

Operation Manual



Extended Hold Bin
EHB-CE Series



CAUTION: Read the instructions before using the machine.

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LIMITED WARRANTY

This product is warranted to be free from defects in material and/or workmanship for a period of 3 years (repair parts) 2 years (service labor) from date of original installation, not to exceed 30 months from the date of manufacture.

Any component which proves to be faulty in material and/or workmanship will be replaced or repaired (at the option of Prince Castle LLC) without cost to the customer for parts and labor. This warranty covers on location service (i.e. trip charges and or mileage). Travel mileage is limited to 100 miles (200 Kilometers) 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 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.

Note: When connected to the Kitchen Minder, the Transfer and Menu functions are disabled on the button bar.

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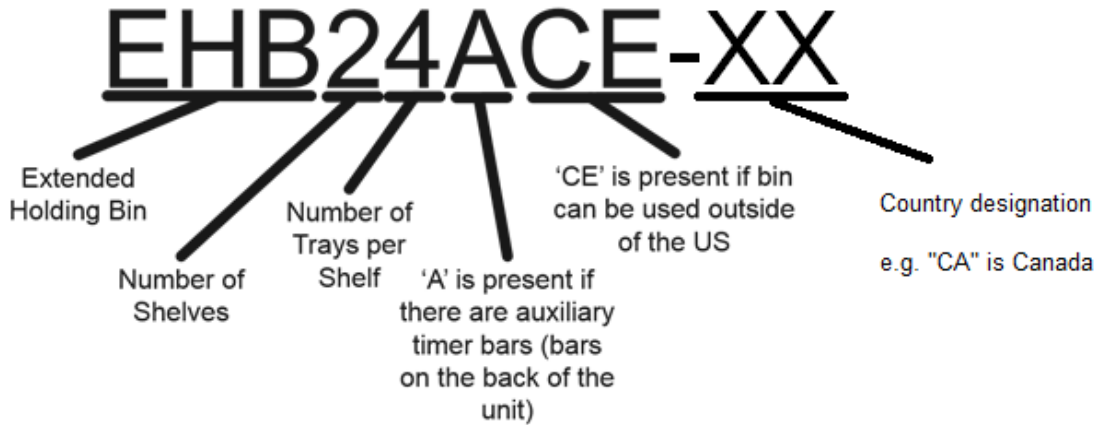


Extended Hold Bin

EHB-CE Series



Model Identification



Model Specifications

STYLE	MODEL NO.	WIDTH (mm)	HEIGHT (mm)	DEPTH (mm)	WEIGHT (kgs)	VOLTAGE	WATTS
2H X 2W	EHB22ACE	19.7 (500)	11.1 (282)	14.1 (358)	64 lbs. (29.0)	208-240	1252
2H X 3W	EHB23ACE	27.2 (691)	11.1 (282)	14.1 (358)	74 lbs. (33.6)	208-240	1878
2H X 4W	EHB24ACE	33.2 (843)	11.1 (282)	14.1 (358)	97 lbs. (44.0)	208-240	2500
3H X 2W	EHB32ACE	19.7 (500)	18.3 (465)	14.1 (358)	80 lbs. (36.3)	208-240	1600
3H X 4W	EHB34ACE	33.2 (843)	18.3 (465)	14.1 (358)	120 lbs. (54.4)	208-240	3760
4H X 2W	EHB42ACE	19.7 (500)	20.6 (523)	14.1 (358)	94 lbs. (42.6)	208-240	2500

NOTE: All Model Numbers above are for double-sided units (with auxiliary timer bars). For single-sided, remove the letter "A"

NOTE: For international (outside of the US) add "CE" to the end of the model number.

NOTE: Weight (kgs) is shipping 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.

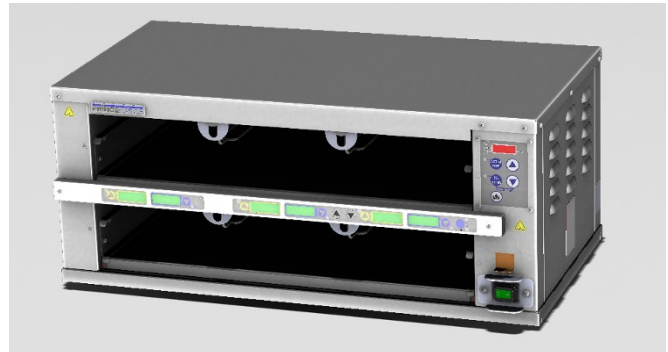
Children shall not play with appliance.

