

INSTRUCTIONS

ELECTRIC COMBI, CONVECTION & STEAM OVENS

BOILERLESS

(LEFT HINGED DOOR)

<i>CE6HD</i>	<i>ML-138010</i>
<i>CE10HD</i>	<i>ML-138012</i>
<i>CE10FD</i>	<i>ML-138016</i>
<i>CE20HD</i>	<i>ML-138014</i>
<i>CE20FD</i>	<i>ML-138018</i>

(RIGHT HINGED DOOR)

<i>CE6HD</i>	<i>ML-138011</i>
<i>CE10HD</i>	<i>ML-138013</i>
<i>CE10FD</i>	<i>ML-138017</i>
<i>CE20HD</i>	<i>ML-138015</i>
<i>CE20FD</i>	<i>ML-138019</i>



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INSTALLATION, OPERATION AND CARE OF ELECTRIC COMBI, CONVECTION & STEAM OVENS

SAVE THESE INSTRUCTIONS

GENERAL

The Electric Combi, Convection & Steam Ovens are single compartment ovens that provide convection heating and/or steaming in the cooking chamber.

The Hobart **Combi Electric** ovens are sized **6**, **10**, or **20** levels high. The 6 level ovens are **Half** depth only. The 10 and 20 level ovens are either **Full** or **Half** depth. All models include a **D**igital programmable control. The **bold** numbers and letters explain the model-number conventions.

The 6 or 10 level ovens can be installed on a suitable countertop using the 2" legs (standard) or the optional 6" legs. The 6 or 10 level ovens can also be installed on an accessory stand. The accessory stand may be equipped with an accessory Pan Slide which provides rack or pan storage underneath the oven. On 6 or 10 level ovens, the accessory Landing Table can load or unload all racks in one motion when the oven is mounted on the accessory stand. Additional racks are also available accessories. The 20 level ovens are installed with legs and come with a Trolley to allow loading or unloading all racks in one motion. An optional Hose Spray accessory supplied by others can be installed near the oven to facilitate easy cleaning of the accessory racks.

INSTALLATION

UNPACKING

Immediately after unpacking the oven, 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.

Prior to installation, verify that the electrical and water service agrees with the specifications on the oven data plate and in this manual.

INSTALLATION CODES AND STANDARDS

In the United States, the Hobart Combi 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.
3. Vapor Removal from Cooking Equipment, (NFPA-96, latest edition) available from NFPA.

In Canada, the Hobart Combi 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, Canada L4W 5N6.

LOCATION

Allow space for operating the oven. Do not obstruct the ventilation ports above the oven. To provide ventilation access, allow 1" clearance on the left side of the oven and 2½" clearance at the rear. A suitable amount of space (18" minimum) should be provided on the right side of the machine for operation, cleaning and service.

DOOR OPENING

The standard oven is delivered with the door hinged on the left. If the door opening needs to be changed, contact your authorized Hobart Service office.

STACKING KITS

Stacking kits are available to allow ovens to stack, one on top of the other (available for 6 and 10 level ovens only). The bottom oven must be the same depth as the upper oven. Assembly Instructions are included with the kit.

LEVELING

Use a spirit level on a rack in the oven to make sure the oven is level, both front-to-back and side-to-side. On 20 levels, accessory stands, and optional 6" legs, adjust the leveling feet on the bottom of the legs by turning the feet in or out to level the oven. After the drain is connected, check for level by pouring water onto the floor of the compartment. All water should drain through the drain opening.

WATER REQUIREMENTS

NOTICE As with all steam related products, water filtration and regular filter replacements coupled with routine deliming are required. Your local Hobart Service office can recommend a water treatment system to meet the needs of your local water conditions. Contact your local Hobart Service representative for water treatment offerings.

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 another. The recommended proper water treatment for effective and efficient use of this equipment will also vary depending on the local water conditions. Ask your municipal water supplier for details about your local water supply prior to installation.

Recommended water hardness is less than 5.0 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 and/or in-line water treatment). Water hardness below 4.0 grains per gallon may also require a water treatment system to reduce potential corrosion. Water treatment has been shown to reduce costs associated with machine cleaning, reduce deliming and reduce corrosion of metallic surfaces.

PLUMBING CONNECTIONS

⚠ WARNING Plumbing connections must comply with applicable sanitary, safety and plumbing codes.

WATER SUPPLY CONNECTIONS

Connect treated potable water (cold) to the inlet. Untreated water contains scale producing minerals which, if supplied, can precipitate and adhere to the surfaces inside the oven. This can result in early component failure and reduced product life.

DRAIN CONNECTION

NOTICE In order to avoid any back pressure in the oven, do not connect solidly to any drain.

Extend the drain line from the 1" NPT drain pipe extending from the bottom of the oven at the rear to an open gap-type drain. Drain piping must have suitable pitch, have appropriate support along its length, and have no connection to other piping. The material used in the drain line should be heat resistant to at least 212°F (100°C).

ELECTRICAL CONNECTION

⚠ 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 follow lockout / tagout procedures.

The wiring diagram is located on the inside surface of the right side panel as you face the oven. Use copper wire rated for at least 194°F (90°C) for the connection.

Model	Volts	Hertz	Phase	Amps
CE6HD	208	60	3	25
	240			22
	480			11
CE10HD	208	60	3	50
	240			44
	480			22
CE10FD	208	60	3	66
	240			58
	480			29
CE20HD	208	60	3	100
	240			87
	480			44
CE20FD	208	60	3	117
	240			101
	480			58

NOTE: Single-phase blower motors are used on these ovens so there is no need to check direction of motor rotation. The fan will rotate in the proper direction.

VENT HOOD

Some local codes may require the Combi oven to be located under an exhaust 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).

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 oven. Operate the oven at 482°F for 45 minutes in Convection Mode.

OPERATION

⚠ WARNING The oven and its parts are hot. Use care when operating, cleaning or servicing the oven. The cooking compartment contains live steam. Stay clear when opening door.

DOOR SWITCH

The oven is equipped with a feature that shuts off power to the oven cavity when the door is opened. The oven will resume cooking once the door is closed.

DOOR OPENING AND CLOSING

To open the door (Fig. 1), turn the handle to the horizontal position. Allow a few seconds for steam to escape before pulling the door open.

To close the door (Fig. 1), position handle in the horizontal position and push the door closed. Rotate handle to the vertical position to secure door.

LOADING THE OVEN

Loading 6 or 10 Level Ovens

Place the product to be cooked in suitable containers. Open the door and slide into the rack guides or place the containers securely on racks in the oven. Close the door.

Loading 6 or 10 Level Ovens With Landing Table And Removable Insert

Place removable insert on the landing table. Place the product to be cooked in suitable containers and slide into the rack guides or place the containers securely on racks on the removable insert (Fig. 2). Place the handle into the removable insert. Open the door. Position the landing table directly in front of the open oven cavity. While holding the landing table in position with one hand, with the other hand, release the insert and gently roll the removable insert into the oven cavity. Make sure that the landing table does not separate from the oven during the transfer. Remove the handle from the insert and close the door.

Loading 20 Level Ovens

Place the product to be cooked in suitable containers and slide into the rack guides or place the containers securely on racks on the trolley (Fig. 3). Place the handle into the trolley. Open the door. Line up the trolley with the trolley slots on the oven and push the trolley into the oven cavity. Remove the handle from the trolley and close the door.

