



SE Series Modular Electric Stone-Hearth Deck Oven **INSTALLATION & OPERATION MANUAL**

LBC BAKERY EQUIPMENT, INC.

6026 31st Ave NE

Tulalip, WA 98271, USA

Toll Free: 888-722-5686

Email: sales@lcbbakery.com

Website: www.lcbbakery.com

Table of Contents

Page 3	Cautions
Page 4	Installation
Page 5	Dimensions
Page 6	Connections
Page 9	Start-Up
Page 10	Trouble-shooting
Page 11	Operation
Page 11	Oven Control
Page 12	Loading the oven
Page 12	Starting a Bake
Page 13	Cleaning and Maintenance
Page 15	Parts Illustrations and Lists
Page 19	Notes
Page 20	Limited Warranty Information

CAUTION!
**DO NOT OPERATE, CLEAN OR SERVICE THIS MACHINE BEFORE
READING THIS MANUAL AND UNDERSTANDING COMPLETELY THE
SAFETY INSTRUCTIONS FOUND IN THIS MANUAL AND ON THE
MACHINE'S LABELS**

IMPORTANT!
**ALL OPERATORS OF THIS OVEN MUST BE OF LEGAL AGE TO
OPERATE SUCH EQUIPMENT AND MUST BE FAMILIAR WITH AND
UNDERSTAND ALL CAUTION LABELS.**

DISCONNECT FROM POWER SOURCE WHEN CLEANING AND/OR SERVICING
THIS MACHINE

NEVER ATTEMPT TO CLEAN THIS MACHINE WHILE IT IS HOT OR HEATING AS
RISK OF SERIOUS INJURY COULD RESULT

NEVER OPERATE THIS MACHINE WITH SAFETY COVERS OR INSPECTION
PLATES REMOVED OR WITH SAFETY SWITCHES INOPERATIVE

IMPORTANT!
**THIS OVEN IS DESIGNED FOR DIRECT HEARTH BAKING OF BREAD
PRODUCTS AND PIZZA ONLY. ALL OTHER PRODUCTS MUST BE
BAKED IN A PAN OR ON OTHER MEDIA.**

The SE Deck oven has been packaged to withstand rough handling; however, it is important that you inspect the shipment for damages, concealed or otherwise and that you sign the bill of lading to note any such damages. These damages are the responsibility of the consignee and must be reported to the carrier within 10 days in order to file for a claim.

LBC Bakery Equipment, Inc. will not warrant any equipment that is not installed by a trained installation contractor or that has not been connected to utilities by a licensed electrician and plumber. Please consult our warranty at the end of this document.

I: Installation Section

A: Installation

The SE deck oven requires some assembly by an authorized LBC trained service technician.

In the US the SE deck oven must be installed in accordance with:

1. State and local codes
2. National Electrical Code (ANSI/NFPA no. 70, latest edition) available from the National Fire Protection Association, Batterymarch Park, Quincy MA 02269

In Canada, the SE deck oven must be installed in accordance with:

1. Local codes.
2. Canadian Electrical Code (CSA C22.2 No. 3 latest edition) available from the Canadian Standards Association, 5060 Spectrum Way, Mississauga, Ontario L4W 5N6

Check with your local building department to determine if the oven will need to be placed under a hood. Information on the construction and installation of ventilating hoods may be obtained from Vapor Removal from Cooking Equipment, NFPA Standard no. 96 (latest edition)

The installation location should be free and clear of all obstruction.

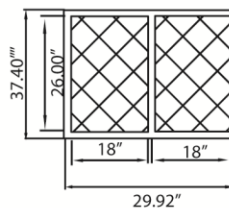
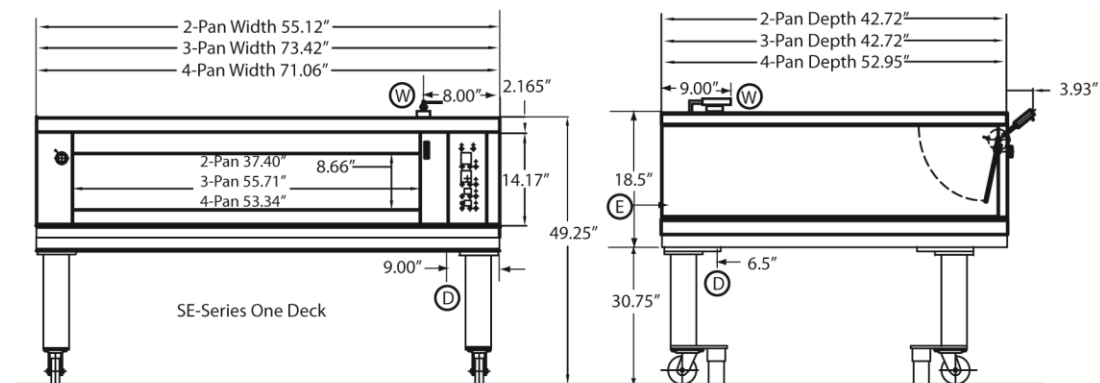
The floor should be smooth and level and must be capable of supporting the weight of the appliance.