Cleaning and user maintenance shall not be made by children without supervision

Configurations



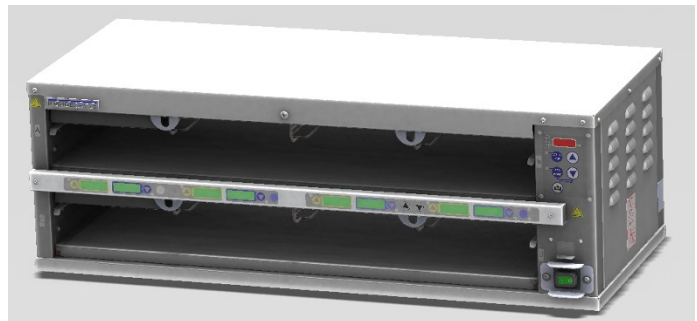
EHB22ACE



EHB23ACE



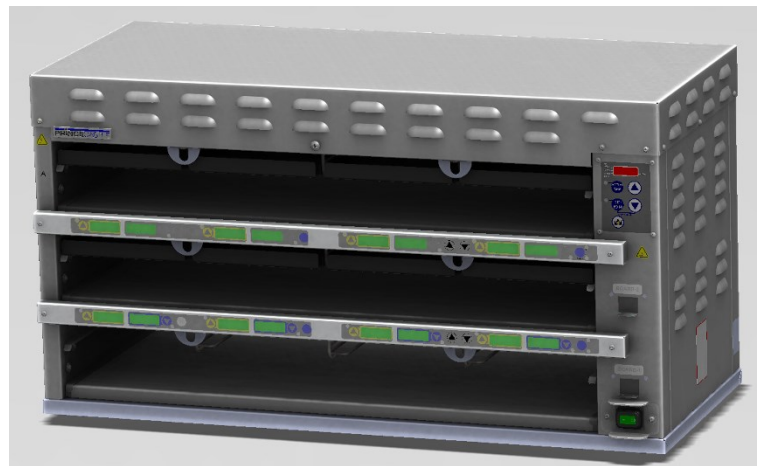
EHB32ACE



EHB24ACE



EHB42ACE



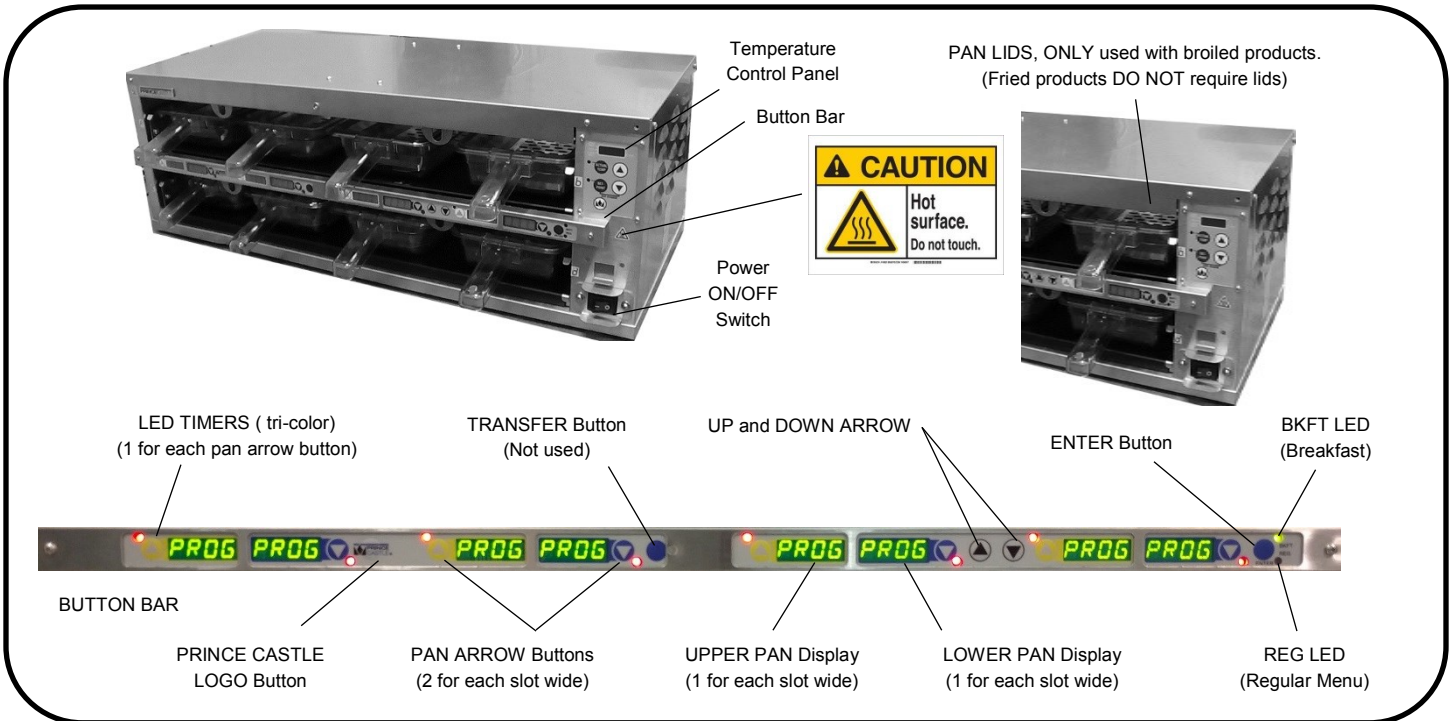
EHB34ACE

Extended Hold Bin

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Product Identification



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. If the unit is to be networked with other Prince Castle units, refer to the CastleNet® Communication Network section in this manual for installation instructions.

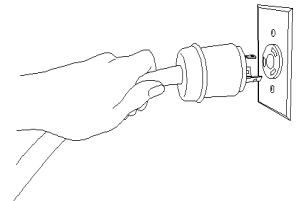
2

Place Extend Holding Bin on flat surface.
Clearances: 6" sides, 24" front and back.
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 (identified with the symbol at right) for this purpose.



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.



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.


3 LED Timing Status



LED TIMERS

- OFF** (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 off, 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 to **GREEN**.

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

The **LED** for the 2nd pan loaded with the same product will turn from **GREEN** 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. If red **LED** is flashing, remove and discard product as

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



⚠ WARNING: HOT SURFACES

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Standalone Mode

NOTE: Prince Castle Holding bins are not to be connected to each other unless a Kitchen Minder is in use. If attempting to configure bins with Kitchen Minder, please refer to the included Kitchen Minder Setup Manual

1 Set all bin addresses to **bin1**.

The factory default address for all bins and timers is address **bin1**.

To check the bin address, press and hold the **ACTUAL TEMP** and **SETPOINT** buttons. The display will show the bin address. Default for a new address is **bin1**.

2 To change a bin address, disconnect power to the unit and wait 10 seconds. Reconnect power to the unit and immediately press and hold the **ACTUAL TEMP** and **SETPOINT** buttons.

NOTE: Continue to hold the buttons until **PROG LED** turns on.

3 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:
bin1 thru *bin9*,
bin1 will always be used when not using Kitchen Minder.

4 Set Timer Bar addresses.

Since each bin is addressed **bin1**, the bottom bar on each bin will be addressed **bar2**. If there is an upper bar on a bin, it will be addressed **bar3**.

Remember: if there are bars on the back of the unit, they do not need to be addressed separately, they follow the front.

NOTE: This naming scheme only is true without a kitchen management system, if hooked up to a system like Kitchen Minder, it is different. See its user manual for details.

5 To check the timer address, press and hold the **PRINCE CASTLE LOGO** button and the **DOWN** Arrow button. The current timer address will be displayed in the far right timer display. To change the timer address, proceed to Step 6.

6 To change the timer address, disconnect power to the unit and wait 10 seconds. Reconnect power to the unit and immediately. Press and hold the **PRINCE CASTLE LOGO** button and the **DOWN** Arrow button until the display shows **SET ADDR** ↓ **ENTR BAR2**. The address number will blink on/off.

7 Use the **UP** or **DOWN** Arrow button to scroll to the desired address. Press the **ENTER** button to store the new address and return to normal operating mode. Press the **PRINCE CASTLE LOGO** button to save the setting.

Available addresses are: *Bar2* thru *Bar9*

NOTE: Bar addresses are numbered from the bottom up

Setting Product Location (Standalone Mode)

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

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

Cleaning

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

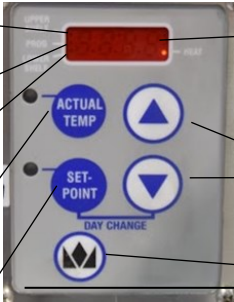
! CAUTION: This unit is not watertight. Do not clean with a water jet/jet spray. Do not immerse the unit in water.

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.

Setting the Temperature (Standalone Mode)

The unit has multiple shelves, each with 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.

PRINCE CASTLE LOGO 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, then immediately press and hold the **ENTER** button 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 **PROD BURG** ↑ ↓ **ENTR** (Set Product Temperature) menu.



2 Press the **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 **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 **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 **ENTER** to confirm setpoint temperature.



- 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.

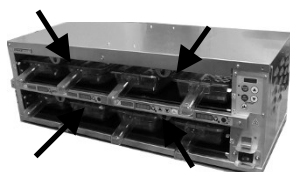
NOTE: Allow sufficient amount of time for temperatures to stabilize before starting calibration. (approx. 30 mins.)



- 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 **PRINCE CASTLE LOGO** 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 **PRINCE CASTLE LOGO** button to save the temperature value and exit the Calibration Mode.



NOTE: On the 3x4 unit, during calibration, a **HOLD** message will appear on the display. When it does, release all buttons until it disappears, then continue.

Selecting Day Part (Standalone Mode)

- 1** Press and hold the **SETPOINT** button and the **DOWN** Arrow button for 3 seconds to change Day Part to change the menu.

NOTE: Only applicable in standalone mode when not connected to Product Management system.

NOTE: The display will show **DAY #** if the daypart has been successfully changed.

NOTE: Whenever a bin is powered **ON** it defaults to **DAY PART 1** no matter what time of day it is.



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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, 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

- 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, 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

- 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.

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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, 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** $\uparrow \downarrow$ **ENTR** (Edit Product Name) menu.



- 2 Press the **ENTER** button to enter the menu. Bar will display **SET DEGR F/C** $\uparrow \downarrow$ **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, 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** $\uparrow \downarrow$ **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.



