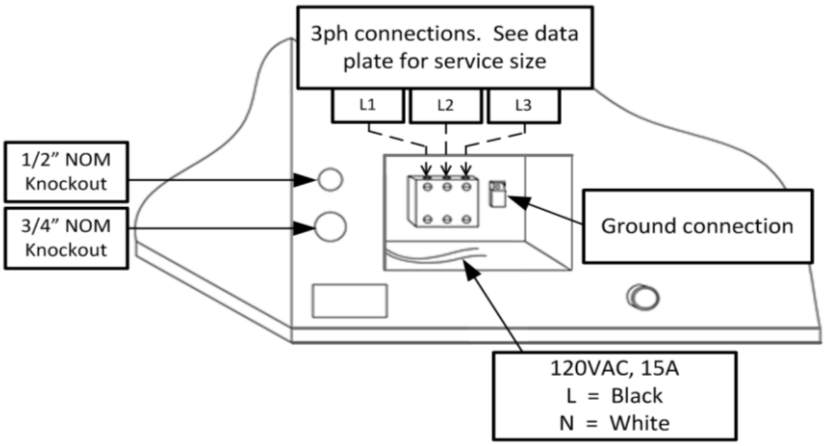
INSTALLATION (Part 3 of 6)

See the Dimensions and Utility Connections section of this manual for oven electric connect-point locations. Power can be connected at the electrical knockout holes in the oven. A flexible conduit or cord is required. Provide sufficient length to allow the oven to be moved for cleaning without applying tension to the connections.

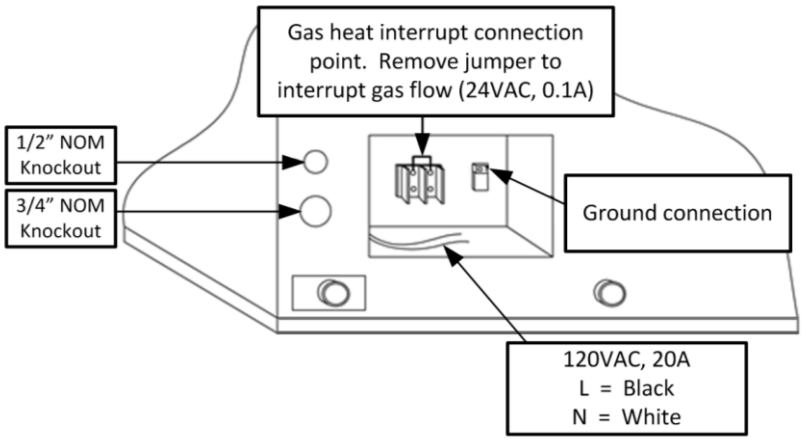
Electric Ovens: Ensure that electrical supply matches voltage listed on the ovens data label. All electric models require a 110/120V, 60Hz, 20A power supply as well as one of the following electrical supplies.

Volts	Phase	kW	Amps			MCA	MOP
			L1	L2	L3		
208	3	12.5	39	26	39	50	60
240	3	12.5	30	30	30	40	50
480	3	12.5	15	15	15	20	30

Route electrical supply through knockout at rear of oven. Connect supply voltage to terminal block located within electrical control compartment at right rear side of oven per the following illustration.



Gas Ovens: All gas models are provided with a 6 ft power supply cord. The oven requires a dedicated 110/120V, 60Hz, 20A single phase power supply with ground. *Note: The Commonwealth of Massachusetts requires that gas flow must be prohibited when exhaust hood is not operational. If installing oven in Massachusetts, connect power to terminal block and ground lug located within electrical control compartment at right rear side of oven per the following illustration.*



INSTALLATION (Part 4 of 6)

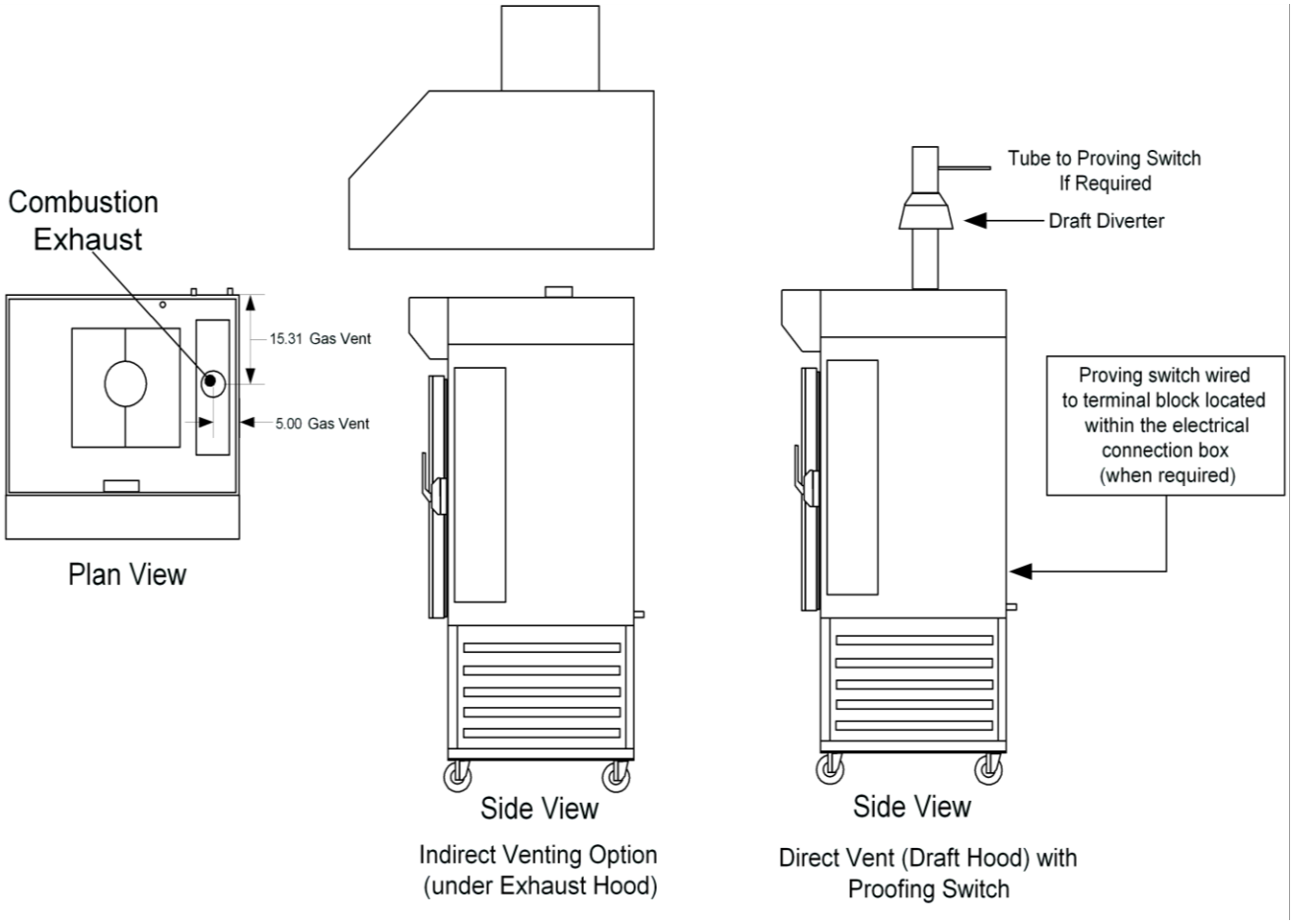
Venting

Ventilation requirements vary with each installation and must comply with applicable portions of the *National Fire Protection Association Standard 96* as well as all State and local codes.

Install the exhaust fan interlock. A connection point (5A max) is provided for indirect venting (standard exhaust hood) or optional direct venting (draft hood). Connect point is located in the electrical connection box at right rear side of oven. Consult local codes for vent interlock requirements.

Indirect venting (standard exhaust hood): Position the oven under the hood with adequate overhangs and exhaust rates to completely capture the byproducts of combustion discharged from the flue. See illustration below. From the termination of the flue to the filters of the hood venting system a clearance of 18" must be maintained. The exhaust hood fan can be directly interlocked to the oven. Refer to the Wiring Diagrams of this manual for terminal location.

