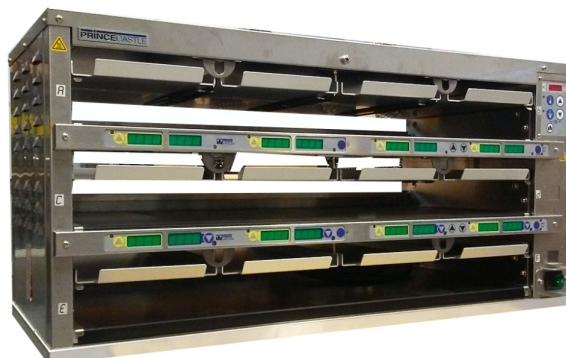# Operation Manual

Extended Hold Bin

EHB34-2 Series

ATTENTION: Read the instructions before using the machine.

LIMITED WARRANTY

Subject to the terms and conditions set forth herein, the manufacturer warrants that the product shall be free from defects in materials and workmanship for a period of three (3) years from the date of original installation. This warranty applies to both repair parts and service labor. Notwithstanding the foregoing, the warranty commencement date shall not exceed ninety (90) days from the date of manufacture, regardless of the actual installation date.

Timer bar components and associated kits are separately warranted to be free from defects in materials and workmanship for a period of five (5) years from the applicable warranty commencement date. Following the expiration of the initial three (3) year equipment warranty period, coverage shall be limited exclusively to parts and shall no longer include service labor.

This warranty is subject to the following exceptions/conditions:

• Use of any non-genuine Prince Castle parts voids this warranty.

• All labor to be performed during regular work hours. Overtime premium (the incremental amount) will be charged to the customer.

• 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 nature) is not covered under this warranty.

• All problems due to operation at voltages other than that specified on equipment nameplates are not covered by this warranty. Conversion to correct voltage is the customer's responsibility.

• This equipment must be serviced by Prince Castle Authorized Service Agency or a Prince Castle Service Technician during the warranty period.

TABLE OF CONTENTS

Model Identification

EHB24ACE-XX

Extended Holding Bin

Number of Shelves

Number of Trays per Shelf

'A' is present if there are auxiliary timer bars (bars on the back of the unit)

'CE' is present if bin can be used outside of the US

Country designation

e.g. "CA" is Canada

Serial Number Matrix

The manufacture date is encoded in the unit's serial number. The service bench installation date (used to determine warranty coverage) is considered to be the end of the following month. For example:

Serial Number: JL0173804
Manufacture Date: September 2016
Service Bench Installation Date: October 31, 2016

		SERIAL NUMBER MATRIX							
		2016	2017	2018	2019	2020	2021	2022	2023
		L	M	N	P	R	S	T	U
January	A	AL	AM	AN	AP	AR	AS	AT	AU
February	B	BL	BM	BN	BP	BR	BS	BT	BU
March	C	CL	CM	CN	CP	CR	CS	CT	CU
April	D	DL	DM	DN	DP	DR	DS	DT	DU
May	E	EL	EM	EN	EP	ER	ES	ET	EU
June	F	FL	FM	FN	FP	FR	FS	FT	FU
July	G	GL	GM	GN	GP	GR	GS	GT	GU
August	H	HL	HM	HN	HP	HR	HS	HT	HU
September	J	JL	JM	JN	JP	JR	JS	JT	JU
October	K	KL	KM	KN	KP	KR	KS	KT	KU
November	L	LL	LM	LN	LP	LR	LS	LT	LU
December	M	ML	MM	MN	MP	MR	MS	MT	MU

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Model Specifications

STYLE	WIDTH (mm)	HEIGHT (mm)	DEPTH (mm)	WEIGHT (kgs)	VOLTAGE	AMPS	PLUG
3H X 4W	33.2" (843)	16.2" (413)	14.1" (358)	83 lbs (38)	208-240V	13.5-15.6	6-20P

NOTE:

Weight (kgs) is product weight.

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.

⚠ **CAUTION**

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

Important

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.

Installation

1 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: Plug the power cord into the proper electrical receptacle. All electrical connections must be in accordance with local electrical codes and any other applicable codes.
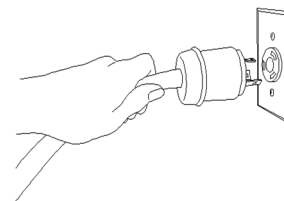
2 Place Holding Bin on flat surface.
Remove blue and/or white protective covering.