Default Menu Items

Burger Products

Product Name	Kitchen Minder Name	Hold Time	Cook-More Time	Upper Temp (C)	Lower Temp (C)
1.7 Burg	HAMB	60	3	90	80
Whopper	WHOP	60	3	90	80

Chicken Products

Product Name	Kitchen Minder Name	Hold Time	Cook-More Time	Upper Temp (C)	Lower Temp (C)
Tender Grill	TG	30	3	90	80
Original Chicken	LONG	90	3	125	105
Chicken Tenders	TEND	90	6	125	105
Spicy Chicken	SPCY	90	3	125	105
Wings	WING	40	3	125	105
Nuggets	NUGG	40	3	125	105

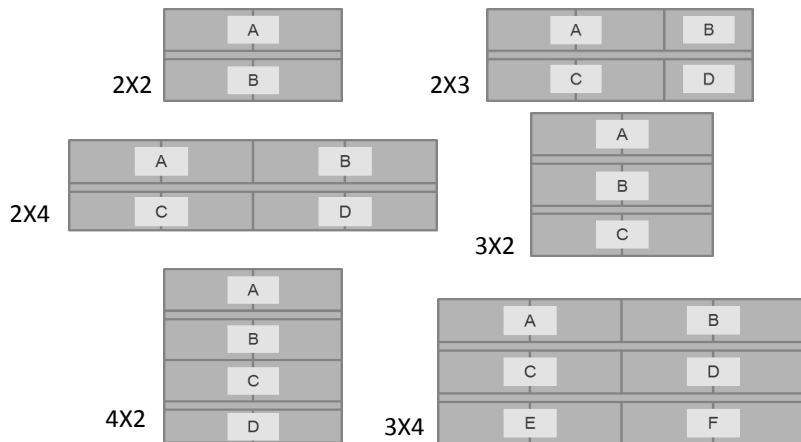
Other Products

Product Name	Kitchen Minder Name	Hold Time	Cook-More Time	Upper Temp (C)	Lower Temp (C)
Onion Rings	ONIN	20	3	125	105
Fish	FISH	30	3	125	105
	BRL1	60	3	90	80
	BRL2	60	3	90	80
	BRL3	60	3	90	80
	BRL4	60	3	90	80
	BRL5	60	3	90	80
	BRL6	60	3	90	80
	FRD1	90	3	125	105
	FRD2	90	3	125	105
	FRD3	90	3	125	105
	FRD4	90	3	125	105
	FRD5	90	3	125	105
	FRD6	90	3	125	105

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.



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Default Day Parts

EHB34ACE

EHB24ACE

EHB23ACE

EHB42ACE

D.P. 1

WHOP	WHOP	WHOP	WHOP
WHOP	WHOP	WHOP	WHOP
WHOP	WHOP	WHOP	WHOP

D.P. 2

HAMB	HAMB	HAMB	HAMB
WHOP	WHOP	WHOP	WHOP
WHOP	WHOP	WHOP	WHOP

D.P. 3

HAMB	HAMB	HAMB	HAMB
HAMB	HAMB	HAMB	HAMB
WHOP	WHOP	WHOP	WHOP

D.P. 4

FISH	FISH	TG	TG
LONG	LONG	LONG	LONG
TEND	TEND	TEND	TEND

D.P. 5

LONG	LONG	TG	TG
FISH	FISH	FISH	FISH
TEND	TEND	TEND	TEND

D.P. 6

SPCY	SPCY	WING	WIND
NUGG	NUGG	NUGG	NUGG
ONIN	ONIN	ONIN	ONIN

D.P. 1

HAMB	HAMB	HAMB
HAMB	HAMB	HAMB

D.P. 2

WHOP	WHOP	WHOP
WHOP	WHOP	WHOP

D.P. 3

HAMB	HAMB	HAMB
HAMB	HAMB	HAMB

D.P. 4

WHOP	WHOP	WHOP
WHOP	WHOP	WHOP

D.P. 5

HAMB	HAMB	HAMB
HAMB	HAMB	HAMB

D.P. 6

WHOP	WHOP	WHOP
WHOP	WHOP	WHOP

D.P. 1

WING	WING
SPCY	SPCY
NUGG	NUGG
ONIN	ONIN

D.P. 2

WING	WING
SPCY	SPCY
NUGG	NUGG
ONIN	ONIN

D.P. 3

WING	WING
SPCY	SPCY
NUGG	NUGG
ONIN	ONIN

D.P. 4

WING	WING
SPCY	SPCY
NUGG	NUGG
ONIN	ONIN


D.P. 5

WING	WING
SPCY	SPCY
NUGG	NUGG
ONIN	ONIN

D.P. 6

WING	WING
SPCY	SPCY
NUGG	NUGG
ONIN	ONIN

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 heat- er 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 com- municating, wait until the message disappears
Display shows WAIT	When in stand alone mode and the oper- ator 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.

Diagnosics

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 the Kitchen Minder/Visor/Sicom system is connected properly. Requires service technician to troubleshoot.

USB Update Procedure (all bins except the 3Hx4W)

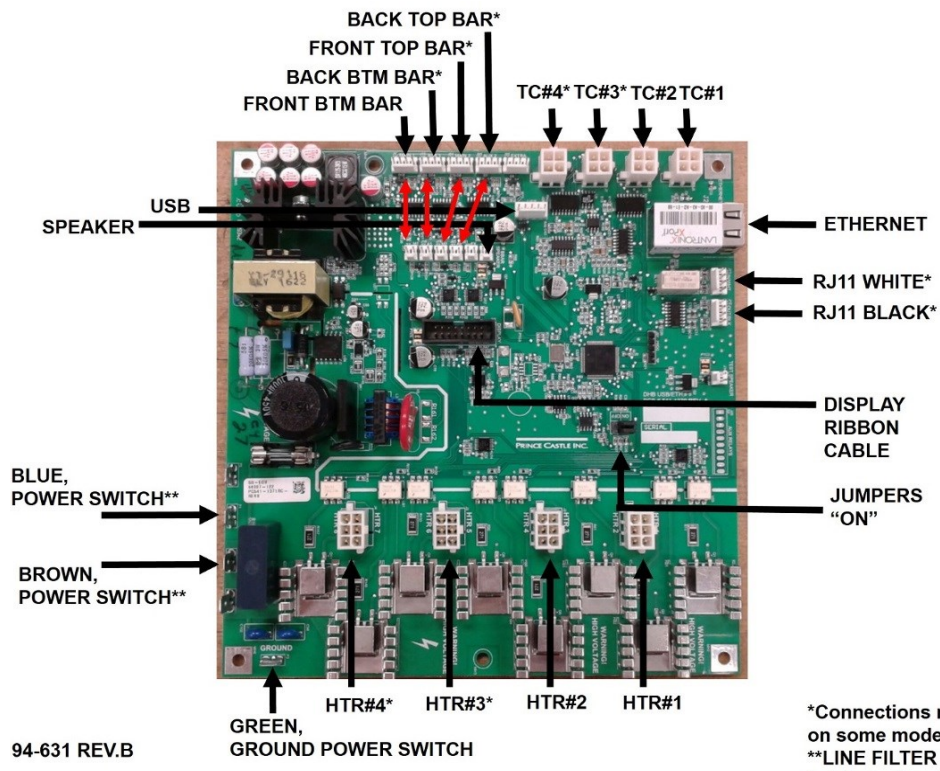
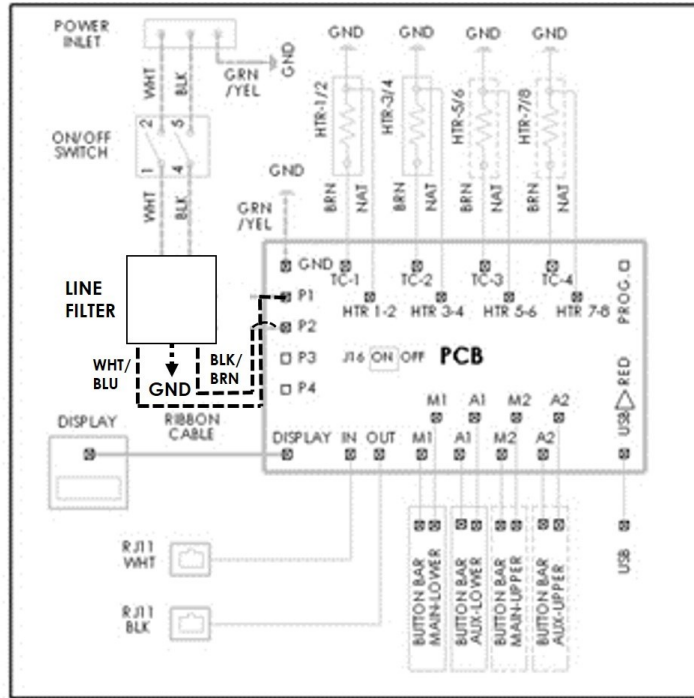
1. First, un-plug Kitchen Minder, translator box, and any cable translation cables from the PHU. These devices will interfere with the timer bar boot loading process.
2. Place the update files on the USB flash drive in the main directory (Do not put them in a folder on the flash drive). There are five 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 “Prince Castle” button on front right side of the bin, above the power switch, turn the power to the bin on.
5. Keeping the “Prince Castle” 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. BL02 (2 timer bars left to upgrade)
 - d. BL01 (1 timer bar left to upgrade)
 - e. BL00 (0 timer bars left to upgrade)
 - f. BN02 (2 timer bars detected and done with programming)
 - g. Confirm the upgrade of timer bars by pressing the Prince Castle logo button and down button on timer bar.
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.