For direct venting (optional draft hood): Install customer-supplied exhaust ducting and draft diverter. See illustration below. Verify that air is drawn into bottom of draft diverter while burner is firing, using a draft gauge or performing a smoke test. Use a draft gauge to verify that a draft of between 0.03 – 0.11 inwc is maintained at a point 6" above the draft diverter's upper collar. Any exhaust fan or draft inducer used to maintain system suction must be operating whenever the oven is turned on.



INSTALLATION (Part 5 of 6)

Water Connections

WARNING:
Plumbing connections must comply with applicable Sanitary, Safety and Plumbing Codes.

See Dimensions and Utility Connections section of this manual for water connect point location. Oven water supply should have a hardness of 4-6 grains per gallon, a pH of 6.5-8.0 and chlorides of less than 30 ppm. Water conditions outside of these parameters may void the warranty. Consult your local water company and or water condition dealer before connecting water supply to oven.

Connect cold water supply to 1/2" NPT fitting located at rear of the oven. Use a 6 ft or longer flexible water line.

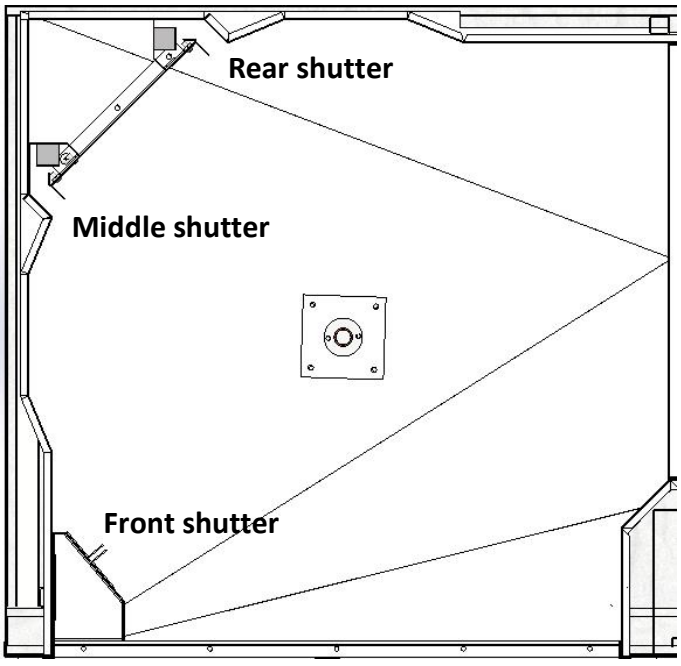
If your oven is used with a proofer insert, it is recommended that a separate water line is provided.

Drain Connections

See Dimensions and Utility Connections section of this manual for drain connect point location. Connect a 1/2" drain line to 1/2" NPT drain connector located at rear of oven. Route drain line to floor drain allowing a minimum 1" air gap between drain line outlet and floor drain.

If your oven is used with a proofer insert, it is recommended that a separate drain line is provided.

Shutter Settings



Top View of Oven Interior

INSTALLATION (Part 6 of 6)

Position	Front Shutter		Middle Shutter		Rear Shutter	
	inch	mm	inch	mm	inch	mm
1 (top)	0.32	8	0.25	6	0.38	10
2	0.18	5	0.28	7	0.38	10
3	0.15	4	0.18	5	0.32	8
4	0.15	4	0.21	5	0.32	8
5	0.18	5	0.21	5	0.29	7
6 (bottom)	0.25	6	0.41	10	0.41	10

Shutter Settings

Appliance Restraint

Adequate means must be provided to limit the movement of the appliance.

STARTUP PROCEDURE and CHECK LIST (Part 1 of 3)

<table>
<tr><th>Model</th><th>Procedure</th><th colspan="7">Specification, Standard or Action</th></tr>
<tr><td>All</td><td>Ventilation Requirements</td><td colspan="7">Ventilation requirements will vary with each installation and must comply with applicable portions of the NFPA Standard 96</td></tr>
<tr><td rowspan="3">All</td><td rowspan="3">Indirect Venting (installation under a hood)</td><td colspan="7">Requires adequate overhang and exhaust rates to capture byproducts of combustion.</td></tr>
<tr><td colspan="7">Requires 18" clearance from the top of the oven flue to the underside of the hood filters</td></tr>
<tr><td colspan="7">Vapor Removal from Cooking Equipment, NFPA No. 96</td></tr>
<tr><td>Gas</td><td>Direct Venting (Draft Hood)</td><td colspan="7">Direct vent using 6" "B" vent</td></tr>
<tr><td>All</td><td>Exhaust fan interlock</td><td colspan="7">A connection point (5A max) is provided for indirect or direct vent. It is located within the rear electrical compartment (terminal TB1). Consult local codes for vent interlock requirements</td></tr>
<tr><td rowspan="2">All</td><td rowspan="2">Verify supply voltage matched data plate</td><td>120V</td><td colspan="2">208V</td><td colspan="2">240V</td><td colspan="2">480V</td></tr>
<tr><td>1 ph</td><td>1 ph</td><td>3 ph</td><td>1 ph</td><td>3 ph</td><td>1 ph</td><td>3 ph</td></tr>
<tr><td>All</td><td>Ensure oven is level</td><td colspan="7">If mounted on a stand with casters, loosen caster bolts and shim base plate with washers as necessary to level oven, re-tighten bolts.</td></tr>
<tr><td>All</td><td>Seal oven to stand</td><td colspan="7">If oven is installed on a stand it must be sealed in place using an NSF approved sealant</td></tr>
</table>

STARTUP PROCEDURE and CHECK LIST (Part 2 of 3)

<table>
<tr><th>Model</th><th>Procedure</th><th colspan="9">Specification, Standard or Action</th></tr>
<tr><td rowspan="5">All</td><td rowspan="5">Clearances for operation, to combustibles and hood clearances</td><td colspan="9">Front</td></tr>
<tr><td colspan="9">Allow adequate room to operate appliance</td></tr>
<tr><td colspan="9">Bottom of Gas Ovens</td></tr>
<tr><td colspan="9">Gas ovens must be mounted on oven stand or on 6" legs. Combustion air is supplied from underside of oven. Never block underside of oven</td></tr>
<tr><td colspan="3">Sides</td><td colspan="3">Back</td><td colspan="3">Top</td></tr>
<tr><td rowspan="3">Gas Only</td><td rowspan="2">Connect oven to gas supply</td><td colspan="9">Connectors in accordance with Standard for Movable Gas Appliances ANZI Z21.69 or CAN/CGA-6.16; Quick-Disconnect Devices for Use with Gas Fuel, ANZI Z21.41 or CAN1-6.9</td></tr>
<tr><td colspan="9">Manual gas shut-off valve is required in line ahead of oven</td></tr>
<tr><td>If Required, verify pressure regulator is installed</td><td colspan="9">If incoming pressure is greater than 14 inwc</td></tr>
<tr><td>All</td><td>If oven is on a stand with casters, ensure oven has approved restraints</td><td colspan="9">Adequate means must be used to limit movement of appliance</td></tr>
<tr><td>All</td><td>Connect oven to water supply</td><td colspan="9">Flexible Lines are acceptable</td></tr>
<tr><td>All</td><td>Connect drain line</td><td colspan="9">1/2" Vented Copper Lines</td></tr>
<tr><td>All</td><td>Check all connections for leaks</td><td colspan="9">Use soapy water to inspect for leaks</td></tr>
<tr><td>Gas Only</td><td>Connect amp meter to incoming power supply</td><td colspan="9">120V, 7A</td></tr>
<tr><td rowspan="3">Electric Only</td><td rowspan="3">Check amp draw per line</td><td colspan="3">208V, 3ph</td><td colspan="3">240V, 3ph</td><td colspan="3">480V, 3ph</td></tr>
<tr><td>L1</td><td>L2</td><td>L3</td><td>L1</td><td>L2</td><td>L3</td><td>L1</td><td>L2</td><td>L3</td></tr>
<tr><td>39A</td><td>26A</td><td>39A</td><td>30A</td><td>30A</td><td>30A</td><td>15A</td><td>15A</td><td>15A</td></tr>
<tr><td rowspan="2">Gas</td><td rowspan="2">Connect manometer to supply side of regulator verify incoming pressure</td><td colspan="5">Natural Gas</td><td colspan="4">Liquid Propane</td></tr>
<tr><td colspan="5">Between 5-14 inwc at all times</td><td colspan="4">Between 11-14 inwc at all times</td></tr>
<tr><td rowspan="3">All</td><td rowspan="3">Press the ON/OFF key at controls</td><td colspan="9">Interior oven lights come on, rack begins to rotate and convection blower starts</td></tr>
<tr><td colspan="9">Set control temperature at 400°F and allow oven to complete two full cycles</td></tr>
<tr><td colspan="9">Verify amperage draw and/or gas pressure readings</td></tr>
</table>

STARTUP PROCEDURE and CHECK LIST (Part 3 of 3)

Model	Procedure	Specification, Standard or Action
All	Open oven door and ensure rack stops at the center of door opening	If necessary, adjust rotation cam located at top of oven to set rack stop position
All	Enter a bake time of 30 minutes and a steam time of 15 seconds	Verify that oven produces steam. Verify convection blower stops operating while steaming.
		Verify drain is free and clear and drains readily
		Verify there are no water leaks
All	Press Vent key until Open LED is illuminated	Verify the vent opens freely
All	Set the bake time for 15-20 minutes with NO steam time and vent CLOSED	Load parchment-covered 18" x 26" sheet pans with nine (9) each frozen sugar cookie dough in a 3 x 3 pattern. Fill every pan slide with a loaded sheet pan.
All	Inspect bake for evenness	Adjust shutter apertures and angle as necessary to achieve an even bake. See Installation, Shutter Settings section of this manual.