Allow adequate clearance at the sides of the oven for serviceability. Allow 42" at the front of the oven so that it can be pulled forward for servicing.

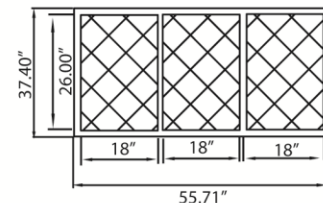
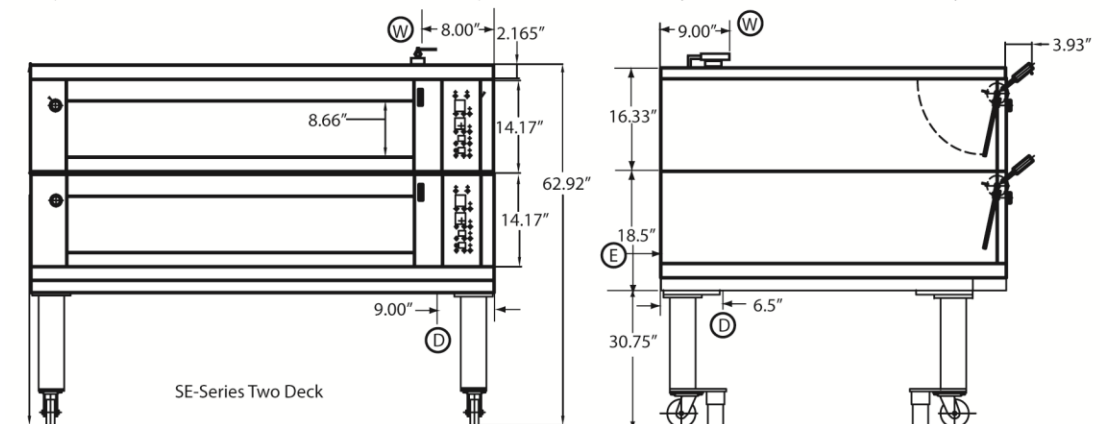


The SE deck oven is equipped with four (4) leveling feet located under the equipment stand, two at the front and two at the rear.

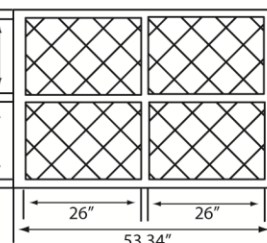
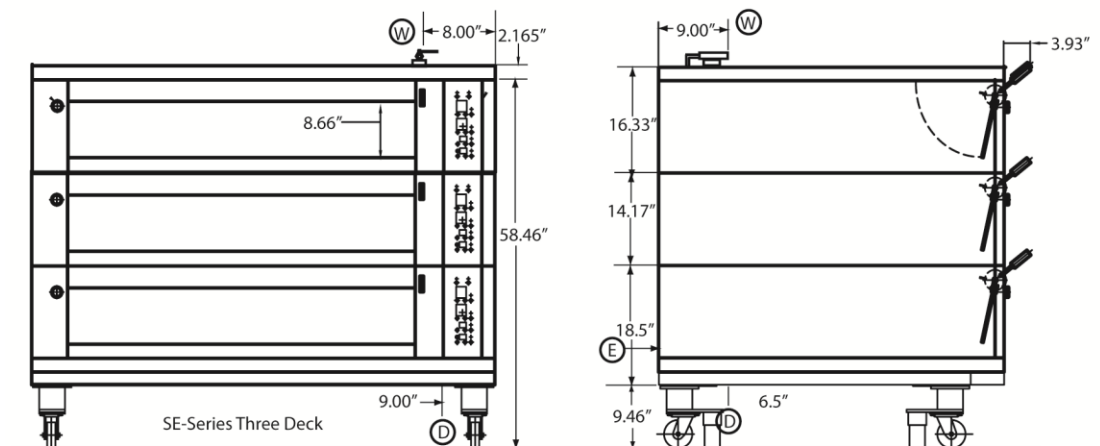
Once the oven is installed in its operating position, lower the feet by turning them clockwise to level and secure the appliance from movement.