NOTE: When installing this unit, the ambient temperature at the mounting site should not exceed 100°F (38°C)

3 Plug unit into a grounded receptacle with a matching plug configuration.

⚠ **WARNING:**

All electrical connections must be in accordance with local electrical codes and any other applicable codes.
If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.
To prevent an electric shock hazard this device must be bonded to equipment in close proximity with an equipotential bonding conductor. This device is equipped with a grounding lug for this purpose.

NOTICE – This product is not intended for connection to the residential public low-voltage supply system.

Dedicated Holding Bin

EHB34-2 Series

PRINCECASTLE™
MARMON FOODSERVICE TECHNOLOGIES
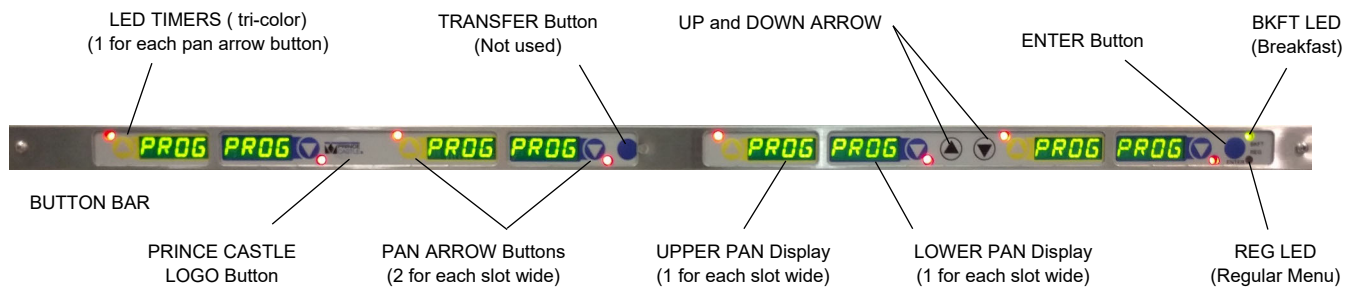A BERKSHIRE HATHAWAY COMPANY

Product Identification

DISPLAY

Control Panel

Button Bar

Power
ON/OFF
Switch

PAN LIDS, ONLY used with broiled products.
(Fried products DO NOT require lids)

LED TIMERS (tri-color)
(1 for each pan arrow button)

TRANSFER Button
(Not used)

UP and DOWN ARROW

ENTER Button

BKFT LED
(Breakfast)

BUTTON BAR

PRINCE CASTLE
LOGO Button

PAN ARROW Buttons
(2 for each slot wide)

UPPER PAN Display
(1 for each slot wide)

LOWER PAN Display
(1 for each slot wide)

REG LED
(Regular Menu)

Operation

⚠ **WARNING:** This application is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

1 To turn on the unit,
Turn Power On/Off switch (A) to **ON** position.

(A)

Allow 20 minutes for heaters to reach operating temperature. The button bar will read "WARM UP" as the unit warms up, they will display the product names.

NOTE: Load pan covers (if used) and insert pans into the unit.

2 Press all Pan Arrow buttons.
The Pan displays will show the assigned product name.

If no product is assigned, the display will be dim and show "----". Pressing the Pan Arrow button will not activate the timer if "----" is displayed. Pressing Pan Arrow button when product name is displayed will start timing cycle.

BKFT (Breakfast) or **REG** (Regular Menu) will be lit depending on pre-programmed menu.

Operation

3 LED Timing Status

LED TIMERS

BLANK (steady) = Ready for product
RED (flashing) = Discard product
GREEN (steady) = Oldest product, use first
GREEN (flashing) = Cook more product
YELLOW (steady) = Newer product, use green first
YELLOW (flashing) = Cook more product

4 When **LED** is **BLANK**, load product and press the Pan Arrow button.

If more than one pan is active for a product, the **LED** for the first pan loaded will turn from **BLANK** to **GREEN**.

If only one pan is active for a product, the **LED** will turn from **BLANK** to **GREEN.**

The **LED** for the 2nd pan loaded with the same product will turn from **BLANK** to **YELLOW**.

The **LED** timer can be stopped (cancelled) at any time by pressing and releasing the corresponding **PAN** Arrow button.

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

GREEN (flashing) = Cook more product
YELLOW (flashing) = Cook more product
RED (flashing) = Discard product

⚠ **WARNING:** **HOT SURFACES**

Dedicated Holding Bin

EHB34-2 Series

PRINCECASTLE™

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Setting the Temperature

The unit has multiple shelves, each with both an upper and lower heater for each zone.
The heaters follow the default setpoints of the preset products for each pan
Each heater has a programmable range of 150° – 275°F (66° – 135°C).
Use the instructions below and the following steps to set the setpoint temperatures for each heater.
NOTE: Only applicable in stand-alone mode when not connected to Product Management system, setpoint cannot be changed when connected to a kitchen manager.
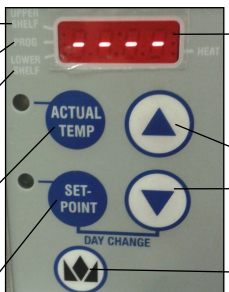
UPPER SHELF LED
This LED will be lit to indicate upper shelf is selected.