USB Update Procedure (3Hx4W Bin Only)

1. The 3x4 bin requires two sets of files for the update, 10 files total. You will have a set of 5 files for the lower board and 5 files for the upper board. You can use one USB flash drive; however you can only have one set of 5 files on the USB drive at one time. The 5 files have the same names and therefore can not be kept on the USB drive at the same time.
 2. Go through steps 1-7 as above placing the USB drive in the USB port labeled 1 on the front of the holding bin.
- When the bin is done updating, place the second set of files on the USB drive.
3. Once all files are on the USB drive, turn the power off to the bin and place the USB drive with the files into the USB port labeled 2 on the front of the bin.
 4. While holding down “Prince Castle” button on front right side of the bin, above the power switch, turn the power to the bin on.
 5. Keeping the “Prince Castle” button pressed, wait for the “BL” message, “BLnU” message, and the BL00 message (THIS WILL TAKE APPROX. 15 SECONDS) to appear on screen, then release the “Prince Castle” button.
 6. Observe the top row of timer bars
 - a. The top row will show dashed lines (indicating that it has entered the boot loader).
 - b. The top row will show Prince Castle boot up, before going back into dashed lines display (boot loader for second time).
 - c. The top row will go again to the Prince Castle boot-up and back to the dashes a third and final time.
 - d. The Prince Castle boot-up will show again and the update is done.
 7. Check the version number by holding the Prince Castle button on the top timer bar and the down arrow.

Wiring Diagrams

This Wiring diagram is used in all configurations except the 3X4



*Connections not used on some models.
 **LINE FILTER if model is international.

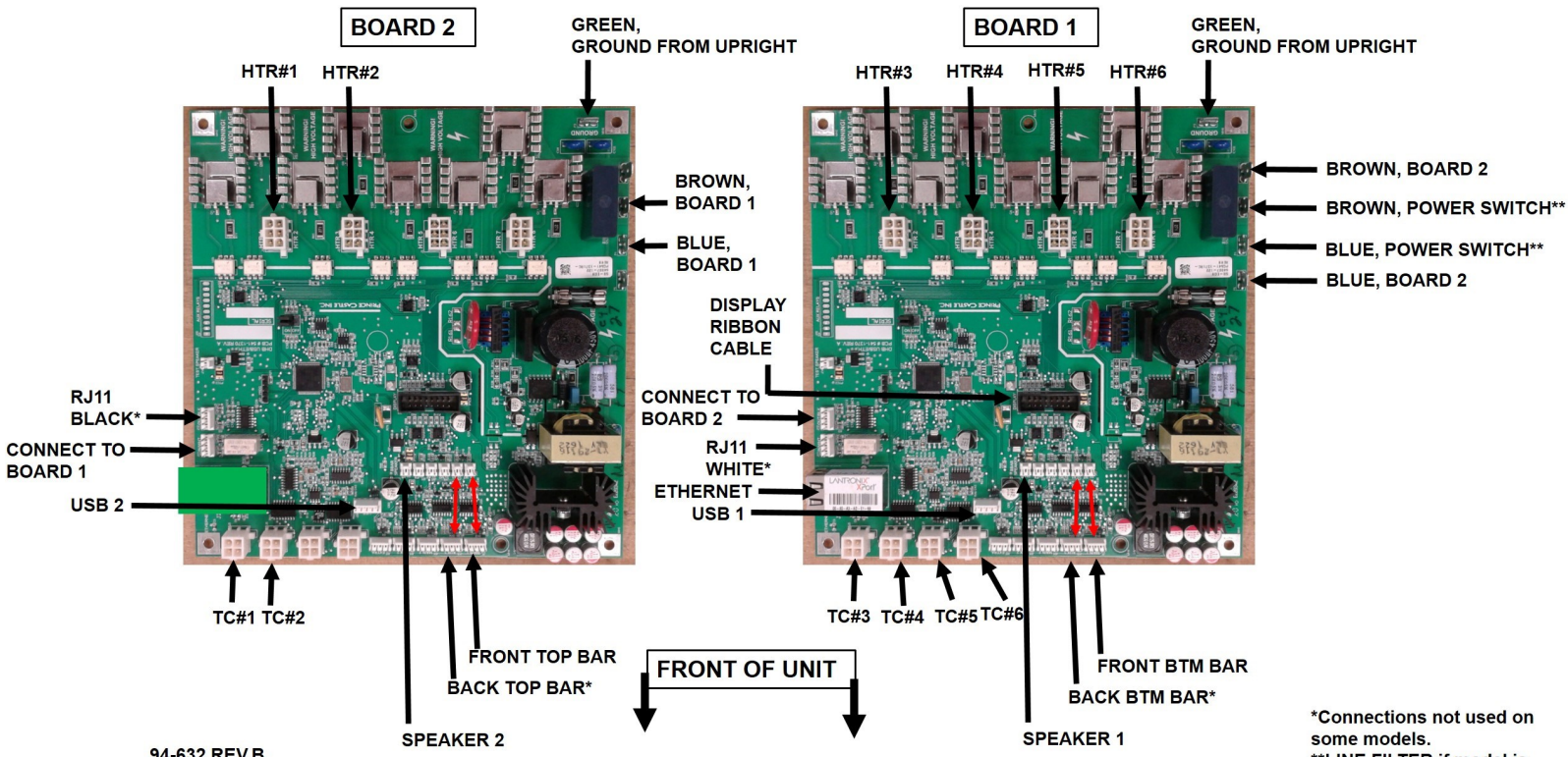
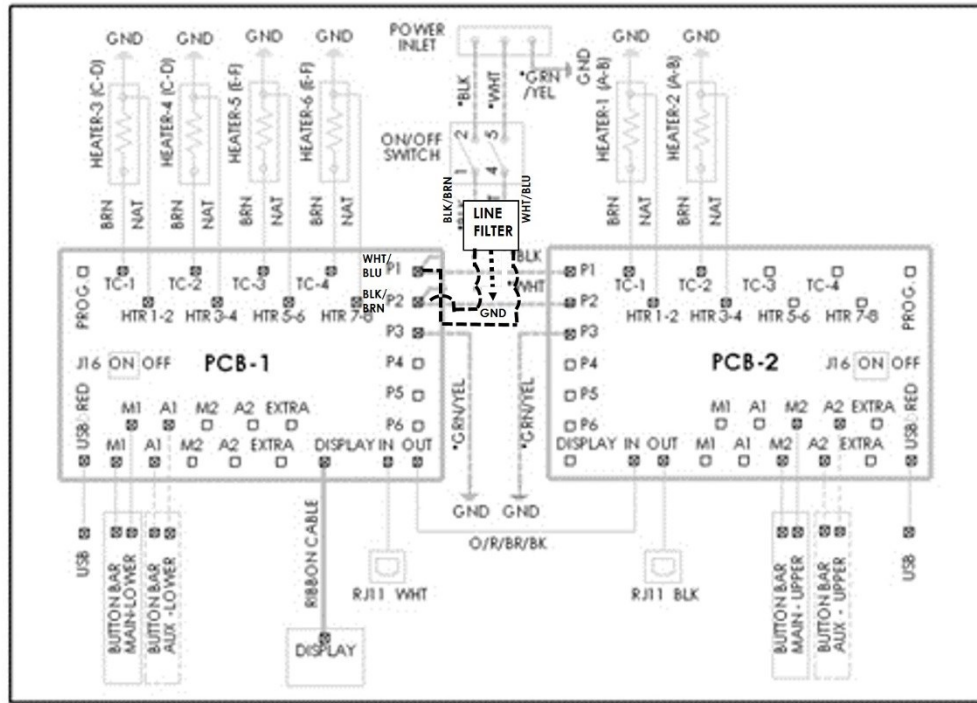
Extended Hold Bin