SE-92 Series Oven Interior

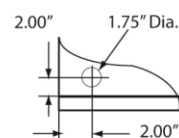


SE-93 Series Oven Interior

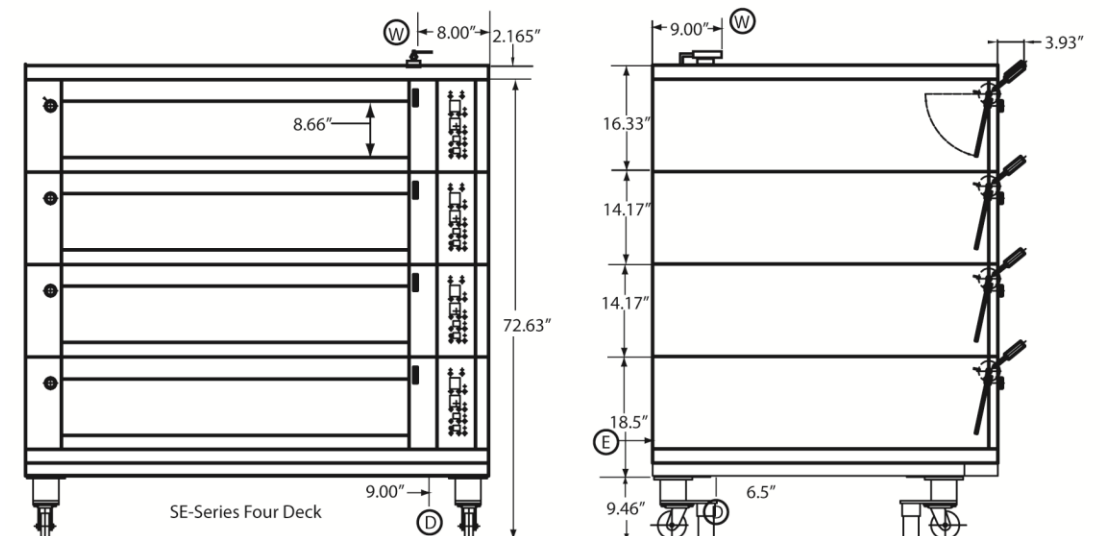


SE-94 Series Oven Interior

- Ⓢ 1/2" NPT Water Connection
- Ⓣ 1/4" Copper Drain
- ⓔ 1 - 3/4" Knock Out Hole



Electrical knockout detail located at the rear left corner of each oven deck.



Deck ovens are shipped individually and will need to be stacked. It is very important to use the proper material handling equipment.

1. Place the stand in an area that is level and can support the weight of the oven.
2. Lower the feet on the stand so that it will not move during the assembly process.
3. Place the first deck on the stand and secure it in place using the supplied XXX fasteners.
4. Stack other decks on top of each other and secure them in place using the stacking kits clips and fasteners.
5. Use a suitable 1.75" strain reliever to connect the power supply to the oven.
6. Wire the decks together using copper wire suitable for 90 degrees C and suitable for the amperage of the branch circuit protector supplying the ovens.

B: Electrical Connections

Electrical connection must comply with all applicable State and local codes and in accordance with the NEC and NFPA.

Electrical connections MUST be made by a licensed electrician.

A separate service disconnect should be installed so that main power can be disconnected during service.

Model	Voltage	3ph Amps / Stack of Decks								1ph Amps / Single Deck	
		1 Deck		2 Decks		3 Decks		4 Decks		Min Circuit Amps	Max O'load Protection
		Min Circuit Amps	Max O'load Protection	Min Circuit Amps	Max O'load Protection	Min Circuit Amps	Max O'load Protection	Min Circuit Amps	Max O'load Protection		
SE91_ (1 Pan)	208	15	20	30	40	50	60	65	75		
	240	20	25	35	45	55	65	75	90	25	30
	480	10	15	20	25	30	35	40	45		
SE92_ (2 Pans)	208	20	25	45	55	65	80	85	105		
	240	25	30	50	60	75	90	100	120	35	40
	480	15	20	25	30	40	45	45	60		
SE93_ (3 Pans)	208	30	40	65	80	95	120	125	150		
	240	35	40	75	90	110	130	145	175	50	60
	480	20	25	35	45	55	65	75	90		
SE94_ (4 Pans)	208	40	50	85	100	125	150	165	175		
	240	40	50	85	100	125	150	165	175		
	480	20	25	45	50	65	75	85	100		

Use only Copper Wire Rated at 90 Degrees Centigrade

The oven must be installed with the provided lanyard securely attached to the stand and to the wall. Verify that all connections are long enough so that the oven can be pulled forward to the extent of the lanyard without straining any connection.

Electrical and grounding connections must comply with the applicable portions of the National Electrical Code and or other local codes.

Disconnect the electrical power to the unit and follow lockout / tag out procedures.

Jump to Next Deck



Incoming Water;
Use the supplied 10MM copper tubing
and three way compression fitting to
link the decks together

Drain Line Drain into Steam Collection Pot

Incoming Power

Electrical connection must comply with all applicable State and local codes and in accordance with the NEC and NFPA.

Electrical connections MUST be made by a licensed electrician.

A separate service circuit breaker should be installed so that main power can be disconnected during service

C: Water Requirements

As with all steam related products, water filtration and regular filter replacements, coupled with routine deliming are required.

Proper water quality can improve the taste of the food prepared in the oven, reduce liming and extend equipment life. Local water conditions vary from one location to the other. The recommended water hardness is 2.0 to 6.0 grains of hardness per gallon with pH from 7.0 to 8.0. Chlorides must not exceed 30 parts per million. Water hardness above 6.0 grains per gallon should be treated by a water conditioner (water softener or in-line water treatment). Water hardness below 4.0 grains per gallon may also require a water treatment system to reduce potential corrosion.

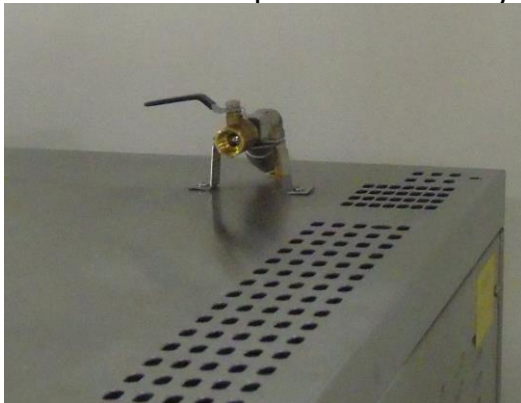
D: Plumbing Connections.

