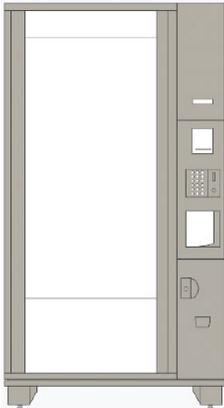


# SERVICE INFORMATION

## 104875 (M099.1)

### R134A Pepsi/Generic DN5800/3800 BevMax 4/3/2 Replacement Control Boards



**Models Affected:** All R134A Pepsi/Generic DN5800/3800 BevMax 4/3/2 Venders.

**Reason:** To provide instructions for installing replacement control boards in all R134A Pepsi & Generic DN5800/3800 BevMax 4/3/2 Venders.

**Control Board Replacement kits:**

**Kit 1 – 111456 (previous #65701220 PC/Generic – BevMax 4 Control Board Only Kit**  
Venders 8900 and higher (including run 8882) manufactured beginning 3/26/09. When replacing an 80492870 board with an 80492972 red board.

**Kit 2 – 105426 (previous #64700960) - PC/Generic – BevMax 4 Service Replacement Control Board Kit (use when replacing 80492529, 80492351, 80492349, 8049272, 80492870 with an 80492972 red board).**

Venders prior to 8900 (except run 8882) manufactured prior to 3/26/09. When replacing an 80492529, 80492351, 80492349, 80492772, or 80492870 with an 80492972 red board.

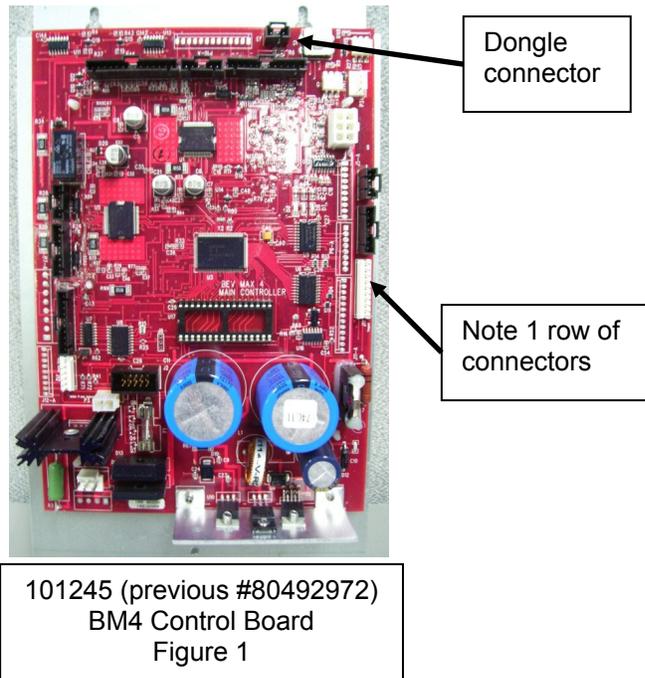
Revised: 7/25/19

Part #	Description	BevMax 4 Service Kit 1	BevMax 4 Service Kit 2
		111456 (65701220)	105426 (64700960)
		<b>Quantity in kit</b>	
104623 (previous #CR0005692)	Mounting Bracket Control Board	1	1
101171 (previous # 80190380)	Stand off	5	5
104544 (previous # CR0001619)	Control Board Cover	1	1
101245 (previous #80492972)	Control Board	1	1
100514 (previous #90190201)	Wire Ties	5	5
100265 (previous #80030418)	Self-Drilling Screws	4	4
100809 (previous #80492898)	Pepsi (E Lock) Door Switch Harness with Dongle	0	1
100808 (previous #80492897)	Generic (T Handle) Door Switch Harness with Dongle	0	1
108898 (previous #80541177)	ESD Static Bag	1	1
102128 (previous #80386715)	ESD Sensitive Label	1	1
104875	M099.1 Install Instructions	1	1

Part numbers and descriptions subject to change with out notice.

In all Pepsi & Generic BevMax 3/2 Venders prior to 3/26/08 (prior to run #8732) with metal plate port assy. (see figure 7 on page 5) you will also need to order a new door bundle harness 100936 (previous #80492425).

**IMPORTANT NOTE:** In older BevMax 3/2 Venders with 1 Ballast set up all Lights will turn out due to the Energy Star Software of the new Controller. If this is an issue a Kit will be needed to allow the Top Light Assembly to stay on and the Side Lights to turn off. Contact Crane Merchandising Systems Technical Service Department for more information.



**Pepsi/Generic BevMax 4 5800-4/3800-4 Board 101245 (previous #80492972) (See Figure 1).**

Mounts on back wall of service area (board shown above). Factory installed in all Pepsi & Generic BevMax 4 Venders beginning 1/8/14 (serialized run #99530019AM and higher) and can be used in all older Pepsi & Generic BevMax 3 and BevMax 2 Venders.

It is important to note that for the Red BevMax 4 Control Board the software 101269 (previous #80492974) is different and is not compatible to the old BevMax 4 Control Boards with the 101267 (previous #80492770) software. Also old BevMax 4 Control Board software does not work in the Red BevMax 4 Control Board. If someone puts the wrong software in the wrong board it will not damage the board, it just will not function properly. To correct, down power, remove wrong software, install correct software, power up and it will load software and correct.

Also important, the very early 101245 (previous #80492972) red boards had 2 rows of connectors. See Figure 12. The latest version has 1 row of connectors see Figure 1 and Figure 11.



Dongle connector

Note 2 rows of connectors

101249 (previous #80492870)  
BM4 Control Board  
Figure 2



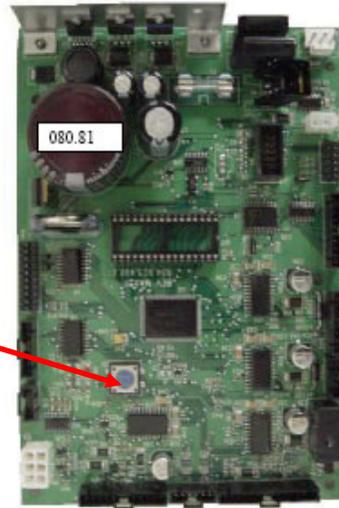
Note 1 row of connectors

80492772  
BM3 Z Control Board  
Figure 3



80492529  
BM3/2 Control Board  
Figure 4

Blue Service Switch



80492351  
80492349  
BM 3/2 Control Board  
Figure 5

**Pepsi/Generic BevMax 4 5800-4/3800-4 Board 101249 (previous #80492870) (See Figure 2).**  
Mounts on back wall of service area (board shown above). Factory installed in all Pepsi & Generic BevMax 4 Venders beginning 3/26/09 (serialized run #8900 and higher – including run #8882) and can be used in all older Pepsi & Generic BevMax 3 and BevMax 2 Venders.