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

LOWER SHELF 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, D (E, F) = ZONES
Upper and Lower Heater

UP/DOWN ARROW BUTTONS
Used with other Buttons to scroll through heater and temperature selections.

CROWN BUTTON
Press to enter temperature selections.

⚠️ **CAUTION:**

DISPLAYED TEMPERATURES ARE HEATER TEMPERATURES AND DO NOT INDICATE ACTUAL FOOD TEMPERATURES.

NOTE: To reset all calibrations 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 calibrations will be reset to original factory settings.

---

1 The **SET PRODUCT TEMP** menu is used to change the Hold and Cook-More times.
Press and hold the **PRINCE CASTLE LOGO** button on the button bar, then immediately press and hold the **MENU/ENTER** button on the button bar until the display shows one of six programming menus…..(hold for about 5 seconds)
Use the **UP** or **DOWN** Arrow button to scroll to the *SET TEMP ↑↓ ENTR* (Set Product Temperature) menu.

---

2 Press and release the **MENU/ENTER** button to enter the programming menu, the display should then read **SEL TEMP XXXX ↑↓** **(**the **XXXX** is where the product abbreviation is displayed). Use the **UP** and **DOWN** arrows to navigate to the desired product.

---
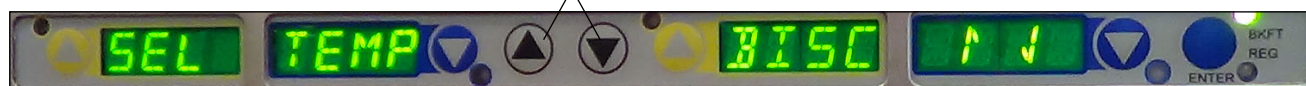
3 Press the **MENU/ENTER** button to select that product profile to update, the display will read **SET UPR XXXX ###s↑↓**   the **XXXX** is where the product abbreviation is displayed, and ### is the temperature. Use the **UP** and **DOWN** arrows to set the temperature of the upper heater of that zone.   Confirm setpoint by pressing **MENU/ENTER**

Setting the Temperature (Continued)

4 The display will now show **SET LWR XXXX ###s ↑ ↓**. Use the **UP** and **DOWN** arrows to set the temperature of the Lower heater of that zone. Press **MENU/ENTER** to confirm setpoint temperature.

NOTE: Changing the profile on one bar in a linked system of bin (s) is enough, it does not need to be changed on all bars in the system.

5 Press PRINCE **CASTLE LOGO BUTTON** to save the setpoints. Repeat steps 2-5 for all necessary profile upgrades.

NOTE: Setpoints are displayed on the front display board, and should be updated according to the product at this point.

Calibrating Heaters

1 Use the following steps to calibrate the individual heaters

Press the **UP** or **DOWN** Arrow button until the desired shelf **LED** and upper or lower heater is selected.
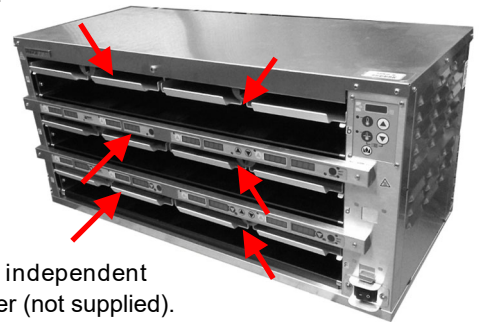
NOTE: Allow sufficient amount of time for temperatures to stabilize before starting calibration. (approx. 30 mins.)

2 Take a temperature reading within the shelf near the center of each heater surface.

⚠ **WARNING: HOT SURFACES**
Use caution when taking temperature readings within the shelf.

NOTE: Use an independent Temperature meter (not supplied).

3 Press and hold the **CROWN BUTTON** and **ACTUAL TEMP** buttons for 5 seconds. The colon (:) LED indicator will light. The temperature displayed is the actual heater temperature sensed by the controller. To clear any offset readings, press the **SETPOINT** button.

