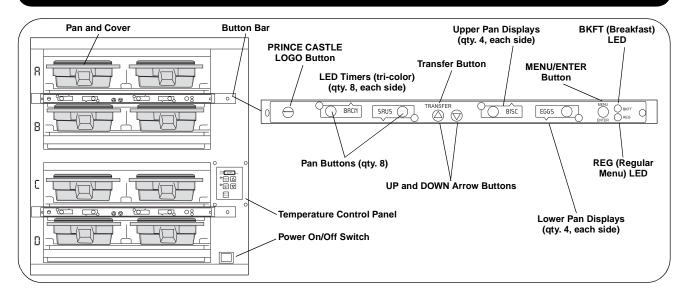
Product Identification



LIMITED WARRANTY

This product is warranted to be free from defects in material and/or workmanship for a period of one (1) year from date of original installation (with the exception of racks, pans, and covers). Any component which proves to be faulty in material and/or workmanship will be replaced or repaired (at the option of Prince Castle, Inc.) without cost to the customer for parts or labor. This warranty covers on location service (i.e. trip charges and/or mileage). Travel mileage is limited to 100 miles (200 kilometers -International) round trip (one trip warranty) from an authorized service agency or its sub-service agency.

This warranty is subject to the following exceptions/conditions:

- Use of any non-genuine Prince Castle parts voids this warranty.
- All labor shall be performed during regular work hours. Overtime premium will be charged to the buyer.
- Damage caused by carelessness, neglect, and/or abuse (e.g., dropping, tampering or altering parts, equipment damaged in shipment, by fire, flood or an act of God) is not covered under this

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PRINCE CASTLE INC.



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Specifications

Model	Voltage	Watts	Hertz
DHB4SS-20	120	1700	60
DHB4SS-20CE	230	1950	50

Safety Information



WARNING

Indicates information important to the proper operation of the unit. Failure to observe may result in damage to the equipment and/or severe bodily injury or death.



Indicates information important to the operation of the unit. Failure to observe may result in damage to the equipment.

Installation

- A. Remove the unit from the carton and inspect for signs of damage. If there is damage to the unit:
- · notify the carrier within 24 hours of delivery
- · save carton and packaging materials for inspection purposes
- contact your local dealer, or if purchased directly, the Prince Castle Sales Department at 800-722-7853 or 1-630-462-8800 to arrange for a replacement unit.

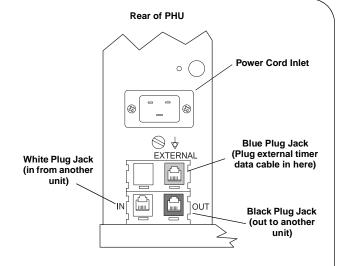
NOTE: When installing this unit, the ambient temperature at the mounting site should not exceed 100°F.

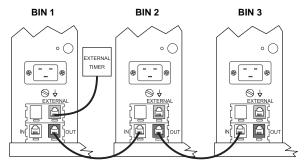
- Place the bin on a counter and seal the base to the counter with foodapproved sealant.
- C. Plug the power cord into the bin and connect the plug into the proper electrical outlet (15 amp, 120 Volt). All connections must be in accordance with local electrical codes and any other applicable codes.

NOTE: The electrical receptacle should be a dedicated outlet. No other equipment should be operating on the line (refrigerators, fryers, etc.).

- D. If used, plug the Prince Castle Retro external timer (consult factory for model) data cable into the blue plug jack (external) located on the rear of the Prince Castle holding bin. If cable from timer is too short, use Prince Castle Extender Cable Kit, P/N PC-COMEXT.
- E. Install the racks, pans and pan covers into the cavities.
- F. Turn the power switch to ON. Allow 30 minutes for warm-up.

NOTE: If the unit is to be networked with other Prince Castle units, an external timer may be connected to any one bin in the chain. Refer to CASTLENET COMMUNICATIONS NETWORK in this manual.

