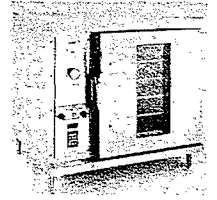


# INSTRUCTIONS



OVENS

## CN85 SERIES CONVECTION OVENS

ML-43600  
ML-43602  
ML-43603  
ML-43641  
ML-43642  
ML-43645  
ML-43646  
ML-43660  
ML-43671  
ML-43672  
ML-43673  
ML-43674



EXECUTIVE OFFICES  
TROY, OHIO 45374

# Installation, Operation and Care of CN85 SERIES CONVECTION OVENS

## SAVE THESE INSTRUCTIONS

### GENERAL

The Model CN85 Convection Oven features an electronic thermostat, digital timer, and five racks as standard equipment. Each oven is equipped with a  $\frac{1}{3}$  horsepower motor and is available for 208 or 240 volt electrical service.

The Model CN85 is a single oven which must be placed on legs. Legs are ordered separately. The oven may also be installed on a stand, or it may be installed with stack set (2 ovens).

The CN852 consists of two CN85 ovens, a set of four 16 $\frac{5}{8}$ " adjustable stainless steel legs and a stack set for mounting one oven on top of the other. The stack set may be ordered with legs or casters.

The CN853 is a single CN85 oven furnished with a storage stand on four 6" adjustable stainless steel legs or casters.

Options for the CN85 include additional racks and removable non-stick or stainless steel liner kits.

### INSTALLATION

#### UNPACKING

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

Prior to installation, test the electrical service to assure that it agrees with the specifications on the oven data plate located below the control panel.

#### LOCATION

Allow a minimum clearance of  $\frac{1}{2}$ " on all sides of the oven.

This oven **MUST NOT** be connected directly to a ventilation system as this will cause uneven heating and greatly reduce its operating efficiency. If an outside flue connection is desired, install the oven under a suitable hood that will not result in a direct pull of air through the oven.

The oven door is installed at the factory with hinges on the left. If you want the oven door hinged on the right side, contact your local Hobart service office as the reversal of door swing should be performed by a trained service person.

## ASSEMBLY

### 4" Adjustable Chrome Plated Legs

When ordered, the leg set is packed inside the CN85 oven for shipment. Remove the legs from the inside of the oven. Place the oven on its left side, being careful to avoid scratching the finish. Thread the legs into the holes provided on the bottom corners of the oven. Carefully raise the oven to its normal upright position. Turn the adjustable feet in or out to level the oven front-to-back and side-to-side.

### CN852 — Two Ovens With Stack Set

Place the bottom oven on its left side, being careful to avoid scratching the finish. Install the four legs (or casters, if so ordered) using the bolts and lockwashers provided. Carefully raise the oven to its normal upright position. Turn the adjustable feet in or out to level the oven front-to-back and side-to-side. Remove the two  $\frac{7}{16}$ " knockouts on each side of the top cover and the  $1\frac{3}{32}$ " knockout on the right side of the top cover.

Place the top oven on its left side, being careful to avoid scratching the finish. Thread the two locating studs into the screw plates on the bottom of the top oven and remove the  $1\frac{3}{32}$ " knockout that will line up with the one removed from the bottom oven. Carefully place the top oven in position above the bottom oven.

### CN853 — Single Oven With Stand

Place the stand on its back, being careful to avoid scratching the finish. Install the four legs (or casters, if so ordered) using the bolts and lockwashers provided. Raise the stand to its normal position and turn the adjustable feet in or out to level the stand front-to-back and side-to-side.

Place the oven on its left side, being careful to avoid scratching the finish. Install the two locating studs in the screw plates on the oven bottom. Carefully lift the oven to the correct position on the stand so the locating studs on the oven fit into the holes on the top of the stand.

