

# INSTRUCTIONS

## *HEC20 & HEC20D ELECTRIC CONVECTION OVENS*

### *MODELS*

<i>HEC20</i>	<i>ML-114574</i>
<i>HEC20D</i>	<i>ML-114576</i>



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# Installation, Operation, and Care of HEC20 & HEC20D ELECTRIC CONVECTION OVENS

## SAVE THESE INSTRUCTIONS

### GENERAL

The model HEC20 Electric Convection Oven features a solid state thermostat, 1-hour dial timer, two-speed ½ HP (.037 kW) electric motor, and five racks as standard equipment. Porcelain cavity with enamel blower baffle is standard; stainless steel is optional. Painted outer panel set is standard; stainless steel is optional. Painted back panel is standard; stainless steel is optional.

Model HEC20D has different controls than model HEC20. Models HEC20 and HEC20D are single cavity ovens, standard with door hinged on left; optional with door hinged on right.

The following leg or caster accessories are available: A set of four 4" (10 cm) adjustable chrome plated metal legs. A set of four 6" (15 cm) adjustable stainless steel legs. A set of 2 swivel and 2 rigid casters.

Stacking kit accessories are available for mounting one oven on top of another: One kit includes a set of four 16<sup>5</sup>/<sub>8</sub>" (42.2 cm) adjustable metal legs. The other stacking kit is provided with casters.

An open storage stand in stainless steel is optional. Additional oven racks are available accessories.

Model HEC20D was originally built with a control described on pages 8-11. After October, 1999, model HEC20D has been built with a control described on pages 12-15.

### INSTALLATION

#### UNPACKING

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

Prior to installation, verify that the electrical supply agrees with the specifications on the oven data plate, located inside of the top front cover.

Do not use the door or its handle to lift the oven.

#### LOCATION

The installation location must allow adequate clearances for servicing and proper operation.

#### INSTALLATION CODES AND STANDARDS

In the United States, Hobart electric ovens must be installed in accordance with: 1) State and local codes; 2) ANSI/NFPA-96, *Vapor Removal from Cooking Equipment* (latest edition), available from National Fire Protection Association, Batterymarch Park, Quincy, MA 02269; and 3) ANSI/NFPA-70, *National Electrical Code* (latest edition).

In Canada, the ovens must be installed in accordance with: 1) Local codes; and 2) Canadian Electrical Code, CSA Standard C22.2 No. 1 (latest edition).

## INSTALLING BASIC OVEN (HEC20 and HEC20D)

The basic oven must be installed on legs or be mounted on a modular stand. Installations on concrete bases or other supports restricting air circulation underneath the oven are not advisable and may void the warranty.

### Assembling the Legs to the Single Oven

Position the oven on its left side, taking care not to scratch or damage it.

Thread each of the 4" (10 cm) leg assemblies into the holes provided on the bottom corners of the oven.

Carefully raise the oven to its normal upright position.

### Assembling the Chimney to the Single Oven

Remove the oven chimney from inside the oven cavity and use the screws provided to fasten the chimney to the top rear of the oven (Fig. 1). The flanges on the chimney are to be positioned over the top cover.

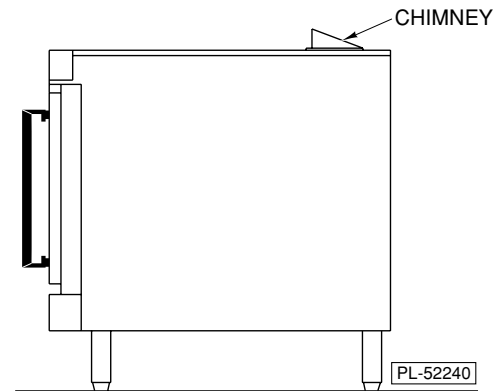


Fig. 1

## LEVELING

Once the oven is in its permanent position, place a carpenter's level on the oven rack. If the oven is installed on legs, turn adjustable feet in or out to level oven front-to-back and side-to-side. If the oven is installed on casters, loosen set screws and turn casters in or out to level oven front-to-back and side-to-side. Retighten set screws after leveling.

## ASSEMBLING STACKED OVENS

Determine which oven will be on the bottom and place it on its left side, being careful to avoid scratching the finish. Install the four legs, using the 24 bolts and lockwashers provided (6 per leg).

Place lower oven (with legs) on floor. Remove the two  $\frac{7}{16}$ " (1.1 cm) knockouts on each side of the top cover and the  $1\frac{3}{32}$ " (2.8 cm) knockout on the right side of the top cover. Move this oven to the installation position.

Install the two locating studs (included in leg stack set) into screw plates on underside of upper oven (Fig. 2), and remove the  $1\frac{3}{32}$ " (2.8 cm) knockout that will line up with the one removed from the bottom oven. Carefully place the top oven in position above the bottom oven.

Level ovens (see LEVELING above).