USING the CONTROL

Manual Mode Operation

2 **Select the Bake Temperature**

5 **Load the Oven Then Select Start Stop**

3 **Select the Bake Time**

4 **Select Steam Time if Required**

1 **Press the Power ON/OFF Key**

All functions can be edited during the bake cycle.
To vent the oven at any time during the Bake press the VENT Key
To pulse or delay the Blower press the BLOWER Key
VERY IMPORTANT: The oven does not heat when the Blower is Delayed!

Recipe Programming

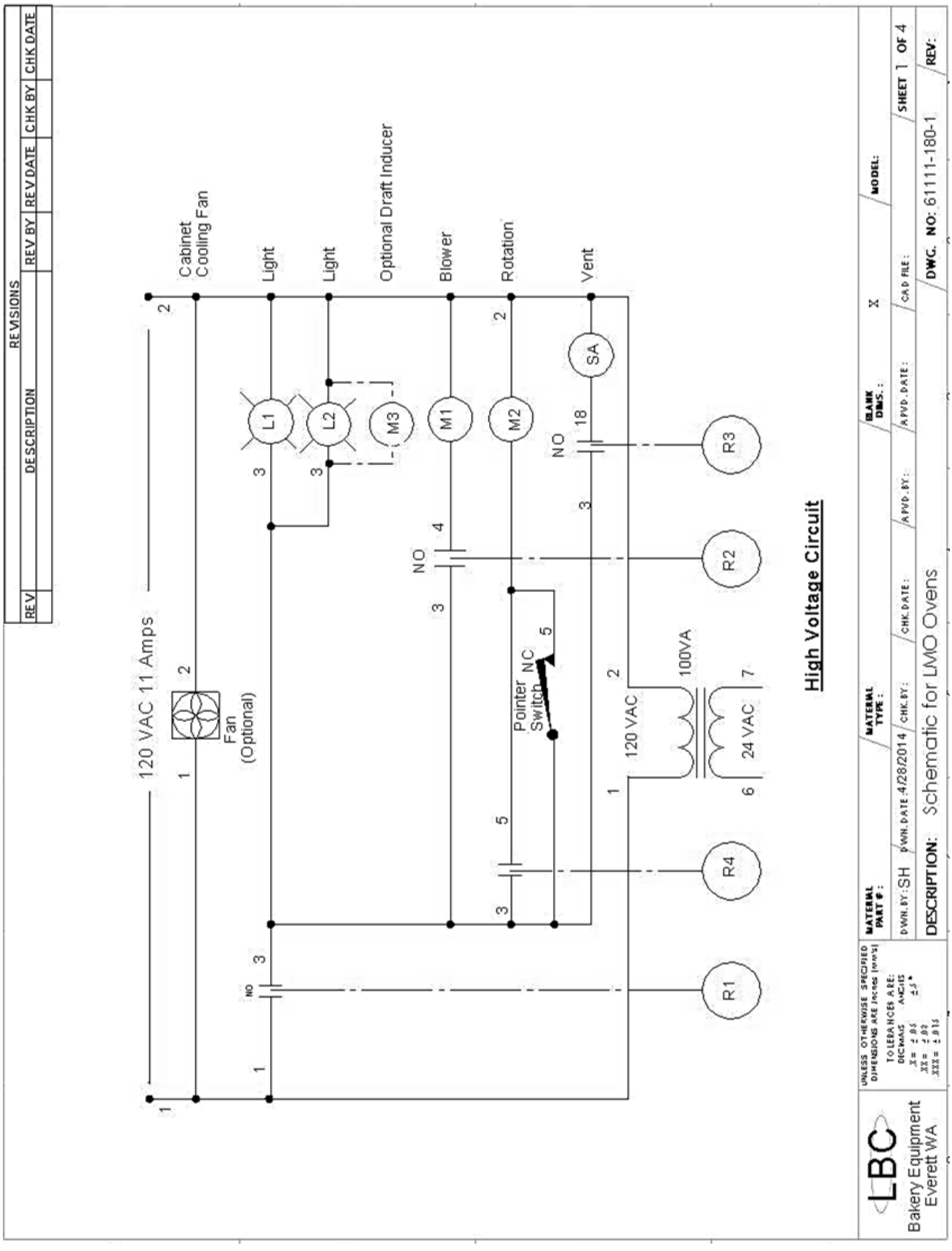
1 **Select a recipe number to be programmed by either selecting 1-6 keys or by scrolling through the 99 recipe items**

NOTE: **The selected recipe number will be displayed**

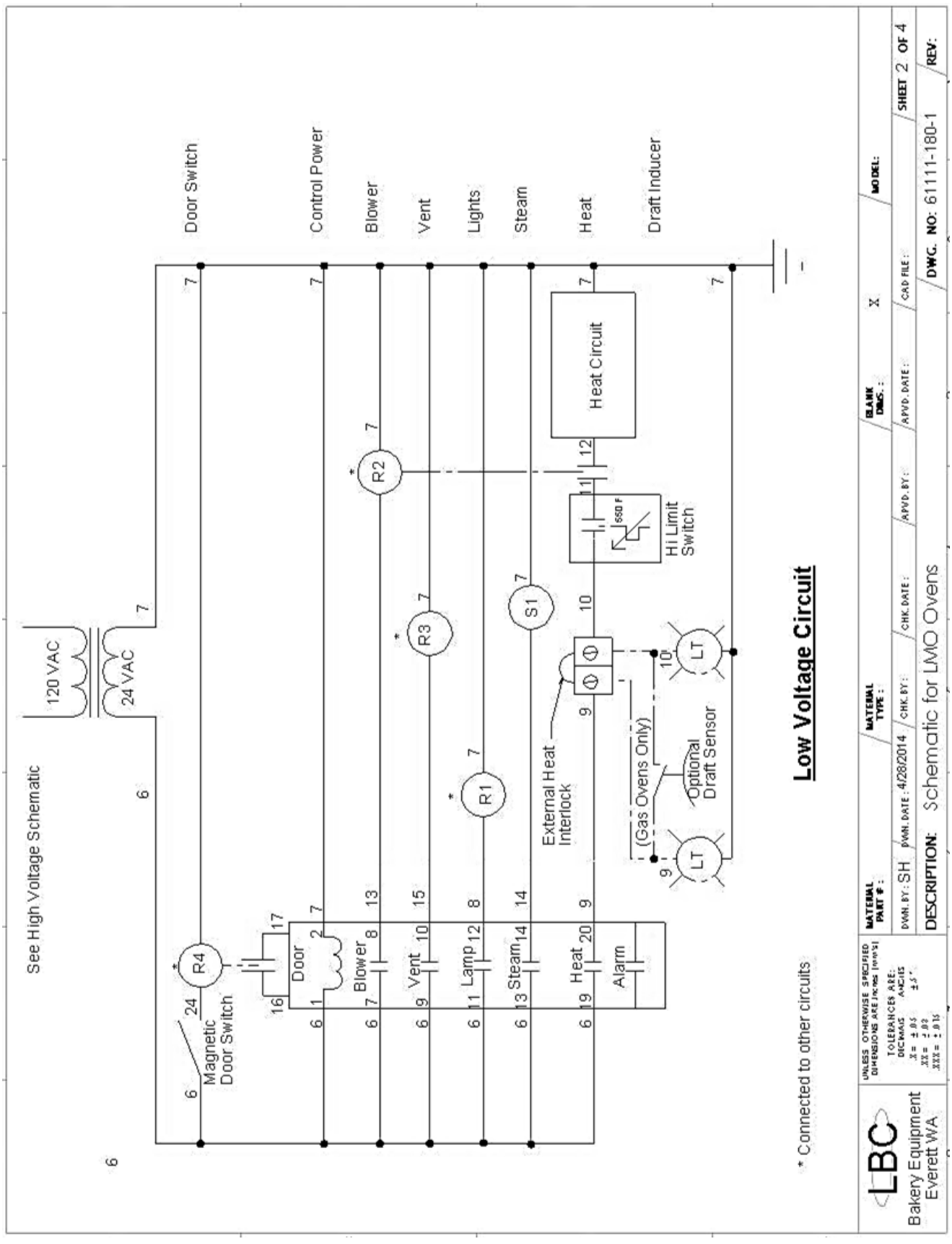
3 **Press the SAVE key 2 times to save this recipe**