Water and waste piping and connections shall comply with the international Plumbing Code 2003, International Code Council (ICC), or to the Uniform Plumbing Code 2003, International Plumbing and Mechanical Officials (IAPMO)

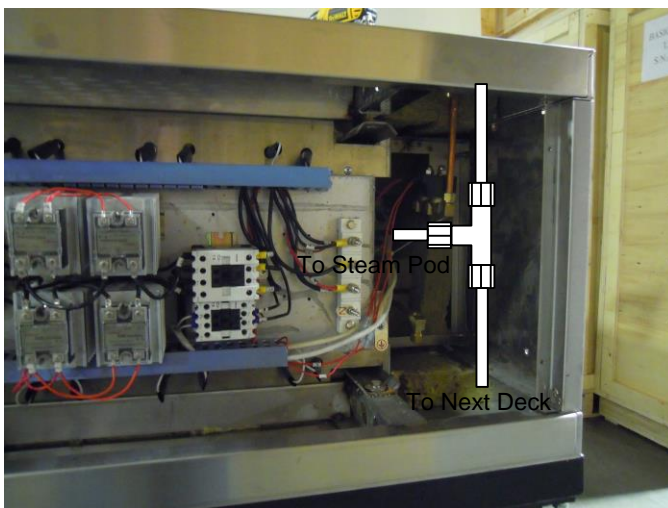
Plumbing connections must comply with applicable sanitary, safety and plumbing codes and provide adequate backflow protection to comply with applicable federal, state and local codes. A 100 mesh strainer must be installed immediately upstream of a check valve-type back-flow preventer.

Each oven deck is equipped with a "Steam Pod" located behind the access panel rear of the oven(s); drains are required for these steam pods. Note: this appliance has atmospheric steam generation and does not create any positive pressure in the oven chamber or in the steam generator pods.

Water to this appliance should be treated to prevent build-up of minerals and rust in the steam pods and water system.



The top deck oven is supplied from the factory with a 1/2" NPT ball valve and "Y" strainer. The water supply connection is made at the 1/2" ball valve. The supply connection should be made with a suitable flexible line to allow the oven to be moved in and out of position.



Subsequent decks will need to have the water lines linked together using the supplies 10mm copper tubing and compression fittings.

Inspect final connections for leaks.

E: Start-Up

Before using the oven for the first time, when new stone deck is installed, or if the stone deck has been cleaned with water, the baking stone need to be slowly “baked in” prior to start-up. Use the following chart as a guide for the first start-up to properly season the baking stone.

Parameter	Step 1	Step 2	Step 3	Step 4	Step 5
Top Heat	150 F	250 F	350 F	450 F	550 F
Bottom Heat	150 F	250 F	350 F	450 F	550 F
Bake Time	30 Min.	30 Min.	30 Min.	30 Min.	30 Min.
Steam	None	None	None	None	None
Steam Vent	Open	Open	Open	Open	Open

F: Trouble Shooting

Oven does not heat

Check main power is on
Check internal circuit breakers
Check that over-temp limit has not tripped (This is a thermal device, allow to cool and re test)
Check voltage at elements
Check that contactors have not tripped; reset if necessary.

Oven Slow to Heat

Check supply voltage matches rating on data plate
Electrical phase is out
Check that all elements are operational
Check internal circuit breakers

Temp display reading backwards

Thermocouple wire backwards

Oven loses temp.

Excessive steam time
Circuit breaker tripped out
Element out
Contactor tripped

Uneven baking

Oven not loaded correctly (see page 10)
Element out
Circuit breaker tripped
Contactor tripped

No Steam

Water supply is not on
Ball valve closed
Blockage in "Y" Trap
Solenoid defective

For the installation company:

I/we _____ certify that the SE-9 _____ model
electric deck oven serial number(s) _____
_____ has been installed and tested and is in excellent operating
condition.

Signed by:

