VULCAN INSTALLATION & OPERATION MANUAL

CONVEYORIZED PIZZA OVEN

MODEL

CB1824E ML-52497



VULCAN-HART COMPANY, P.O. BOX 696, LOUISVILLE, KY 40201-0696, TEL. (502) 778-2791

Installation, Operation and Care of MODEL CB1824E CONVEYORIZED PIZZA OVEN

PLEASE KEEP THIS MANUAL FOR FUTURE USE

GENERAL

The Vulcan Conveyorized Pizza Oven uses Calrod heaters in independently controlled groups. The heaters and conveyor speed have a wide range of adjustment suitable for pizza baking or other uses.

Vulcan Pizza Ovens are produced with quality workmanship and material. Proper installation, usage and maintenance of your oven will result in many years of satisfactory performance.

It is suggested that you thoroughly read this entire manual and carefully follow all of the instructions provided.

INSTALLATION

Before installing, verify that the electrical service agrees with the specifications on the rating plate located underneath the right front corner. If the supply and equipment requirements do not agree, do not proceed with the installation. Contact your dealer or Vulcan-Hart Company immediately.

UNPACKING

Immediately after unpacking, check for possible shipping damage. If the oven is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

ASSEMBLY

Assemble four 4" legs to the threaded holes in the bottom corners of the oven. The foot on each leg may be adjusted to provide stability; precise leveling is not required.

All deflector pans must be properly installed in the oven before operating.

LOCATION

This oven can be placed on a suitable counter surface. Allow 4" minimum bottom clearance and 6" minimum clearance on all sides of the oven. Additionally, appropriate operator access is required to the front and back of the oven, and 27" minimum clearance on either side to allow removal of the bottom deflector pan. Do not place anything on top of the oven.

This oven must not be connected directly to a ventilation system as this would cause uneven heating and reduce operating efficiency. If ventilation is desired, install the oven under a suitable hood that will not result in a direct pull of air through the oven.

Overall dimensions are 29" wide x $64^{1/4}$ " deep x $19^{3/4}$ " high.

INSTALLATION CODES AND STANDARDS

The oven must be installed in accordance with:

In the United States of America:

- 1. State and local codes.
- 2. National Electrical Code, ANSI/NFPA-70 (latest edition). Copies may be obtained from The National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

In Canada:

- 1. Local codes.
- 2. Canadian Electrical Code, Part 2, CSA Standard C22.1 (latest edition). Copies may be obtained from The Canadian Standard Association, 178 Rexdale Blvd., Rexdale, Ontario, Canada M9W1R3.

ELECTRICAL CONNECTION

Permanently Connected Ovens

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

Remove the left side panel and connect incoming power to the terminal block in accordance with the wiring diagram located on the inside wall of the left side panel and the ELECTRICAL DATA chart on page 4.

Cord Connected Ovens

WARNING: THE ELECTRICAL CORD HAS A GROUNDING PLUG WHICH MUST BE CONNECTED TO A PROPERLY GROUNDED RECEPTACLE. IF THE RECEPTACLE IS NOT THE PROPER GROUNDING TYPE, CONTACT AN ELECTRICIAN. DO NOT REMOVE THE GROUNDING PRONG FROM THE PLUG.

ELECTRICAL DATA

Model	Volts / Hz / Ph		Kilowatts			Rated Amps		Circuit Size (Amps)	Fuse Size or Circuit Breaker Size* (Amps)	90° Copper Wire Size
CB1824E	208/60/1		9.4			45.2		60	60	6
CB1824E	240/60/1		9.4			39.2		50	50	8
			Per Phase			Per Line Wire	9		-	
		L1 - L2	L2 - L3	L1 - L3	L1	L2	L3			
CB1824E	208/60/3	5.2	1.6	2.6	32.5	28.3	17.5	40	40	8
CB1824E	240/60/3	5.2	1.6	2.6	28.2	24.5	15.2	40	40	8
	5			5	5				ient Time-De Time Circuit	

Circuit Size (Minimum) & Fuse / Circuit Breaker Size (Maximum) compiled in accordance with the National Electrical Code (ANSI/ NFPA 70), 1993 Edition.

OPERATION

WARNING: THE OVEN AND ITS PARTS ARE HOT. BE VERY CAREFUL WHEN OPERATING AND CLEANING THE OVEN.

CONTROLS (Fig. 1)





MAIN POWER SWITCH	— Turns power on or off.

PILOT LIGHT — Main power is on when light is on.

- TOP HEAT IN Settings [0 10] adjust the first two heaters above the conveyor.
- TOP HEAT OUT Settings [0 10] adjust the final heater above the conveyor.
- BOTTOM HEAT Settings [0 10] adjust the four heaters below the conveyor.
- BELT SPEED Settings [0 10] adjust the conveyor speed.

BEFORE FIRST USE

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING.

Clean all stainless steel parts with a soft cloth moistened in mild detergent and warm water to remove any shipping dust and the protective oil film. Refer to CLEANING in this manual.

WARM-UP

Turn main power ON. Adjust dial settings for: Top Heat - In, Bottom Heat, Top Heat - Out, and Belt Speed to medium position 5. Allow about 7 minutes for warm-up.

OPERATOR TIPS

Depending on settings for Top Heat - In, Top Heat - Out, and Bottom Heat, product can be baked on top and/or bottom. Product is placed on the chain conveyor at the front and moves through the heated oven chamber to the exit tray at the rear.

Maximum product size is 18" wide. Moving product through the 24" long baking chamber requires about 6 - 8 minutes, depending on the belt speed. Belt Speed 1 is slowest (for more doneness); Belt Speed 10 is fastest and results in lighter toasting or less doneness.

CAUTION: DO NOT turn speed to 0 during warm-up or baking. This could damage the conveyor.