## ELECTRICAL CONNECTIONS

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

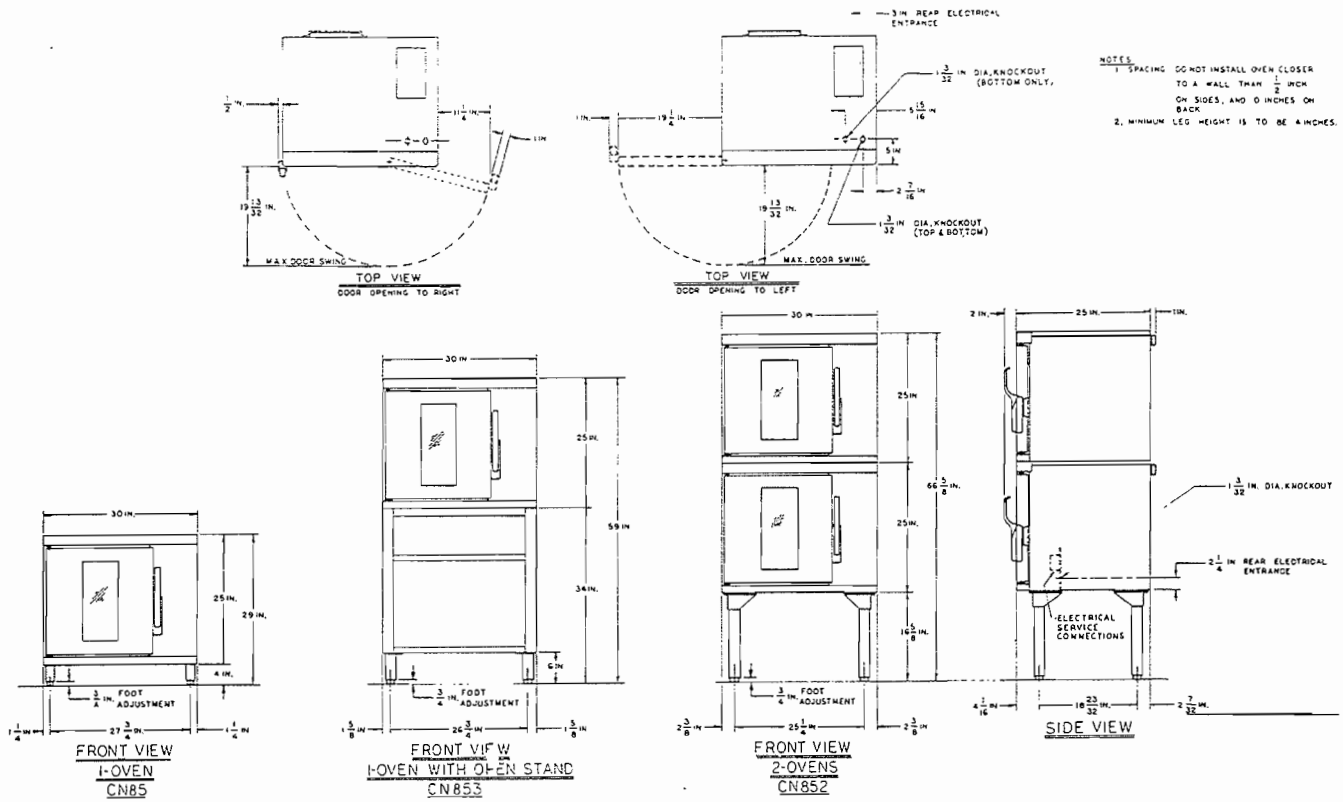
**WARNING:** DISCONNECT THE ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH INDICATING THAT YOU ARE WORKING ON THE CIRCUIT.