EHB-CE Series



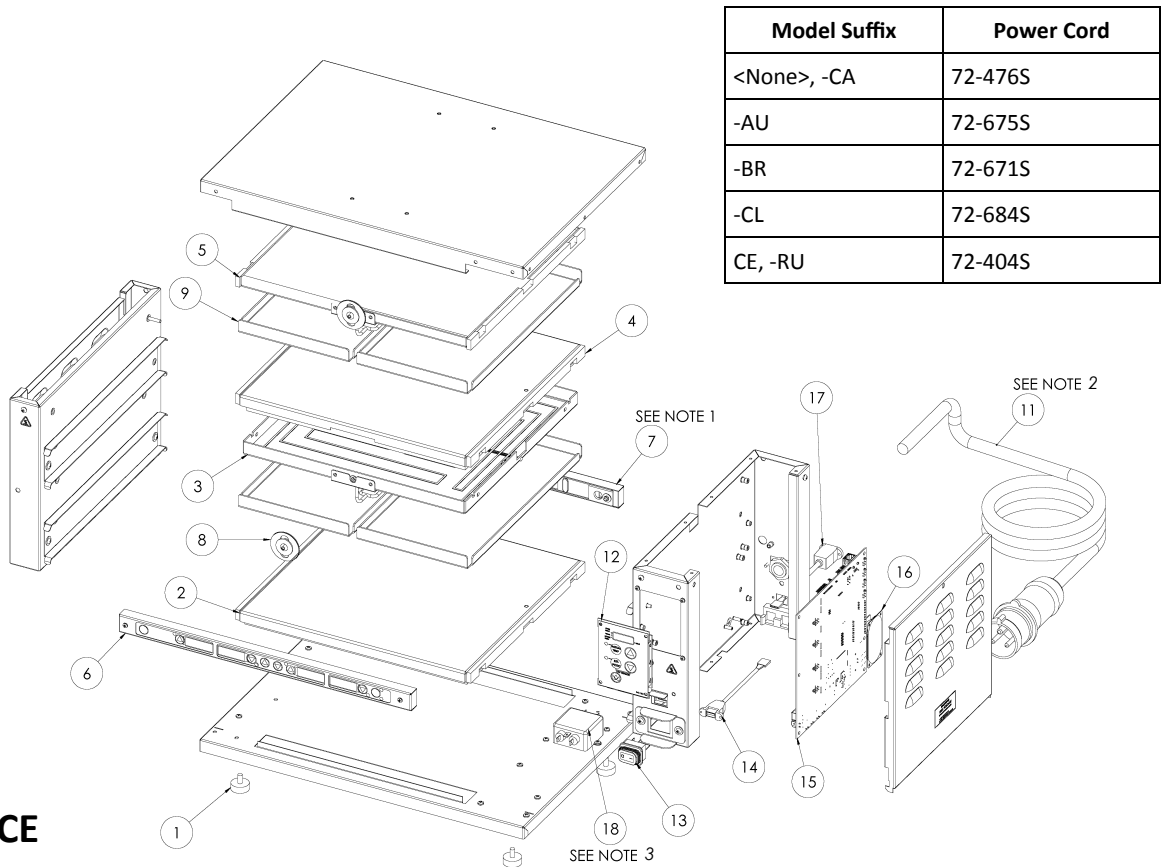
Wiring Diagrams

This wiring diagram is used in the 3X4 configuration only



*Connections not used on some models.
**LINE FILTER if model is international.

Exploded View



EHB22ACE

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	197-232S	FOOT (4 PACK)	7	510-243S*	SERVICE KIT BB 4CH AUX	16	88-709-2-11S	SPEAKER
2	540-1107S	HEATER ASSY LOWER SHELF, 2W	8	540-1158S	LATCH, CATCH	17	95-2011S	ETHERNET CONNECTOR
3	540-1109S	HEATER ASSY, UPPER, 2W	9	540-1251S	LID (4 PACK)	18	88-824S	LINE FILTER
4	540-1111S	HEATER ASSY, LOWER TOP SHELF 2W	11	USE TABLE	POWER CORD	*Recommended spares for stocking		
5	540-1120S	UPPER HEATER TOP SHELF	12	540-1215S*	OVERLAY AND DISPLAY			
6	510-242S*	TIMER BAR, 4 MAIN	13	78-184S	POWER SWITCH			
			14	95-1819S	USB CORD			
			15	540-1263S*	PCB, CONTROL BOARD			