## ASSEMBLING THE OVEN TO THE STAND

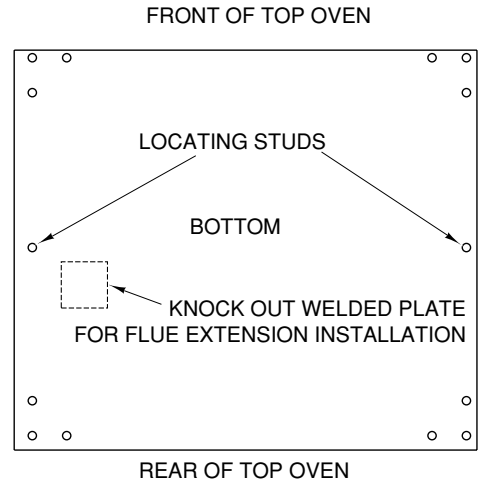
Unpack the oven and stand. Position oven on its back, taking care not to scratch or damage it.

Install the two locating studs (included in the stand carton) into the screw plates on the underside of the oven ( Fig. 2).

Attach each of the four leg assemblies to the bottom of the stand with the 24 bolts and lockwashers (6 per leg).

Mount the oven on top of the stand.

Adjust the legs to ensure that the oven racks are level in the final installed position.



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Fig. 2

## 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	
					208V.			240V.			208V.	240V.
					L1-L2	L2-L3	L1-L3	L1	L2	L3		
Single Oven	5.5	2.5	0	3.0	23.0	10.0	12.0	20.0	9.0	11.0	26.0	23.0
Stacked Ovens	11.0	5.0	0	6.0	46.0	20.0	24.0	40.0	18.0	22.0	52.0	46.0

Knockouts are provided on the back and bottom of the oven for making conduit connections. Remove the screws from the front control panel for access to the terminal block.

Wire and required hardware for making connections between stacked ovens are furnished with the leg stack set.

Replace the right side panel if it was removed during electrical connection.

Replace the front control panel and turn on the power supply.

# OPERATION

**WARNING:** THE OVEN AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, CLEANING, OR PERFORMING ANY MAINTENANCE ON THE OVEN.

## CONTROLS — MODEL HEC20 (Fig. 3)

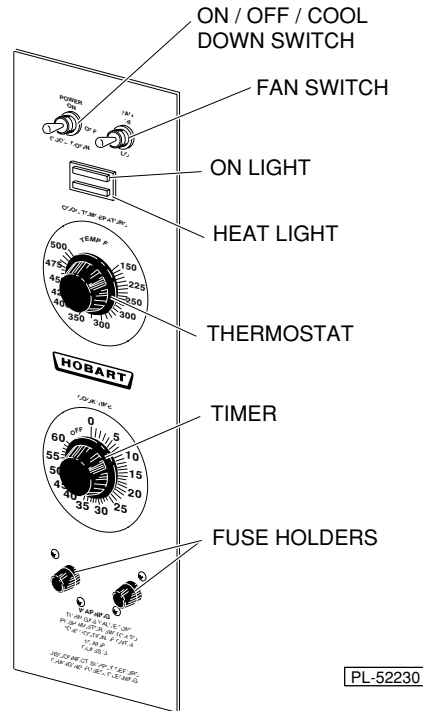


Fig. 3

- ON / OFF / COOL DOWN Switch** — Turns oven control circuits ON or OFF; or COOL DOWN allows the fan motor to run with the doors ajar to speed oven cooling.
- THERMOSTAT** — Controls oven temperature during cooking operation.
- TIMER** — Set the cooking cycle time, from 0 to 60 minutes. Buzzer sounds continuously when elapsed time counts down to 0; oven does not turn off. Turn timer OFF to stop buzzer. When the oven is not in use, keep timer at OFF position.
- ON LIGHT (Amber)** — Lit when On / Off / Cool Down switch is ON.
- HEAT LIGHT (White)** — Comes on and goes off when the heating elements cycle on and off.
- 2-SPEED MOTOR — LO / HI** — Adjusts air velocity in the oven. Use the HI setting as the usual operating speed and the LO setting for delicate product like meringue which might be blown around in the oven.
- FUSE HOLDERS** — Replace fuses with appropriate type described on control panel.

## **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 surfaces in the chamber.

1. Using a clean damp cloth, wipe the inside of the oven, including the racks.
2. Close the oven doors, turn the On / Off / Cool Down switch ON, turn the Thermostat to 300°F (149°C) and allow the oven to cycle for 6 to 8 hours before turning the On / Off / Cool Down switch OFF.

## **USING THE HEC20 OVEN**

### **Preheating**

1. Turn the On / Off / Cool Down switch ON. The amber ON light will come on, indicating that power to the oven is on.
2. Set the Thermostat as desired. Refer to SUGGESTED COOKING GUIDELINES for temperatures and times for various products.
3. Prepare the product and place in suitable pans. When the white HEAT light goes off, the oven has reached the set preheat temperature.