### ELECTRICAL DATA

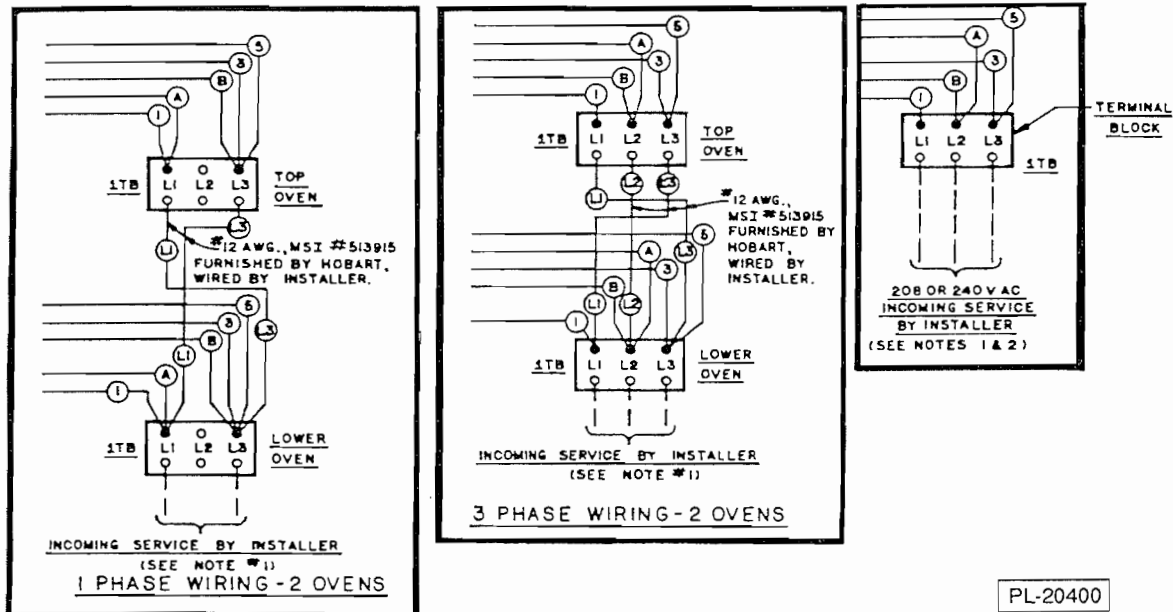
	TOTAL KW	3 PHASE LOADING (KW PER PHASE)			NOMINAL AMPS PER LINE WIRE							
					3 PHASE						1 PHASE	
					208 V			240 V			208 V	240 V
					L1-L2	L2-L3	L1-L3	L1	L2	L3		
SINGLE OVEN	5.5	2.5	0.5	2.5	21.0	13.4	13.4	18.0	11.6	11.6	26.5	23.0
STACKED OVEN	11.0	3.0	3.0	5.0	33.6	25.0	33.6	29.1	21.6	29.1	53.0	45.0

Make electrical connections per Field Wiring Connections, page 4. Knockouts are provided on the back and bottom of the oven for making conduit connections. Remove the screws and open the hinged front control panel for access to the terminal block.

Wire and required hardware are furnished in the stack set for connections between stacked ovens.



FLOOR PLAN LAYOUT CN85 OVENS - 353756



PL-20400

FIELD WIRING CONNECTIONS

NOTES:

- Recommended individual branch circuit wire size to be copper wire sized in accordance with the NATIONAL ELECTRIC CODE.
- Wiring shown for 3-phase. For single phase move lead A to L1 terminal and lead B to L3 terminal.

## BEFORE FIRST USE

Before using the oven for the first time, it must be 'burned in' to release any odors that might result from heating the new oven lining.

Wipe the inside of the oven including the racks with a clean damp cloth.

Close the oven door, turn the ON - OFF - COOLDOWN switch ON. Turn the thermostat to 300 and allow the oven to cycle for 6 to 8 hours; then turn the switch OFF.

The perma-lucent gray enamel, which is the standard finish on the back and sides of CN85 ovens, should be waxed to make future cleaning easier. Wipe the painted surfaces to remove any dirt or dust that may have accumulated during shipment. Apply a generous coat of wax to protect the painted surfaces.