2 **Edit the Bake Time, Temperature and Steam Time If desired select the Auto Vent feature to have the steam vent automatically 2/3 of the way through thebake.**

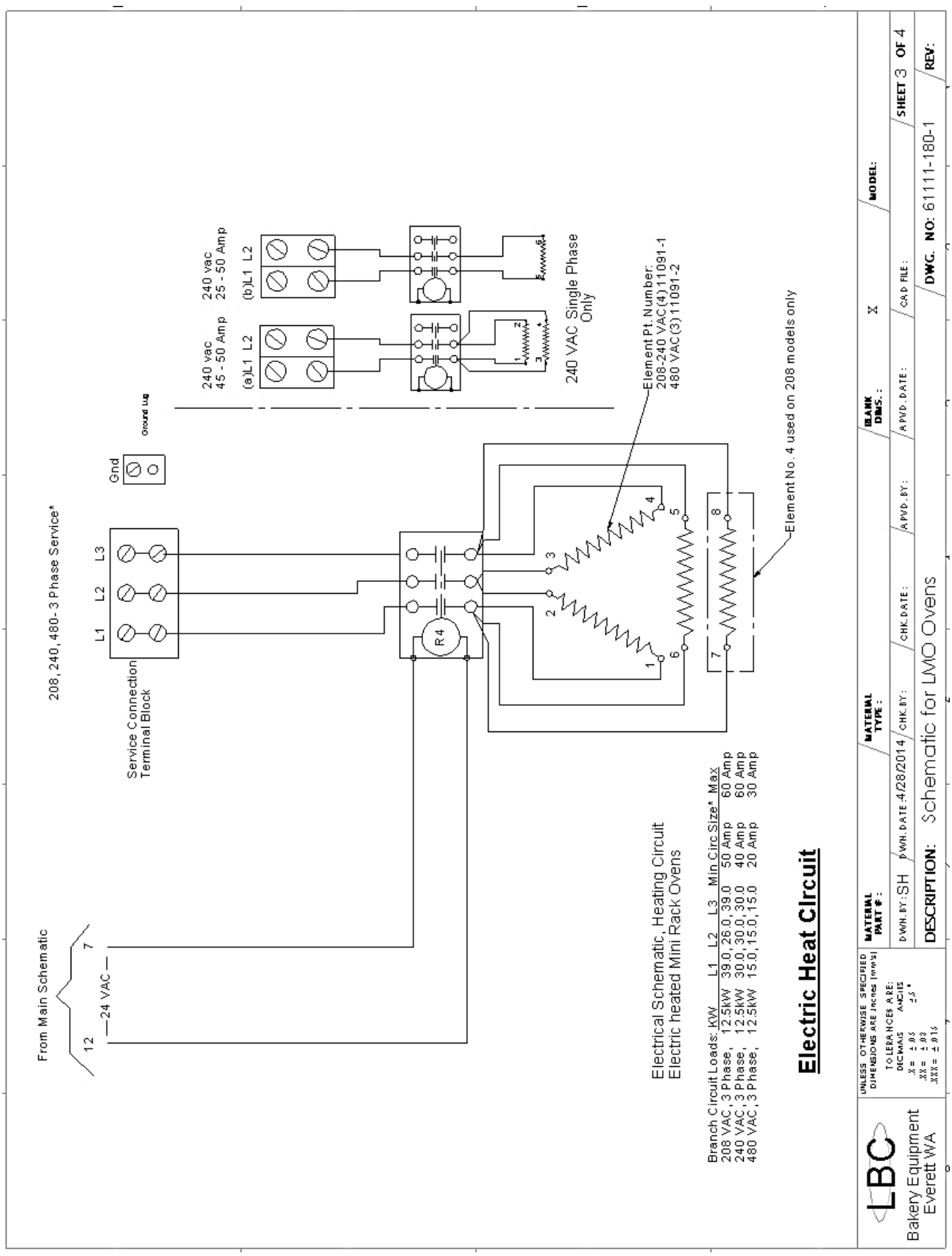
SCHEMATICS (Part 1 of 4)



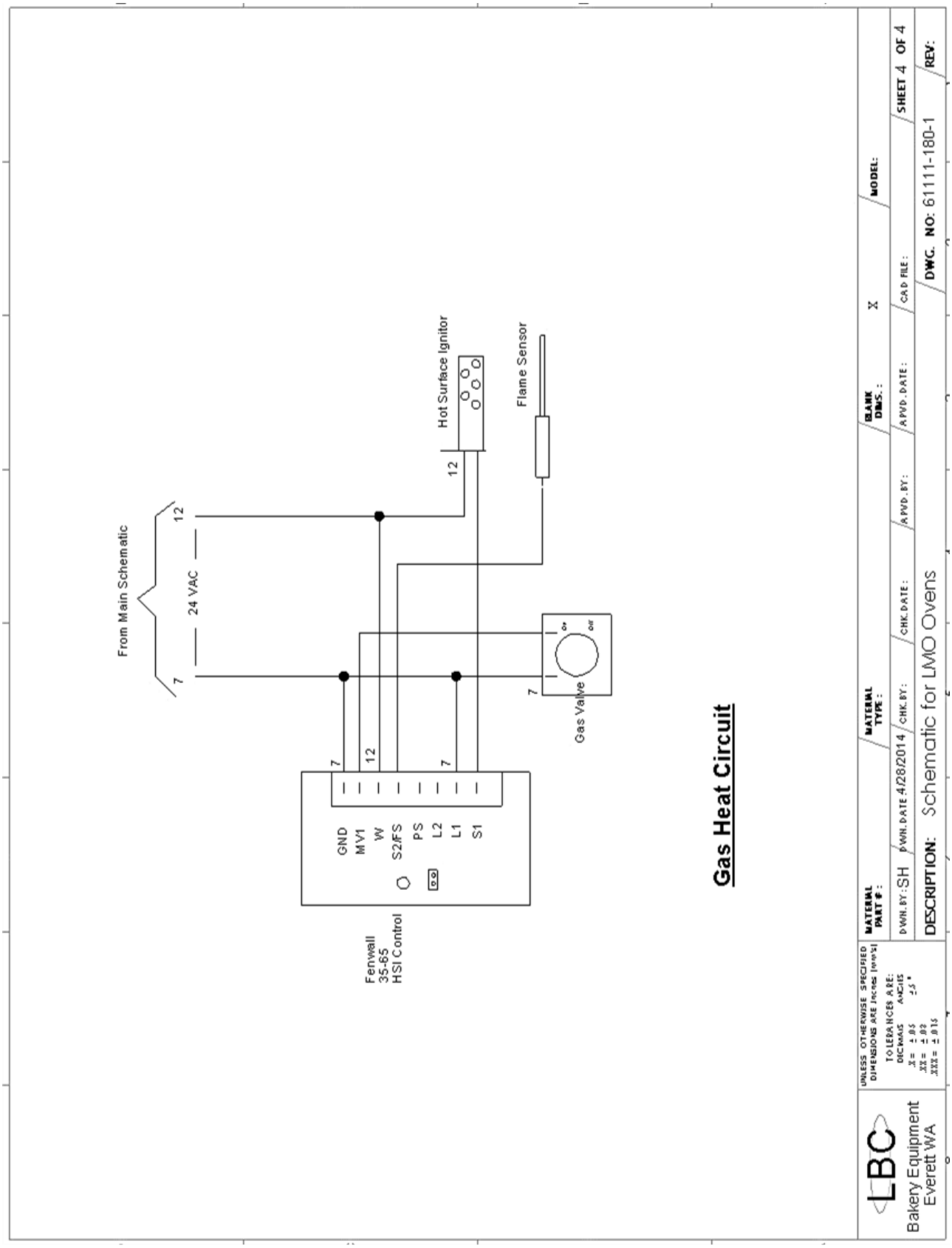
SCHEMATICS (Part 2 of 4)