4 Press the **UP** or **DOWN** Arrow button until the temperature displayed matches the reading obtained in Step 2. Press the **CROWN BUTTON** to save the temperature value and exit the Calibration Mode.
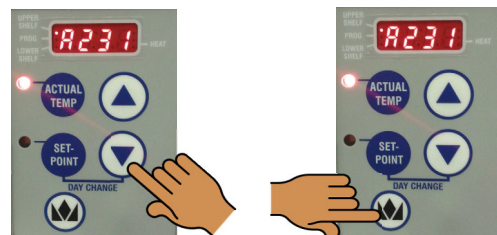
Changing the Hold and Cook-More Times *(Standalone Mode)*

1 The **SET PRODUCT TIME** menu is used to change the Hold and Cook-More times.
Press and hold the **PRINCE CASTLE LOGO** button on the button bar,
then immediately press and hold the **ENTER** button until the display shows one of six programming menus.
Use the UP or DOWN Arrow button to scroll to the *PROD TIME ↑ ↓ ENTR* (Set Product Time) menu.

2 Press and release the **ENTER** button to enter the Set Product Time menu. The display will show ***BURG TIME ↑↓ ENTR***.
Use the **UP** or **DOWN** Arrow button to scroll through the list of products.
When the desired product is displayed, press the **ENTER** button to select it.

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

3 The display will show ***90 ↑↓ ENTR***.

Use the **UP** or **DOWN** Arrow button to scroll to the desired Hold time. When the desired Hold time is displayed, press the **ENTER** button to save the desired Hold time.

*NOTE: Hold time cannot be reduced to less than the Cook-More time plus one minute. **NOTE**: All times are displayed in minutes only. For example, 2 and half hours is displayed as 150*

4 The display will show ***COOK 03 ↑ ↓ ENTR***.

Use the **UP** or **DOWN** Arrow button to scroll to the desired Cook-More time. When the desired Cook-More time is displayed, press the **ENTER** button to save it.

NOTE: Cook-More time cannot be increased to more than the Hold time, minus one minute.

5 The display will show ***BURG TIME ↑ ↓ENTR***. Repeat Steps 2 – 4 for any other product.
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 ENTER button has not been pressed to save any changes, the program will revert to the original values.

Changing Product Names *(Standalone Mode)*

1 The **EDIT PRODUCT NAME** menu is used to change a default product name to one of your own choosing.
Press and hold the **PRINCE CASTLE LOGO** button on the button bar,
then immediately press and hold the **ENTER** button until the display shows one of six programming menus.
Use the **UP** or **DOWN** Arrow button to scroll to the *PROD NAME ↑↓ ENTR* (Edit Product Name) menu.

NOTE: Only applicable in stand-alone mode when not connected to Product Management system.
NOTE: The default menu items and names are listed on page 13.

2 Press and release the **ENTER** button to enter the Edit Product Name menu.
Use the **UP** or **DOWN** Arrow button to scroll through the list of products.
When the desired product is displayed, press the **ENTER** button to select it.
The first letter (in this case, the *B*) will start blinking.

3 To change the blinking *B*, use the **UP** or **DOWN** Arrow button to scroll to the desired letter/number/symbol.
When the desired selection is displayed, press the **PAN** Arrow button to move to the next digit. Repeat for all digits.

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

4 When all four digits have been changed, press the **ENTER** button to select the new name.

5 The display will show **PROD NAME ↑↓ ENTR**. Repeat Steps 2 – 4 for any other product.
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 **ENTER** button has not been pressed to save any changes, the program will revert to the original names.*

Changing Temperature Scale *(Standalone Mode)*

1 The **SET F/C** menu is used to change the temperature scale.
Press and hold the **PRINCE CASTLE LOGO** button on the button bar,
then immediately press and hold the **ENTER** button until the display shows one of six programming menus.
Use the **UP** or **DOWN** Arrow button to scroll to the ***SET F/C XXXX ↑ ↓ ENTR***   (Edit Product Name) menu.

2 Press the **ENTER** button to enter the menu.
Bar will display **SET DEGR F/C ↑ ↓ ENTR** and either the **F** or **C** will be blinking.

3 Use the **UP** and **DOWN** arrows to select the desired temperature mode (the selected mode will blink)
Press the **ENTER** button to confirm the selection. Press the **PRINCE CASTLE LOGO** button to save the setting.

Adjusting Alarm Volume (Standalone Mode)

1 The **SET VOLUME** menu is used to change the alarm volume.
Press and hold the **PRINCE CASTLE LOGO** button on the button bar,
then immediately press and hold the **ENTER** button until the display shows one of six programming menus.
Use the **UP** or **DOWN** Arrow button to scroll to the **SET VOL ↑ ↓ *ENTR*** (Set Volume) menu.