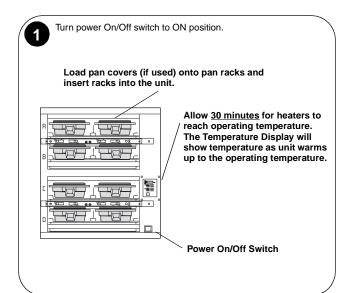


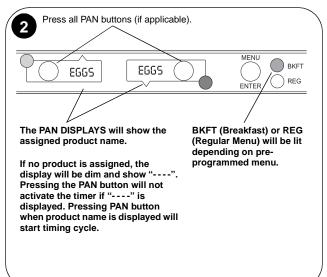


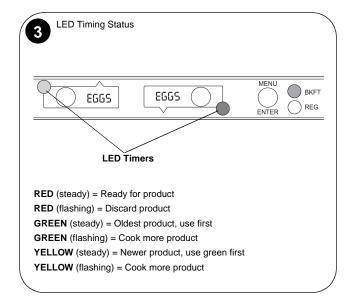
Prince Castle reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

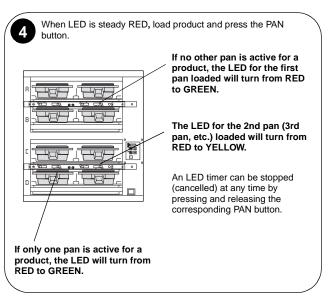


Operation



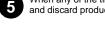








Operation (continued)



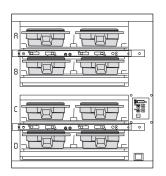
When any of the timer LEDs flash, cook more product or remove and discard product as indicated.

GREEN Flashing = Cook more

YELLOW Flashing = Cook more product

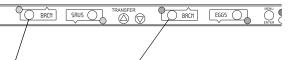
RED Flashing = Discard product





Product, along with any remaining time, can be transferred from one cavity to another as follows:

- A. Press and release the TRANSFER button on the timer bar of the product to be moved. Displays for all pans available for transfer will be brightly lit. All others will be dimly lit.
- C. Press and release the TRANSFER button on the bar where the product will be moved. All available pan locations on the bar will be brightly lit.



- B. Press and release the PAN button of the product to be moved.
- D. Press and release the PAN button for the new location. The new location will finish timing the product. When the transferred pan time expires, the location will revert back to the original menu settings.

NOTE: If product transfer is not completed within a pre-programmed transfer time, the transfer will be cancelled. See your Manager.



To shut down the unit, turn the power On/Off switch to OFF.

NOTE: To load preset times/menus:

- A. Turn power switch to OFF.
- B. Press and hold both the UP and DOWN Arrow buttons.
- C. Turn power switch ON.
- D. When the four right-most displays show PRESET LOADED, release the buttons.

$\overline{\cap}$	
4	PRESET LORDED











) BKFT REG

Cleaning



WARNING

Before performing any maintenance, turn the power switch to the OFF position and unplug the power cord from the electrical receptacle.



A CAUTION

This unit is not watertight. Do not clean with a water jet/jet spray. Do not immerse the unit in water.

- 1. Turn the unit off and unplug the power cord from the electrical receptacle.
- 2. Remove the pan covers and pan racks. Wipe all parts and unit with a damp cloth. DO NOT use a green Scotch Bright pad cleaner, ice or



Setting the Temperature



The unit has four shelves, each with an upper and lower heater (eight heaters total).

The factory pre-set for the upper heaters is 225°F.

The factory pre-set for the lower heaters is 195°F.

Each upper heater has a programmable range of 150° - 275°F.

Each lower heater has a programmable range of 150° – 225°F.

Use the control below and the following steps to set the setpoint temperatures for each heater.

UPPER HEATER LED

This LED will be lit to indicate upper shelf is selected.

PROG LED

This LED will be lit to indicate unit is in Program Mode

LOWER HEATER LED

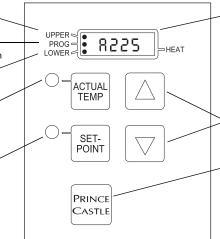
This LED will be lit to indicate lower shelf is selected.

ACTUAL TEMP BUTTON and LED

Press to display actual temperature for the selected heater. LED will be lit when actual temperature is displayed.