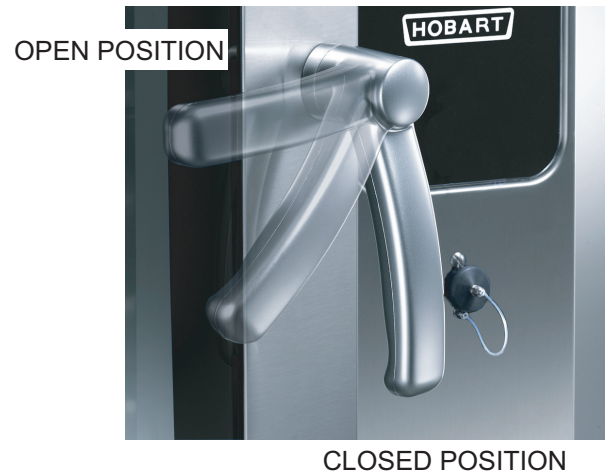


Fig. 1

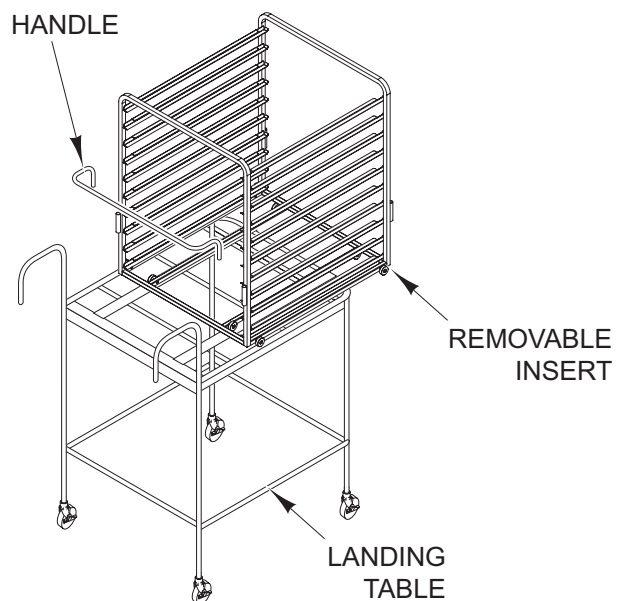


Fig. 2

UNLOADING THE OVEN

Unloading 6 or 10 Level Ovens

Open door partially to allow hot air and steam to escape. Remove the product from the rack guides or racks in the oven. Close the door.

Unloading 6 or 10 Level Ovens With Landing Table And Removable Insert

Open door partially to allow hot air and steam to escape. Position the landing table (Fig. 2) directly in front of the oven cavity. Insert the handle into the removable insert. Using protective gear, carefully roll the removable insert onto the landing table. Make sure that the landing table does not separate from the oven during transfer. Close the door.

Unloading 20 Level Ovens

Open door partially to allow hot air and steam to escape. Insert the handle into the trolley. Using protective gear, pull the trolley (Fig. 3) out of the oven. Close the door.

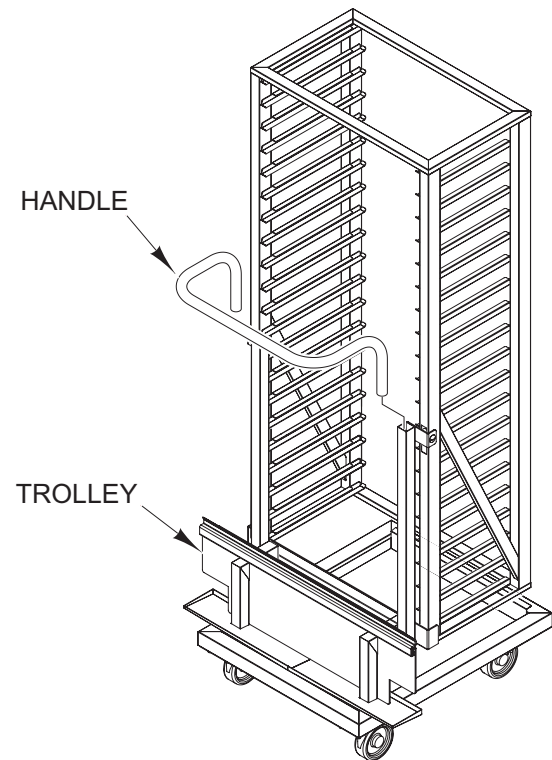


Fig. 3

COOKING MODES

There are three modes of cooking available with the Combi Oven.

Convection Mode

Convection Baking involves baking, browning, roasting, etc. without adding steam or moisture to the process. Hot air is circulated to maintain even temperatures throughout the oven.

Steam Mode

Steam cooking is used for stewing, poaching, and gentle cooking of products cooking in water. Steam flows without pressure into the oven. The fan circulates the steam to all parts of the oven.

Combi Mode

Combi baking/steaming is used for baking, roasting, or braising when steam needs to be added to the oven during a convection baking operation.

CONTROL PANEL

The control panel (Fig. 4) has a screen that displays to the user the functions in progress. All features are displayed on the screen and adjusted by using the buttons on the control panel.

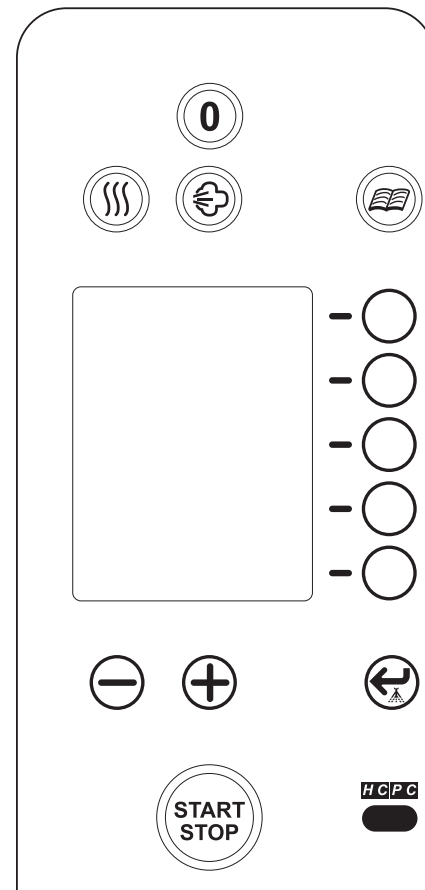

























Fig. 4

CONTROL PANEL BUTTONS		
	ON/OFF Button	Press this button to turn the oven on or off.
	Convection Mode	Press this button to set the oven to Convection Mode. The button will illuminate to indicate it has been selected.
	Steam Mode	Press this button to set the oven to Steam Mode. The button will illuminate to indicate it has been selected.
	Combi Mode	Press both buttons to set the oven to Combi Mode. The buttons will illuminate to indicate they have been selected.
	Program Button	Press this button to use an existing program or to write a new program. (Press and hold 3 seconds to name program)
	Enter Button (also used as Humidity Injector Button)	Press this button to confirm a program selection. When used during Convection Mode, humidity will be injected into the oven cavity. (Press and hold 3 seconds to save recipe)
	Minus Button	Press this button to decrease setting feature such as temperature or time.
	Plus Button	Press this button to increase setting feature such as temperature or time.
	Selection Line Button (total of five)	Press these buttons to select the feature displayed in the control panel next to each Selection Line. These features will change depending on the screen being displayed.
	START/STOP Button	Press this button to start or stop a program or cooking cycle. (Press and hold 3 seconds for preheat)

DISPLAY SCREEN ICONS		
44 EXAMPLE	Program Number (Name)	This indicates the current program number, if used.
PH 1/10	Cooking Phase	This indicates the cooking phase in progress. The oven can be set from 1 to 10 phases.
	Delayed Preheat Timer	This icon indicates that the oven has a delayed timer set for preheat. (Only displayed if no timer has been selected)
	Temperature (Delta T)	This icon is selected when adjustment of the temperature is needed.
	Delta T	This icon appears when Delta T is selected. Core probe readings control rising set temperatures on a set scale.
	Timer (Core Probe)	This icon is selected when adjustment of the timer is needed.
	Core Probe	This icon appears when the core probe is being used to monitor the internal temperature of a product.
 	Vent Open/Closed	This icon indicates that the oven cavity vent is open or closed. Press the Selection Line Button next to the icon to toggle. (Convection Mode only)
	Humidity	This icon indicates that humidity is present in the oven.
	Humidity Arrow	An arrow may appear next to the humidity icon to indicate whether more or less humidity is needed in the oven.
	Fan Speed	This icon indicates the fan speed in the oven. The value range is 1 to 4.
	Manual Operation/ No Timer	This icon is used to show that a function is in continuous mode. It is commonly used when the timer is not set.
	Cool Down	This icon appears when the oven is set to cool down from high temperatures.
 500H	Service/Hours Remaining	These icons remind the operator to perform a service on the machine such as delime of the cavity or routine service check. The machine will continue to operate regardless of the number displayed.