***NOTE:** Only applicable in stand-alone mode when not connected to Product Management system.*

2 A timer alarm is included to sound after a hold timer is complete.

The volume is adjustable from level 0-3.

Once the menu is on the bar, press ENTER to enter the menu

3 Scroll to the desired volume setting and hit ENTER to accept.

Selecting the Daypart

1 Press and hold the **SETPOINT** button and the **DOWN** Arrow button for 3 seconds, the current day part will begin flashing on the screen.

Use the **up/down** arrows to select day part 1 through 6 and the **Prince Castle Crown** button to confirm your selection.

*NOTE: Whenever a bin is powered **ON** it defaults to **DAY PART 1** no matter what time of day it is.*
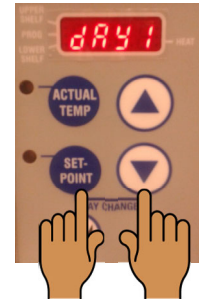
2 To shut down the unit,
turn the Power On/Off switch (A) to **OFF** position.

(A)

Cleaning

⚠ **WARNING:**

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

⚠ **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 electrical receptacle.
2. Remove the pans and covers. Wipe all parts and unit with a damp cloth.
DO NOT use a green Scotch Bright pad cleaner, ice or water.

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Setting Product Location

1 To change a menu selection for a specific pan cavity, use the following steps:

A. Press and hold the **PRINCE CASTLE LOGO** button for 6 seconds. All Pan displays will show *PROG*.   All **LED** Timers will be **RED**.

C. Press the **UP** or **DOWN** Arrow button to scroll to the desired menu item.

D. Press the **ENTER** button to select the menu item.

B. Press a Pan Arrow button to change the menu. The **LED** Timer will change to **YELLOW** and the display will change from *PROG* to the assigned menu item.

E. Repeat steps A – D as required for other Pan displays. Press the PRINCE CASTLE LOGO button to exit the Program Mode.

NOTE: A pan may be set as "not used" by assigning "- - - -" as its product.

NOTE: Setting a pan to a particular product will automatically change the other pan in that zone to the same product.

2 To shut down the unit, turn the Power On/Off switch (A) to **OFF** position.

(A)

Cleaning

⚠ **WARNING:**

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

⚠ **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 electrical receptacle.
2. Remove the pans and covers. Wipe all parts and unit with a damp cloth.
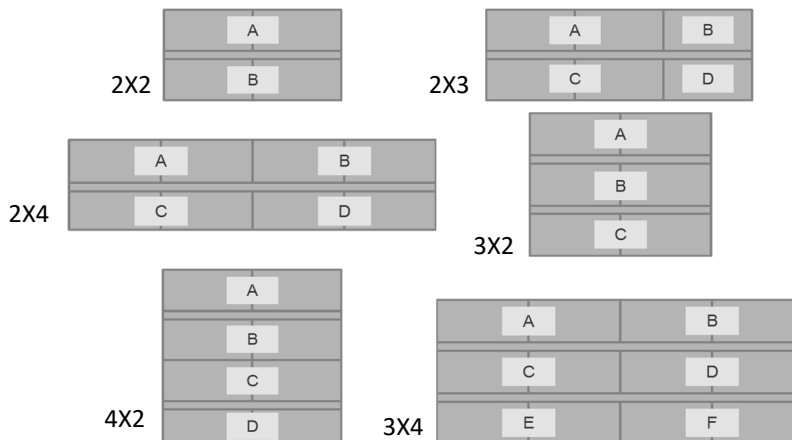**DO NOT** use a green Scotch Bright pad cleaner, ice or water.