SETPOINT BUTTON and LED

Press to display setpoint temperature of a selected heater. LED will be lit when setpoint temperature is displayed.



TEMPERATURE DISPLAY

A, b, C or d Shelf

NOTE: The unit is preset to display temperature in Fahrenheit. To display in Celsius, press and hold the DOWN Arrow button immediately after turning on the power switch. To switch back to Fahrenheit, press and hold the UP Arrow button after turning on the power switch.

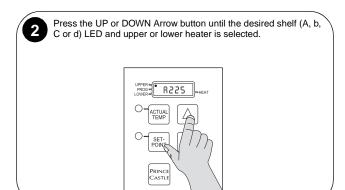
UP/DOWN ARROW BUTTONS

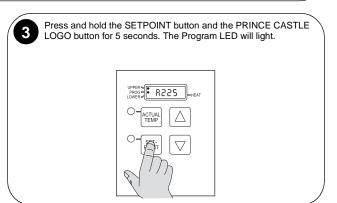
Used with other buttons to scroll through heater and temperature selections.

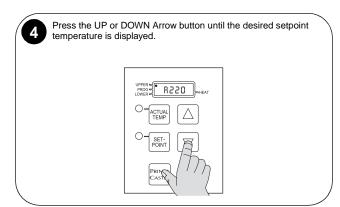
PRINCE CASTLE LOGO BUTTON

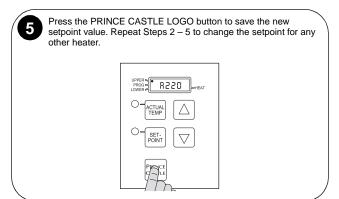
Press to enter temperature selections.

NOTE: To reset all times and temperatures to the factory settings, turn the unit off, then press and hold the UP and DOWN Arrow buttons simultaneously while turning the unit back on. A "P" will appear in the display and all times and temperatures will be reset to original factory settings.











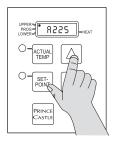
Calibrating Heaters

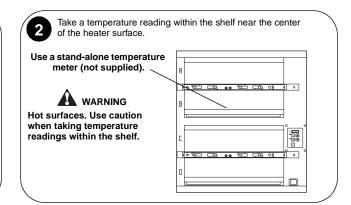


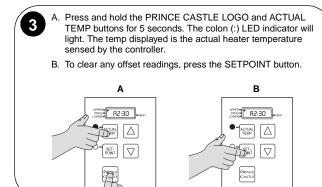
Use the following steps to calibrate the individual heaters.

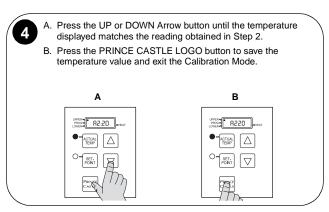
NOTE: Allow sufficient amount of time for temperatures to stabilize before starting calibration.

Press the UP or DOWN Arrow button until the desired heater LED and shelf is selected.