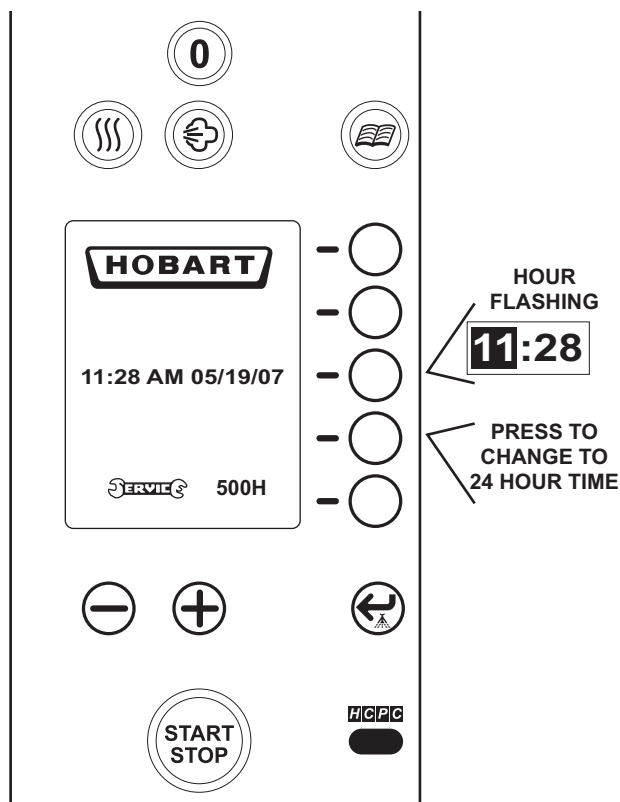
INITIAL START-UP

When the machine is connected to electrical power, the display screen will show the current time and date as set in the oven and the countdown for service/deliming. The internal clock should be set at this time.

SETTING THE INTERNAL CLOCK

1. Press and hold the Selection Line Button next to the time and date. The hour portion of the time will flash.
2. Use the Plus/Minus Buttons to adjust the hour.
3. Press the Enter Button. The minute portion of the time will flash.
4. Repeat steps 2 and 3 until the time and date are set.

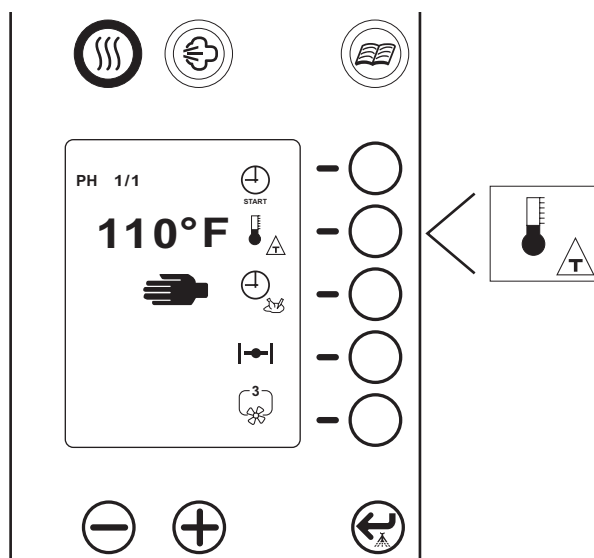
NOTE: Press the Selection Line Button below the time and date to toggle the time between 12 hour and 24 hour time.



SETTING THE TEMPERATURE

1. Select the cooking mode by pressing the Convection, Steam or Convection and Steam (Combi) Button(s).
2. Press the Selection Line Button next to the Temperature icon. The icon will be highlighted to indicate that it has been selected and the set temperature will be shown.
3. Use the Plus/Minus Buttons to adjust the temperature. After a few seconds the Temperature icon will change contrast and the set oven cavity temperature will be displayed.

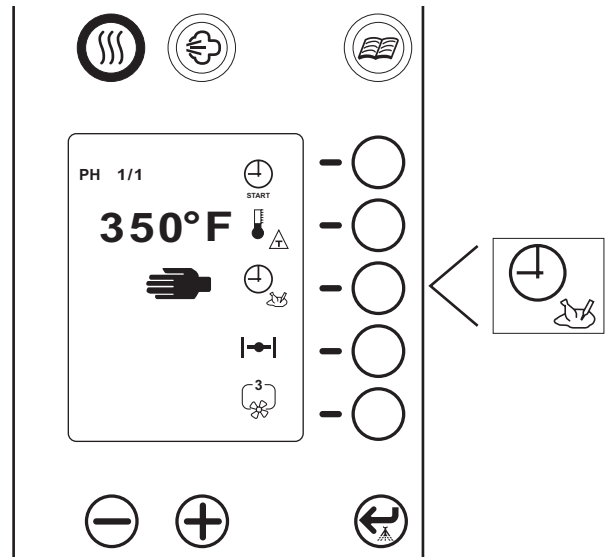
NOTE: Press and hold the Selection Line Button next to the Temperature icon to view the current oven temperature.



SETTING THE TIMER

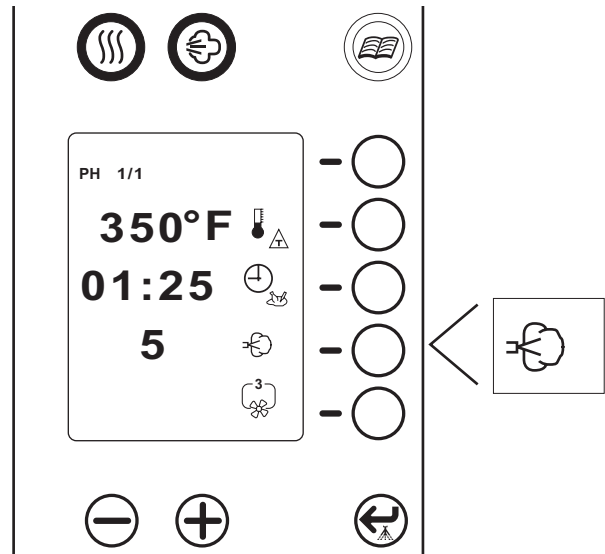
1. Select the cooking mode by pressing the Convection, Steam or Convection and Steam (Combi) Button(s).
2. Press the Selection Line Button next to the Timer icon. The icon will be highlighted to indicate that it has been selected and the set timer will be shown.
3. Use the Plus/Minus Buttons to adjust the timer. After a few seconds the Timer icon will change contrast and the set timer will be displayed.

NOTE: The Hand icon indicates the timer is in continuous mode and no timer is used.



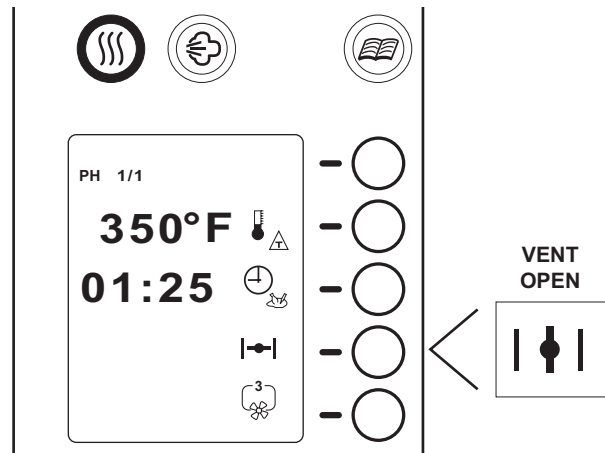
SETTING THE HUMIDITY

1. Select Combi Mode by pressing the Convection Button and Steam Button.
2. Press the Selection Line Button next to the Humidity icon. The icon will be highlighted to indicate that it has been selected and the set humidity will be shown.
3. Use the Plus/Minus Buttons to adjust the humidity. After a few seconds the Humidity icon will change contrast and the set humidity will be displayed.