Default Menu Items

BREAKFAST PRODUCTS					
DISPLAY NAME	PRODUCT NAME	HOLD TIME (MINUTES)	COOK MORE TIME (MINUTES)	TOP TEMP (°F)	BOTTOM TEMP (°F)
EGGS	SCRAMBLED EGGS	90	4	230	200
FREG	FRIED EGG	90	2	230	200
PCAK	PANCAKES	30	2	180	170
BISC	BISCUITS	60	16	180	180
FTST	FRENCH TOAST	60	2	245	230
SAUS	SAUSAGE PATTY	120	2	235	215
HAMC	COUNTRY HAM	90	5	215	200
BURGER PRODUCTS					
DISPLAY NAME	PRODUCT NAME	HOLD TIME (MINUTES)	COOK MORE TIME (MINUTES)	TOP TEMP (°F)	BOTTOM TEMP (°F)
WHOP	WHOPPER	40	3	240	180
JR18	WHOPPER JR. (2018)	90	3	240	210
CHICKEN PRODUCTS					
DISPLAY NAME	PRODUCT NAME	HOLD TIME (MINUTES)	COOK MORE TIME (MINUTES)	TOP TEMP (°F)	BOTTOM TEMP (°F)
BCKN	BREAKFAST CHICKEN	60	4	250	220
CFRY	CHICKEN FRIES	60	2	260	235
PFRY	PRETZEL CHICKEN FRIES	60	2	260	235
OCS	ORIGINAL CHICKEN	90	4	210	190
CKJR	CRISPY CHICKEN JR.	60	3	240	220
CRIS	CRISPY CHICKEN	30	7	210	190
SPCH	SPICY CHICKEN	30	7	210	190
GCHK	GRILLED CHICKEN	90	3	220	190
CNUG	CHICKEN NUGGET	60	3	260	235
OTHER PRODUCTS					
DISPLAY NAME	PRODUCT NAME	HOLD TIME (MINUTES)	COOK MORE TIME (MINUTES)	TOP TEMP (°F)	BOTTOM TEMP (°F)
CZST	CHEESE STICKS	60	2	200	200
CTOT	CHEESY TOTS	120	4	200	200
TACO	TACOS	40	2	215	200
FMAC	FLAMING HOT MAC & CHEETOS	60	3	200	200
FISH	FISH	60	4	240	200
SPAM	SPAM	120	2	235	215
PSAU	PORTUGUESE SAUSAGE	120	20	235	215

Zones

All bin configurations are set up with zones, which correspond to a set of heaters that work together to hold the product. A single product can be programmed into each zone.

The timer bars are equipped with this knowledge. If the product in one slot of a zone is changed, the other slot will automatically change to that product as well.

2X2

2X3

2X4

3X2

4X2

3X4

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Troubleshooting

⚠ **WARNING:** To avoid personal injury and possible damage to the unit, troubleshooting and repair of electrical equipment should be performed by qualified service personnel. This unit should be unplugged when servicing. Except when electrical tests are required. Use extreme caution during electrical circuit tests as live circuits may be exposed.

Problem	Probable Cause	Solution
No Power	Power switch is turned off, Power cord is not plugged in.	Turn power switch to ON position, Ensure power cord is connected to proper receptacle
Unit will not heat up	Wrong power cord, loose connection on power switch and/or heater	**CALL TECH SUPPORT** **1-800-722-7853**
Unit heats up but timer bars do not work	Timer bar wiring disconnected, timer bar is defective	**CALL TECH SUPPORT** **1-800-722-7853**
Unit under/over heats	Check temperature settings	**CALL TECH SUPPORT** **1-800-722-7853**
Display flashes **OPN** and **REL**	Open relay, circuit or heater inoperable	**CALL TECH SUPPORT** **1-800-722-7853**
Display flashes **SHR** and **REL**	Shorted relay, circuit inoperable, open heater, unplugged ribbon cable	**CALL TECH SUPPORT** **1-800-722-7853**
Display shows **HHH** for extended period and heater surface temperature is hot	Temperature is above 300 F (149 C), Abnormal operation	**CALL TECH SUPPORT** **1-800-722-7853**
Display shows **HOLD**	Only displayed on a 3X4 Bin display board, when the operator changes the bin address or during calibration	**HOLD** message means the 2 PC boards in the bin are communicating, wait until the message disappears
Display shows **WAIT**	When in stand alone mode and the operator makes change to the product profile	Wait until the message disappears
Display shows **INIT**	When switching from Kitchen Minder to stand alone mode	Bin is learning Kitchen Minder menus, wait for message to disappear
Timer bar displays **COMM DOWN**	Bin is not communicating with Kitchen Minder	Refer to Kitchen Minder setup manual

For all technical support in North America, please contact **PRINCE CASTLE LLC 1-800-722-7853**
For technical support worldwide, contact your local service representative / installer.

Diagnostics

DIAGNOSTICS

For all diagnostic messages on the holding bin, the message will appear on the timer bar located at the pan that is triggering the message.

The message is a two-word message that will cycle through on the timer bar in addition to the product name at that pan location.
1. WARM | UP | XXXX – When turning on holding bin the warm up message will appear until heaters reach within 15°F set point.
   a. Cleared when within 15°F of the set point.
2. HTR | OFF | XXXX – Heater off message appears when both the upper and lower heaters are off.
   a. Cleared when heater is turned on.
3. HTR | LOW | XXXX – Heater low appears if the temperature falls 15°F below the set point.
   a. Cleared when temperature is back in range. If not cleared, would require a service technician to repair.
4. HTR | HIGH | XXXX – Heater high appears if the heater is above 285°F for 20 minutes.
   a. Cleared when temperature is back in range. If not cleared, would require a service technician to repair.
5. RLY | SHRT | XXXX – Relay short error occurs when there is a thermocouple or heater problem.
   a. Bin requires service to further troubleshoot and repair.
6. RLY | OPEN | XXXX – Relay open error occurs when there is a thermocouple or heater problem.
   a. Bin requires service to further troubleshoot and repair.
7. COMM | DOWN | XXXX – Communication down error occurs when the temperature data is not being properly communicated.
   a. Check that unit is in bin1/BAR2/BAR3. Otherwise, requires service technician to troubleshoot.