Date

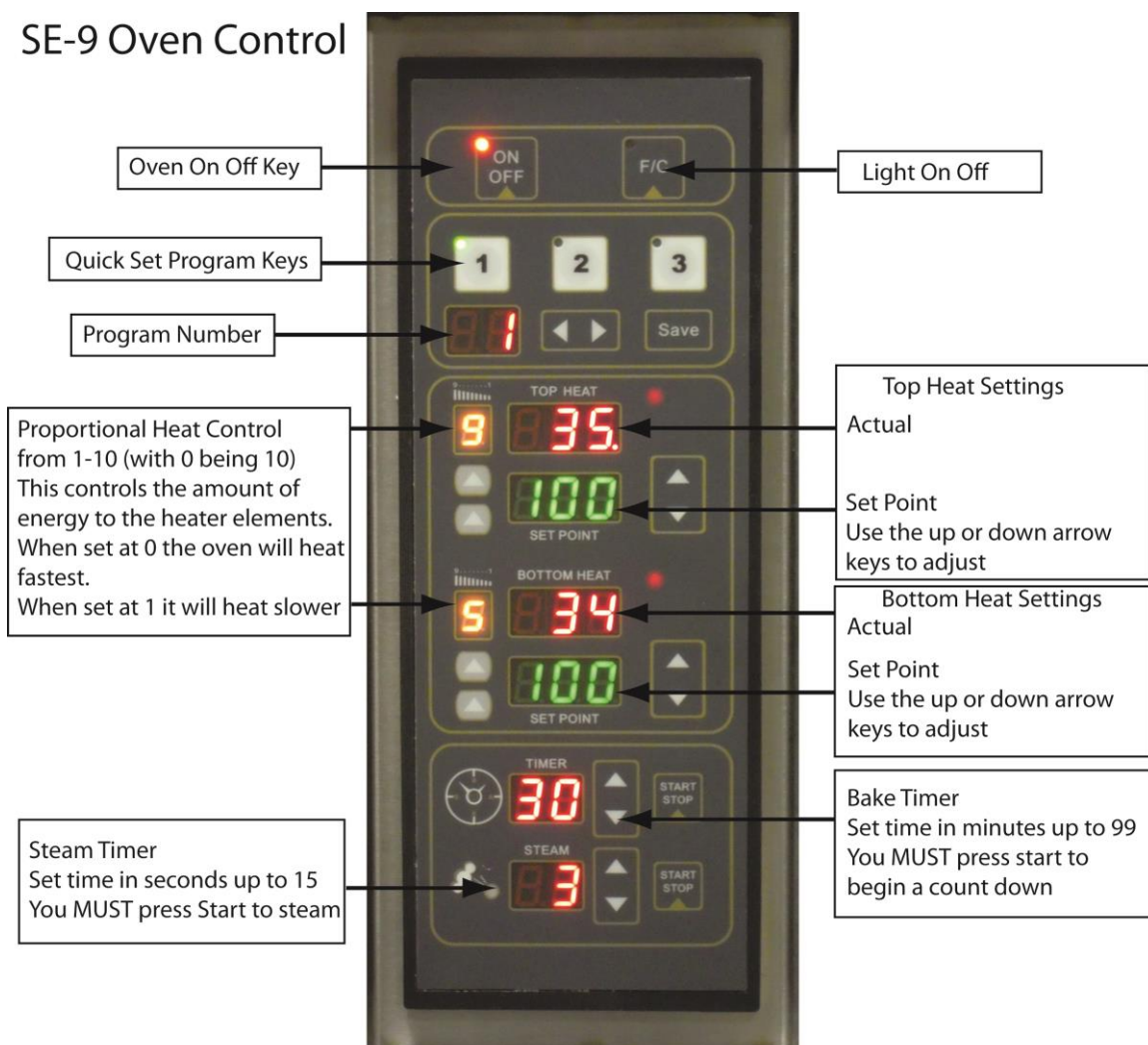
Please sign and return this to LBC Bakery Equipment, Inc 5901 23rd Drive West, Suite 105, Everett
WA 98203

II: Operation Section

Please take a few minute to have all operators read and understand these instructions

CAUTION: Always wear protective gloves or use a wooden oven peel when loading or unloading the deck oven as there is risk of serious injury from hot surfaces.

SE-9 Oven Control



To save a programs do the following:

Select a program number using either the three quick sets or by selecting a program number from 1 to 99. Enter in your desired top and bottom temperatures, proportional values, steam time and bake time.

Press the Save key two time.

The program is now saved.

To run a program simple select the program number and press Start.

You MUST press the start key next to the steam timer in order to introduce steam.

A: Controls Operations

1. Press the main On/Off key
2. Using the temperature adjustment keys set the desired top and bottom temperatures.
 - a. **Very Important:** The temperature difference between the top and bottom heat should NEVER be more than 50 degrees.
3. Allow the oven to heat to the desired temperature; at initial start-up allow **30 minutes** for the oven stones to saturate.
 - a. The steam system will begin heating as soon as the oven is turned on.
4. Set the desired bake time by using the up or down timer keys
5. Set the desired steam time by using the up or down steam timer arrows
 - a. **Very Important:** It is not recommended that you exceed more than **6** seconds of steam as this will cause a severe drop in temperature and poor baking results.
 - b. **EXTREMELY IMPORTANT:** NEVER STEAM THE OVEN WITH THE LOADING DOORS OPEN AS RISK OF SERIOUS BURNS WILL RESULT!
 - c. It will take about 10 minutes between steaming for the system to recover.

B: Loading the Oven

Depending on your particular model the deck oven will hold either two, three or four 18"x26" sheet pans wide. If partial loads are going to be used please follow these very important instructions to ensure you achieve even baking results.

Regardless of the type of pan used it is important to keep them spaced evenly and as close to centered as possible to avoid uneven baking results.

Product may be placed directly on the oven stones. Use the same centering techniques as shown above.

CAUTION: Products such as pizza, artisan bread or other bread products may be baked directly on the hearth stone. All other products must be cooked in a pan or on other medium to prevent contact with the deck stone. If food products spill onto the deck stone, clean by scraping or brushing off the excess material. DO NOT WASH WITH WATER. See Section **D: Cleaning and Maintenance** for instructions.