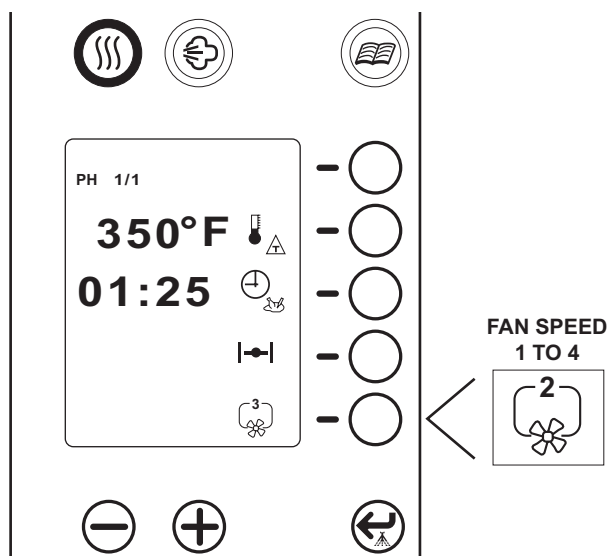
SETTING THE VENT POSITION

1. Select Convection Mode by pressing the Convection Button.
2. Press the Selection Line Button next to the Vent Position icon. The icon will toggle between the open and closed position.



SETTING THE FAN SPEED

1. Select the cooking mode by pressing the Convection, Steam or Convection and Steam (Combi) Button(s).
2. Press the Selection Line Button next to the Fan Speed icon. The icon will be highlighted to indicate that it has been selected.
3. Use the Plus/Minus Buttons to adjust the fan speed. After a few seconds the Fan Speed icon will change contrast.

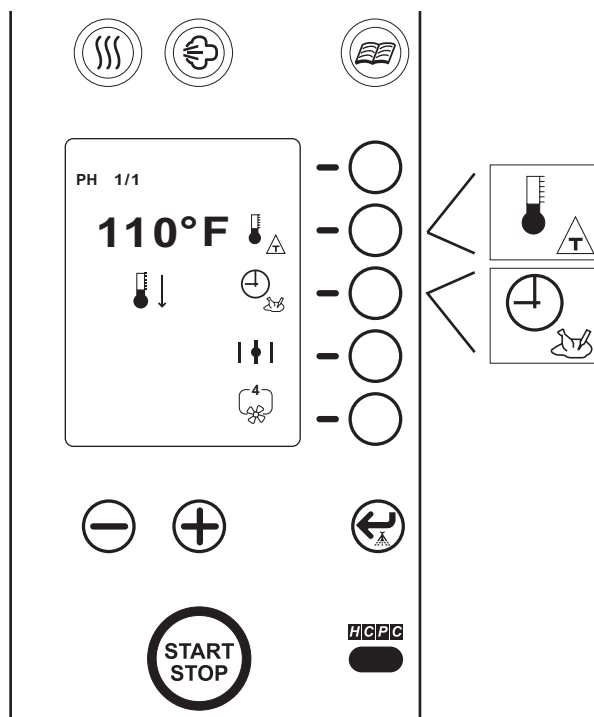


FAST COOL DOWN

This feature is used to cool down the oven quickly. It may be necessary to do this when changing from a high temperature operation to one that requires lower temperatures.

1. Press the Selection Line Button next to the Timer icon. The icon will be highlighted to indicate that it has been selected.
2. Press and hold the Minus Button until the Cool Down icon appears.
3. Press the Selection Line Button next to the Temperature icon. The icon will highlight to indicate that it has been selected and the set cool down temperature will be shown.
4. Use the Plus/Minus Buttons to adjust the oven to the desired cool down temperature.
5. Press the START/STOP Button.

NOTE: Choosing another mode will stop above process.



SELECTING THE COOKING MODE

After selecting one of the cooking modes, the default temperature for that cooking mode is displayed. The oven cavity lights will be on (only if the door is closed).

PREHEATING THE OVEN

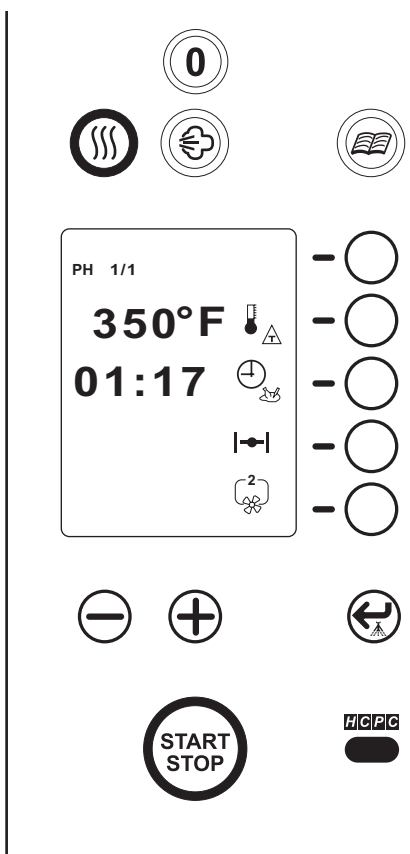
1. Set the cooking mode or use a program.
2. Press and hold the START/STOP Button for 3 seconds. The buzzer will sound and the oven will automatically preheat to the correct cooking temperature. The timer, if set, will not count down. When the set temperature is reached the buzzer will sound again to indicate the oven is ready to be loaded.
3. Load the oven and press the START/STOP Button.

USING CONVECTION MODE

1. If the screen is blank (sleep mode), turn on the oven by pressing the ON/OFF Button.
2. Press the Convection Button to select convection mode. The button will illuminate to indicate it has been selected.
3. Set the oven temperature.
4. Set the timer.
5. Set the vent position.
6. Set the fan speed.

NOTE: Preheating the oven is recommended.

7. Load the oven and press the START/STOP Button.
8. If called for in the recipe, press the Humidity Injector Button to add a short blast of steam to the cavity.
9. When the timer has counted down, the buzzer will sound for 5 seconds and the oven cavity lights will flash.
10. Press the START/STOP Button to silence the buzzer and end the cooking session.
11. Unload the oven.

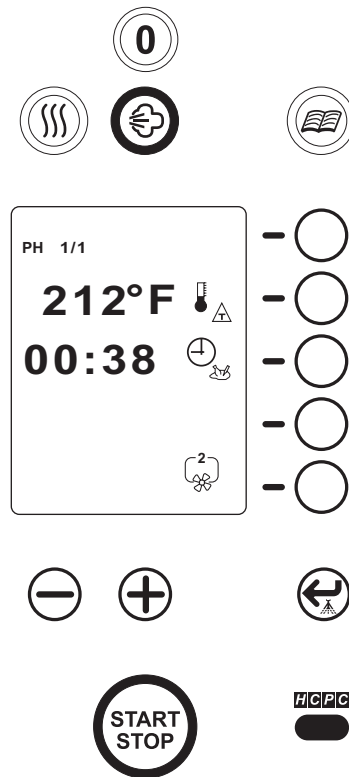


USING STEAM MODE

1. If the screen is blank (sleep mode), turn on the oven by pressing the ON/OFF Button.
2. Press the Steam Button to select steam mode. The button will illuminate to indicate it has been selected.
3. Set the oven temperature.
4. Set the timer.
5. Set the fan speed.

NOTE: Preheating the oven is recommended.

6. Load the oven and press the START/STOP Button.
7. When the timer has counted down, the buzzer will sound for 5 seconds and the oven cavity lights will flash.
8. Press the START/STOP Button to silence the timer and end the cooking session.
9. Unload the oven.

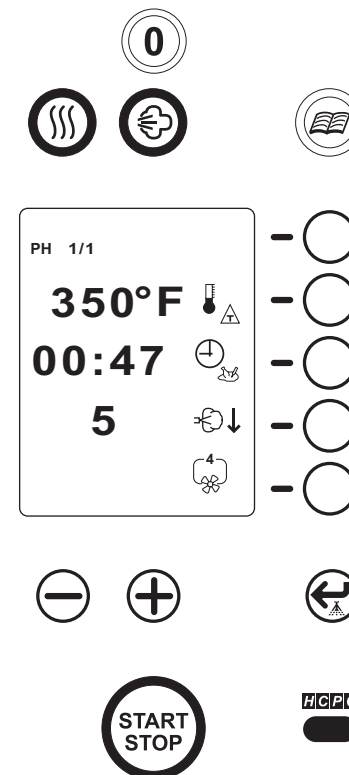


USING COMBI MODE

1. If the screen is blank (sleep mode), turn on the oven by pressing the ON/OFF Button.
2. Press the Convection and Steam Button to select combi mode. Both buttons will illuminate to indicate they have been selected.
3. Set the oven temperature.
4. Set the timer.
5. Set the humidity level.
6. Set the fan speed.

NOTE: Preheating the oven is recommended.