## OPERATION

### CONTROLS (Fig. 1)

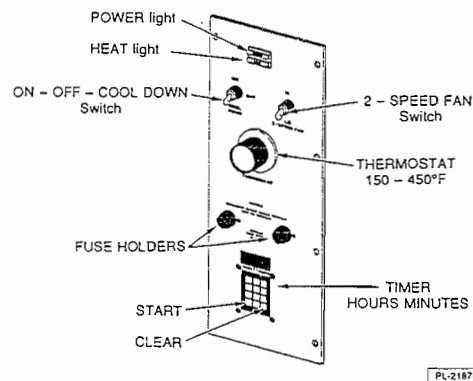


Fig. 1

ON - OFF - COOL DOWN switch	—	Turns power ON or OFF. COOL DOWN position allows the fan motor to run with the door ajar to speed oven cooling at the end of the day.
THERMOSTAT	—	Controls oven temperature.
TIMER	—	Signals the operator when a preset time has passed.
* 2 - SPEED FAN switch	—	Select oven fan velocity: HI = high speed; LO = low speed.
POWER light (red)	—	Indicates power is connected to the oven and the switch is on ON or COOL DOWN.
HEAT light (amber)	—	Cycles on and off with the heaters (when the heaters come on, so does the light).

**NOTES:** The timer does not turn off the oven but will sound an alarm when the preset time has passed. Some timers are one hour timers while others may be set to 99 hours 99 minutes.

Style W Thermostats have three settings: LO = 325°F, MED = 375°F, HI = 425°F.

Style K Thermostats maintain a single temperature (400°F). Time is the only variable.

Style A Thermostats have a maximum setting of 350°F.

\* Included on some models.

## **USING THE TIMER**

To use the timer, enter the desired time using the number keys and press the start key to begin counting down. On some ovens, you turn a knob to set the time.

When the time has passed, an alarm will sound for thirty seconds. The alarm will sound until you press the clear key; or, on some ovens, you turn the knob to shut the alarm off.

## **PROPER UTENSILS**

The use of proper utensils can enhance oven operation. Medium and light weight pans heat faster than heavy pans and are usually recommended for reasons of economy.

For baking operations, dull seasoned pans are recommended. Dull aluminum or tin baking sheets with shallow sides or no sides produce the most evenly browned products.

Meats should be roasted in a shallow pan that is deep enough to hold all juices.

## **TIPS FOR CONSERVING ENERGY**

Turn off unused equipment.

Adjust menu patterns and cooking/baking schedules for optimum equipment use.

Reduce thermostat settings in slack periods since electric equipment heats up and recovers quickly.

Preheat only to required cooking temperature for specific food — not higher.

Do not open the door unless necessary. Use the window to observe cooking progress.

Keep the oven door and the facing surface clean and free of food particles. Any obstruction that prevents the door from closing completely will adversely effect oven efficiency.

## **USING THE OVEN**

Refer to the COOKING CHART, page 7, for suggested time and temperature settings for various products. Cooking times and temperatures will vary depending on the initial product temperature, thickness, frozen or thawed, etc. Adjust temperatures and times to your own cooking requirements. Carefully monitor results and note any recommendations for future reference.

### **Preheating**

Turn the ON - OFF - COOL DOWN switch ON. The red light indicates power is on.

Set the thermostat to the desired temperature. The yellow light indicates the oven is heating.

While the oven is preheating, load the product into suitable pans.

When the yellow light goes off, the thermostat temperature has been reached. The oven is ready for loading.

### **Loading**

After preheating, open the door and place the pans in the center of the racks. Close the door.

Set the timer and press the start key.