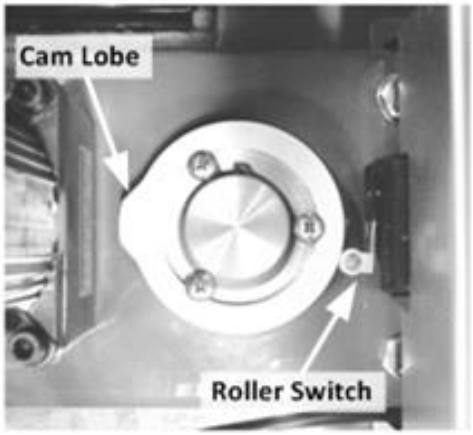
SCHEMATICS – ELEC OVENS (Part 3 of 4)



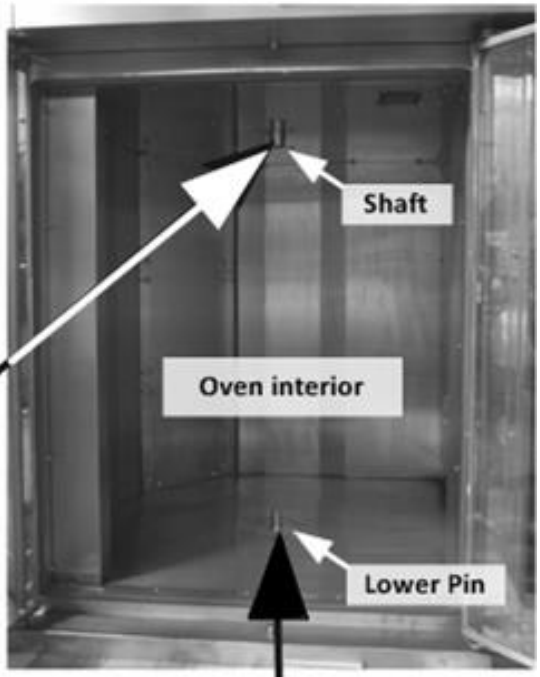
SCHEMATICS – GAS OVENS (Part 4 of 4)

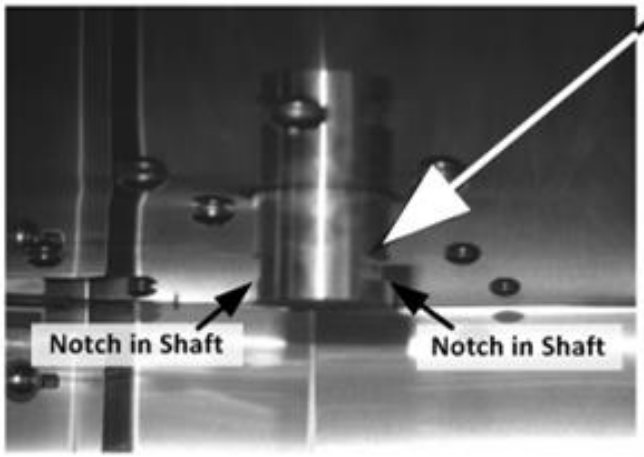


ILLUSTRATED PARTS LIST (Part 1 of 6)

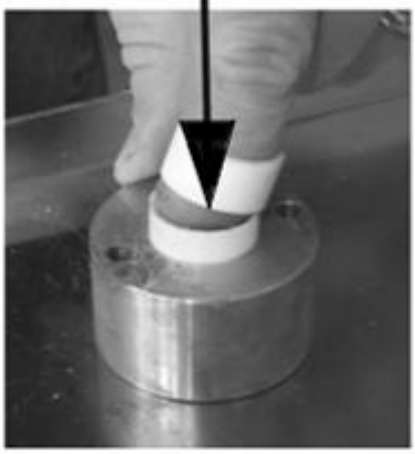


1st: Rotate shaft until cam lobe is 180° from roller switch

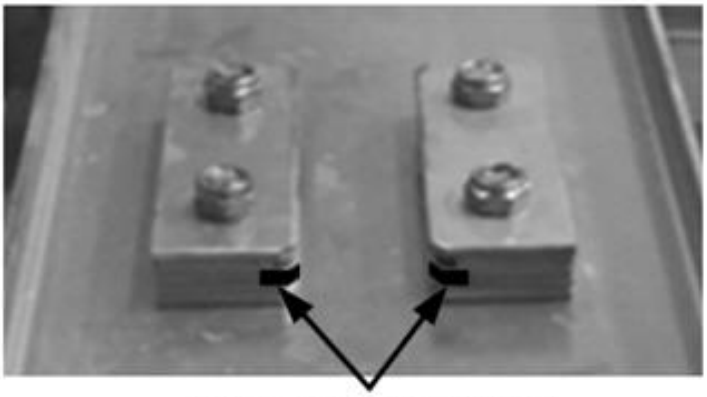




4th: Push shaft up slightly and slide rack into place. Install rack with front side toward back of oven. Notches in rack mount blocks (step 3) allow rack to slide onto shaft notches.

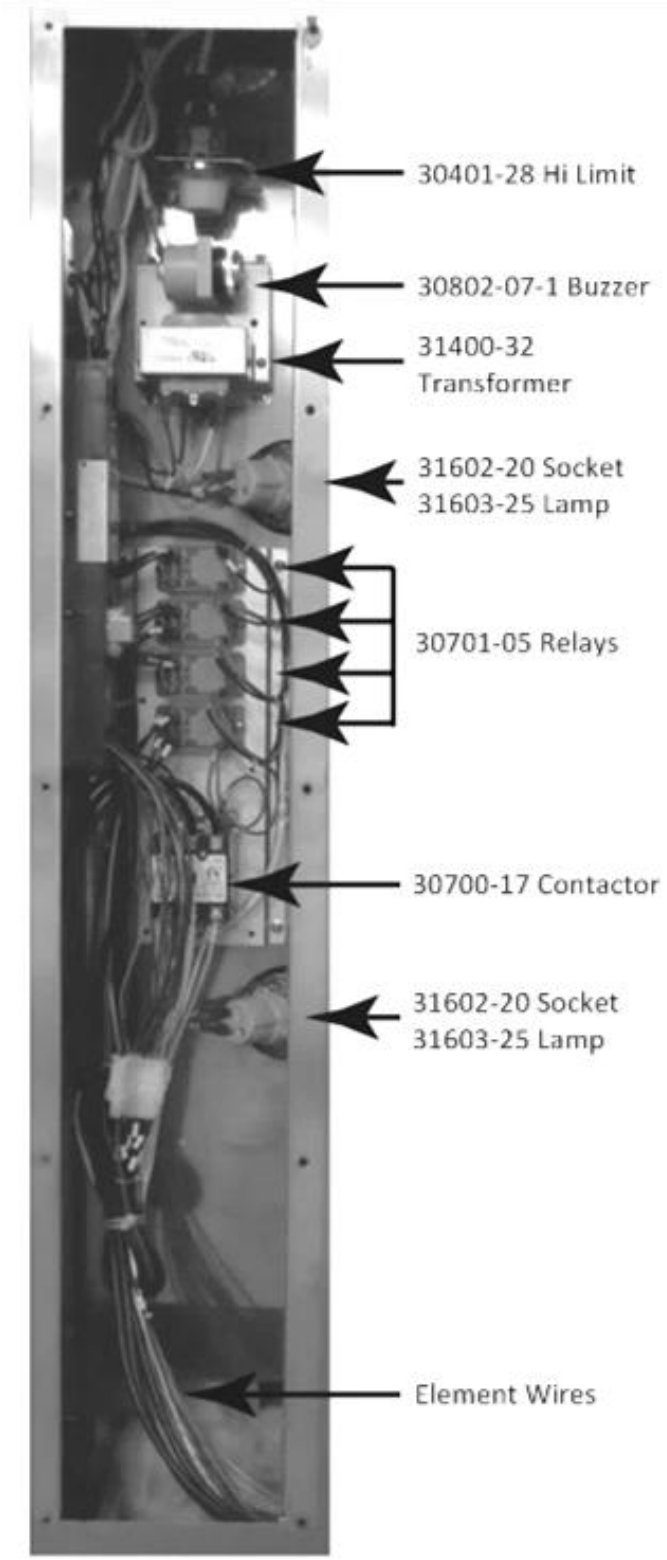


2nd: Ensure bushings are installed in bottom spacer of rack before installing rack on lower pin inside oven