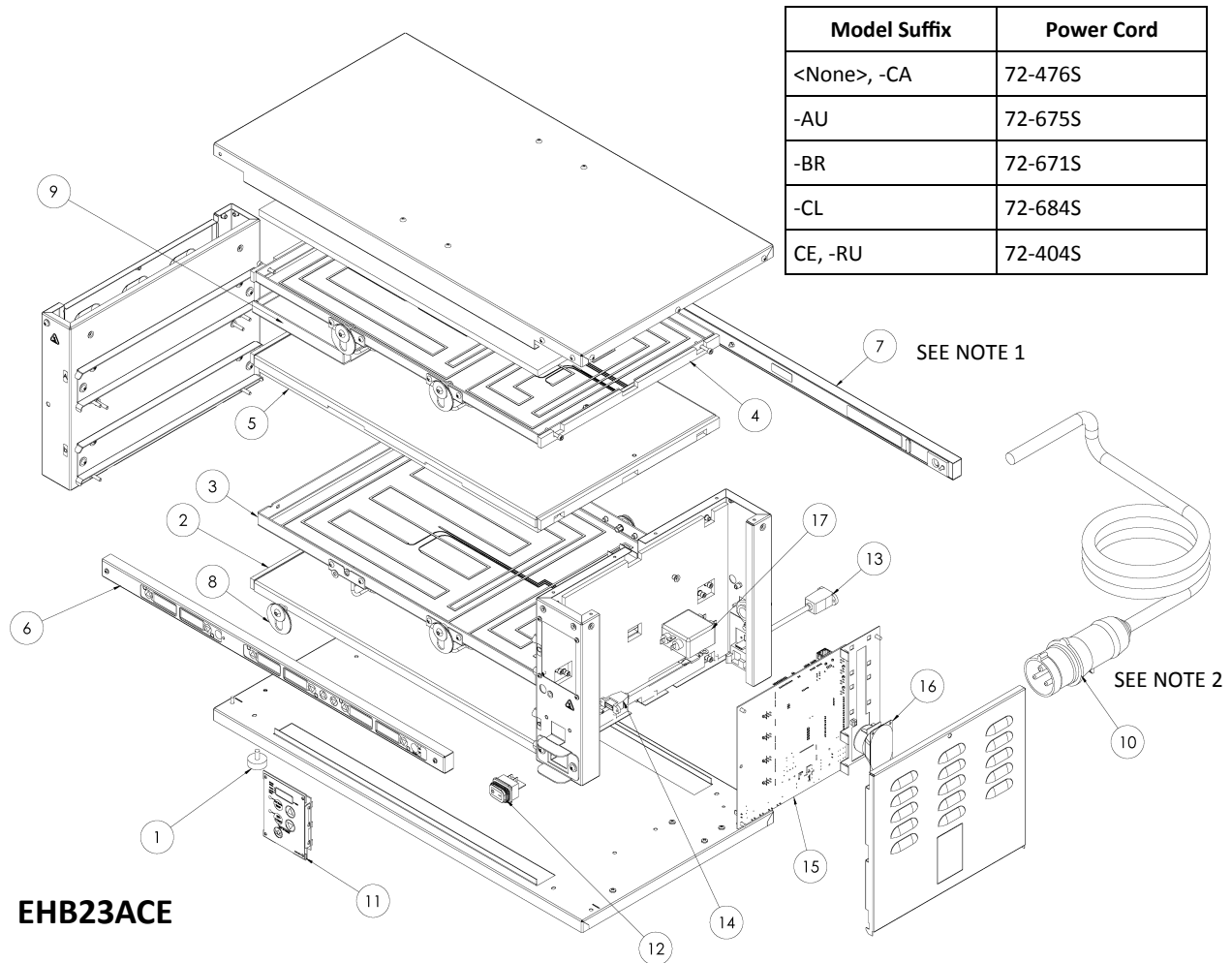
1. AUX TIMER BAR (510-243S) USED ONLY ON EHB22A AND EHB22ACE.
2. REFER TO POWER CORD TABLE ABOVE.
3. LINE FILTER (88-824S) ONLY USED ON EHB22ACE AND EHB22CE.

Extended Hold Bin

EHB-CE Series



Exploded View



EHB23ACE

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

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	197-232S	FOOT (4 PACK)	7	510-272S*	TIMER BAR 6 AUX	13	95-2011S	ETHERNET CONNECTOR
2	540-1122S	HEATER ASSY, LOWER PANEL, BOTTOM SHELF	8	540-1158S	LATCH, CATCH	14	95-1819S	USB CORD
3	540-1118S	HEATER ASSY, MID SHELF, LOWER 3-WIDE	9	540-1251S	LID (4 PACK)	15	540-1252S*	CONTROL BOARD
4	540-1116S	HEATER ASSY, UPPER PANEL, TOP SHELF 3-WIDE	10	USE TABLE	POWER CORD	16	88-709-2-11S	SPEAKER
5	540-1123S	HEATER ASSY, MID SHELF UPPER 3-WIDE	11	540-1215S*	OVERLAY AND DISPLAY	17	88-824S	POWER FILTER
6	510-269S*	TIMER BAR, 6 MAIN	12	78-184S	POWER SWITCH			

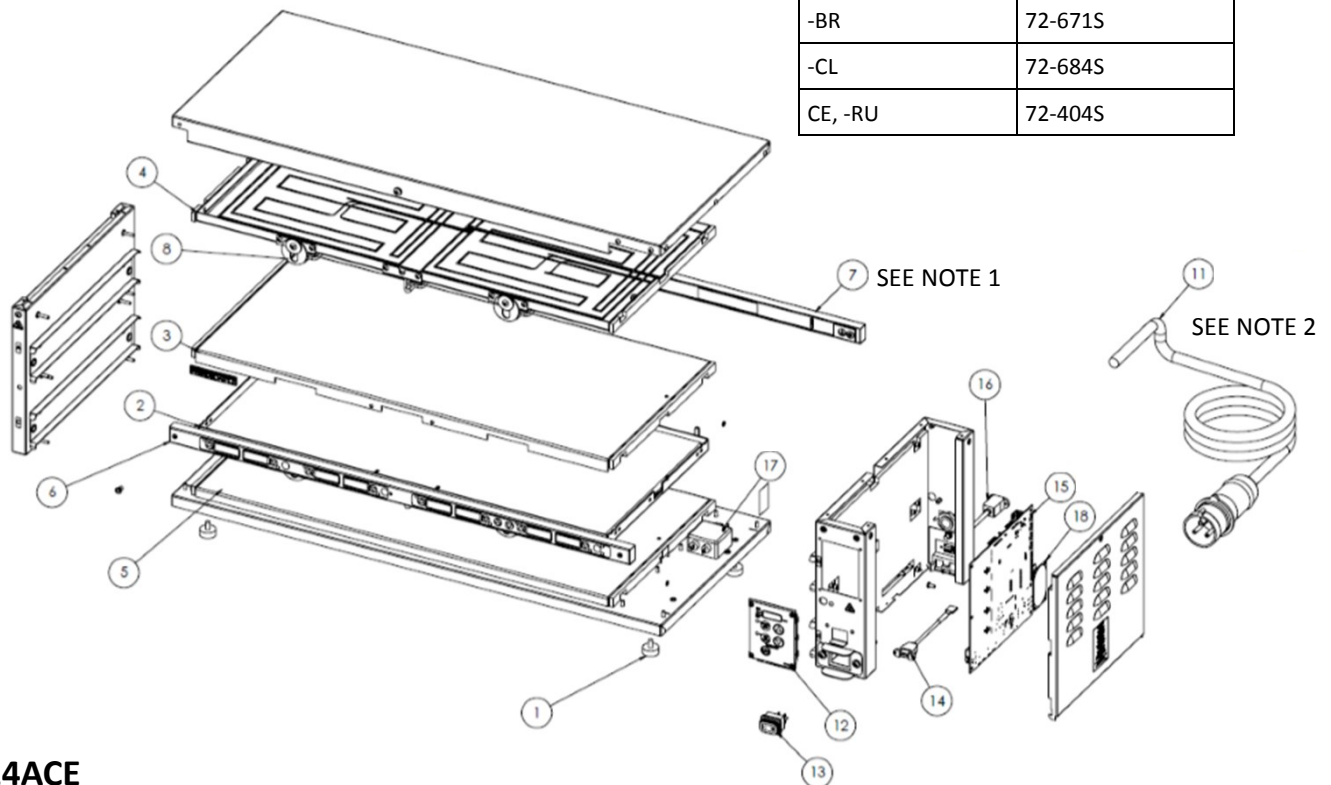
*Recommended spares for stocking

NOTE:

1. Aux. timer bar 510-272S used on EHB23ACE only.
2. REFER TO POWER CORD TABLE ABOVE.

Exploded View

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



EHB24ACE

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	197-232S	FOOT (4 PACK)	7	510-258S*	TIMER BAR 8 AUX	14	95-1819S	USB CORD
2	540-1226S	HEATER ASSY MID SHELF, LOWER 4W	8	540-1158S	LATCH, CATCH	15	540-1392S*	CONTROL BOARD
3	540-1224S	HEATER ASSY, MID SHELF UPPER 4W	9	540-1251S	LID (4 PACK)	16	95-2011S	ETHERNET CONNECTOR
4	540-1222S	HEATER ASSY, UPPER TOP 4W	11	USE TABLE	POWER CORD	17	88-824S	POWER FILTER
5	540-1072S	LOWER HEATER BASE	12	540-1215S*	OVERLAY AND DISPLAY	18	88-709-2-11S	SPEAKER
6	510-257S*	TIMER BAR, 8 MAIN	13	78-184S	POWER SWITCH			