## COOKING CHART

PRODUCT	TEMPERATURE (°F)	TIME (MINUTES)	NUMBER OF RACKS
<b>BREAD PRODUCTS</b>			
Hamburger Rolls	300	15	5
Bread – 1 pound loaves	325	34	3 (12 loaves)
Rolls	300	16	5 (60 rolls)
Baking Soda Biscuits	400	7	3
<b>PASTRIES</b>			
Sheet Cake (2½ lbs. per pan)	300	17	5
Frozen Fruit Pies 46 oz.	350	50	5 (10 pies)
Frozen Fruit Pies 26 oz. 8" diam.	350	40	5 (15 pies)
Sugar Cookies	300	15	5
Danish Rolls	350	12	5
Fruit Cakes	275	75	3
Cake — 1 Pound	300	19	5 (10 cakes)
<b>MEAT</b>			
Hamburger Patties (5 per lb. well done)	400	9 - 10	5 (55 patties)
Hot Dogs	300	9	5 (200)
Baked Stuffed Pork Chops	400	40	5
Roast Beef (10 lb. roasts)	250	2½ - 3 hrs.	2 (4 roasts)
<b>FISH</b>			
Fish Sticks	350	15	9
Lobster Tails	450	9	5
Halibut Steaks (frozen 5 oz.)	350	20	5
Baked Shrimp (stuffed)	400	7	5
<b>FOWL</b>			
Turkey, Rolled (18 lb. rolls)	310	3¾ hrs.	1
Chicken (2½ lb. quartered)	350	30 - 35	5
Chicken Breasts	350	30	5
<b>OTHER</b>			
Melted Cheese Sandwiches	400	8	5
Idaho Potatoes (120 count)	450	40	5
Beef Pot Pies	400	30 - 35	5
Macaroni & Cheese	350	30	5
Turkey Pot Pies	400	30 - 35	5
TV Dinners	450	25	9 (27)

### Unloading

When the product is done, open the door and unload the oven.

Carefully wipe any spills to prevent staining.

### End of Day

Turn the ON - OFF - COOL DOWN switch to COOL DOWN.

Leave the door ajar while the fan runs to cool the oven.

When the oven has cooled sufficiently, turn the switch OFF and clean the oven.

## **CLEANING**

Clean the outside of the oven daily by wiping with a clean damp cloth.

### **Aluminized Oven Interior**

When cleaning the interior of your Hobart oven, bear in mind that the aluminum coating, though tightly adherent, is a coating. To preserve the coating, clean often when cold with a soft cloth dampened in mild detergent or soap and water. This will prevent food and dirt from "baking on" and may be all the cleaning that is necessary.

Where soil resists soap and water cleaning, use a wooden tool to loosen spillage from the cold oven. Follow with a non-etching cleaner which is specifically recommended for aluminized steel.

DO NOT USE STEEL WOOL, WIRE BRUSHES, OR CAUSTIC SOLUTIONS SUCH AS LYE, SODA ASH OR AMMONIA. NEVER POUR WATER OR USE A SOAKING WET RAG IN OVEN INTERIOR. DO NOT CLEAN HEATERS BECAUSE THEY ARE SELF CLEANING.

To remove hardened food spillage, sprinkle salt on hardened particles. Turn thermostat to high heat. Close oven door and allow oven to idle until spillage has carbonized (charred). Allow the oven to cool and then brush or wipe surface clean.

### **Optional Stainless Steel Oven Interior**

Clean as described above for aluminized steel. Wipe with a cloth moistened in detergent and warm water for routine cleaning.

For burned-on foods and grease which resist simple soap and water cleaning, an abrasive cleanser (scouring powder) mixed into a paste may be used. Apply with stainless steel wool or sponge, always rubbing in the same direction as the grain in the stainless steel.

This treatment is equally effective for "heat tint" (slightly darkened areas caused by oxidation). Again, rub in the direction of the grain. Rinse with clear water and dry with a soft cloth.

## **SERVICE**

Contact your local Hobart service office for any repairs or adjustments needed on this equipment. Long term service contracts are available on this and other Hobart products.