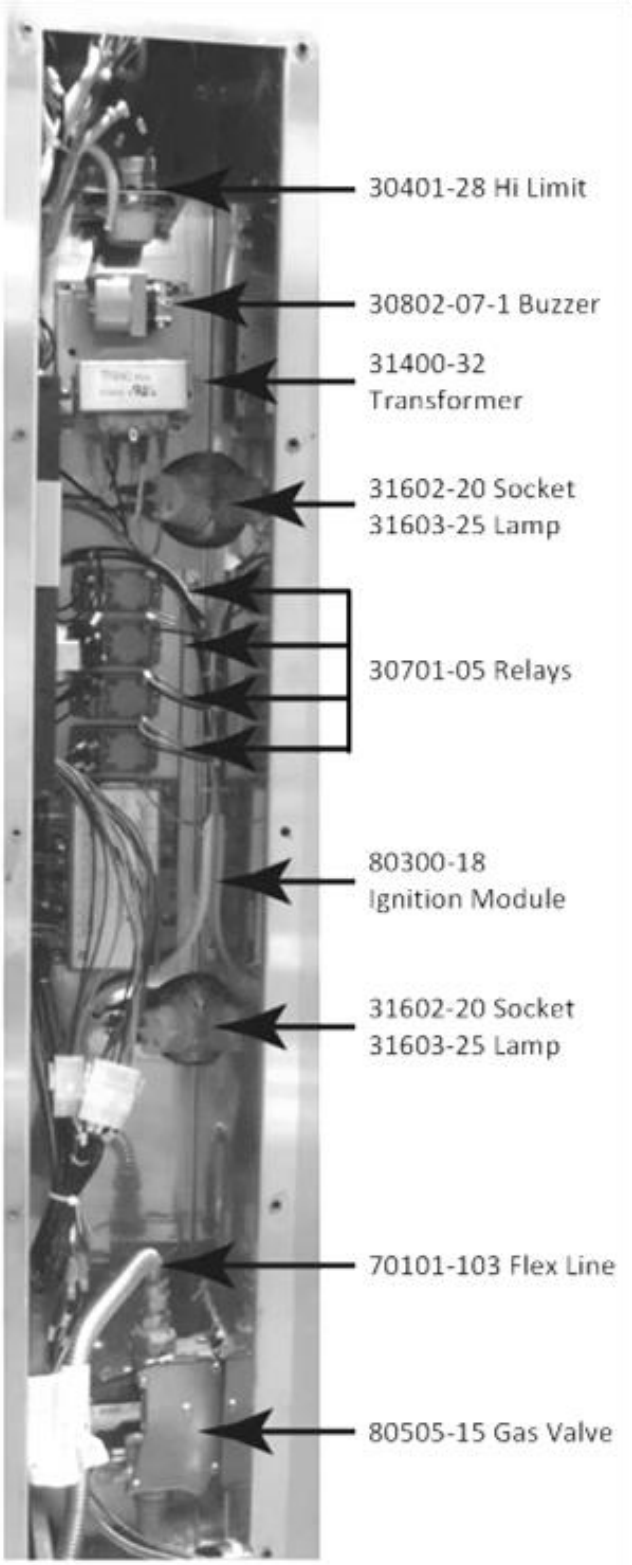


3rd: Locate notches in both mount blocks at top of rack

ILLUSTRATED PARTS LIST (Part 2 of 6)



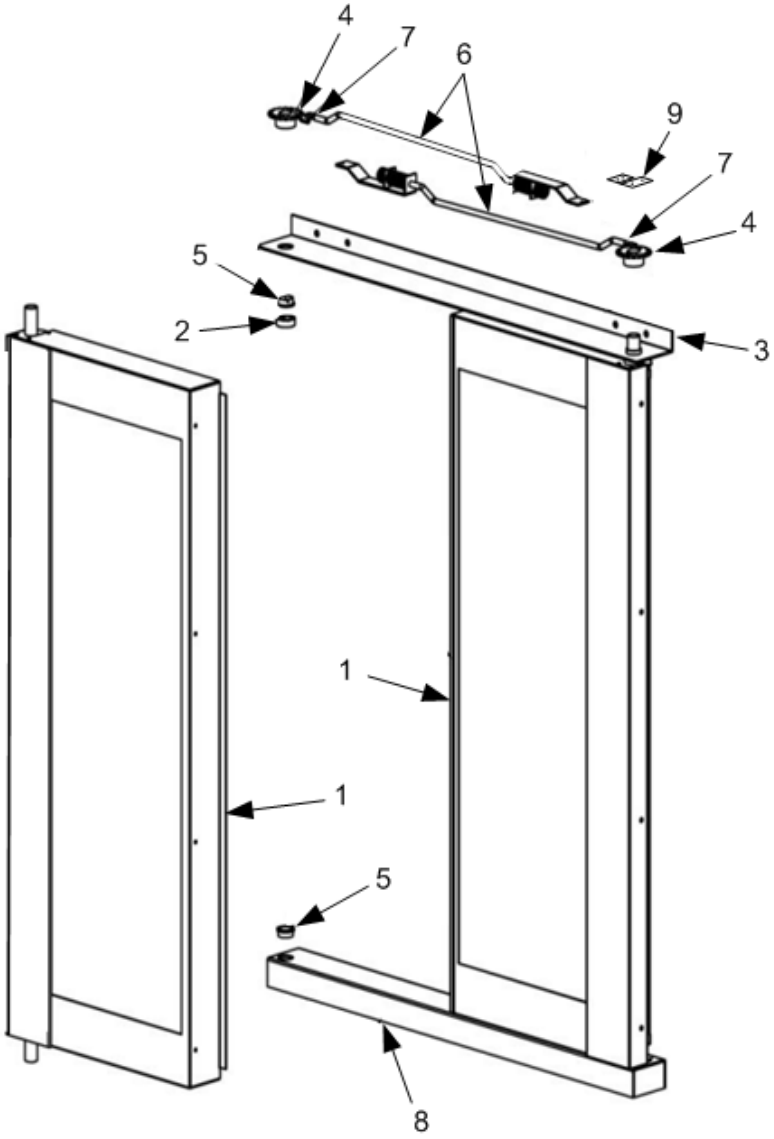
LMO-E Electrical Compartment



LMO-G Electrical Compartment

ILLUSTRATED PARTS LIST (Part 3 of 6)