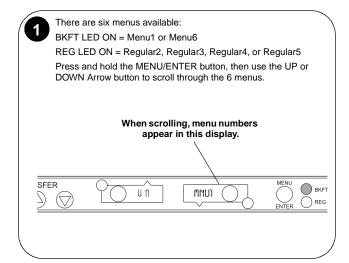


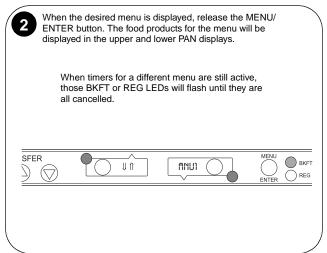






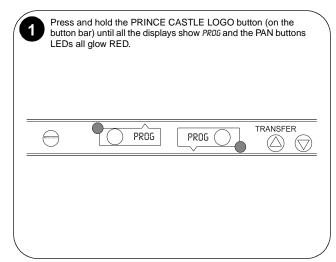
Selecting Breakfast and Regular Menus

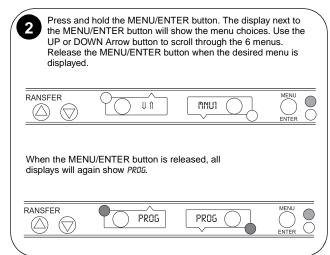


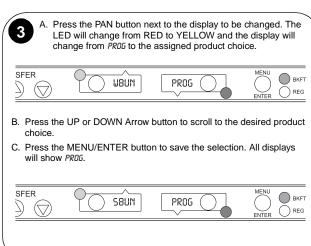


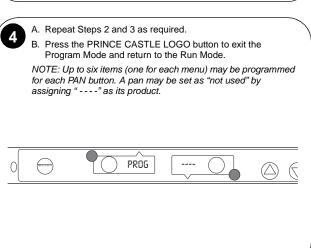


Programming the Menus

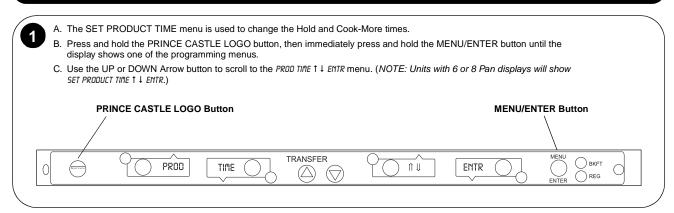








Changing the Hold and Cook-More Times



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Changing the Hold and Cook-More Times (continued)

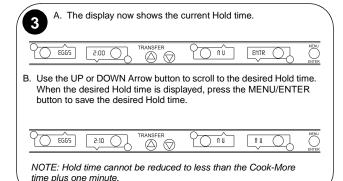


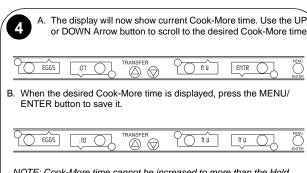
- Press and release the MENU/ENTER button to enter the Set Product Time menu. The display will show, for example,
- B. Use the UP or DOWN Arrow button to scroll through the list of products. When the desired product is displayed, press the MENU/ENTER button to select it.

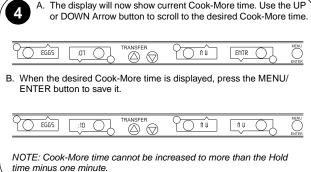
Refer to the Product Menu Details on page 13 for a list of products and their corresponding display names.

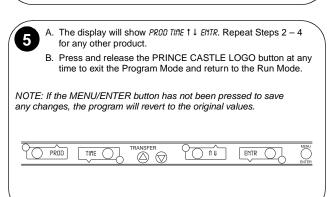


NOTE: Holding the UP or DOWN Arrow button for longer than 2 seconds will cause the product list to automatically scroll up or down.



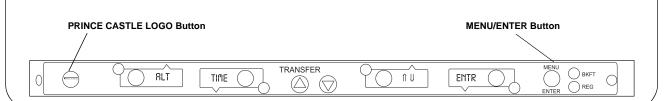






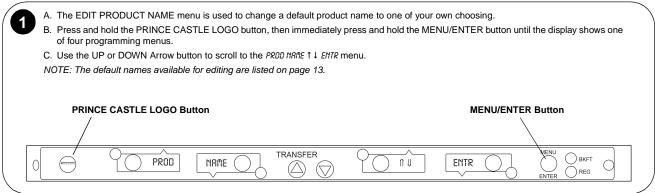
Setting the Alternating Display Interval

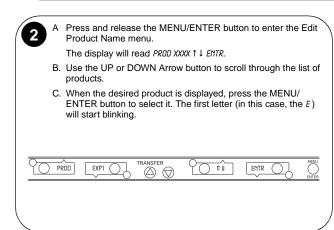
- A. The Alternating Display Interval allows the timer bar displays to alternate between the product name and remaining Hold time. The default setting
- B. Press and hold the PRINCE CASTLE LOGO button, then immediately press and hold the MENU/ENTER button until the display shows one of the programming menus.
- C. Use the UP or DOWN Arrow button to scroll to the DISP ALT TIME menu. Press MENU/ENTER button.
- D. Use the Up and Down Arrow buttons to adjust the interval setting from 0 to 15 seconds. Press MENU/ENTER to save the change.
- E. Press and hold the PRINCE CASTLE LOGO button at any time to exit the Program Mode.