**Pepsi/Generic BevMax 3 Z Board 80492772 (See Figure 3).**  
Mounts on back wall of service area (board shown above). Factory installed in all Pepsi & Generic BevMax 3 Venders from 3/26/08 to 3/26/09 (serialized run #8732 to run #8900 – except run #8882).

**Pepsi/Generic BevMax 3/2 Non Z Board 80492529, 80492351, & 80492349 (See Figures 4 & 5).**  
Mounts on back wall of service area (board shown above). Factory installed in all Pepsi & Generic BevMax 3/2 Venders prior to 3/26/08 (prior to run #8732).

**NOTE: SEE PAGE 1 FOR CONTROL BOARD FIELD SERVICE REPLACEMENT KITS.**

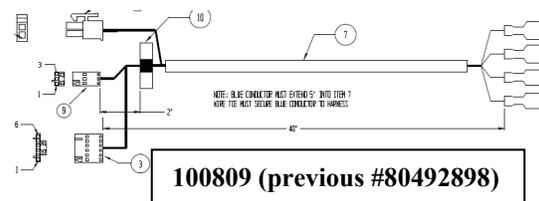
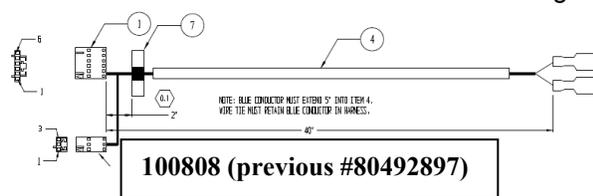
**Kit 1 Installation instructions:**

1. Remove power to the Vender by turning off the main power toggle switch and remove the power supply cord from the AC Distribution Box located in the service area. See Figures 8 & 10.
2. Remove existing controller & install new controller.
3. Plug power supply cord in AC Distribution Box.
4. Toggle the main power switch to the on position.
5. The display will show the following: “No Model Set” Press the “A” key to scroll thru the model numbers, 3800-4, 5800-4, 3800-E, 5800-E4. With the display showing the correct model number of the Vender press the “\*” key to save the model number.
6. Enter the Menu by pressing the white service switch on the controller. **Listed are the menu items that must be programmed when a new controller is installed for the Vender to operate properly.**  
In **Service Mode** – Set Shelf Location (G, M1, M2, D, E, E1, D2, E3, E4, E5, or E6 depending on individual Vender); Set Prices; & Clear Errors.  
In **Test Mode** – List Errors; Test Vend; & Factory Diagnostics – Set Model Number, Extended Cup, Cup Sensor, Position Test, Product Sensors, Shelf Offset, & Hook Swipe.  
To access the different programming modes:  
Press Service Switch 1 time - “**Service Mode**”  
Press Service Switch 2 times - “**Test Mode**”  
Press Service Switch 3 times - “**Setup Mode-1**”  
Press Service Switch 4 times - “**Setup Mode- 2**”  
Press Service Switch 5 times - “**Satellite Mode**” (**MultiMate**)
7. Refer to programming section for steps to set these modes to ensure proper Vender operation starting on page 10.

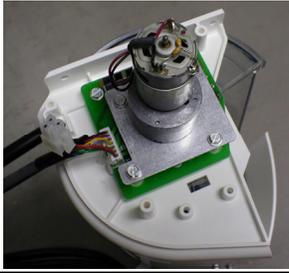
**Kit 2 Installation instructions:**

For BevMax 3/2 Venders with the controllers 80492772, 80492529, 80392351, and 80492349 mounted on the back wall of the Service area.

1. Remove power to the Vender by turning off the main power toggle switch and remove the power supply cord from the AC Distribution Box located in the service area. See Figures 8 & 10.
2. If you are installing: 80492870 or 80492972 control board in place of a BevMax 3/2 board with a blue service switch (Figures 4 & 5) or the “80492872” or “80492972” board with the white service switch, (Figure 3) unplug all the harnesses from the control board.
3. In BevMax 3 & 2 Venders determine the correct Door Switch Harness with Dongle and install in place of existing Door Switch Harness that does not have a Dongle.



4. Remove the existing failed control board from the cabinet.
5. Determine if the door bundle harness (not included in kits) will need to be changed based on the Port assembly in the Vender. Reference BevMax Delivery Port Assemblies Instructions M090.x for more detailed information.
  - a. Delivery Port Assemblies used in Pepsi/Generic BevMax 4/3 and BevMax 2 Venders differ. The following provides an explanation of the changes and a description to make you familiar with the differences (see Photos). Beginning serial number 8631-0053 in the BevMax 3 Delivery Port Assembly the motor mounting changed and the switches were replaced with a circuit board. These changes also created a need for a new Door Bundle Harness. The Port Assemblies are not interchangeable unless you also change the Door Bundle Harness. NOTE: Pepsi/Generic BevMax 3 Venders serialized prior to 0053-8631 have the original Delivery Port Assembly (used in all BevMax 2) with the revised port sensor. See figures 6 & 7.



Used on PC/Gen. BevMax 3 Serialized 8631-0053 & higher.  
(With printed circuit board)  
Figure 6



Used on PC/Gen. BevMax 2 and BevMax 3 Prior to 8631-0053.  
(Original with LED & switch assy.)  
Figure 7

6. The new red controller 101245 (previous # 80492972) or previous 101249 (previous # 80492870) blue controller will be mounted on the rear wall of the service area. **Do not secure to rear wall at this time.**
7. It is necessary to plug all wiring to the new controller and then determine where the controller will mount on the back wall.
8. Plug in all harnessing to Controller. For new red controller 101245 reference Figure 11 on page 6 to verify all wiring connections to the controller being used are correct.
9. After connecting all harnessing to the control board and determining the location for the new controller, secure the controller assembly to the rear service wall with self-drilling screws.
10. Dress the harnessing using the wire ties included in the kit and existing P Clamps and twist ties in the service area. Install the board cover. Be sure to secure the Door Bundle Harness to the main door as shown if any of the wire ties were cut on the bundle harness during installation of the new board. See Figures 8 and 9.