USB Update Procedure

1. First, un-plug any communication cables from the holding bin. These devices will interfere with the timer bar boot loading process.
2. Place the update files on the USB flash drive in the main directory (Do not put them in a folder on the flash drive). There are five* files that you will need to put on the drive. Two for the controller board, **mainbin.hex** and **DHBFWBIN.TXT**. Three for the timer bars, **mainbar.hex**, **auxbar.hex** and **DHBFWBAR.TXT**.
3. Once all files are on USB drive, turn power off to bin and place the USB drive with the files into USB port on the front of the bin.
4. While holding down crown button on front right side of the bin, above the power switch, turn the power to the bin on.
5. Keeping the crown button pressed, wait for the "BL" (boot load) message to appear on the screen. Release the button approx. 5 seconds after the "BL" message appears or once the USB stick light begins to flash.
6. Wait for the display to show:

   a. (blank while upgrading main bin firmware)
   b. BL00 (searching for timer bars to upgrade)
   c. BL04 (4 timer bars left to upgrade)
   d. BL03 (3 timer bar left to upgrade)

   e. BL02 (2 timer bars left to upgrade)
   f. BL01 (1 timer bar left to upgrade)
   g. BL00 (0 timer bars left to upgrade)
   h. BN04 (4 timer bars detected and done with programming)

7. You can check the version number on the timer bars by pressing the Prince Castle logo button and the down button on timer bar.
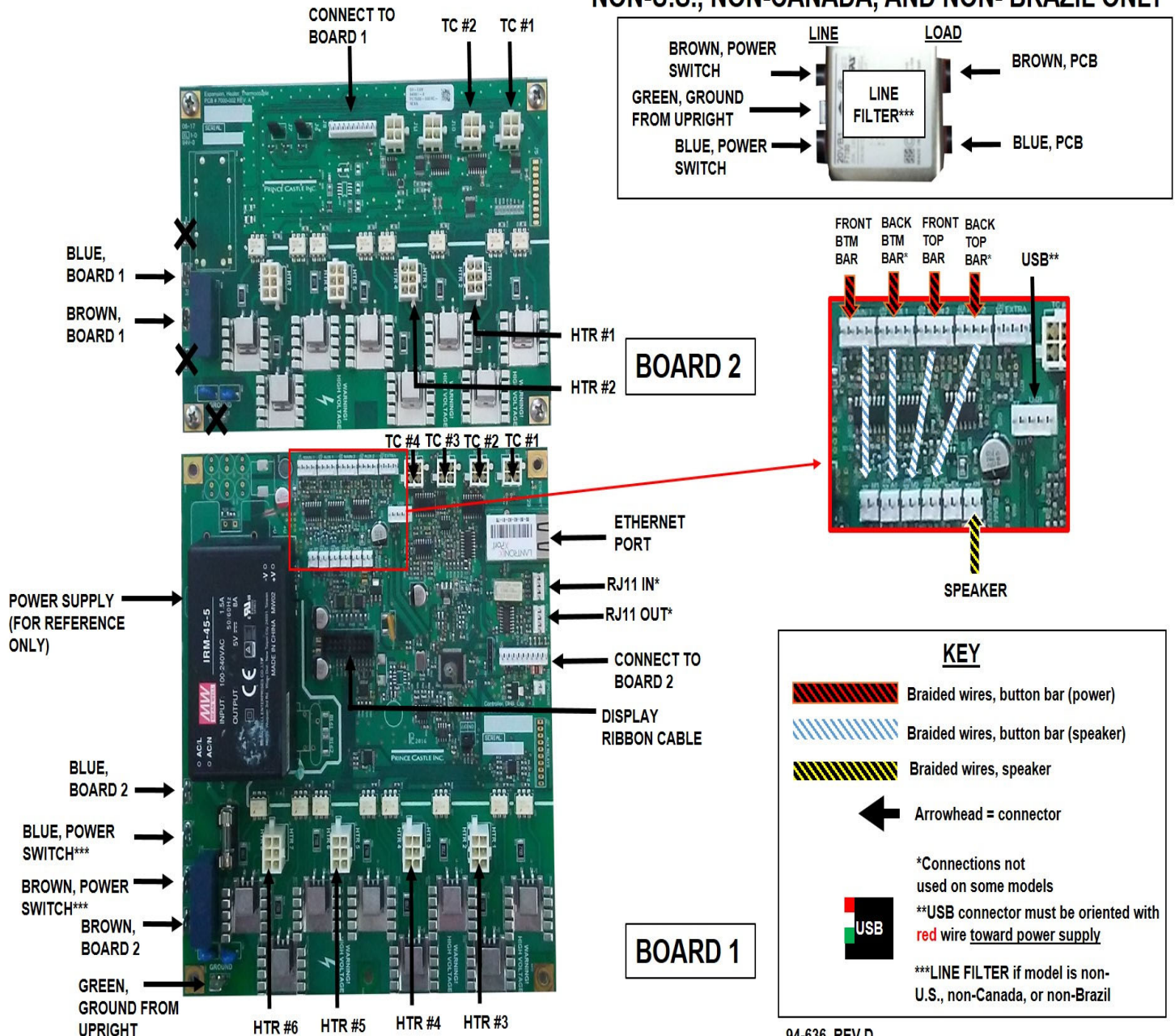
*EHB34XX requires **seven** files. The two additional to those listed are **mainbar2.hex** and **auxbar2.hex**.