7. Load the oven and press the START/STOP Button.
8. When the timer has counted down, the buzzer will sound for 5 seconds and the oven cavity lights will flash.
9. Press the START/STOP Button to silence the timer and end the cooking session.
10. Unload the oven.



TEMPERATURE PROBE

The probe temperature defines the final temperature of the product for any cooking phase. The oven cooking cycle stops when the product temperature reaches the probe temperature setting. Total cooking time is not known or entered when using the probe.

There are two ways to control the oven temperature when using the probe:

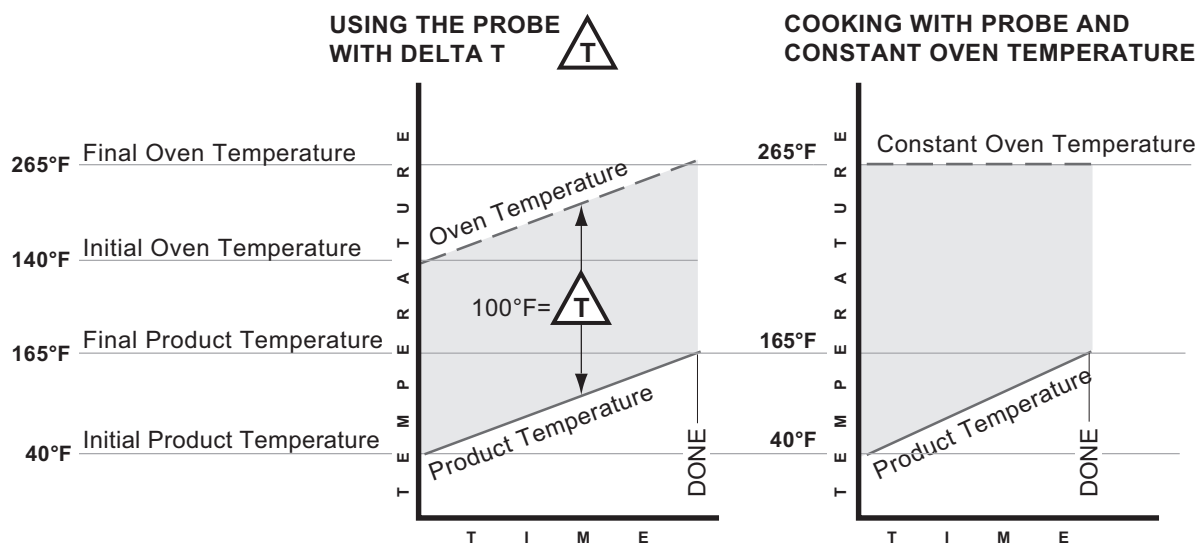


- Setting the oven temperature at a constant value. The oven maintains the set temperature throughout the cook cycle and ends when the product reaches the probe temperature setting.



- Setting the probe using Delta T. The oven temperature gradually increases as the internal temperature of the product increases, always maintaining the oven at a set number of degrees warmer than the product. Delta T can provide a slow cooking process that allows the product to reach the required final internal temperature with maximum product yield.

The graph below shows the two ways of controlling the oven temperature when using the core probe. The "100°F" value for Delta T is used to show how the oven works and is not typical of any particular cooking program.



USING THE PRODUCT TEMPERATURE PROBE

Setting the Cooking Core Probe Temperature

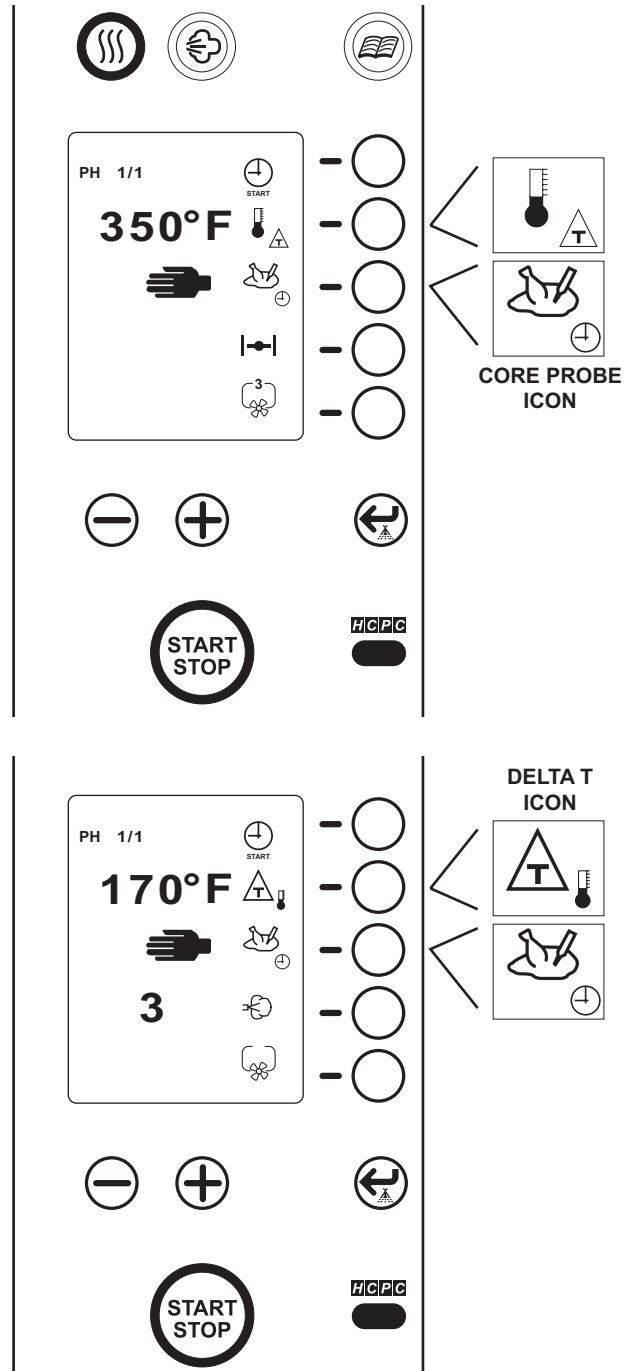
1. Insert the pointed end of the core probe into the product so that the tip is approximately in the middle of the product to be cooked.
2. Load the product into the oven.
3. Run the probe cable out the side of the door opening and close the door.
4. Connect the temperature probe (Fig. 6) to the connector below the control panel.
5. Press and hold the Selection Line Button next to the Timer icon. The icon will change to the Core Probe icon and display the set core probe temperature.
6. Press the Selection Line Button next to the Core Probe icon. The icon will be highlighted to indicate that it has been selected.
7. Use the Plus/Minus Buttons to adjust the core probe set temperature. After a few seconds the Core Probe icon will change contrast and the current temperature measured by the probe will be displayed.
8. Set all other cooking mode settings.
9. Press the START/STOP Button.

Setting Delta T

1. Select the cooking mode by pressing the Convection Button and/or Steam Button.
2. Press and hold the Selection Line Button next to the Temperature icon. The icon will change to the Delta T icon and display the set temperature difference between the oven cavity and the core probe.
3. Press the Selection Line Button next to the Delta T icon. The icon will be highlighted to indicate that it has been selected.
4. Use the Plus/Minus Buttons to adjust the Delta T set point temperature. After a few seconds the Delta T icon will change contrast and the current oven cavity temperature will be displayed.
5. Set the core probe temperature by following the instruction above.
6. Set all other cooking mode settings.
7. Press the START/STOP Button.



Fig. 6



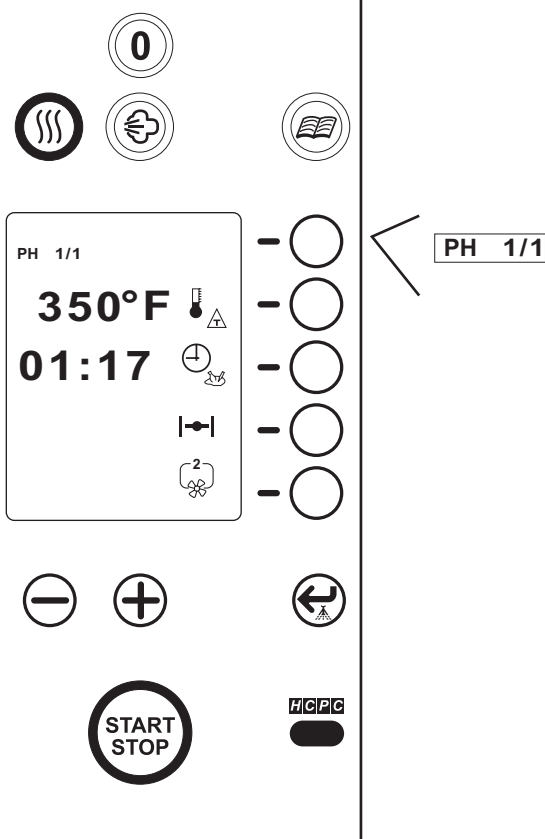
WRITING A COOKING PHASE

It is possible to link up to 10 cooking phases without using the program function.