On/Off Main Power Switch

Figure 8  
BevMax 4  
AC Box Main Power



Figure 9  
Door Bundle Harness



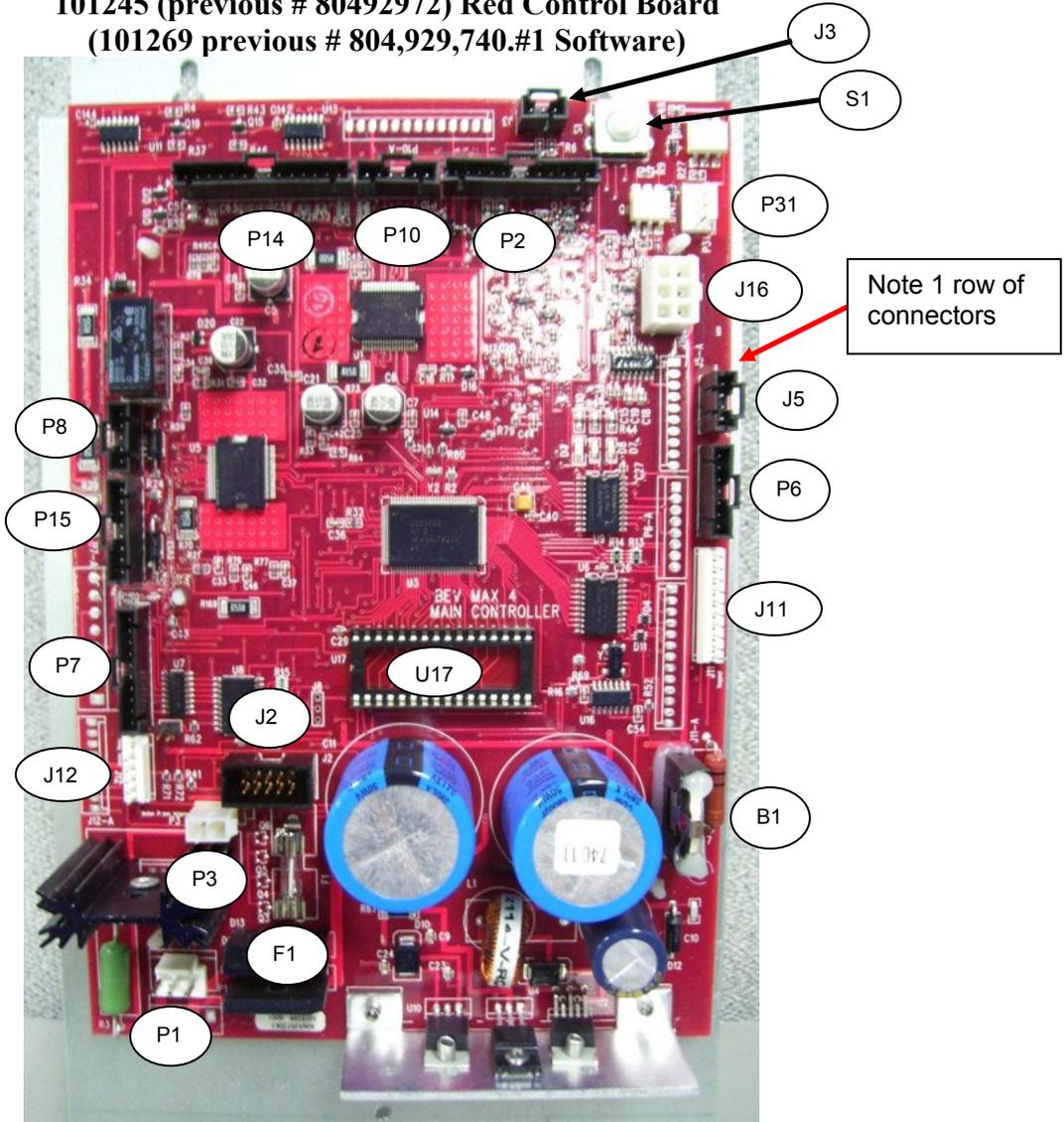
On/Off Main Power Switch

Main Power

Figure 10  
BevMax 3/2 AC Distribution Box.  
Located in the bottom of the service

11. Plug power supply cord in AC Distribution Box.
12. Toggle the main power switch to the on position.
13. The display will show the following: "No Model Set" Press the "A" key to scroll thru the model numbers, 3800-4, 5800-4, 3800-E, 5800-E4. With the display showing the correct model number of the Vender press the "\*" key to save the model number.
14. Enter the Menu by pressing the white service switch on the controller. **Listed are the menu items that must be programmed when a new controller is installed for the Vender to operate properly.**  
 In **Service Mode** – Set Shelf Location (G, M1, M2, D, E, E1, D2, E3, E4, E5, or E6 depending on individual Vender); Set Prices; & Clear Errors.  
 In **Test Mode** – List Errors; Test Vend; & Factory Diagnostics – Set Model Number, Extended Cup, Cup Sensor, Position Test, Product Sensors, Shelf Offset, & Hook Swipe.  
 To access the different programming modes:  
 Press Service Switch 1 time - "**Service Mode**"  
 Press Service Switch 2 times - "**Test Mode**"  
 Press Service Switch 3 times - "**Setup Mode-1**"  
 Press Service Switch 4 times - "**Setup Mode- 2**"  
 Press Service Switch 5 times - "**Satellite Mode**" (**Multimate**)
15. Refer to programming section for steps to set these modes to ensure proper Vender operation starting on page 10.

**101245 (previous # 80492972) Red Control Board  
(101269 previous # 804,929,740.#1 Software)**



**BEVMAX 4 CLASSIC 5800-4/3800-4 "101245 (previous # 804929720)" CONTROLLER CONNECTIONS**

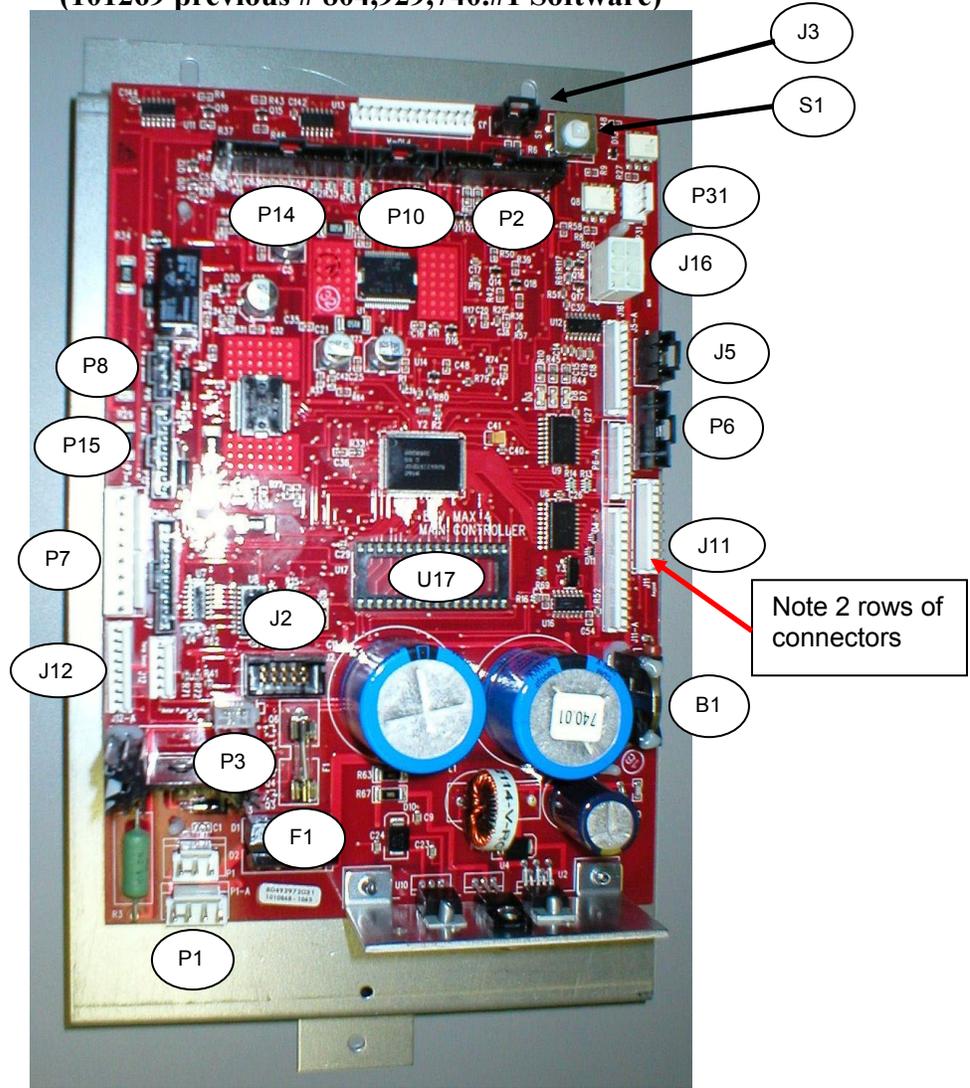
**NOTE: Has Single Row of Connectors on Board**