### **Cooking**

1. Open the doors and load the product into the oven. Place pans in the center of the racks. Close the door.
2. Set the Timer. After the preset time has lapsed, turn the timer OFF to stop the buzzer.
3. When the product is done, open the door and carefully remove the cooked product from the oven. Wipe up any spills.

### **End of Day**

1. Turn the Thermostat OFF.
2. Turn the On / Off / Cool Down switch ON. Leave the door ajar while the fan is on to cool the oven.
3. When the oven has cooled sufficiently, push the On / Off / Cool Down switch OFF and clean the oven.

## CONTROLS — MODEL HEC20D (Built before October, 1999, Fig. 4)

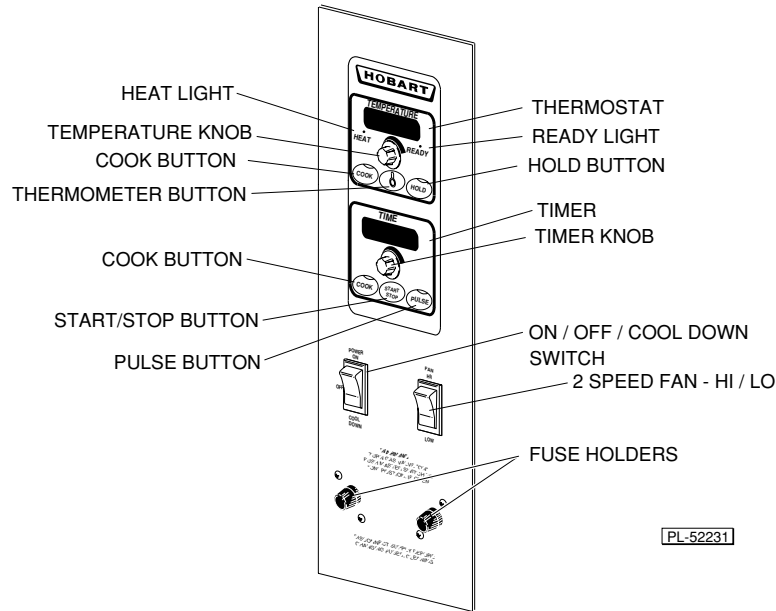


Fig. 4

### THERMOSTAT CONTROL

#### Temperature Display (When Not Timing Product)

Displays set cook temperature while the light in the Cook Button is lit. Will be overridden to display actual cavity temperature for 8 seconds when Thermometer Button is pushed.

1. The light in the Thermometer Button will be lit while the actual temperature is being displayed.
2. The light in the Thermometer Button will extinguish when the display returns to set temperature display.

#### Temperature Display (When Timing Product)

Displays set hold temperature while the light in the Hold button is lit. Displays the cook temperature when the Cook button is lit. Will be overridden to display actual cavity temperature for 8 seconds when the Thermometer Button is pushed.

1. The light in the Thermometer Button will be lit while actual temperature is being displayed.
2. The light in the Thermometer Button will extinguish when the display returns to set temperature display.

#### Temperature Knob (When Not Timing Product)

1. Sets the cook temperature when the Cook Button light is lit. The Cook Button light can be turned on by pressing the Cook Button.
2. Sets the hold temperature when the Hold Button light is lit. The Hold Button light can be turned on by pressing the Hold Button.

#### Temperature Knob (When Timing Product)

1. Sets the cook temperature when the Cook Button light is lit. The Cook Button light cannot be changed by pressing the Cook Button.
2. Sets the hold temperature when the Hold Button light is lit. The Hold Button light cannot be changed by pressing the Hold Button.



### **Cook Button Light (If On) - (While Not Timing Product)**

Indicates the cook mode is selected. This means:

1. The displayed temperature settings will be for the cook temperature except for the time that the light in the Thermometer Button is lit.
2. Rotating the Thermostat Knob will change the cook set temperature.
3. Cook time can be adjusted using the Timer Knob.
4. The time displayed is the initial set cook time.
5. It is possible to select the Hold mode using the Hold Button.

### **Cook Button Light (If On) - (While Timing Product)**

Indicates the cook mode is selected. This means:

1. The displayed temperature settings will be for the cook temperature except for the time that the light in the Thermometer Button is lit.
2. Rotating the Temperature Knob will change the cook set temperature.
3. It is not possible to select the Hold mode using the Hold Button.
4. The time displayed is the time counted down from the initial cook time set.

### **Cook Button**

1. Lights the Cook Button light. See Cook Button Light above.
2. Selects the Cook mode.
3. Has no effect if timing in the Hold mode.

### **Thermometer Button**

When pressed, causes actual cavity temperature to display for about 8 seconds, then display returns to set temperature.

### **Heat Light**

When lit, indicates that power is being supplied to the heating elements.

### **Ready Light**

Will be lit any time the actual temperature is within 5 F° (3 C°) of the set temperature for the current mode.