C: Starting a Bake

With the oven loaded and the doors closed press the start stop key.

If steam is desired press the Steam Start Stop key.

To vent the steam pull the vent knob located at the front left of the oven deck.

At the end of the bake, open the oven door slightly to allow steam to escape then open the door fully and use a peel to remove the finished product.

D: Cleaning and Maintenance

When the oven is cool:

Inspect the oven interiors and clean any loose debris from the oven stones. A long handled hearth broom is best.

Remove any baked on product with a brass brush or scraper.
NEVER WASH THE HEARTH STONES WITH WATER OR CHEMICALS AS THEY MAY BREAK OR SHATTER WHEN HEATED!

To clean above the door and the back side of the window glass:

1. Allow the oven interior to cool to room temperature. Remove the center knurled head screw from the door glass.
2. Open the door. With assistance, remove the remaining screws from the door as shown. If you do not have assistance, place an 8" box under the door in the center.
3. Remove the glass from the oven by tilting one end up as shown. Place on a clean flat surface. Clean the glass with paper or cloth and a mild glass cleaner solution.
4. Use a brush or damp cloth to clean the space above the door and above the heating elements. **DO NOT SPRAY WATER INTO THE OVEN.**
5. Replace the door in the oven. Use paper towel to support the glass at the bottom. Reinstall the knurled headed screws through the glass into the hinge. Be sure the Teflon® washer and hole liners are in place. Tighten the screws by hand only.



Clean the exterior surfaces with a damp cloth and polish with a commercial grade stainless steel polish.

Check and replace any water filters that may have been installed at the incoming water line.

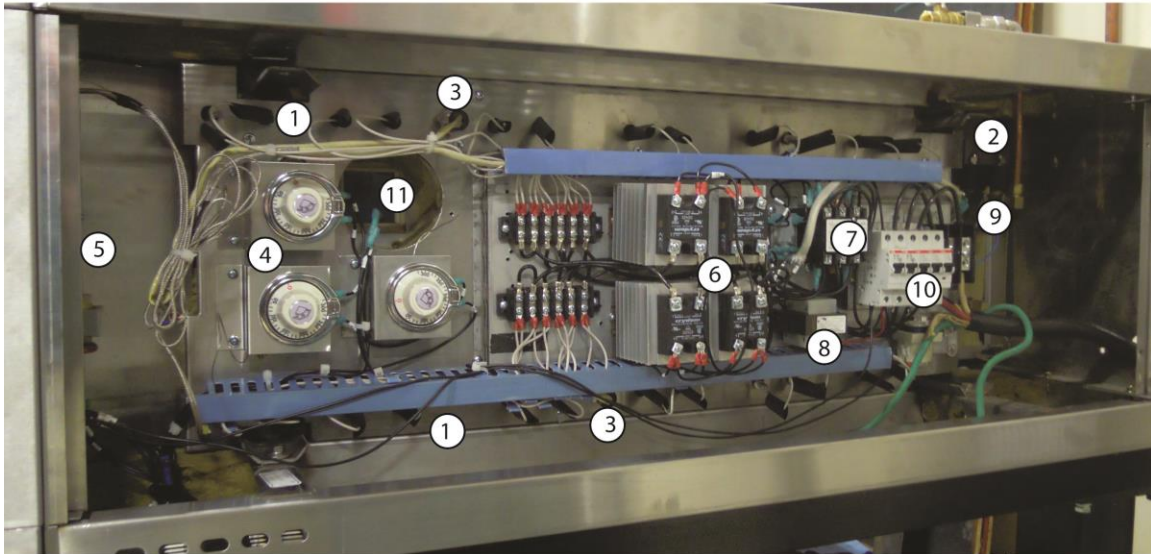
If needed, you may lift the oven stone(s) to thoroughly clean under them. Use extreme caution when lifting the stones.

1. Open the loading door. Allow the oven to cool to room temperature.
2. Remove the door stops on the left and right side of the door.
3. Remove the angles on the sides of the deck that hold the deck down.
4. Place a screw driver or other tool into the hole in the front of the forward deck clamp. Lift the deck and slide a board under the deck.
5. Use a vacuum cleaner to remove any debris under the deck.
6. Replace the deck and clamp parts when completed.
7. Replace the door stops on the left and right sides.