This was the 2<sup>nd</sup> revision and current version of the Red Board.

Figure 11

CONNECTION PC/Generic	DESCRIPTION	CONNECTION PC/Generic	DESCRIPTION
P1	Power from AC Distribution Box	F1	Fuse
P14	Cup Signals & Y Encoder	J5	DEX
P15	X Motor & Encoder	J11	Keypad
P2	Product Port	J12	Temp Sensor
P6	Display	J16	Multi Drop Bus
P7	Relays	U17	EPROM Socket
P8	Y & Cup Motors	P3	Motor Power Interrupt
P10	Door Switch	B1	Battery
J2	Supplier Programming Connector	S1	Service Switch
P31	Executive Interface	J3	Dongle Harness

**101245 (previous # 80492972) Red Control Board  
(101269 previous # 804,929,740.#1 Software)**



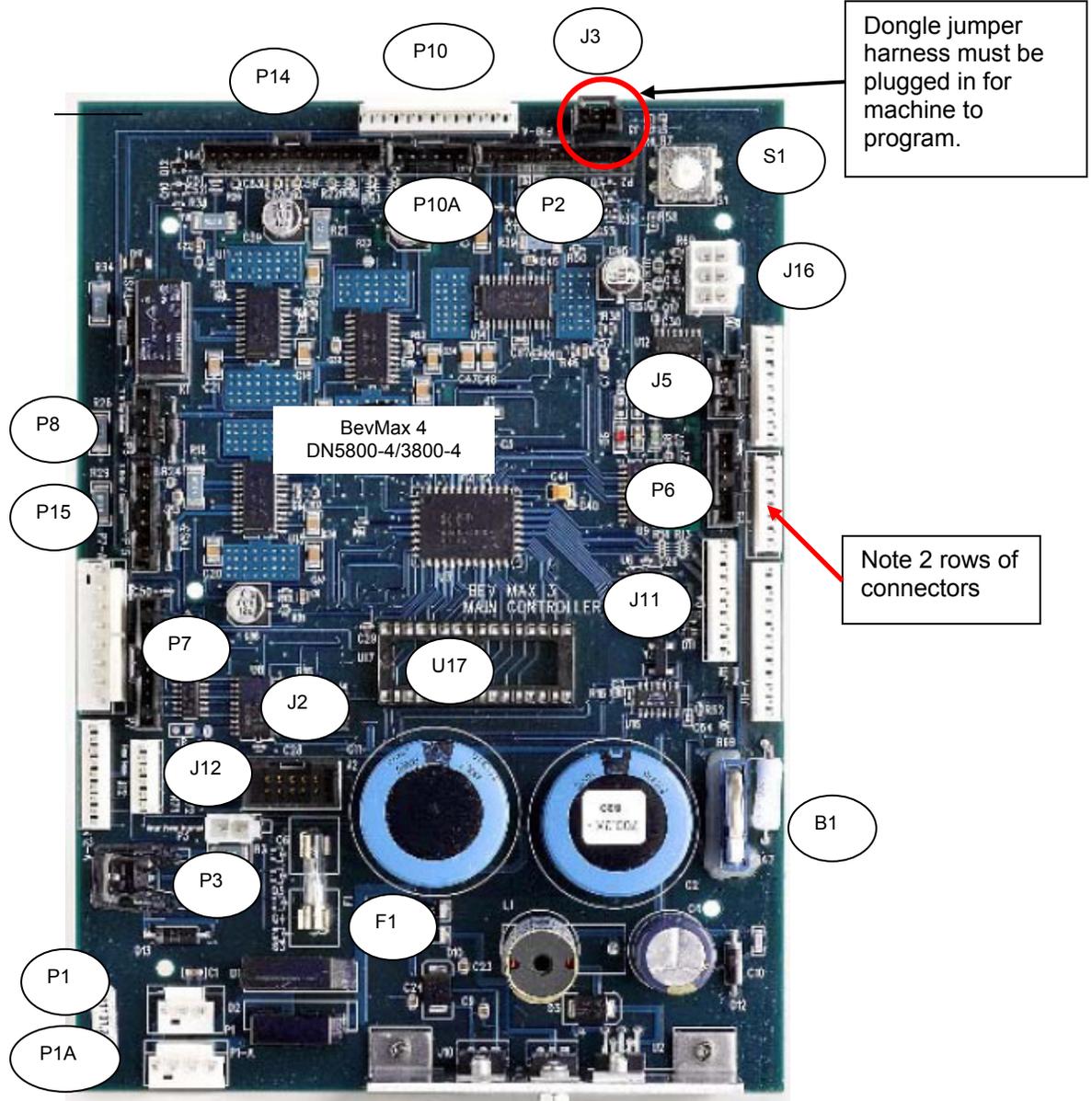
**BEVMAX 4 CLASSIC 5800-4/3800-4 "804929720" CONTROLLER CONNECTIONS**

NOTE: Has 2 Rows of Connectors on Board.  
This was the 1<sup>st</sup> version of the Red Board.