## **TIMER CONTROL**

### **Time Display (While Not Timing Product)**

Displays the set cook time if the light in the Cook Button is lit.

### **Time Display (While Timing Product)**

1. Displays the counted down cook time if the Cook Button light is lit and in the Cook mode.
2. Displays the counted up hold time if the Hold Button light is lit and in the Hold mode. Count-up of hold time does not begin until cavity temperature reaches the hold temperature.

### **Time Display Semicolon**

1. Flashing if product is timing.
2. Not flashing if not timing product.

**Time Button** — Press to set cooking cycle time.

**Time Button Light** — Illuminates when the Time Button is pressed.

**Timer Knob** — Sets the cook time when not already timing and the Cook Time indicator is lit.

## **Pulse Button**

Selects the pulse time setting. A cook time must be set first. The pulse time can then be set equal to or less than the cook time. The pulse time will be the portion of cook time to operate in the pulse mode. Pulse mode will start first. When pulse time elapses, the remainder of the cook time will be in the non-pulse mode.

Use when cooking delicate product, such as strudel, muffins, cupcakes, meringue pies, etc., to keep product from forming waves on the top.

Use the Pulse Button to switch between the selection of pulse mode and no pulse mode time setting. A pulse mode time of zero means no pulse mode will occur.

The light in the Pulse Button will be lit when in the pulse mode.

In Pulse Mode:

1. The fan cycles (45 seconds ON and 45 seconds OFF) for the duration of the pulse cycle time.
2. The fan stays on while the heat cycles in hold mode.
3. The fan stays on while heat cycles at 100% power when not timing.
4. Can be switched at any time.

## **Stop / Start Button**

1. Initiates timing a product in the mode selected if a cook time has been set.
2. Stops timing of a product if a timing sequence has already started.

## **Hold Button**

Selects Hold mode.

1. Allows selection of hold temperature.
2. Temperature indication of ---°F (---°C) indicates no hold mode.

## **Hold Button Light**

Is lit when in the Hold mode.

1. When not timing, allows setting/enabling a hold mode setting of ---°F (---°C), meaning no hold will take effect.
2. Any other temperature means that when the actual cook time has ended, the oven will enter the Hold mode and use the hold temperature.

## **Two-Speed Fan Switch**

Adjusts air velocity in the oven.

## **On / Off / Cool Down Switch**

1. ON turns oven control circuits on.
2. OFF turns oven control circuits off.
3. COOL DOWN allows the fan motor to run with the doors ajar to speed oven cooling.

## **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 surfaces in the chamber.

1. Using a clean damp cloth, wipe the inside of the oven, including the racks.
2. Close the oven doors, push the On / Off / Cool Down switch ON, turn the Thermostat to 300°F (149°C) and allow the oven to cycle for 6 to 8 hours before turning the On / Off / Cool Down switch OFF.

## **USING THE HEC20D OVEN**

### **Preheating**

1. Close oven doors. Push On / Off / Cool Down switch to ON position. The HEAT light will come on, indicating that power to the oven is on.
2. Set THERMOSTAT as desired. Refer to SUGGESTED COOKING GUIDELINES for temperatures and times for various products.
3. Prepare product and place in suitable pans. When READY light comes on, oven has reached desired preheat temperature.

### **Cooking**

1. Open doors and load the product into the oven. Place pans in the center of the racks. Close doors.
2. Set COOK temperature and time. Set HOLD temperature and PULSE time, if desired. PULSE time may not be more than COOK time. PULSE will cycle the fan during the set time at the beginning of the cooking cycle.
3. Press the START / STOP button to start the cooking cycle.
4. At the end of the cooking cycle, the alarm will sound continuously if the HOLD mode is OFF. If the HOLD mode is ON, there will be a short beep at the beginning of Second Stage Cooking (oven temperature will begin to decline to the HOLD temperature), and a long beep (20 seconds) at the end of the cooking cycle. Refer to COOK AND HOLD OPERATION.
5. When product is done, open doors and carefully remove cooked product from the oven. Wipe up any spills.

### **End of Day**

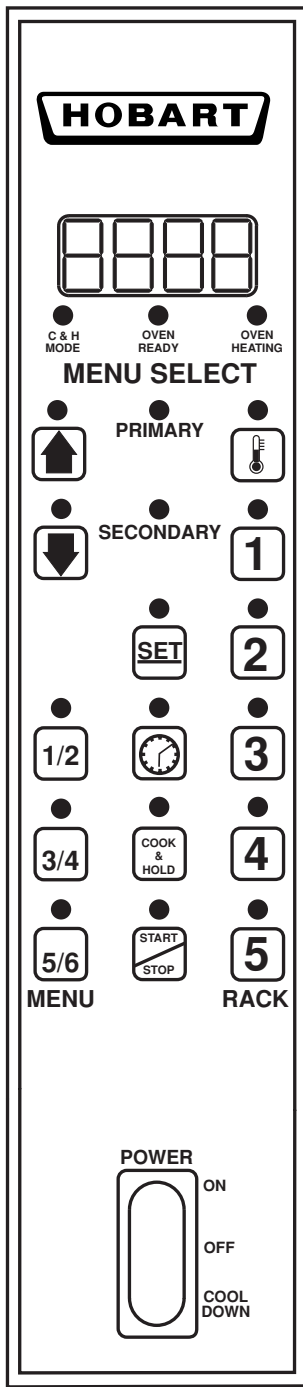
1. Push On / Off / Cool Down switch to COOL DOWN. Leave the door ajar while the fan is on to cool the oven.
2. When the oven has cooled sufficiently, push the On / Off / Cool Down switch OFF and clean the oven.