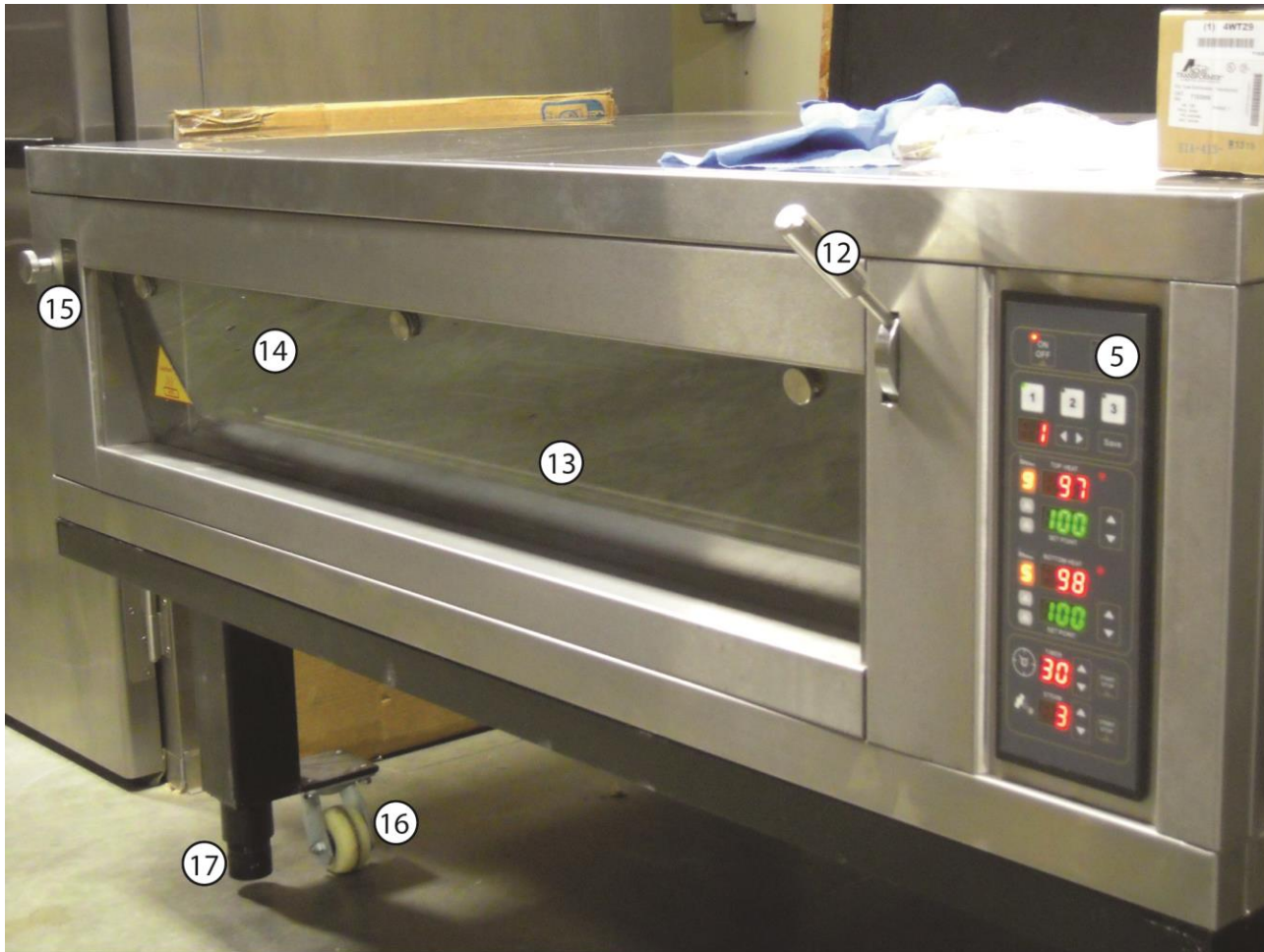
E: Parts Illustrations and Listing

SE-9 Series Electric Deck Oven Parts

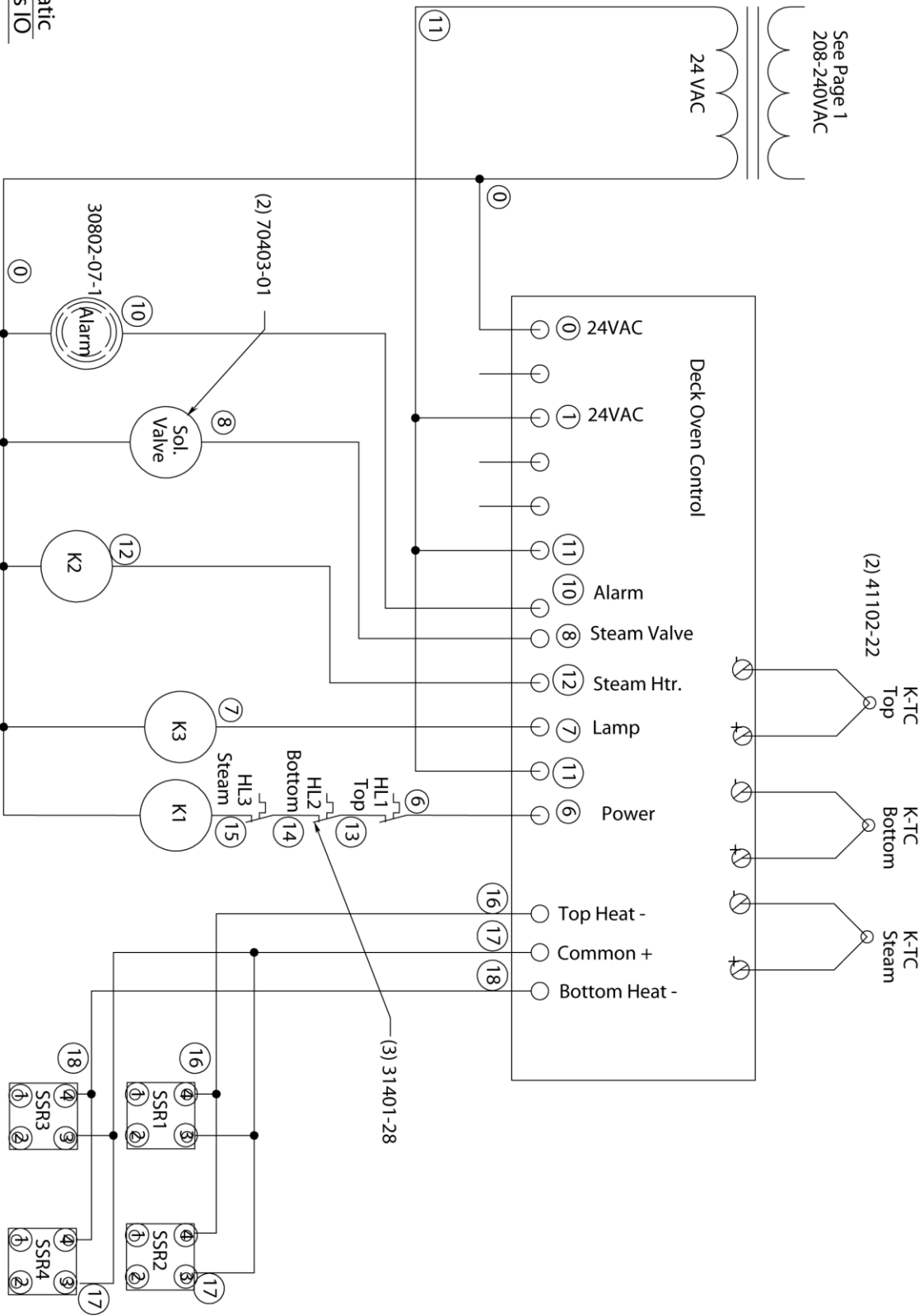


Item No.	Part No.	Description
1	11090-43	Element SE-92X Deck Oven, 208V 330 Watts
1	11090-44	Element SE-92X Deck Oven, 208V 480 Watts
1	11090-45	Element SE-92X Deck Oven, 240V 330 Watts
1	11090-46	Element SE-92X Deck Oven, 240V 480 Watts
1	11090-47	Element SE-93X Deck Oven, 208V 490 Watts
1	11090-48	Element SE-93X Deck Oven, 208V 720 Watts
1	11090-49	Element SE-93X Deck Oven, 240V 490 Watts
1	11090-50	Element SE-93X Deck Oven, 240V 720 Watts
1	11090-51	Element SE-94X Deck Oven, 208V 660 Watts
1	11090-52	Element SE-94X Deck Oven, 208V 950 Watts
1	11090-53	Element SE-94X Deck Oven, 240V 660 Watts
1	11090-54	Element SE-94X Deck Oven, 240V 950 Watts
2	11090-55	Element, SE-92X Steam Pod, 208 V 1000 Watts
2	11090-56	Element, SE-93X and SE-94X Steam Pod, 208 V 2000 Watts
2	11090-57	Element, SE-93X and SE-94X Steam Pod, 240 V 2000 Watts