Figure 12

CONNECTION NOT USED	CONNECTION PC/GENERIC	DESCRIPTION	CONNECTION NOT USED	CONNECTION PC/GENERIC	DESCRIPTION
P1A	P1	Power from AC Distribution Box		F1	Fuse
	P14	Cup Signal & Y Encoder	J5A	J5	DEX
	P15	X Motor & Encoder	J11A	J11	Keypad
	P2	Product Port	J12A	J12	Temp Sensor
P6A	P6	Display		J16	Multi Drop Bus
P7A	P7	Relays		U17	EPROM Socket
	P8	Y & Cup Motors		P3	Door Switch XY
P10A	P10	Door Switch		B1	Battery
	J2	Supplier Programming Connector		S1	Service Switch
P31	Executive Interface			J3	Dongle Harness

101249 (previous # 80492870 Board Connections  
101267 (previous # 804927702.#1 Software



BEVMAX 4 CLASSIC 5800-4/3800-4 101249 (previous # 80492870) CONTROLLER CONNECTIONS  
Figure 13

CONNECTION NOT USED	CONNECTION PC/GENERIC	DESCRIPTION	CONNECTION NOT USED	CONNECTION PC/GENERIC	DESCRIPTION
P1A	P1	Power from AC Distribution Box		F1	Fuse
	P14	Cup Signal & Y Encoder	J5A	J5	DEX
	P15	X Motor & Encoder	J11A	J11	Keypad
	P2	Product Port	J12A	J12	Temp Sensor
P6A	P6	Display		J16	Multi Drop Bus
P7A	P7	Relays		U17	EPROM Socket
	P8	Y & Cup Motors		P3	Door Switch XY
P10A	P10	Door Switch		B1	Battery
	J2	Supplier Programming Connector		S1	Service Switch
				J3	Dongle Harness

**BevMax 4 5800-4/3800-4 Board Programming**

Service Mode		Test Mode		Setup Mode 1		Setup Mode 2		Satellite Mode (Multimate)	
A	Step through below	A	Step through below	A	Step through below	A	Step through below	A	Step through below
B	Cash Box	B	List Errors	B	Enter Message	B	STS Enabled/Disabled	B	(not used)
C	Sales	C	Light Timer	C	Clear Message	C	Custom STS	C	Set SAT Price (Satellite only)
D	Display Temperature	D	Enable Snack Menus	D	Enable/Disable \$	D	Default STS	D	Enable Combo Discount
E	Set Refrig. Temp.	E	Keypad Test	E	Set Happy Hour Time	E	Display STS	E	Number Combo Discount
F	Clear Totals	F	<b>*Factory Diagnostics</b>	F	Master Reset	F	Set No Vend Limit	F	(not used)
1	Number Sold	1	<b>Tube Fill/Dispense</b>	1	Machine Number	1	Multivend	1	Set Golden Eye Policy
2	Enable Item (Disable)	2	Daylight Savings	2	Set Happy Hour	2	Select Language	2	Set Golden Eye Selections
3	Sales by Column	3	Set Not Available	3	Set Not Available Time	3	Sold Out Enable	3	Check Motor Scan (press #1)
4	Escrow	4	Set Credit Timer	4	Consumer Overpay	4	Price Display	4	Set Credit Return Timeout
5	Force Vend	5	Door Open	5	<b>Date/Time</b>	5	Storage Temp Enable		
6	Set Temp. (F or C)	6	Power out	6	Total Sales	6	Interval Sales Reset		Use other Setup Modes for:
7	<b>Set Prices</b> (Regular & Secondary)	7	Test Health Guard	7	Health Control	7	Set Lights Off		Multivend: Setup Mode 2 key 1.
8	***Set Shelf Location (G, M1, M2, D, E, E1, D2)	8	Display Health Guard	8	Update Software	8	Double Talk		Set Not Available: Test Mode key 3.
9	Relay Toggle Test	9	<b>**Test Vend</b>	9	Set Lights Off Time	9	Set Storage Time		Set Not Available Time: Setup Mode 1 key 3.
0	Clear Errors	0	Show Checksum	0	Enter New Password	0	Set Storage Temp		Test Vend: Test Mode key 9.

**\*Factory Diagnostics – sub-menus**

- A **Build #####** = software revision build number
  - B **Reset Model #** = Set Model Number DN5800-4, DN3800-4, DN5800-E4, DN3800-E4
  - C **Vending- Vend Err“**
  - D **Recovery-** New Dance, the Cup makes left/right movement when cup does not detect product when dispensing
  - E **Extended Cup** = All BevMax 4 5800-4/3800-4 - Enabled
  - F **Delivery (Picker) Cup Sensor Option** = BevMax 4 5800-4/3800-4 with cup sensor set ON, BevMax 4 5800-4/3800-4 without cup sensor set OFF.
  - 1 **Position Test** = F – goes home; 0 – cycles plunger; \* - stops all motors; Shelf letter – moves cup to shelf selected; Column # - moves cup to column selected.
  - 2 **Port Test** = A – opens port; B – closes port; C – sensor test ON; D – sensor test OFF; E – cup LED’s on; F – port LED’s on; \* - All Stop.
  - 3 **Delivery (Picker) Cup Check** = “On (status of cup sensor):#”; “In (detects product in cup):#”; “Out (picker out switch status):#”; “Hm (picker home switch status):#”.
  - 4 **Repeat Vend -**
  - 5 **Vend Error Codes** = Factory Use Only / Do Not Use.
  - 6 **Product Sensors** = All BevMax 4 5800-4/3800-4 set ON
  - 7 **Factory Use Only / Do Not Use**
  - 8 **Shelf Offset** = BevMax 4 5800-4/3800-4 Shelf Location “D2” = 700
  - 9 (Not Used)
  - 0 **Hook Swipe X** = sets far right travel distance to Delivery door (BevMax 4 5800-4 factory default = 93871). **Software 701.31 Default DN5800 = 93000, DN3800 = 7000.**
- \*\*Test Vend** = Test Mode press “9” and “\*” (enter) to get to “Enter Selection”. Close the service door and choose desired selection to test vend.
- To set Timers for schools** = Set Date/Time / Set Not Available blocks / Set Not Available Times / Set Daylight Savings Time
- Cash and Sales Numbers** = Sales / Number Sold / Sales by Column / Total Sales / Cash Box
- \*\*\* Set Shelf Location** = Service Mode press “8” - BevMax 3 5800-4 = D2 – Domestic, E3 - Export 5 Shelf, E4 – Export 4 Shelf, E5 - , E6 - (default is 700)
- Set Hook Swipe X** = Test Mode press “F” and “\*” (enter) to get to “Factory Diagnostics”. Press “8” and “\*” (enter) to get to Hook Swipe #####.

# Key Programming Steps when replacing a controller.

(For a complete set of programming instructions please refer to the Technical Manual for the Vender.)