## **ERROR MESSAGES — HEC20D OVEN**

- E-01 High limit error. Contact your local Hobart service office.
- E-02 Low limit error. Contact your local Hobart service office.
- E-03 High ambient temperature, 215°F (102°C). Contact your local Hobart service office.
- E-04 Low ambient temperature, 32°F (0°C). Let control warm up after cold storage.
- E-06 Thermocouple probe open. Contact your local Hobart service office.

When calling for service, please advise what error code was displayed.

**CONTROLS — MODEL HEC20D (Built after October, 1999)**



Always displays [HR:Min] when setting the Time.  
 Displays [HR:Min] if the countdown Time is more than 1 Hour.  
 Displays [Min:Sec] if the countdown Time is less than 1 Hour.  
 Displays Temperature in °F.



Indicates the oven is in the Cook and Hold Mode.



Indicates the oven is preheated and ready for cooking.



Indicates the oven is preheating.



Primary indicates Menu Items 1, 3, or 5.



Secondary indicates Menu Items 2, 4, or 6.



Up arrow increases; Down arrow decreases — a displayed Time or Temperature value (if arrow keys are lit).



TEMPERATURE: Use with SET to set the oven temperature.



SET: Use with Time or Temperature.



TIME: Use with SET to manually set the time.



Selects Cook and Hold mode; also selects Low Fan Speed.



Press once to start; press a second time to stop.



Press once for Primary Menu Items (1, 3, or 5).  
 Press a second time for Secondary Menu Items (2, 4, or 6).



Rack Buttons select individual Menu / Rack # Cook Times — once programmed.

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## MANUALLY SETTING THE TEMPERATURE AND COOK TIME

### To Set the Temperature

- Press the SET button. Press the TEMPERATURE button; *StPt* displays to indicate Setpoint.
- Use the Up and Down Arrow keys to increase or decrease the displayed Temperature value.
- Press the SET button again to save the Temperature setpoint in the computer.

### To Set the Cook Time

- Press the SET button. Press the TIME button. *Tine* displays to indicate TIME.
- Use the Up and Down Arrow keys to increase or decrease the displayed Cook Time (HR:min).
- Press the SET button again to save the Time setting in the computer.

### To Start Cooking

- Press the START / STOP button.
- The manual Cook Time counts down to 00:00. Displays [HR:Min] above 1 hour; [min: sec] below.
- The buzzer will sound. To silence the buzzer, press the START / STOP button again.
- \* *The control retains the manual settings for Temperature and Time.*

## TO PROGRAM MENU ITEM and RACK # Cook Times

Factory Preset and Programmable Cook Times are shown in the table, below:

MENU SELECTION	MENU ITEM	FACTORY PRESET MENU ITEM COOK TIME	PROGRAMMABLE VALUES					
			MENU ITEM COOK TIME	RACK 1 COOK TIME	RACK 2 COOK TIME	RACK 3 COOK TIME	RACK 4 COOK TIME	RACK 5 COOK TIME
1 / 2 Primary	1	10 min.						
1 / 2 Secondary	2	15 min.						
3 / 4 Primary	3	20 min.						
3 / 4 Secondary	4	25 min.						
5 / 6 Primary	5	30 min.						
5 / 6 Secondary	6	35 min.						

The Primary indicator light with Menu 1 / 2 selects Menu Item 1 (Factory Preset Cook Time = 10 minutes). The Secondary indicator light with Menu 1 / 2 selects Menu Item 2 (Factory Preset Cook Time = 15 minutes). Similarly, for Menu Buttons 3 / 4 or 5 / 6. Any Menu Item Cook Time can be changed using the procedure below. Rack # Cook Times may be programmed if desired but are not required.

### To Change the Time Setting for any Menu Item (1 – 6)

- To enter program mode, press and hold the Up and Down arrow buttons until PrOG displays.
- ❖ Select the Menu Item to be programmed (1 – 6). *Tine* displays to indicate TIME. Use the Up and Down arrow buttons to increase or decrease the Menu Item's COOK TIME. Repeat this step for any other Menu Items.
- Press the START / STOP button; LOC displays. Press the START / STOP button a second time to save the Menu Item(s)' COOK TIME(s).
- Press the START / STOP button once to begin cooking (with the Menu Item's Cook Time). To exit, press the START / STOP button a second time.