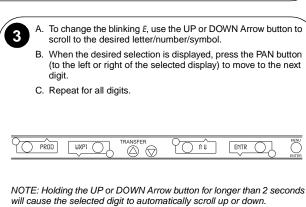


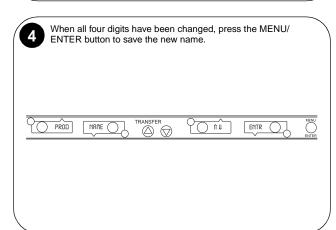


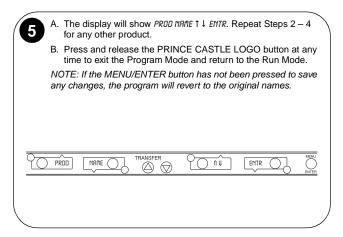
Changing Product Names











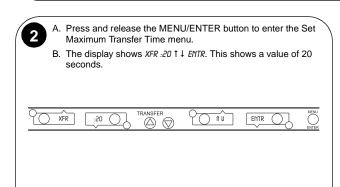


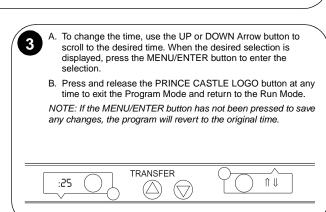
Set Maximum Transfer Time



- A. The Set Maximum Transfer Time menu is used to set the amount of time allowed to make a product transfer from one pan to another.
- B. Press and hold the PRINCE CASTLE LOGO button, then immediately press and hold the MENU/ENTER button until the display shows one of the programming menus.
- C. Use the UP or DOWN Arrow button to scroll to the XFR TIME 1 \$\frac{1}{2}\$ ENTR menu. (NOTE: Units with 6 or 8 pan displays will show #RX XFR TIME 1 \$\frac{1}{2}\$ ENTR.)

PRINCE CASTLE LOGO Button MENU/ENTER Button TRANSFER TIME TRANSFER TIME REG REG

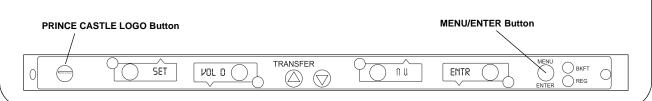




Set Volume Level



- A. The default setting for the volume level is OFF.
- B. Press and hold the PRINCE CASTLE LOGO button, then immediately press and hold the MENU/ENTER button until the display shows one of the programming menus.
- C. Use the UP or DOWN Arrow button to scroll to the SET VOL 0 1 LENTR menu.





- A. Press and release the MENU/ENTER button to enter the Set Volume menu.
- B. The display shows SET VOL 0 ↑ \downarrow ENTR. This shows that the volume is currently turned off.

The volume may be set for Vol 0 (off) or for volume levels Vol 1 through Vol 3.



- A. To change the volume level, use the UP or DOWN Arrow button to scroll to the desired level. When the desired selection is displayed, press the MENU/ENTER button.
- B. Press and release the PRINCE CASTLE LOGO button at any time to exit the Program Mode and return to the Run Mode.

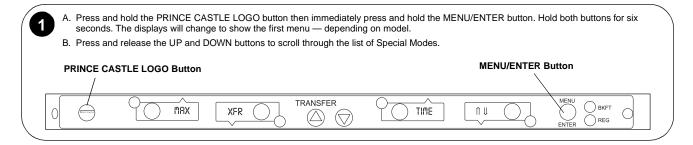
NOTE: If the MENU/ENTER button has not been pressed to save any changes, the program will revert to the original time.



Product Linking

Any Timer Bar (except bun holding timers) can be linked to others (see Special Programming Mode, this page). If Timer Bars are set to the same link group, any product started in any bar of the same group will be compared to all other products in the same group, and its LED color will be determined based on all timers in the group with the same product (not just with all timers on its own Timer Bar).