1. Select the cooking mode by pressing the Convection Button and/or Steam Button.
2. Set cooking temperature or Delta T temperature.
3. Set cooking time or use the core probe. The Cooking Phase will indicate 1 of 1.
4. Set the vent position or the humidity level, depending on the cooking mode being used.
5. Set the fan speed.
6. Press the top Selection Line Button to add a phase. The Cooking Phase will indicate that is ready for the next phase 2 of 2.
7. Repeat steps 1 through 6 for each phase.

NOTE: Press the top Selection Line Button to review the cooking phases.

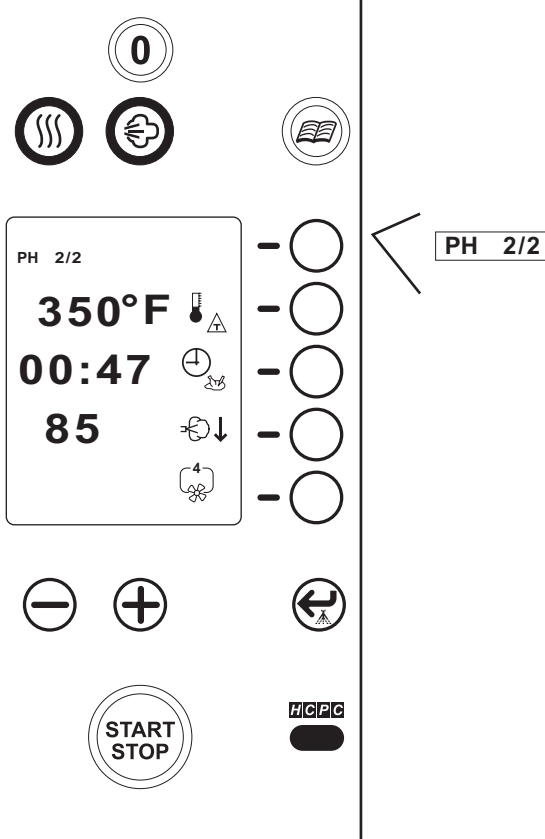
8. Load product, close door and press the START/STOP Button to begin cooking phases.



ERASING A COOKING PHASE

1. Press the top Selection Line Button until the phase to be erased is displayed.
2. Press and hold the top Selection Line Button. The buzzer will sound and the phase will be erased.

NOTE: Once a phase is erased the remaining phases automatically renumber.



WRITING A COOKING PROGRAM

It is possible to write and store up to 100 cooking programs with a maximum of 10 phases each.

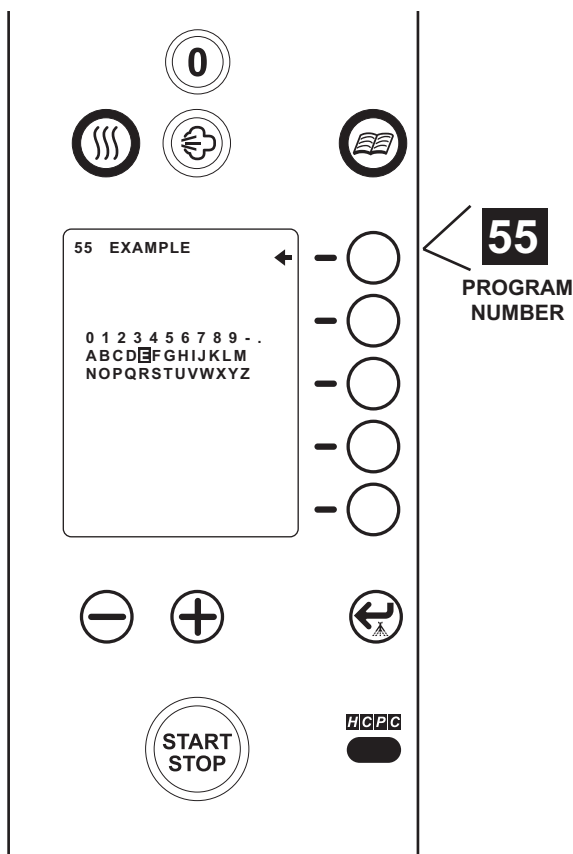
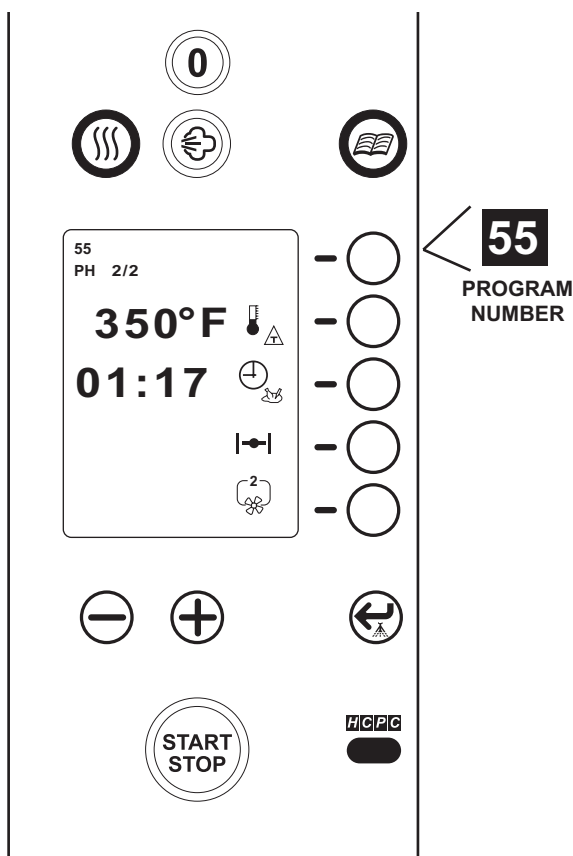
NOTE: The oven is also equipped to use an optional HCPC-HACCP recording system to facilitate fast, easy and accurate data management via wireless communication to a PC. Contact your local Hobart representative for more information.

1. Press the Program Button to select program mode. The button will illuminate to indicate it has been selected and will display recipe "00".
2. Use the Plus/Minus Buttons to select the program number that will identify this program.
3. Input all cooking phases. The program number will blink to indicate that it has not been stored.
4. Press and hold the Program Button. The display will change and show the available characters that can be used to name the program.
5. Use the Plus/Minus Buttons to place the flashing cursor over the character to be used.
6. Press the Enter Button to add the character to the name. The characters will be added to the right of the program number on the display screen.
7. Repeat steps 5 and 6 to add more characters to the program name.

NOTE: Use the top Selection Line Button next to the arrow icon to erase a character or to backspace.

8. After the program has been named, press and hold the Enter Button to store the name with the program number. The buzzer will sound and the program number will stop blinking to indicate that the program has been stored.

NOTE: A program can also be made after a cooking cycle has been run. Press the Program Button, use the Plus/Minus Buttons to navigate to a number to store the program and press the Enter Button. Use the steps above to name the program.



MODIFYING A COOKING PROGRAM

1. Press the Program Button to select program mode. The button will illuminate to indicate it has been selected.
2. Use the Plus/Minus Buttons to select the program to be modified.
3. Modify the desired cooking phases. The program number will blink to indicate that it has not been stored.

NOTE: A modified program can be run before storing. After the program has run, it can then be stored. It is not possible to insert a phase into a program.

4. Press and hold the Enter Button. The buzzer will sound and the program number will stop blinking to indicate that the program has been stored.