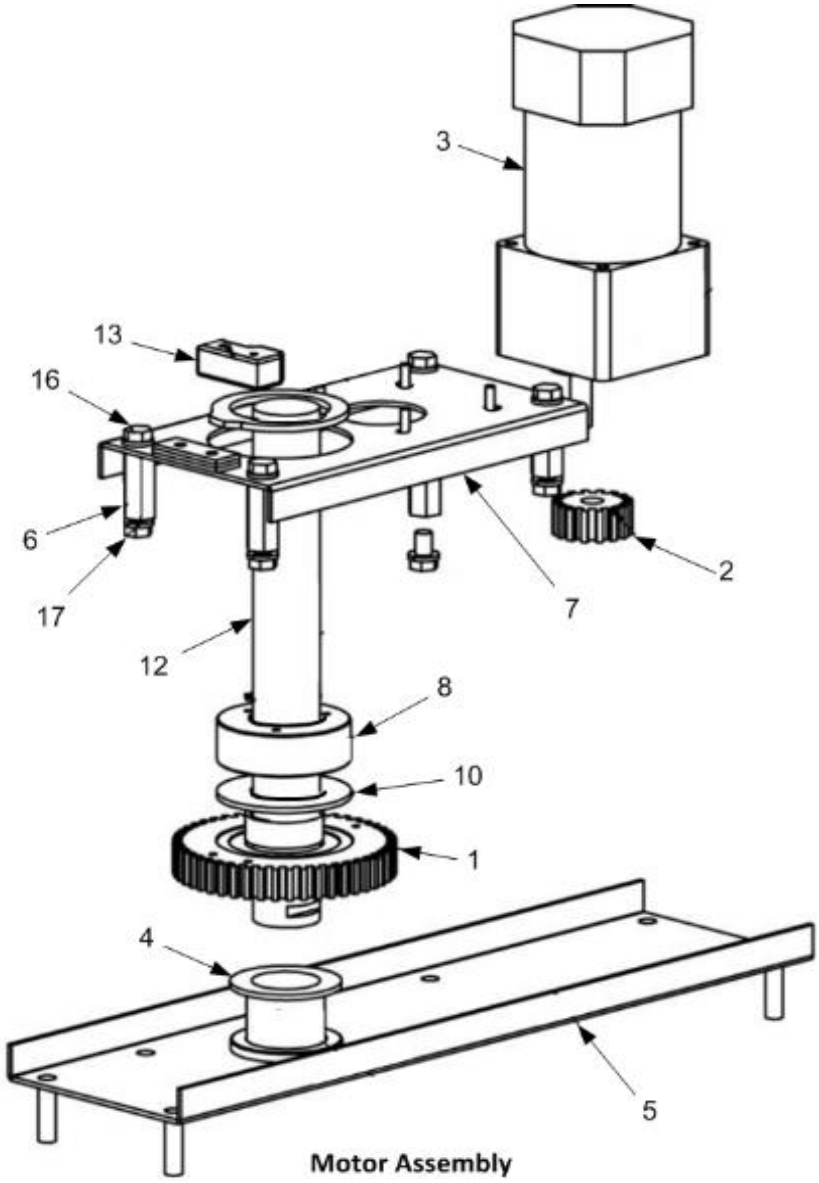
Item No	Part No	Description	Qty
1	151-741	Door Assembly	2
2	151-499	Spacer Bushings	2
3	151-500	Door Mount	1
4	73000-10	Sprocket (35B, 13TG)	2
5	151-503	Bronze Bearing	4
6	151-744	Door Linkage Assembly	2
7	Chain Link	Chain and Master Link (35B)	2
8	151-745	Bottom Door Support	1
9	151-510	Door Closer Crank	1



Loading Doors

ILLUSTRATED PARTS LIST (Part 4 of 6)

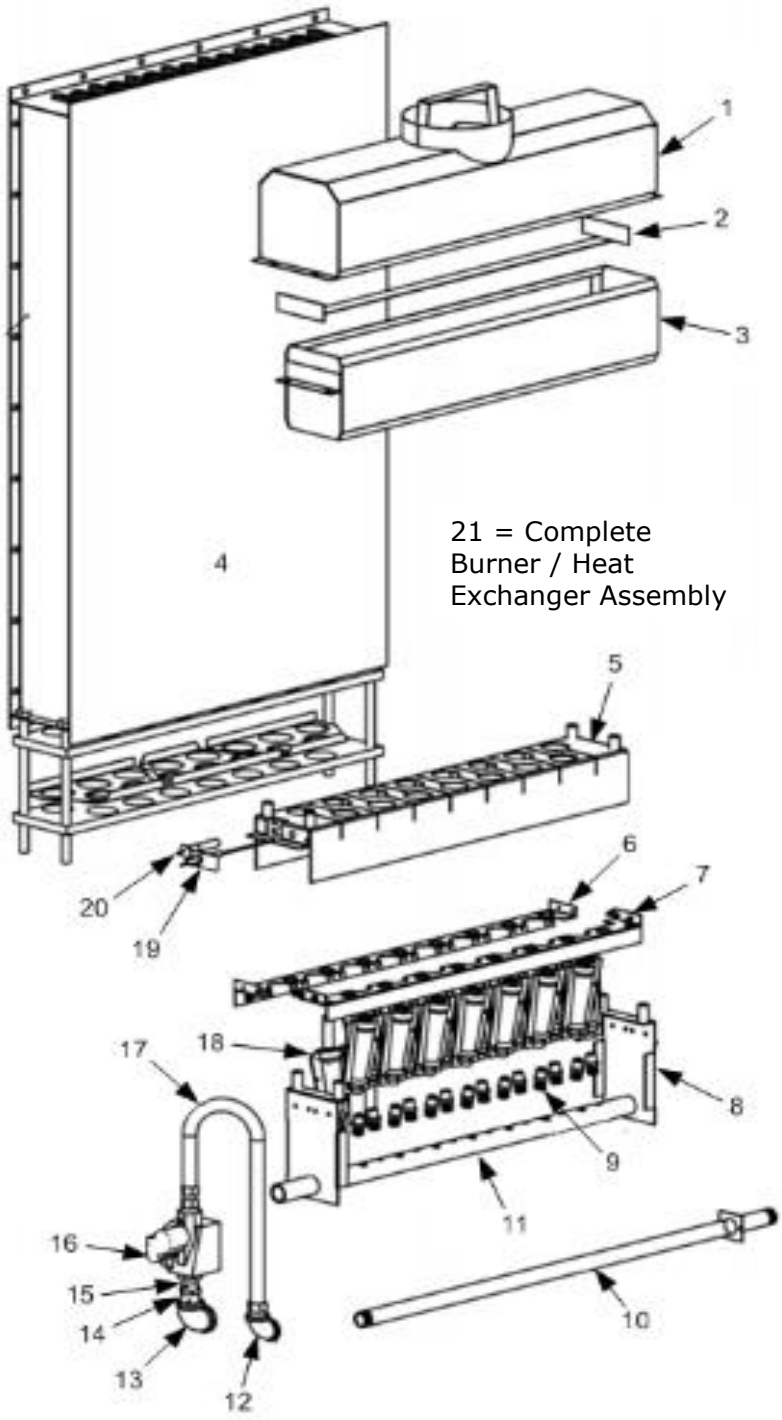
Item No	Part No	Description	Qty
1	73000-06a	Driven Gear	1
2	73000-05a	Motor Gear	1
3	30200-65	Motor Rotation Drive	1
4	70200-11	Bushing	1
5	151-739	Rotator Bottom Assembly	1
6	150-150-2	Spacer, Rotator	4
7	151-740	Rotator Top Assembly	1
8	50803-002	Drive Collar	1
9	70200-13	Bushing	1
10	70200-14	Friction Washer	1
11	20601-04	Snap Ring	1
12	151-482	Drive Shaft	1
13	30301-15	Roller Switch	1
14	20104-20	1/4-20 x 3/4" HH Mach Screw, SS	4
15	20202-05	1/4 Split Lock Washer, SS	4
16	20104-09	3/8-16 x 5/8" Mach Cap Screw, SS	8
17	20202-09	3/8 Split Lock Washer, SS	8
18	20105-20	3/8-16 x 1/2 Mach Cup Screw, SS	1
19	20105-04	6mm-1mm x 10mm Set Screw, SS	2
20	151-523	Rotator Cam	1
21	151-524	Spacer, Roller Switch	3



Motor Assembly

ILLUSTRATED PARTS LIST – ELECTRIC OVENS (Part 5 of 6)

Item No	Part No	Description	Qty
1	151-722	Draft Diverter	1
2	151-727	Exhaust Restrictor	1
3	151-719	Chimney	1
4	151-702b	Heat Exchanger	1
5	151-160	Burner Box	1
6	151-311	Mount, Burner - Left	1
7	151-312	Mount, Burner - Right	1
8	151-313	End, Burner Assembly	2
9	80400-01	Orifice*	15
10	150-215	Gas Pipe Assy	1
11	151-310	Manifold	1
12	70305-01	Elbow, 1/2NPT - Steel	1
13	70305-09	Elbow, 3/4NPT - Steel	1
14	70307-02	Reducer, Pipe – 3/4 x 1/2 NPT, Steel	1
15	70302-08	Nipple, Close – 1/2NPT, Steel	1
16	80505-15	Gas Valve, Combination	1
17	70302-09	Gas Connector – 18”	1
18	80002-14	Burner, Inshot	15
19	41100-36-1	Flame Sensor	1
20	80302-12	Ignitor, Hot Surface	1
21	151-763	Burner / Heat Exchanger Assy	1