## Service Mode

### SET PRICES (Regular & Secondary) - Key "7"

To set the prices enter the "SERVICE MODE" by opening the service door and pressing the Service Button once. Allows the setting of regular and secondary prices for an individual item, a complete tray, or the entire machine. Factory setting is 665.30. Press the number "7" on the keypad and the display will show "SET PRICE". Press the "\*" key and the display will show "1 = Regular Pricing, 2 = Secondary Pricing". To set regular prices press number 1 key and display will show "Regular ###.###". To set price:

1. **All selections.** Press the keypad numbers of the price you wish to use. As numbers are entered the numbers will shift in from the right as they are entered. Note: The CLR key will remove the last # of the price. Once the desired price is showing on the display press the "\*" key and the display will show "PR###.### All Set", press "\*" to enter more prices or CLR to exit to SET PRICE.
2. **One tray.** Press the keypad numbers of the price you wish to use. As numbers are entered the numbers will shift in from the right as they are entered. Note: The CLR key will remove the last # of the price. Once the desired price is showing on the display press the tray letter desired for setting price. Press "\*" and display will show "PR ###.### B(tray letter) Row Set", press "\*" to set more prices or CLR to exit to SET PRICE.
3. **Single selection.** Press the keypad numbers of the price you wish to use. As numbers are entered the numbers will shift in from the right as they are entered. Note: The CLR key will remove the last # of the price. Once the desired price is showing on the display press the selection desired for setting price. Press "\*" and display will show "PR ###.### B1 Selection Set", press "\*" to set more prices or CLR to exit to SET PRICE.

The last price entered for a selection is the one that is used. For example, If one price on the A tray was set to \$1.50 using option 3 above and you wish to change the remaining selections on that tray using option 2, the pricing for the entire tray would take precedence. Conversely, if the price was set using option 2 first followed by the single selection using option 3, the pricing for the remainder of the shelf would remain and the new price for the single selection would change to the new value. Press the "CLR" key to return to "Set Prices". Press the "CLR" key to return to "SERVICE MODE" or press the "A" key to advance to the next menu item below.

### SET SHELF LOCATION - Key "8"

Allows the service technician to program the electronics to match the seven different settings available for the shelves. These settings are available to vend different package heights. The factory default setting is Shelf Setting D. Press the number "8" on the keypad and display will show "Set Shelf Location". Press the "\*" key and display will show current setting. To change the setting press one of the following: A = G setting, B = M1 setting, C = M2 setting, D = D setting, E = E setting, F = E1 setting, 1 = D2 setting, 2 = E3 setting, & 3 = E4 setting. D2 = BM3 5800-4 domestic setting. Note G, M1, & M2 settings are used in Venders prior to 0001-8487AE and D, E, & E1 settings are used in Venders 0001-8487AE & higher, D2 is setting used in all domestic BevMax 4 5800-4 Venders and E3 (5 shelf Export), E4 (4 shelf Export), E5 (5 shelf Export), and E6 (5 shelf Export) are manufactured on request in BevMax 4 5800-E4 and 3800-E4 Venders. Once the desired setting is showing on the display press the "\*" key to save the setting. Note: all shelf settings have to be physically set to match the programmed setting. You cannot set the physical shelf settings differently. Press the "CLR" key to return to "Set Shelf Location". Press the "CLR" key to return to "SERVICE MODE" or press the "A" key to advance to the next menu item below.

Domestic Set Shelf Location settings:

- BevMax 4 Venders should be programmed to "D2".
- BevMax 3/2 Venders serialized after 8487 (except run 8511) should be set to "D"
- BevMax 2 Venders prior to serial number 8487 should be set to "G" or "M1". Note: If a 20 oz bottle will fit in row A1 without hitting the belt, should be set to "G". If the 20 oz bottle hits the belt in A1, should be set to "M1".

Export Set Shelf Location settings:

- BevMax 4 Venders should be programmed to "D2" or "E3".
- BevMax 3/2 Venders serialized after 8487 (except run 8511) should be set to "E" or "E1".
- BevMax 2 Venders prior to serial number 8487 should be set to "G", "M1", or "M2". Note: If a 20 oz bottle will fit in row A1 without hitting the belt, should be set to "G". If the 20 oz bottle hits the belt in A1, should be set to "M1".

## **CLEAR ERRORS - Press key “0”**

Allows the service technician to clear errors recorded in the Venders data. Press the number “0” Key and the display will show “CLEAR ERRORS”, then press “\*” Key and the display will show “Clear All Errors? \* = Y CLR = N”. Press the “CLR” key to return to “Clear Errors”. Press “\*” Key to clear all errors or press the “CLR” key to return to “SERVICE MODE”.

## **Test Mode**

### **LIST ERRORS - Press key “B”**

Allows the service technician to view a list of all recorded errors. Press the letter “B” on the keypad and the display will show “LIST ERRORS”, then change to “NONE” if no errors exist or, if errors are present, one of the error prompts below will be displayed. If an error code is displayed, press the “\*” key to view the next error until “END LIST” is displayed. With “END LIST” showing on the display, press the “\*” key to clear errors and return to TEST MODE. If you wish to exit the list without clearing errors, simply push the “CLR” key and the display will return to LIST ERRORS. If the CLR key is pressed prior to reaching the end of the list, the display will jump to END LIST. Explanations for the error codes are listed below. Note: The prompts listed will only show on the display if an error has occurred.