Special Programming Mode



2

Set Link Group

- A. When the displays show 5ET LINK GRPX 1 \$\frac{1}{2}\$ ENTR, the X indicates the currently assigned Link Group. Press and release the MENU/ENTER button to set the Link Group Mode.
- B. The link group number (X) will flash. Press and release the UP and DOWN Arrow buttons to change the group number. The maximum number allowed is 3, and the minimum is 0. When a Timer Bar is assigned to Link Group 0, it is isolated and not associated with any other Timer Bar (linking is disabled).
- C. When the desired link group is displayed, press and release the MENU/ENTER button to save it. The program will revert to Set Link Group Mode.

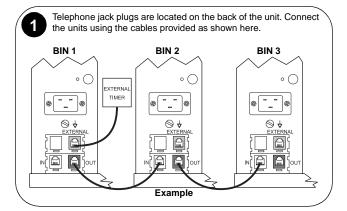


CastleNet® Communications Network

The Prince Castle DHB Bins, external timers, and New Bun Cabinet Timers can be inter-connected to form the CastleNet® Communication Network. The network can be used for data transfer between bins and timers for menu updates or to transfer product Hold time from bin-to-bin. A PDA (or similar device) or a notebook with Prince Castle MenuView® software is used to connect to the network and enter the desired changes.

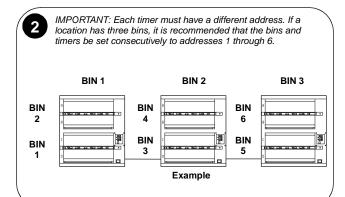
Each bin is supplied with a standard 25' cable and allows units to be "daisy-chained" together to form the network. If cable is too short, use Prince Castle Extender Cable Kit, P/N PC-COMEXT.

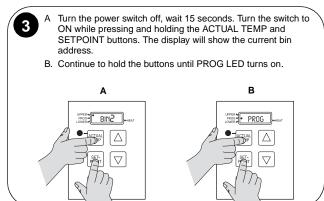
The factory default address for Main bins and timers is address 1. The factory default address for Specialty bins and timers is address \mathcal{E} . If a third bin is used, the address must be set at \mathcal{E} .





CastleNet® Communications Network (continued)



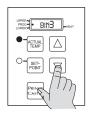


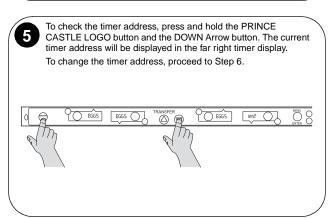
Use the UP or DOWN Arrow button to scroll to the desired address. Press the PRINCE CASTLE LOGO button to store the new address.

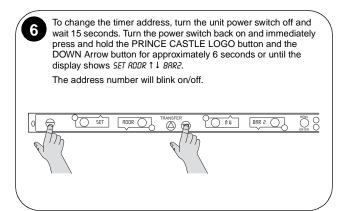
Available addresses are:

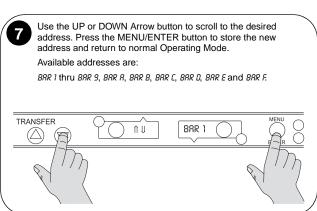
BIN? thru BINS, BINR, BINB, BINC, BIND, BINE and BINE.

IMPORTANT: Continue to step 5 to check the timer address. <u>No two</u> timers can have the same address.











Factory Presets

Product Menu Details				
Product	Display Name	Hold Minutes ¹	Cook-More Minutes	
Burger	BUR1	30	3	
Burger	BUR2	30	3	
Chicken Patty	CHX1	30	3	
Chicken Patty	CHX2	30	3	
Chicken Patty	CHX3	30	3	
Chicken Wing	WING	30	3	
Fish	FISH	5	3	
Eggs	EGGS	30	3	
Sausage	SAUS	30	3	
Bacon	BACN	30	3	
Ham	HAM	30	3	
Popper	POP	30	3	
Mozzarella Stick	MOZ	30	3	
Onion	ONIN	10	7	
Mushroom	MUSH	30	3	
Chicken Nuggets	NUGG	30	3	
Spicy Chicken	SPCY	30	26	
French Toast	TOST	10	8	
Chicken Stars	STAR	30	27	
Large	LRG	20	17	
\$6 Burger	SIX	20	17	
BBQ Chicken	BBQ	20	17	
Crispy Chicken	CRSP	30	26	
Special #1	SPC1	30	3	
Special #2	SPC2	30	3	

^{1.} Hold and Cook-More times may be re-programmed. See page 7.