### To Program Individual Rack # Cook Times for a Menu Item

- To enter program mode, press and hold the Up and Down arrow buttons until PrOG displays.
- Select the Menu Item to be programmed (1 – 6); *Tine* displays to indicate TIME.
- ❖ Then select the Rack # (1 – 5). [*t 1*] indicates Rack #1; [*t 2*] indicates Rack #2; ... [*t 5*] indicates Rack #5. Use the Up and Down arrows to increase or decrease the COOK TIME for any Rack #.
- Press the START / STOP button; LOC displays. Press the START / STOP button a second time to save the Menu / Rack #'s COOK TIME(s).
- To exit program mode, press START / STOP twice.

## Always Set the Temperature Before Setting the Time

- Press the SET button. Press the TEMPERATURE button; *StPt* displays. Use the Up and Down Arrow keys to increase or decrease the Temperature. To save, press the SET button again.

At startup, the display will initially show a *GROWING BAR*. When the oven temperature reaches the Set Point, the set temperature displays. The READY light is lit, the HEAT light goes out, and the oven is ready for you to select the Cook Time, Menu Item Cook Time, or Menu / Rack # Cook Time.

## Starting a Timed Cycle On All Racks

- Open the door, *door* will display.
  - Place the desired product on any of the five racks.
  - Close the door. The display should return to the set temperature or the *GROWING BAR*.
  - Press the Menu Key once for Primary or twice for Secondary to select a Menu Item Cook Time.
  - Press the START / STOP button \*.
  - The timer will count down the time remaining for the Menu Item Cook Time.
  - When the time has counted down to 00:00, the buzzer will sound and all Rack Buttons will flash.
  - To silence the buzzer, press the START / STOP button.
- \* *Pressing the START / STOP button after making a menu selection will time all racks for the selected menu time.*

## Starting a Timed Cycle Using Programmed Individual Menu / Rack # Cook Time(s)

- After the set Temperature is reached, open the door; *door* displays. Place product(s) in oven.
- Close the door. The display returns to the set Temperature or the *GROWING BAR*.
- Select the Menu Item (once for Primary or twice for Secondary) and the Rack # to select the Menu / Rack # Cook Time. If using simultaneous cook times, select the other Menu / Rack #'s.
- The timer selects the Rack # with the shortest Cook Time and counts down to 00:00.
- The buzzer sounds and the Rack # flashes. To silence the buzzer, press the flashing Rack #.
- Open the door; *door* displays; remove the finished product; close the door.
- ❖ The next shortest Cook Time displays, its Rack # flashes and the time counts down to 00:00.
- The buzzer sounds. Press the flashing Rack #. Open the door, *door* displays. Remove the product, close the door. Repeat from ❖ until all Rack #'s are done.

## To Display the Actual Oven Temperature

- Press and hold the Temperature button for 3 seconds to display Actual Oven Temp until released.

## To End a Cooking Cycle

At the end of a cooking cycle, the alarm will sound. To silence the alarm and end a Menu Item cooking cycle, press START / STOP. To silence the alarm and end a Rack # cooking cycle, press the Rack #.

To cancel a cooking cycle which might have been started in error, press and hold the Rack button to be terminated and press START / STOP at the same time.

## Door and Timing

Opening the door while loading additional product will interrupt all timing functions until the door is closed and the timer resumes. For example, if a product time had diminished to 1 minute and the door was opened for 30 seconds and then closed, the timer would still show 1 minute.