**NONE** No errors have occurred.

#### **VEND MECH ERROR**

**HORIZ** – Horizontal Drive System problem.

**VERT** – Vertical Drive System problem.

**PICKI** – Picker not all the way in problem.

**PICKO** – Picker out switch error problem.

**PORT** – Port Drive System problem.

**VS** – Vend Sensor problem.

#### **VMC ERRORS**

**FRAM** – Memory module read/write error.

**RTC** – RTC read/write error, clock error.

**SF** – Decimal error.

**RCRC** – software not loaded properly.

**LB** – Low battery.

**CTRL PWR OUT** – Power lost.

#### **KEYPAD ERROR**

**KEYPAD** – Keypad not installed.

#### **COIN MECH ERROR**

**CM CC** – Coin Mech disconnected.

**CM TS** – Tube Sensor defective.

**CM IC** – No coin accepted for 96 hours (4 days).

**CM TJXX** – Tube jam.

**CM CRCH** – Check sum.

**CM EE** – Excessive escrow pressed (255 times between coin arrivals).

**CM NJ** – Coin jam.

**CM LA** – Low acceptance count.

**CM DIS** – Acceptor unplugged.

**CM ROUT** – Coin routing error.

#### **NOTE ACCEPTOR ERROR**

**NA BC** – Note Acceptor disconnected.

**NA BFUL** – Stacker full.

**NA BILL** – Defective motor.

**NA BJ** – Validator jammed.

**NA BRCH** – ROM checksum error.

**NA BOPN** – Stacker out of position.

**NA BS** – Sensor problem.

#### **CARD READER ERROR**

**CRC** – Card reader disconnected.

#### **REFRIG ERROR**

**SENS** – Temperature sensor problem.

**COLD** – Temperature too cold.

**HOT** – Temperature too hot.

**CMPR** – Compressor not cooling.

**HEALTH** – Health Guard error.

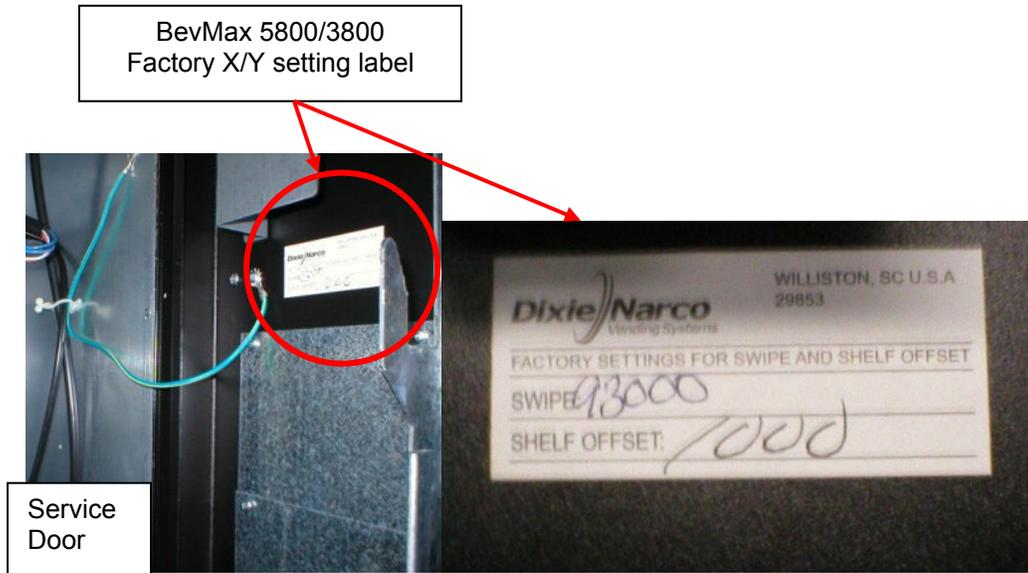
**END LIST** Indicates you have scrolled through the list of all present errors. Press the “CLR” key and display will change to “OK” and the display will change to “NONE”. Press the “CLR” key to return to “TEST MODE”, or the “A” key to proceed to “SELF TEST”

## **FACTORY DIAGNOSTICS - Press key “F”**

Allows the service technician to test the XY and Cup port operations. The following are available in the test menu: 1 = Position Test, 2 = Port Test, 3 = Delivery Cup Check, 4 = Repeat Vend, 5 = Vend Error Codes, 6 = Product Sensors, 7 = Turns off vend mech for software test, 8 = Adjust shelf offset, 9 = Not used at this time, 0 = Adjust Hook Swipe “X” Offset, A = Software Build Number, E = Extended Cup Setting, F = Cup Sensor Setting. To enter the available modes press the “F” Key on the keypad and display will show “FACTORY DIAGNOSTICS”. Press the “\*” key and the display will show “1 = Position Test, 2 = Port Test”. Press the key # or letter you wish to enter. Note: In early software revisions Port Test was 4, Repeat Test was 2, & Shelf Offset was 8. Below is current programming as of 04/15/14.

- **Key A = Build Number #####.**
- **Key B = Reset Model Number.** Press key B and the display will show “Reset Model? Continue? \* = Yes CLR = No”. Press the \* key and display will show “No Model Set Save? A = ^ (scroll up) \* = Yes CLR = No”. Press key A to scroll through available model numbers DN5800-4, DN3800-4, DN5800-E4 (export), DN3800-E4 (export). With Vender model displayed that you are installing board press the \* key to save. Press the “CLR” Key to return to “Factory Diagnostics”.
- **Key C= Vending – “VEND ERR”**
- **Key D= Recovery - New Dance on- Cup makes left/right movement when cup not detect product**
- **Key E = Extended Cup.** Press key E and the display will show “Extended Cup: Enabled”. Press the “\*” key to toggle the Extended Cup to the Disabled setting. Factory default setting is Enabled. Note Extended Cup Disabled setting is used in BevMax 2 Pepsi Venders prior to run #8625CF and Generic Venders prior to run #8600AG. Extended Cup Enabled is used in all BevMax 4 5800-4/3800-4 Venders.
- **Key F = Cup Sensor.** Press key F and the display will show “Cup Sensor Off”. Press the “\*” key to toggle the Extended Cup to the On setting. Cup Sensor On is used in all BevMax 4 5800-4.2800-4 Venders produced 3/26/09 and after.
- **Key 1 = Position Test.** Note: The left or top door switch (depending on the mounting bracket in use) must be pulled to the out position to perform this test. **Caution: XY needs to be in the home position before performing this test.** If you look at the control board the green, amber (yellow), and red lights should be on at this time. If not please check the following: Green light is for home switch on bottom of port cup, amber light is for home switch on left side of Y motor assembly, red light is for home switch for picker cup plunger. Press the number 1 key and the display will show a set of numbers (ie ##### # ##### #). To position test press the following:
  - a. Shelf letter (A,B,C,D,E) to travel to selected shelf.
  - b. Column number (1,2,3,4,5,6,7,8, & 9) to travel to selected column.
  - c. Key “0” to cycle cup plunger to hit column target.
  - d. Key “F” to return cup to home position.
  - e. Key “\*” is All Stop.
- **Key 2 = Port Test.**
- **Key 3 = Delivery Cup Check.**
- **Key 4 = Repeat Vend.**
- **Key 5 = Vend Error Codes – Caution: Factory Use Only Do Not Use. SHOULD BE OFF, (not shown in later boards).**
- **Key 6 = Product Sensors.** Press key 6 and the display will show “Product Sensors On”. Press the “\*” key to toggle the Product Sensors to the Off setting. Factory default setting is on. Note Product Sensors Off setting is used in BevMax 2 Pepsi Venders prior to run #8625CF and Generic Venders prior to run #8600AG. Product Sensors On is used in all BevMax 4 5800-4/3800-4 Venders.
- **Key 7 = Turns off vend mech for software test. Caution: Factory use only for peripheral testing, do not use.**
- **Key 8 = Adjust Shelf (Y) Offset (up and down).** Press the number 8 key and the display will show “Shelf Offset #####, 3310 counts = 1 inch”. To change the offset enter a new number and press the “\*” key to save and display will show “##### Offset recorded. Then press “CLR to go back to “Factory Diagnostics”. Go back to Position Test and check the plunger is contacting the targets correctly.
  - a. The default on BevMax 4 board is 4310 or 700; default for BevMax 3/2 (run #8487 & higher) is 2500; default for BevMax 2 (prior to run #8487) is 9200. Clear this by pressing the clear button until this number is gone. Then enter new number by pressing the keys on the keypad. Then press the “\*” to save. On BevMax 4’s start with 900 or check the inside of the service door for the original setting written on the Factory Settings XY Label. Remember the higher the number, the higher the cup goes up.
  - b. Test cup height in position test. If the cup hits too high or too low return to the “shelf offset” to adjust.
  - c. The higher the number the higher the cup will go, and the lower the number the lower the cup will go.