^{2.} Product abbreviations SPC1 and SPC2 may be reprogrammed. See page 9.

				I	Menus					
UP	DOWN	UP	DOWN	UP	DOWN	UP	DOWN	Menu	LED	
CRSP	ONIN	BBQ	SPCY	SIX	SIX	LRG	LRG	MNU1	Bkft	
BUR1	BUR1	BUR1	BUR1	BUR2	BUR2	BUR2	BUR2	MNU2	Reg	
CHX1	CHX1	CHX2	CHX2	CHX3	CHX3	WING	FISH	MNU3	Reg	
CHX1	CHX2	WING	WING	MOZ	MOZ	POP	POP	MNU4	Reg	
CHX1	CHX2	CHX3	WING	WING	POP	ONIN	MUSH	MNU5	Reg	
EGGS	EGGS	EGGS	EGGS	HAM	BACN	SAUS	SAUS	MNU6	Bkft	

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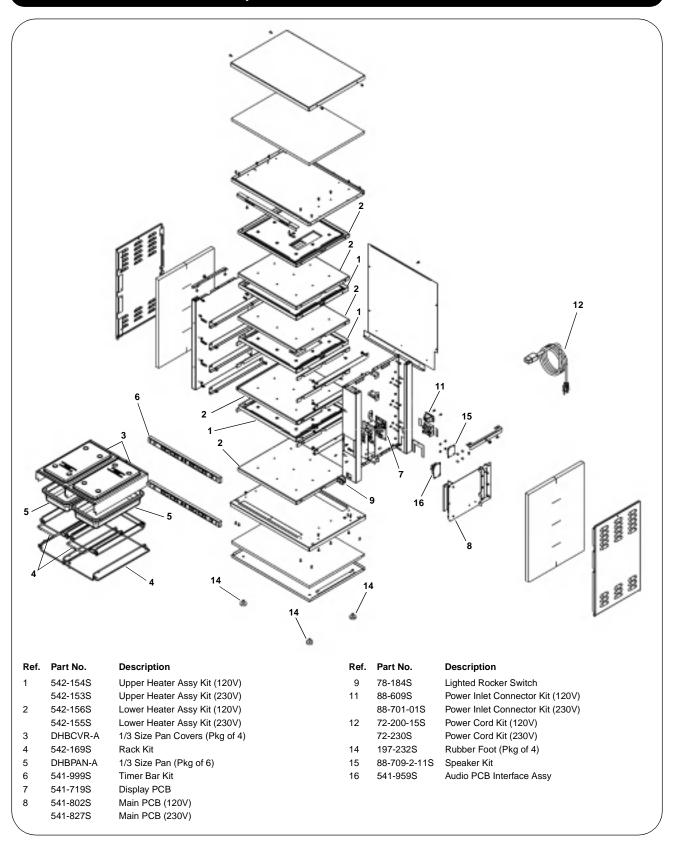


Troubleshooting

PROBLEM	PROBABLE CAUSE	SOLUTION
Display flashes OPM and REL.	Open relay. Circuit inoperable.	Consult an authorized Service Technician.
Display flashes SHR and REL.	Shorted relay. Circuit inoperable. Open heater. Unplugged ribbon cable between power and main circuit boards.	Consult an authorized Service Technician.
Display flashes מאיז and REL.	Temperature is below 75°F. Heater inoperable. Probe inoperable. Relay inoperable.	Consult an authorized Service Technician.
Display shows HHH for an extended period of time and heater surface temperature is hot.	Temperature is above 300°F (abnormal operation).	Consult an authorized Service Technician.
Display shows HHH for an extended period of time and heater surface temperature is cool.	Probe is inoperable.	



Exploded View and Parts List





Wiring Diagram