3	41100-42	Thermocouple, K type.
4	30401-33	High Limit Thermostat
5	40102-82	Circuit Board, SE Deck Oven
6	30701-12	Solid State Relays
7	30700-17	Contactor, 3-Pole 50 Amp.
8	31400-26	Transformer, LRP, 208-240 Primary 24-12 Secondary 40VA CL2
9	70403-03	Solenoid Valve
10	31800-13-1	Circuit Breakers, 15 AMP
11	31602-23	Lamp, Halogen

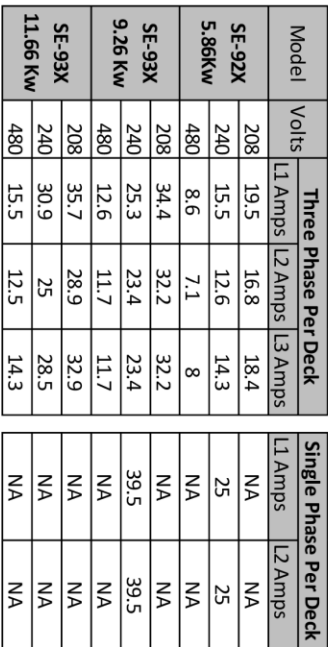
E: Parts Illustrations and Listing



Item No.	Part No.	Description
5	40102-82	Circuit Board, SE Deck Oven
12	50800-104	Handle, Deck Oven Door
13	71401-34	Oven Stone, SE-92 Two Pan
13	71401-35	Oven Stone, SE-93 Two Pan
13	71401-36	Oven Stone, SE-94 Two Pan
14	71300-34	Oven Door, Glass, SE-92 Two Pan Oven
14	71300-35	Oven Door, Glass, SE-93 Three Pan Oven
14	71300-36	Oven Door, Glass, SE-94 Four Pan Oven
15	50800-105	Knob, Vent
16	72901-39	Caster, Deck Oven Stand
17	72901-40	Leveler Foot Deck Oven



Schematic
Controls IO



① Remove all jumpers for 480V, 6x

REV D

Notes:

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