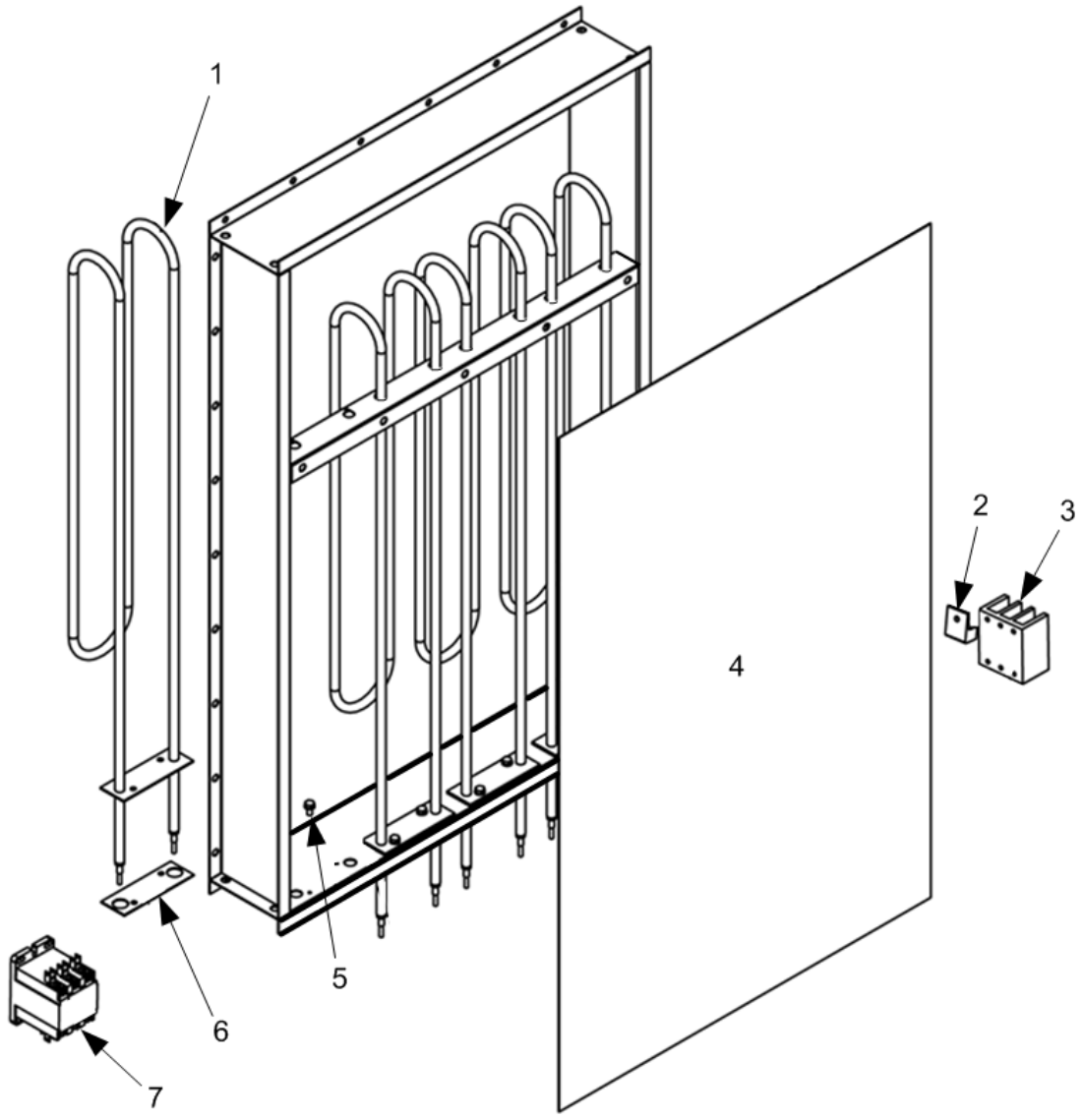
* Orifice Sizes:

Natural Gas @ 3.5 inwc = 3/64” (0.047)[1.19mm]

Propane Gas @ 5.0 inwc = #65 (0.035)[0.89mm]

ILLUSTRATED PARTS LIST – GAS OVENS (Part 6 of 6)

Item No	Part No	Description	Qty
1	11091-1	Element (4250W @240V)	4
2	31200-08	Ground Lug, 2-Hole	1
3	30500-07	Term Block, 3-Pole	1
4	151-164b	Cover, Heat Exchanger	1
5	20202-01	Hex Bolt, 6mm-1x12mm, MS	8
6	150-907	Gasket, Element	4
7	30700-17	Contactor, 3-Pole, 40A, 24V Coil	1



NOTES

LIMITED WARRANTY

LBC Bakery Equipment ("LBC Equipment") has been skillfully manufactured, carefully inspected and packaged to meet rigid standards of excellence. LBC Bakery Equipment, Inc. (LBC) warrants products produced and sold by LBC and its duly authorized agents against defects in materials and workmanship within the following limitations:

What is Provided:

- Limited replacement parts as specified below, including standard ground shipping from LBC or service parts center when required.
- Limited labor for repair as specified below, including authorized service agent's transportation, portal to portal, up to one hundred (100) miles round trip and two (2) hours travel time.
- LBC, or an authorized service representative, will repair or replace, at LBC's sole discretion, any LBC equipment, including but not limited to the listed exclusions.

Coverage Period:

Extending from the date of shipment from LBC or its duly authorized dealer/distributor for the specified period:

- LRO and LMO Model Rack Ovens, LRP Model Rack Proofers, LRPR Model Retarder Proofers, LCR Model Rotisseries and LHC Model Holding Cabinets for a period of one (1) year limited parts and labor.
- Replacement parts shall be warranted for a period of ninety (90) days after installation by an authorized LBC service agent.

Conditions:

- Covered equipment must have been properly installed according to the requirements of the installation manual and all applicable local codes.
- The equipment shall not have been abused, misused or neglected or used for purposes other than intended by LBC.
- Water connected to the appliance shall have been in compliance with the following requirements:
  - Cold Water: 30 - 80 PSI
  - pH: 7 - 7.5
  - Conductivity: < 1/500,000 Ω per inch
  - Total Dissolved Solids: < 100 ppm
  - Hardness: 6.3 - 8.8 grains per gallon
  - Maximum Salinity and Ion content:

Chlorides:	< 30 ppm
Sulfates:	< 40 ppm
Iron:	< 0.1 ppm
Copper:	< 0.05 ppm
Manganese:	< 0.05 ppm
- It is the responsibility of the purchaser to install and maintain the water supply to the appliance. Failure to provide satisfactory water quality in accordance with the operating manual requirements can cause damage to internal components and will VOID the warranty.
- All repair work is to be performed by an LBC authorized service agent.
- Equipment must be at the installation location of the original purchaser/user and shall not have been resold or reclaimed by another party.

Conditions (Continued):

- LBC 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.
- Conditions of sale of the equipment shall have been met in full.
- The request for repair shall be made within the limited period of the warranty.

Failure to meet the above conditions will void this warranty.

Exclusions:

This warranty does not cover the following:

- Routine general maintenance, or periodic adjustment.
- Thermostat calibration after the first 30 days of use.
- Glass, Lamps, Gaskets, Oven Racks and other consumable parts.
- Air and gas burner adjustments.
- Fuse replacement.
- Cleaning and adjusting burners and pilot burners.
- Rack oven shutter adjustments.
- Repairs adjustments and corrections in the refrigeration portion of retarder/proofers resulting from the improper installation.
- Retightening of screws and fasteners.
- Failures caused by erratic or inadequate electrical, water, ventilation or gas service.
- Unauthorized repairs.
- Premature rusting, corrosion, or mineral build up caused by incoming water.
- Attached water treatment systems.
- Expedited freight on replacement parts other than standard ground shipments.
- Ordinary wear and tear.
- Use of the equipment for purposes other than those intended including non-commercial use such as residential or domestic.
- Appliances installed outside the contiguous U.S., including Alaska and Hawaii, and Canada.
- Incidental costs, charges, loss of business and damages as incurred by the user or others as a result of the use or failure of the equipment.
- Work and workmanship of the authorized service agent or others in the repair of the equipment.
- Other failures that are beyond the reasonable scope of this warranty.
- Damage caused during shipment is to be reported to the carrier, is not covered under this warranty, and is the sole responsibility of the purchaser/user.
- Natural disaster.

This warranty is exclusive and in lieu of all other warranties, expressed or implied, including expressed or implied warranties of merchantability or fitness for a particular purpose, each of which is hereby expressly disclaimed. The remedies described herein are exclusive and in no event shall LBC be liable for special, consequential or incidental damages for the breach or delay in the performance of this warranty