*Recommended spares for stocking

NOTE:

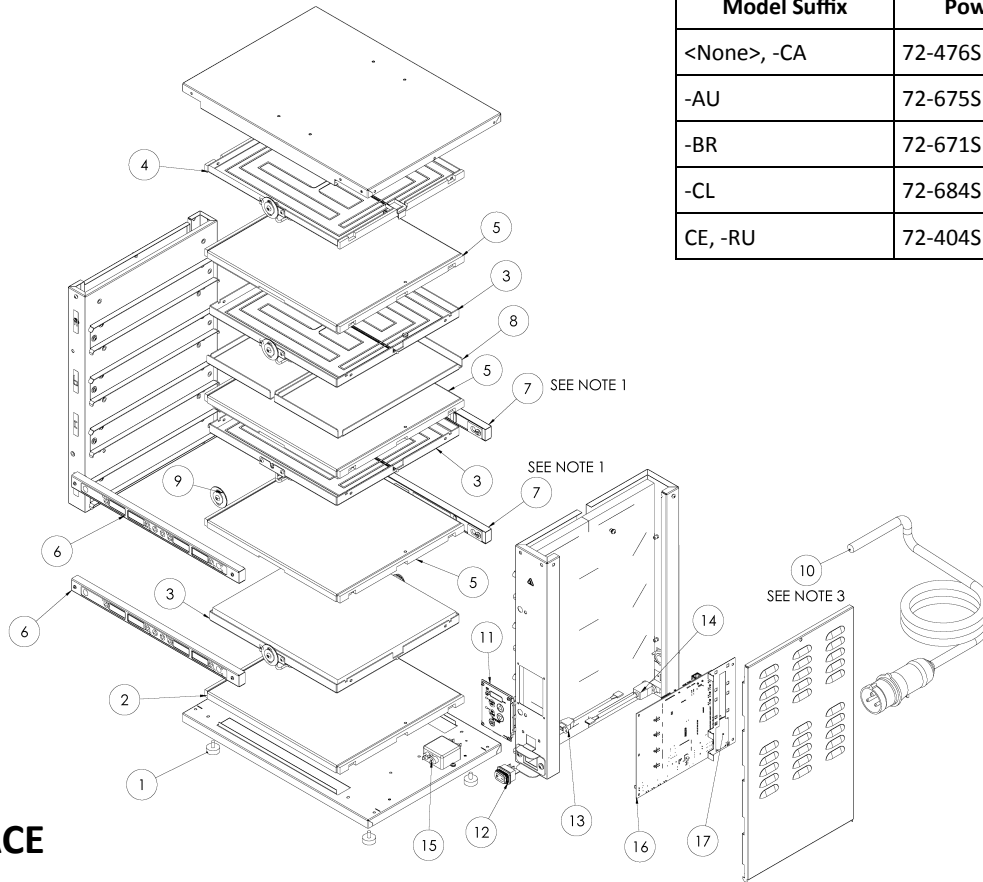
1. Aux. timer bar 510-258S used on EHB24ACE only.
2. REFER TO POWER CORD TABLE ABOVE.

Extended Hold Bin

EHB-CE Series



Exploded View



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

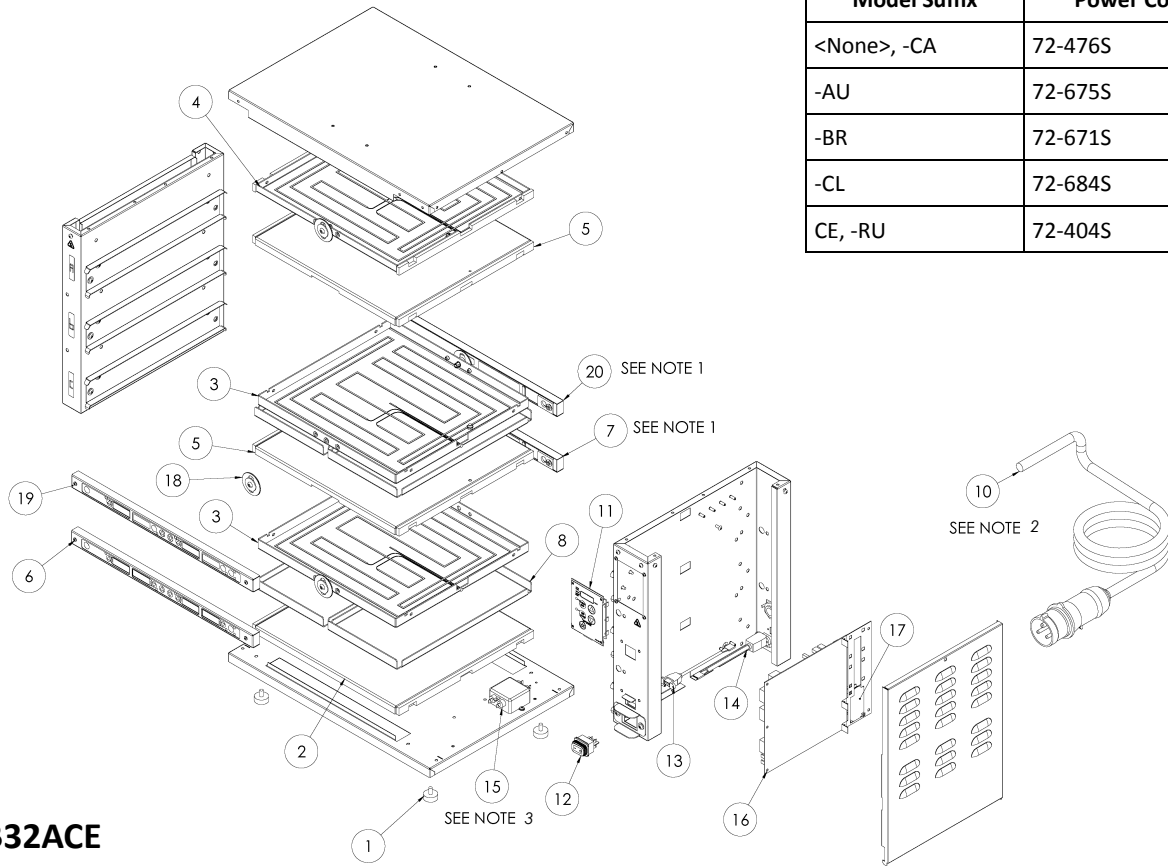
EHB42ACE

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	197-232S	FOOT (4 PACK)	7	510-276S*	SERVICE KIT BB 4CH AUX	16	540-1284S*	MAIN BOARD
2	540-1107S	HEATER ASSY, LOWER PANEL, BOTTOM SHELF	8	540-1251S	LID (4 PACK)	17	88-709-2-11	SPEAKER
3	540-1109S	HEATER ASSY, LOWER SHELF, UPPER 4x2	10	USE TABLE	POWER CORD			
4	540-1120S	HEATER ASSY, UPPER SHELF, TOP 4x2	11	540-1215S*	OVERLAY, DISPLAY BRD			
5	540-1111S	HEATER ASSY, UPPER SHELF BOTTOM 4x2	12	78-184S	POWER SWITCH			
6	510-275S*	TIMER BAR, 4 MAIN	13	95-1819S	USB CORD			
			14	95-2011S	ETHERNET CORD			
			15	88-824S	POWER FILTER			