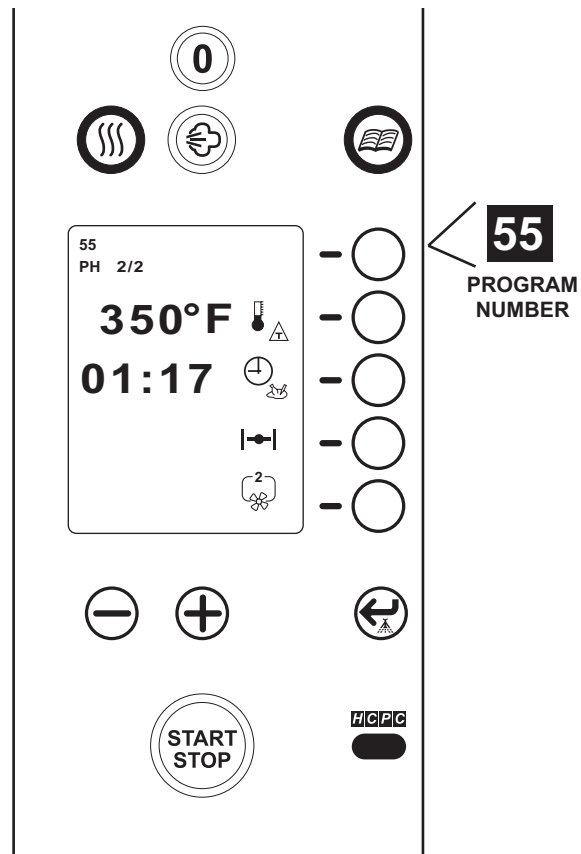
REVIEWING A COOKING PROGRAM

1. Press the Program Button to select program mode. The button will illuminate to indicate it has been selected.
2. Use the Plus/Minus Buttons to select the program number to be reviewed. The screen will display the first phase of the program.
3. Press the top Selection Line Button to scroll through the phases of the program.
4. Press the Selection Line Button next to the temperature icon to view the set temperature on each phase.
5. Press the START/STOP Button to view total cooking time for the selected program.

NOTE: The total cooking time for all phases will be displayed unless one of the phases uses the core probe or continuous timer mode.

ERASING A COOKING PROGRAM

1. Press the Program Button to select program mode. The button will illuminate to indicate it has been selected.
2. Use the Plus/Minus Buttons to select the program to be erased.
3. Press and hold the Enter Button. The buzzer will sound and the program will be erased.



USING A COOKING PROGRAM

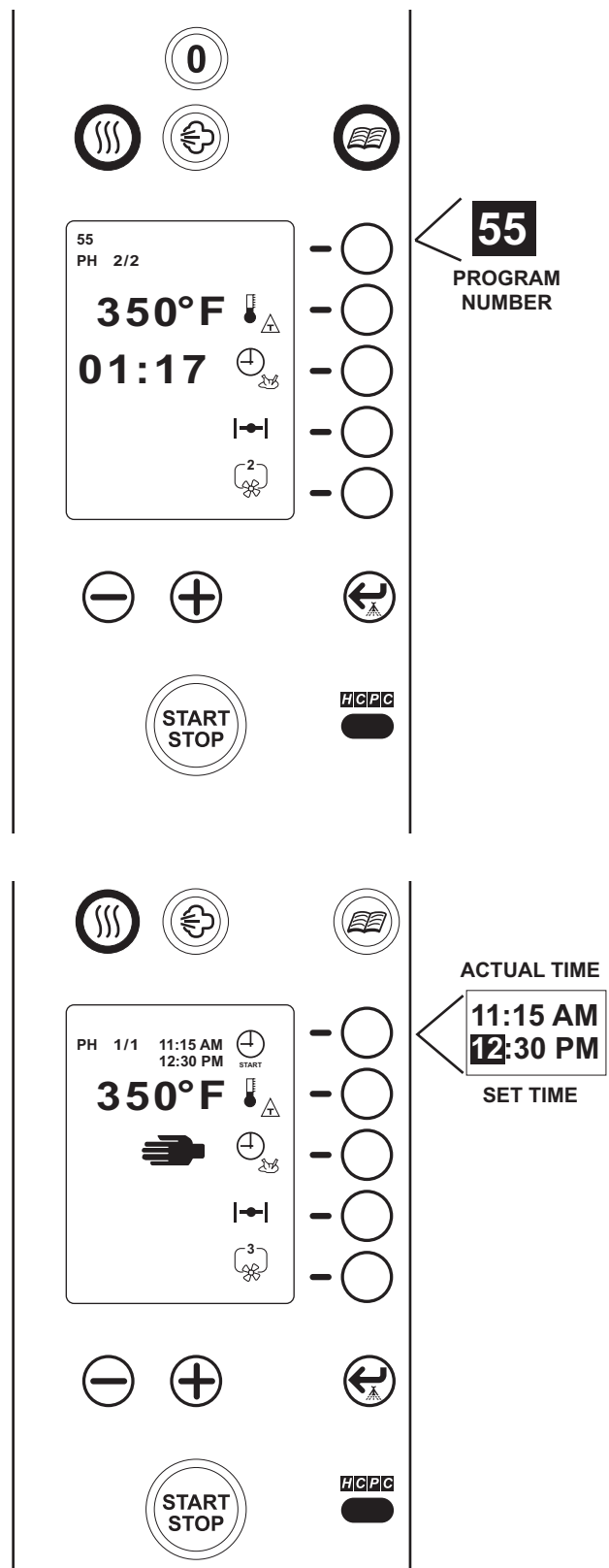
1. Press the Program Button to select program mode. The button will illuminate to indicate it has been selected.
2. Use the Plus/Minus Buttons to select the program number to be used. The screen will display the first phase of the program.
3. Press the START/STOP Button to start the program. The total time remaining will be displayed and the buzzer will sound for one second at the completion of each phase.

NOTE: The total cooking time for all phases will be displayed unless one of the phases uses the core probe or continuous timer mode.

SETTING A PREHEAT PROGRAM

It is possible to program the oven to start preheating at any set time.

1. Select a cooking mode and set the preheat temperature.
2. Press the Selection Line Button next to the Delayed Timer icon. The actual time will be displayed and the hour portion of the preheat time will be flashing.
3. Use the Plus/Minus Buttons to adjust the hour.
4. Press the Enter Button. The minute portion of the time will flash.
5. Use the Plus/Minus Buttons to adjust the minute.
6. Press the START/STOP Button.



MAINTENANCE

⚠ WARNING Disconnect electrical power supply and follow lockout / tagout procedures.




NOTICE Fluorescent lamp in display panel contains a small amount of mercury. Please dispose of according to local, state or federal laws.

SERVICE ADJUSTMENTS

The Combi Oven default settings can be customized to fit your own personal needs using service parameter setup. Contact your local Hobart Service office for any adjustments needed on this equipment.

SHUTTING DOWN THE OVEN

1. Press the ON/OFF Button. The display screen will show the Cleaning and Shutdown icons.
2. Press the Selection Line Button next to the icon to be performed.

DISPLAY SCREEN CLEANING AND SHUTDOWN ICONS		
	Stop Only	Select this feature if the oven will be shutdown and not cleaned.
	Manual Clean Cycle	Select this feature if the oven cavity is to be cleaned manually.
	Auto Clean Cycle	Select this feature if the oven cavity is to be cleaned automatically.

CLEANING

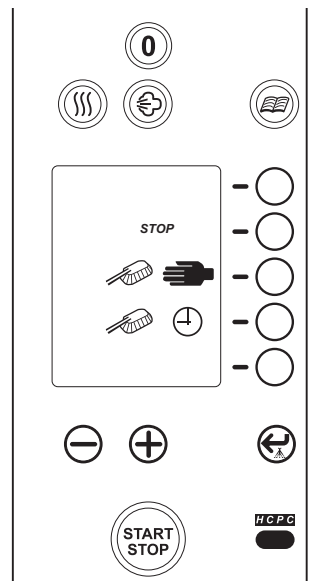
⚠ WARNING The oven and its parts are hot. Always allow the oven to cool before cleaning.

Daily Cleaning

1. Remove any large pieces of food that may be in the oven cavity before starting a cleaning cycle.
2. Perform one of the cleaning cycles.
3. Clean the door gasket with a soft, clean, damp cloth after every cleaning cycle. This will ensure a long life for the gasket.
4. Do not use cleaners containing grit, abrasive materials, bleach, harsh chemicals or chlorinated cleaners. Do not use steel wool on stainless steel surfaces.
5. Be cautious with new or improved cleaning formulas; use only after being well tested in an inconspicuous place.