Products will require some experimentation to achieve the appropriate balance of heat control and conveyor speed. Each time the controls are changed, allow about 5 minutes for the temperature to stabilize.

COOKING GUIDELINES

The suggested settings, pages 6 and 7, are guidelines only. They are based on Vulcan-Hart lab testing and may differ from your products. Prove your products and recipes by testing them in the oven to determine repeatable settings before full operation.

For consistent results, allow the temperature to stabilize in the oven before sending products through.

Baking temperatures and belt speed settings depend primarily on whether the pizza dough is parbaked or raw.

<u>Par-Baked Dough</u> pizza products are generally prebaked from 50 - 90% done and come in different thicknesses. These pizzas require less bottom heat, while the belt speed can vary depending on variety and number of toppings. High-moisture toppings can require more top heat to evaporate excess moisture before completing the browning/melting process in baking. Sauce should be spread evenly to the outer edge of the pizza crusts.

Par-Baked Regular/Thin Crust Pepperoni Pizza.

Prep: Thawed Crust + thin layer sauce + half the cheese + layer pepperoni + other half cheese.

TOP HEAT - IN	BOTTOM HEAT	TOP HEAT - OUT	BELT SPEED
5	8.5	8	6

Par-Baked Regular/Thin Crust Deluxe Pizza (extra cheese).

Prep: Thawed Crust + thin layer sauce + half the cheese + four toppings + other half cheese.

TOP HEAT - IN	BOTTOM HEAT	TOP HEAT - OUT	BELT SPEED
5	8	9.5	5

Par-Baked Thick Crust Pan Pizza.

Prep: Thawed Crust + thin layer sauce + half the cheese + all toppings + other half cheese.

TOP HEAT - IN	BOTTOM HEAT	TOP HEAT - OUT	BELT SPEED
6	8	8	5.5

<u>Raw Dough</u> pizza products use fresh-prepared dough (or thawed from frozen). These doughs are either run through a "sheeter" or "tossed" and then "proofed" in a proofing cabinet before baking. After the dough has been mixed and "scaled" into uniform balls (portioned), a "sheeter" is used to stretch, flatten, and shape the dough. Dough may be passed through the sheeter one or more times to achieve proper thickness and shape. "Tossing" the dough means manually stretching, flattening and shaping the dough. "Proofing" means the dough has been allowed to rise for a period of time in a proofing cabinet under controlled temperature and humidity. Raw dough pizza requires high bottom heat and lower top heat settings to properly bake the crust. Dough may or may not be "docked" before baking. "Docked" means the dough was rolled with a spiked rolling pin which punches holes in the dough, preventing the dough from rising during baking. The number of toppings has little to do with the heat settings. Again, sauce should be spread evenly to the outer edge of the pizza crust.

Results are similar with seasoned pans or screens; however, bottom heat should be reduced when baking in aluminum foil deep-dish pans because of their high level of heat transfer.

Raw Dough Regular/Thin Crust with any number of toppings, baked on pan or screen. Prep: Raw Crust + thin layer sauce + any number of toppings and cheese.

TOP HEAT - IN	BOTTOM HEAT	TOP HEAT - OUT	BELT SPEED
4	10	4.5	4.5

Raw Dough Regular Crust with any number of toppings baked in a deep-dish aluminum foil pan. Prep: Raw Crust + thin layer sauce + any number of toppings and cheese.

TOP HEAT - IN	BOTTOM HEAT	TOP HEAT - OUT	BELT SPEED
4	8	4.5	4.5

Hoagie Sandwiches can also be heated in the conveyor oven.

Hoagie Sandwiches.

Prep: Butter or dress the top bun and cover with aluminum foil. Assemble the bottom half of the sandwich and heat face up.

TOP HEAT - IN	ВОТТОМ НЕАТ	TOP HEAT - OUT	BELT SPEED
4	10	4.5	4.5 - 5

CLEANING (Fig. 2)

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING. WAIT FOR OVEN TO COOL.

CAUTION: Avoid using abrasive powders or pads on the outside of the oven; these cleaners may damage the finish.

NEVER clean any electrical appliance by immersing it in water. Using a soft clean cloth and detergent and warm water, clean the exterior of the oven daily after use. Reconnect the oven. With the heaters

OFF, turn the conveyor speed to 5. Using a plastic abrasive pad, carefully wipe the conveyor belt in a horizontal motion (side-to-side) to remove baked-on product. Wipe the conveyor in the same manner with a hot damp cloth. When the open link of the conveyor is accessible at the front, turn the main power switch OFF. **WARNING:** DISCONNECT ELECTRIC POWER.

- 1. Lift up to remove the top cover and top reflector.
- 2. Slide the bottom deflector pan out the side.
- 3. Remove the rear deflector by lifting over the supports.
- 4. Relax the conveyor chain by pressing down on the top of the chain and disconnect at the open master link. When reconnecting the chain's master link, the weight of the chain holds it in place.
- 5. With the chain removed, the middle deflector pan and conveyor support rods can be removed.
- 6. Lift up to remove the exit tray; its support legs must be removed from the side pins.
- 7. Clean parts in a sink with warm soapy water, rinse, and wipe dry.
- 8. Reassemble all parts before returning oven to operation.



Fig. 2

PL-52403

MAINTENANCE

The drive motor bearings are permanently lubricated and do not require any lubrication maintenance.

The conveyor chain does not require any lubrication maintenance.

With reasonable care and periodic cleaning, the oven requires no customer applied maintenance.

SERVICE AND PARTS INFORMATION

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE SERVICING THE OVEN.

To obtain service and parts information concerning this oven, contact the Vulcan-Hart Service Agency in your area (refer to listing supplied with the oven), or Vulcan-Hart Company Service Department at the address or phone number shown on the front cover of this manual.