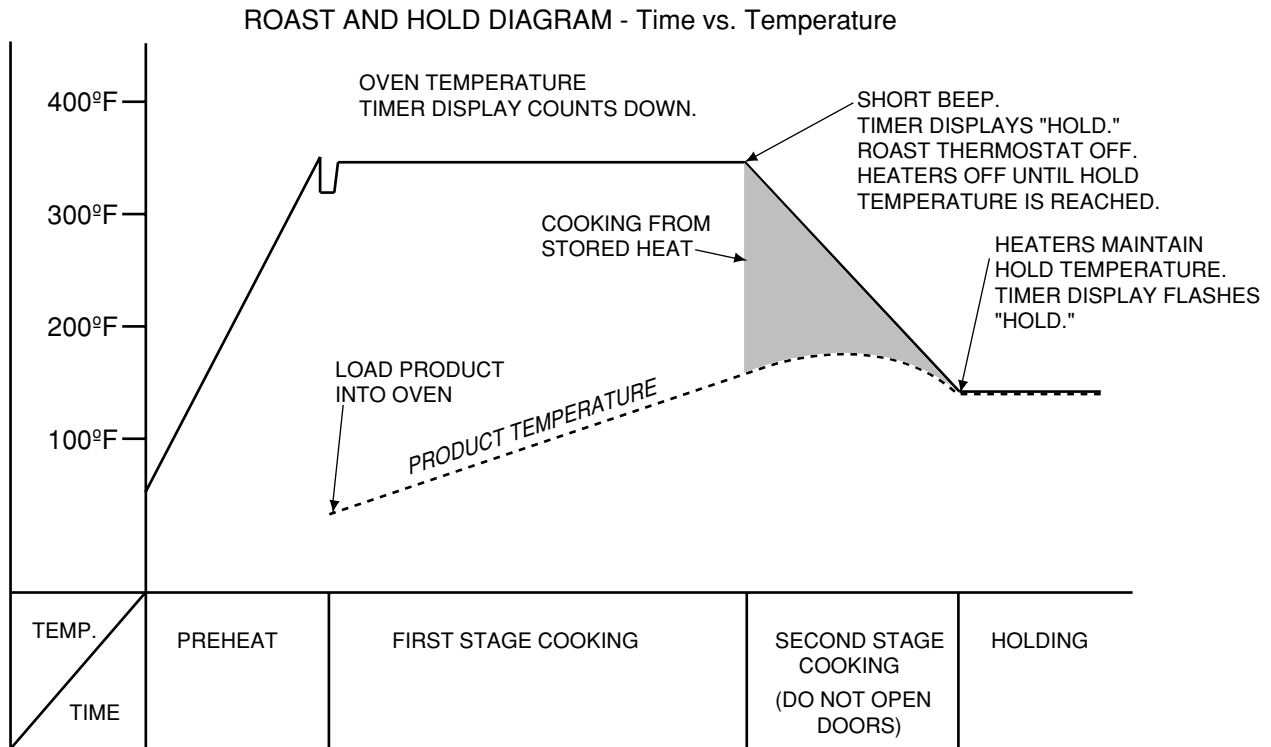
## SETTING THE OVEN FOR COOK & HOLD

- Press the Cook & Hold button to select Cook & Hold.
- Set the first stage Temperature and the Cook Time as described in: MANUALLY SETTING THE TEMPERATURE AND COOK TIME. Press START / STOP to begin cooking.
- \* *The HOLD Temperature is preset by the computer control at 150°F (66°C).*
- \* *The LOW FAN SPEED is present during Cook & Hold. Use C&H to select LOW FAN SPEED.*

## COOK AND HOLD OPERATION — Model HEC20D

Cook and Hold roasts the product in two stages. During First Stage Cooking, the oven temperature is regulated by the Temperature setpoint and the Time setting. After the time counts down to 00:00, Second Stage Cooking begins. During Second Stage Cooking, the heating elements are off as the temperature in the oven declines to the Hold Temperature. The doors should remain closed during Second Stage Cooking.

When the Hold temperature is reached, the display flashes *HOLD*. Temperature in the oven will be maintained at the Hold temperature until the oven is turned off.



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## **PROPER UTENSILS**

The use of proper utensils can enhance oven operation. Medium- and lightweight pans are recommended since it is more economical to bake with lighter pans.

Meats should be roasted in shallow pans deep enough to hold all juices and allow free air circulation.

## **CONSERVING ENERGY**

- Turn off unused equipment.
- Adjust menu patterns and cooking/baking schedules for optimum equipment use.
- Preheat only to required cooking temperature for specific food - not higher.
- Do not open the oven door unless absolutely necessary. Use the window to observe cooking progress.
- Keep area around the oven door clean and free of food particles.
- Any obstruction that prevents the door from closing completely will adversely affect oven efficiency.

## **OPERATING HINTS**

When using the convection oven for the first time with a particular food, check the degree of doneness periodically before the suggested time has elapsed, to make sure the desired doneness is achieved.

Record your temperature and time settings for various products. The convection oven can provide consistent, repeatable results.

The convection oven is faster than conventional deck-type ovens; temperature settings are lower and cook times are shorter. Since recipes and foods are subject to many variations and tastes, the guidelines regarding times and temperatures in this manual are SUGGESTIONS ONLY. Experiment with your food products to determine the cooking temperatures and times that give you the best results.

## **CLEANING**

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

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

Clean porcelain oven interior daily with soap or detergent and water. Rinse thoroughly and wipe dry with a soft clean cloth.

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

Soap or detergent and water usually handle routine cleaning. Rinse thoroughly and dry with a soft clean cloth.

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 with the "grain."

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



## SUGGESTED COOKING GUIDELINES

The following cooking time and temperature guidelines will vary depending on product temperature, size, shape, etc. They are SUGGESTIONS ONLY and should be adjusted to suit your operation.