Manual Clean Cycle

1. Press the Selection Line Button next to the Manual Clean Cycle icon.
2. Press the START/STOP Button to begin the clean cycle. The buzzer will sound to indicate that the interior is ready to be sprayed with an appropriate detergent.
3. Open the door and spray the detergent.
4. Close the door, the clean cycle will restart and end with the appropriate rinse of the cavity.

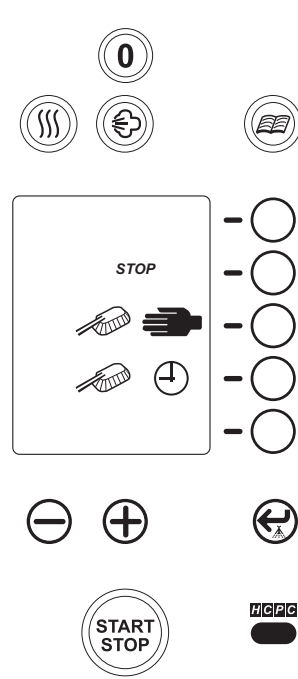


Automatic Clean Cycle

NOTE: Before using the auto clean cycle, make sure that the detergent pump tube is inserted correctly into the detergent container and that enough detergent is available.

1. Press the Selection Line Button next to the Auto Clean Cycle icon.
2. Use the Plus/Minus Buttons to select the clean cycle time and amount of detergent to be used. The time and detergent values are preset. Select the preset value depending on the level of cleaning needed.
3. Press the START/STOP Button to begin the clean cycle.

Preset Automatic Clean Cycle Values (times may vary depending on automatic cool down)								
Level	Detergent Dose	Time	Level	Detergent Dose	Time	Level	Detergent Dose	Time
0	0	0:25	3	15	0:47	6	30	1:12
1	5	0:30	4	20	0:55	7	35	1:20
2	10	0:38	5	25	1:04	8	45	1:29



Quick Rinse Cycle

NOTE: The quick rinse cycle is an automatic cycle that does not use detergent. This feature can be used to give the oven cavity a quick rinse between product uses.

1. Press the Selection Line Button next to the Auto Clean Cycle icon.
2. Use the Minus Button to select "0" detergent to be used.
3. Press and hold the Minus Button until an "R" appears instead of a "0".
3. Press the START/STOP Button to begin the quick rinse cycle.

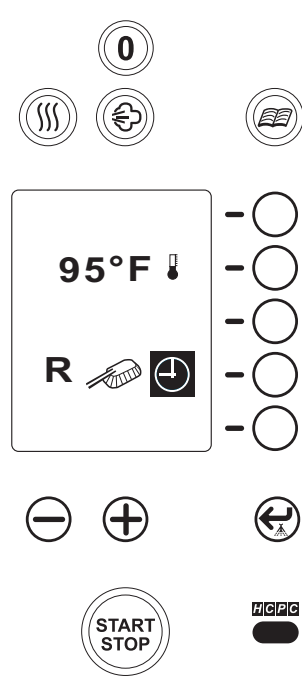
Deliming the Cavity

Oven cavity deliming should be done on a regular basis. The frequency depends on oven use, quality of the local water supply and what type of water treatment system is used. Even with the use of a water treatment system, periodic deliming of the oven cavity is still required. If lime scale build up becomes visibly noticeable, then the oven cavity deliming should be performed.

NOTICE Deliming should only be performed on a cool oven after a clean cycle has occurred.

NOTE: All components inside the oven cavity, such as the heating elements, racks, rack guides and interior glass, can be sprayed with white vinegar or a deliming product.

1. Spray the entire oven cavity with white vinegar (full strength) and let it stand for 15 minutes. Or use a deliming product. When using a deliming product other than white vinegar, follow the directions on the product label.
2. Close the oven door.
3. Rinse the oven cavity using the automatic clean cycle and set the cycle to "0".

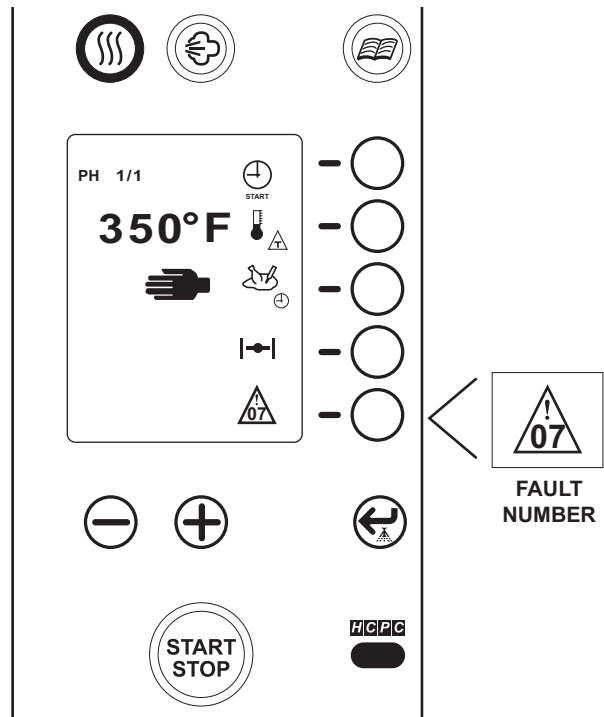


TROUBLESHOOTING

AUTODIAGNOSTICS

The microprocessor of the oven constantly checks the proper functioning of the machine and indicates any problems with a number inside a symbol located in place of the fan speed. See the Fault Symbols Chart for more information.

- Faults must be corrected, otherwise they will be displayed each time a function using the faulty component is selected.
- The fault display stays on if the corresponding mode or function cannot be used.
- The last 99 faults are stored in the control board memory.
- If a fault occurs during a cooking program, the program will stop.
- If a fault is displayed before starting a program, it will not be possible to start that program.



FAULT SYMBOLS CHART

00	Electronic components overheat (CPU)
01	Cavity overheat
02	Not used
03	Cavity probe fault
04	Not used
05	Not used
06	Not used
07	Core probe fault or probe not connected
08	Fan motor fault
09	Lack of water
10	Not used
11	Static relays overheat
12	Not used
13	Not used
14	Not used
15	Not used
16	Temperature probe grounded

SERVICE AND PARTS INFORMATION

Contact your local Hobart Service office for any repairs or adjustments needed on this equipment.

SERVICE PARAMETER SETUP

The internal settings of the combi oven can be customized to fit your own personal needs. The chart below is provide to show you what functions can be modified. All system modifications must be made by an authorized Hobart technician.

Contact your local Hobart Service office for any adjustments needed on this equipment.

SYSTEM PARAMETER FUNCTIONS		
Parameter Number	Function	Use this function to:
1	Oven number	Assign each oven a number.
2	Service use only.	Service use only.
3	Display contrast	Change display contrast.
4	Fahrenheit or Celsius	Change oven to use Fahrenheit or Celsius.
5	Oven with hood	Service use only.
6	Audible frequency.	Change timer beeper volume.
7	Program keypad lockout	Lock the oven to program changes.
8	Flashing oven lights	Allow oven lights to flash or not.
9	Fan on/off in Steam Mode	Service use only.
10	Maximum temperature setting	Change maximum temperature.
11	Set temperature	Change default convection temperature.
12	Service use only.	Service use only.
13	Humidity range	Change setting range (1-5, 0-10, or 0-100).
14	Service use only.	Service use only.
15	Demo mode	Service use only.
16	Core probe	Adjust variant settings.
17	Service use only.	Service use only.
18	Service use only.	Service use only.
19	Service use only.	Service use only.
20	Detergent usage	Change detergent time adjustment.
21	Fan speed	Adjust minimum fan speed.
22	Fan rotation	Adjust time between fan direction change (1 to 4).
23	Fan stopping	Change how quick the fan stops.
24	Oven run time	Service use only.
25	Service use only.	Service use only.
26	Service use only.	Service use only.
27	Temperature display	Change oven to display actual or set temperature.
28	Service use only.	Service use only.
29	Service use only.	Service use only.