*Recommended spares for stocking

1. AUX TIMER BAR 510-276S USED ONLY IN EHB42ACE.
2. REFER TO POWER CORD TABLE ABOVE.

Exploded View



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

EHB32ACE

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	197-232S	FOOT (4 PACK)	7	510-278S*	SERVICE KIT BB 4CH AUX	16	540-1285S*	MAIN BOARD
2	540-1107S	HEATER ASSY, LOWER PANEL, BOTTOM SHELF	8	540-1251S	LID (4 PACK)	17	88-709-2-11S	SPEAKER
3	540-1109S	HEATER ASSY, LOWER SHELF, UPPER 4x2	10	USE TABLE	POWER CORD	18	540-1158S	KIT, LATCH CATCH
4	540-1120S	HEATER ASSY, UPPER SHELF, TOP 4x2	11	540-1215S*	OVERLAY, DISPLAY BRD	19	510-244S*	MAIN BB, UPPER
5	540-1111S	HEATER ASSY, UPPER SHELF BOTTOM 4x2	12	78-184S	POWER SWITCH	20	510-245S*	AUX BB UPPER
6	510-277S*	TIMER BAR, 4 MAIN	13	95-1819S	USB CORD			
			14	95-2011S	ETHERNET CORD			
			15	88-824S	POWER FILTER			

*Recommended spares for stocking

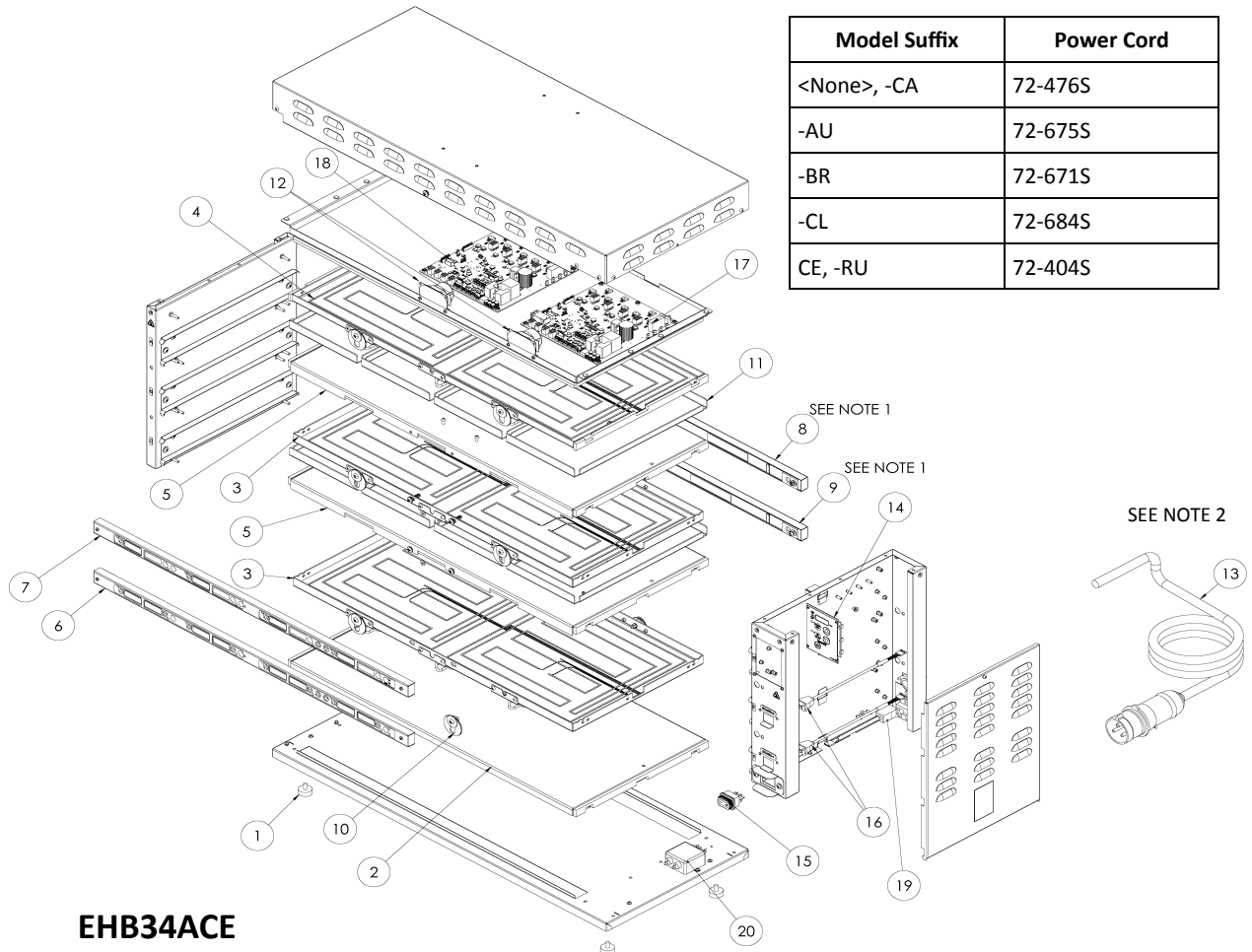
1. AUX TIMER BAR (510-278S) AND (510-245S) USED ONLY ON EHB32A AND 32ACE.
2. REFER TO POWER CORD TABLE ABOVE.
3. LINE FILTER 88-824s ONLY USED ON EHB32ACE AND EHB32CE.

Extended Hold Bin

EHB-CE Series



Exploded View



EHB34ACE

ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION	ITEM NO.	PART NUMBER	DESCRIPTION
1	197-232S	FOOT (4 PACK)	7	510-259S*	TIMER BAR, 8 MAIN TOP	16	95-1995S	USB CORD
2	540-1198S	HEATER ASSY, LOWER PANEL, BOTTOM SHELF	8	510-260S*	TIMER BAR, 8 AUX, TOP	17	540-1238S*	CONTROL BOARD 1
3	540-1230S	HEATER ASSY, LOWER SHELF, UPPER 3X4	9	510-258S*	TIMER BAR, 8 AUX	18	540-1239S*	CONTROL BOARD 2
4	540-1228S	HEATER ASSY, UPPER SHELF, TOP 3X4	10	540-1158S	LATCH, CATCH	19	95-2012S	ETHERNET CONNECTOR
5	540-1229S	HEATER ASSY, UPPER SHELF BOTTOM 3X4	11	540-1251S	LID (4 PACK)	20	88-824S	POWER FILTER
6	510-257S*	TIMER BAR, 8 MAIN	12	88-709-2-11	SPEAKER			
			13	USE TABLE	POWER CORD			
			14	540-1215S*	OVERLAY AND DISPLAY			
			15	78-184S	POWER SWITCH			

*Recommended spares for stocking

1. AUX TIMER BAR 510-260S AND 510-510-258S USED ONLY IN EHB34ACE.

2. REFER TO POWER CORD TABLE ABOVE.

REV	DATE	DESC.
A	8/8/16	RELEASE
B	8/18/16	UPDATE DHB-BK42AFCE PART #'S
C	9/15/16	ADDED TIMER BAR FOR DHB-BK42F
D	9/23/16	CHANGED SPEAKER # FOR 3X4
E		UPDATED WARRANTY INFORMATION
F	1/19/18	ADD 2x4 CONFIGURATION TO DHB-BKF FAMILY
G	5/7/18	REMOVE ANY MENTION OF BKF, UPDATING PART REPLACEMENT KITS TO BECOME EHB-CE MANUAL
H	12/7/18	EXPLODED VIEWS: ADDED POWER CORD REFERENCE TABLE; REPLACED LID WITH PART NUMBER 540- 1251S
J	4/25/19	UPDATED WIRING DIA- GRAM FOR LINE FILTER