Wiring Diagram

NON-U.S., NON-CANADA, AND NON- BRAZIL ONLY

BROWN, POWER SWITCH → LINE FILTER*** ← BROWN, PCB
GREEN, GROUND FROM UPRIGHT →
BLUE, POWER SWITCH → ← BLUE, PCB
LINE   LOAD

CONNECT TO BOARD 1   TC #2   TC #1

BLUE, BOARD 1 →
BROWN, BOARD 1 →
← HTR #1
← HTR #2

BOARD 2

FRONT BTM BAR   BACK BTM BAR*   FRONT TOP BAR   BACK TOP BAR*   USB**

TC #4 TC #3 TC #2 TC #1

POWER SUPPLY (FOR REFERENCE ONLY)

ETHERNET PORT →
RJ11 IN* →
RJ11 OUT* →
CONNECT TO BOARD 2 →
DISPLAY RIBBON CABLE →

SPEAKER

BLUE, BOARD 2 →
BLUE, POWER SWITCH*** →
BROWN, POWER SWITCH*** →
BROWN, BOARD 2 →
GREEN, GROUND FROM UPRIGHT →

HTR #6   HTR #5   HTR #4   HTR #3

BOARD 1

KEY

- Braided wires, button bar (power)
- Braided wires, button bar (speaker)
- Braided wires, speaker

Arrowhead = connector

*Connections not used on some models

**USB connector must be oriented with red wire underneath toward power supply

USB

***LINE FILTER if model is non-U.S., non-Canada, or non-Brazil

94-636_REV.D

Exploded View

Model Suffix	Power Cord
<None>, -CA	72-476S
-AU	72-675S
-BR	72-671S
-CL	72-684S
CE, -RU	72-404S

*Recommended spares for stocking

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	197-232S	FOOT (4 PACK)	8	510-375S*	TIMER BAR, BACK BASE	14	78-184S	POWER SWITCH
2	540-1072S	HTR, BOTTOM SHELF, LOWER	9	510-377S*	TIMER BAR, BACK TOP	15	95-1819S	USB CORD
3	540-1226S	HTR, CENTER SHELF, LOWER	10	540-1158S	LATCH, CATCH	16	540-1472S*	BOARD 1
4	540-1224S	HTR, CENTER SHELF, UPPER	11	540-1251S	LID (4 PACK)	17	540-1426S*	BOARD 2
5	540-1222S	HTR, TOP SHELF, UPPER	12	USE TABLE	POWERCORD	18	95-2011S*	ETHERNET CONNECTOR
6	510-374S*	TIMER BAR, FRONT BASE	13	541-1215S*	OVERLAY, DISPLAY	19	88-709-2-11S	SPEAKER
7	510-376S*	TIMER BAR, FRONT TOP				20	88-824S	FILTER (SEE WIRING DIAGRAM)

REV	DATE	DESC.
A	4/15/19	RELEASE
B	9/11/19	UPDATED MODEL TITLE
C	10/2/19	CHANGED TO "–2" MODEL SERIES
D	10/3/19	UPDATED WIRING DIAGRAM
E	4/29/20	UPDATED WIRING DIAGRAM REGARDING LINE
F	7/1/2020	ADDED NOTE PG. 3: "NOTICE – This product is not intended for connection to the residential public low-voltage supply system"