PRODUCT	TEMPERATURE		TIME (MINUTES)	NUMBER OF RACKS
	°F	(°C)		
<b>BREAD PRODUCTS</b>				
Hamburger Rolls	300	(149)	15	5
Bread - 1 Lb. (454 gr.) Loaves	325	(163)	34	3 (9 loaves)
Rolls	300	(149)	16	5 (60 rolls)
Baking Soda Biscuits	400	(204)	7	3
<b>PASTRIES</b>				
Sheet Cake (2½ Lb. per Pan) (1 kg)	300	(149)	17	5
Frozen Fruit Pies (46 oz.)	350	(177)	50	5 (5 pies)
Frozen Fruit Pies (26 Oz. [1.3kg] 8" [223mm] Diam.)	350	(177)	40	5 (10 pies)
Sugar Cookies	300	(149)	15	5
Danish Rolls	350	(177)	12	5
Fruit Cakes	275	(135)	75	3
Cake - 1 Lb. (454 gr.)	300	(149)	19	5 (5 cakes)
<b>MEAT</b>				
Hamburger Patties (5 per Lb. [454 gr.]) (well done)	400	(204)	9-10	5 (30 patties)
Hot Dogs	300	(149)	9	5 (200)
Baked Stuffed Pork Chops	375	(190)	40	5 (30 chops)
Roast Beef (10-Lb. [4.5 kg] Roasts)	250	(121)	2½-3 hrs.	2 (2 roasts)
<b>FISH</b>				
Fish Sticks	350	(177)	15	5
Lobster Tails	450	(232)	9	5
Halibut Steaks (Frozen, 5 oz.) (142 gr.)	350	(177)	20	5
Baked Shrimp (Stuffed)	400	(204)	7	5
<b>FOWL</b>				
Turkey, Rolled (18 Lb. [8 kg] Rolls)	310	(154)	3¾ hrs.	1
Chicken (2½ Lb. Quartered) (1 kg)	350	(177)	30-35	5
Chicken (Breasts)	350	(177)	30	5
<b>OTHER</b>				
Melted Cheese Sandwiches	400	(204)	8	5
Idaho Potatoes (120 Count)	400	(204)	40	5
Beef Pot Pies	400	(204)	30-35	5
Macaroni & Cheese	350	(177)	30	5
Turkey Pot Pies	400	(204)	30-35	5
TV Dinners	450	(232)	25	5 (15)

**ROLLED BEEF ROASTS — MODEL HEC20D**

<b>COOK TEMPERATURE</b>	<b>200°F (93°C)</b>		<b>250°F (121°C)</b>		<b>300°F (149°C)</b>	
<b>HOLD TEMPERATURE</b>	<b>150°F (65.5°C)</b>					
<b>DONENESS</b>	<b>RARE</b>	<b>MEDIUM</b>	<b>RARE</b>	<b>MEDIUM</b>	<b>RARE</b>	<b>MEDIUM</b>
<b>WEIGHT OF ROAST POUNDS</b>	<b>HOURS:MINUTES</b>					
8	2:40	3:45	1:45	2:20	1:20	1:40
9	2:50	3:58	1:50	2:25	1:25	1:50
10	3:00	4:15	2:00	2:35	1:30	1:55
11	3:10	4:25	2:05	2:45	1:35	2:00
12	3:20	4:40	2:15	2:50	1:40	2:05
13	3:30	4:50	2:20	3:00	1:45	2:15
14	3:40	5:05	2:25	3:10	1:50	2:20
15	3:45	5:15	2:30	3:15	1:55	2:25
16	3:55	5:30	2:35	3:20	2:00	2:30
17	4:00	5:40	2:40	3:30	2:00	2:35
18	4:10	5:50	2:45	3:35	2:05	2:40
19	4:15	6:00	2:50	3:40	2:10	2:45
20	4:25	6:10	2:55	3:50	2:15	2:50
21	4:30	6:20	3:00	3:55	2:15	2:55
22	4:40	6:30	3:05	4:00	2:20	2:55
23	4:45	6:40	3:10	4:05	2:25	3:00
24	4:55	6:50	3:15	4:15	2:25	3:05
25	5:00	7:00	3:20	4:20	2:30	3:10
26	5:05	7:10	3:25	4:25	2:35	3:15
27	5:15	7:20	3:30	4:30	2:35	3:20
28	5:20	7:25	3:35	4:35	2:40	3:20
29	5:25	7:35	3:35	4:40	2:45	3:25
30	5:30	7:45	3:40	4:45	2:45	3:30

Overall oven interior dimensions may limit the size of larger roasts that can be accommodated.

# MAINTENANCE

**WARNING:** THE OVEN AND ITS PARTS ARE HOT. USE CARE WHEN OPERATING, CLEANING, OR PERFORMING ANY MAINTENANCE ON THE OVEN.

**WARNING:** DISCONNECT THE ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH INDICATING THAT YOU ARE WORKING ON THE OVEN BEFORE PERFORMING ANY MAINTENANCE.

## FUSE HOLDERS

Replace fuses with appropriate type described on control panel.

## LUBRICATION

The fan motor comes with sealed bearings and requires no lubrication.

The door hinges and mechanism require occasional lubrication with high temperature Teflon grease.

## **SERVICE**

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