Note: If the machine has the factory X/Y setting label below on the service door, use it as your starting point when setting the shelf offset and swipe.



- **Key 9** = Not used at this time.
- **Key 0** = Adjust Hook Swipe "X" Offset (left to right). Press the number "0" key and the display will show "Hook Swipe ####, 3310 counts = 1 inch". For factory default setting see born on label settings listed on service door. To change the off set, pull the top left (white) door switch in the out position to power the XY motors. Press the "\*" key once will automatically run the Delivery Cup Assembly to the swipe position and allow specific Vender coordinates to be changed and saved in the control board memory. Use the numbers on the key pad to change the coordinates. Press the "\*" key to save the new setting and the Delivery Cup Assy. will automatically go to the "Home" position, then move back to the swipe position again. Press the "\*" key to send the Delivery Cup Assy. back to the "Home" position and the programming will return to "Factory Diagnostics". Press "CLR" key to return to "Test Mode". Then go to "Test Vend" and test for proper delivery of product in the Port Assy. of the Service Door.

Press the "CLR" key to return to "Factory Diagnostics". Press the "CLR" key to return to "TEST MODE" or press the "A" key to advance to the next menu item below.

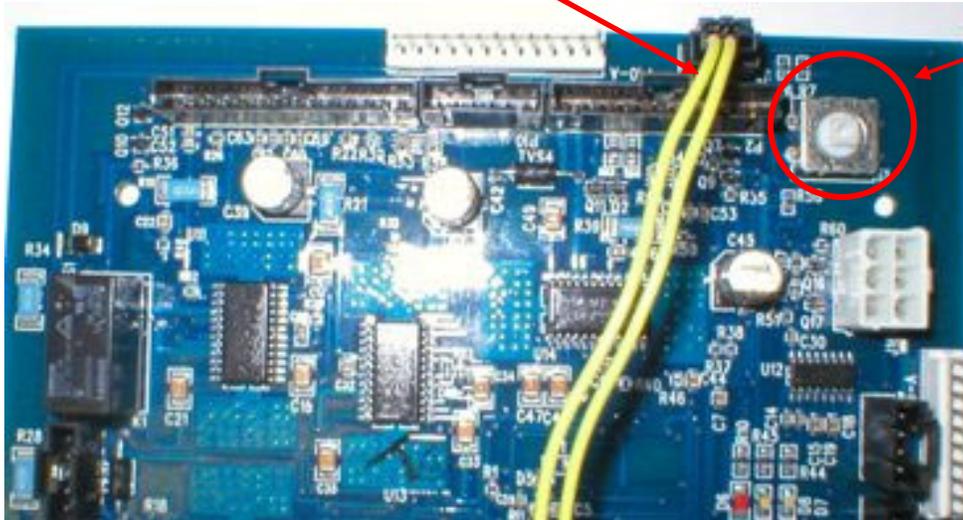
### TEST VEND - Press key "9"

Allows the service technician to test vend any item. The service door must be closed or open all the way so the discharge door does not hit the delivery cup during the test vend process. You will need to catch the product if you test with door open. Press the number "9" on the keypad and the display will read "TEST VEND". Pull the top or left door switch in service door area to the out position for this test to work. Press the "\*" key and the display will read "ENTER SELECTION", you must close and lock door at this point if you wish to test with door closed. Select the item/column to be tested by pressing the corresponding keys on the keypad (i.e. A6), then press the "\*" Key to start the test vend, and the corresponding vend cycle will occur. Press the "CLR" key to return to "Test Vend". Press the "CLR" key to return to "TEST MODE" or press the "A" key to advance to the next menu item below.

# BEVMAX 4 CLASSIC DN5800-4/3800-4 "700" or "720" CONTROLLERS

804,928,70x.x1 or 804,929.72x.x1  
Control Board colors may be Red, Green or Blue

Dongle harness must be installed in the J3 plug



White Service Switch

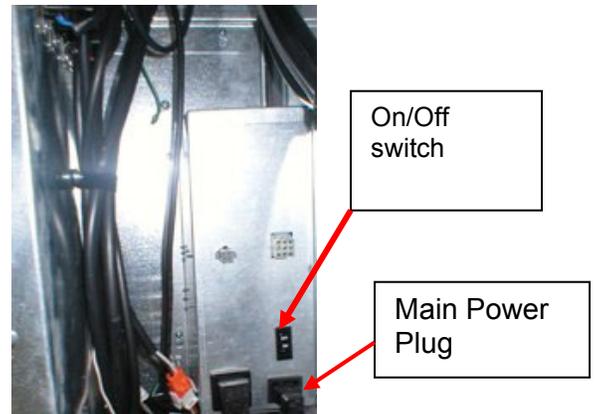
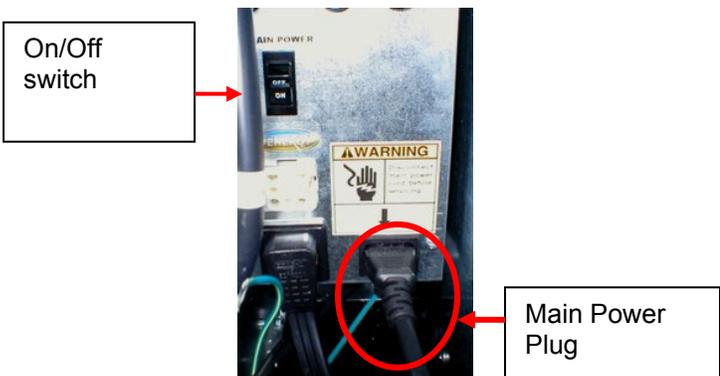
Dongle harness color may be Blue or Yellow.

If the Dongle is missing the display will scroll  
**"dongle missing ..."**

Power down the machine using the on/off toggle switch located in the AC Distribution Box. Insert the dongle jumper harness in J3 port, power up the machine and program.

BevMax 2/3  
AC Distribution Box

BevMax 4  
AC Distribution Box



## Key Menu Items when installing a new Control Board:

These are the main menu items that will have to be programmed when replacing the main control board.

### **SERVICE MODE: Press the service mode switch once**

Key - 7 – Set Prices

Key - 8 – Set Shelf Location

Key - 0 – Clear Errors

### **TEST MODE: Press the white service mode button twice**

Key - B- List Errors

Key - F- Factory Diagnostics

#### **FACTORY DIAGNOSTICS:**

Key - B – Set Model Number

Key - E – Extended Cup

Key - F – Cup Sensor

Key - 1 – Position Test

Key - 6 – Product Sensors

Key - 8 – Shelf Offset

Key - 0 – Hook Swipe X

Key - 9 - Test Vend

**Note: See Full Explanation of these menus on pages 9 through 13.**