CRANE. MERCHANDISING SYSTEMS

BevMAX Refresh 4   Pepsi - Generic

Programming Guide   **Models 5800-4 / 3800-4**
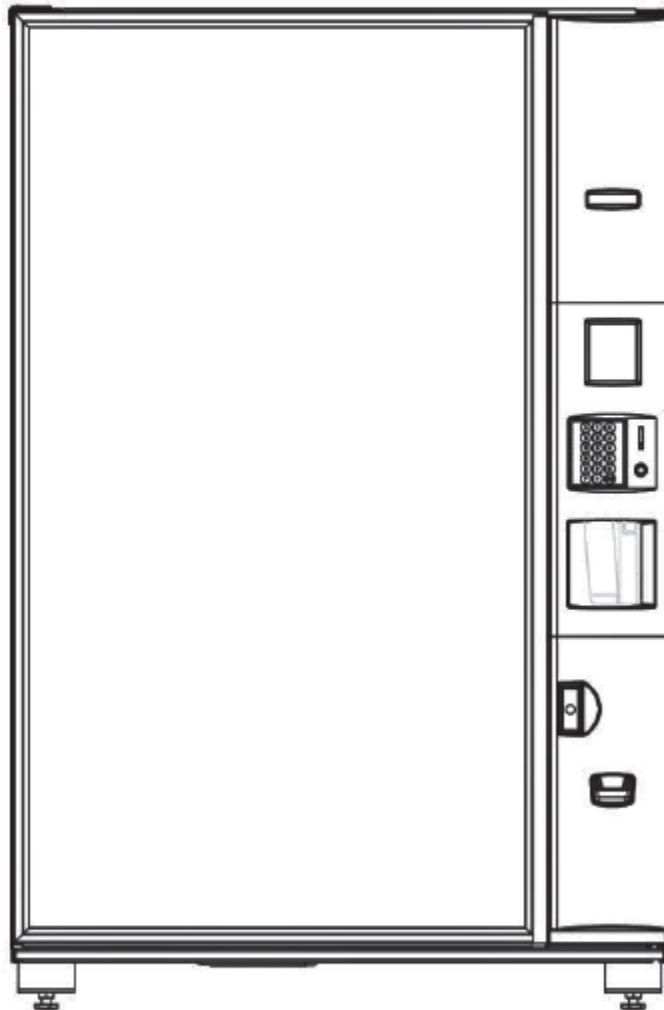
Pepsi/Generic
Programming
Guide

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CRANE

Cautions & Warnings

| | **High Voltage Warning / Electrical Warning Danger electricity, electric shock.** |

| | **A Generic Warning.** |

| | **Hazard Warning: Beware of moving machinery – Entanglement hazard. Keep hands, loose clothing, and long hair away from moving parts.** |

PROGRAMMING

GENERAL INFORMATION

In order to fully utilize the many features of your Vender it is important that you first understand the options available and procedures for programming the VMC (Vending Machine Controller).

All programming, testing, and service functions are accomplished by using the Keypad in an easy to follow, Display prompted format. In standalone operation there are four modes of operation for servicing, testing, and setting up your Vender. The modes of operation are accessed by, opening the Service Door, and pressing the Service Button on the VMC.

The Service Button will cycle through each of the four modes in turn: Service Mode, Test Mode, Setup Mode 1 and Setup Mode 2. In each of these modes, the "A" Key is used to scroll through the available options/settings within that mode/selection. (Note: In each of the mode selections, pressing the character Key next to the listed option will take you directly to that feature - see menu items chart on page 7.) The "❋" Key is used as an enter Key to select the currently Displayed item/feature, and the "CLR" Key is used as a Done or Exit Key. Closing the Service Door or activating the Service Door Switch will exit the function you are currently in and place the Vender back in service.

EXTERNAL DISPLAY ITEMS
(HOT KEYS)

Allows the service technician to view several items via the Display without opening the Vender. There are four options that can be viewed externally:

1. **Display Temperature in degrees "C" (Celsius)**. To view, press the "C" Key then press the "❋" Key. The Display will then show the Vender's inside temperature in degrees "C" (Celsius).
2. **Display Date/Time**. To view, press the "D" Key, then press the "❋" Key. The Display will then show the current date and time.
3. **Display Temperature in degrees "F" (Fahrenheit)**. To view, press the "F" Key, then press the "❋" Key. The Display will show the Vender's inside temperature in degrees "F" (Fahrenheit).
4. **Display Current Software Revision**. To view, press the "B" Key, then press the "❋" Key. The Display will then show the current software revision in the VMC.

NORMAL OPERATION MESSAGES

At initial power-up, the program will start and the Display will briefly show the VMC software version in use as Software ###.,r## CRC OK (i.e. 006r00), followed by Model 5800-4 (or the model that is set) followed by the default idle message, "**ENJOY A REFRESHING DRINK**". Note: With Service Door open if the VMC has any errors, the Display will show OPEN – Check errors will follow the Model number. If the following messages appear on the Display on power up with the door open an error or problem has been recognized in the Machine. "--.-C" or "--.-F" is a temperature sensor error check the Encapsulated Temperature Sensor. "Unavailable" is a Comms error issue with one or more of the following peripheral Cabinet Peripheral Control Boards; X Motor Board, Y Motor Board, Cup Motor Board, and/or Port Board.

INITIAL PROGRAMMING

DATE/TIME

To set Date/Time enter "SETUP MODE 1" by opening the Service Door and pressing the Service Button three (3) times. Press the number "5" Key and "DATE/TIME" will show on Display. Press the "❋" Key and Display will show the current year, month, date, and time setting currently in the system in following format: **2018** Apr 28 15:45 with the **Year** highlighted. Press the Keypad numbers to enter the current year. **Month** will then be highlighted. To change the month press the "A" Key to scroll forward through the months or the "B" Key to scroll backward through the months. With the correct month showing, press the "❋" Key to save. **Date** will then be highlighted. Press the Keypad numbers to enter the current date. **Hour** will then be highlighted. Note: Hours are shown in 24 hour format. Press the numbers to enter the current hour. **Minutes** will then be highlighted. Press the numbers to enter the current minutes. The Display will then change to show "OK? ❋=Y (Yes) CLR = N (No)". You must press "❋" Key to save the new date and time entered. Pressing "CLR" Key will revert to the previous date and time setting. Press the "CLR" Key to return to "SETUP MODE".

SET PRICES

To set the prices enter the "SERVICE MODE" by opening the Service Door and pressing the Service Button once. This mode allows the setting of Regular Prices and Secondary Prices for an individual item, a complete tray, or the entire machine. Factory setting is $99.95. Press the number "7" Key and the Display will show "SET PRICE". Press the "❋" Key and the Display will show "1 = Regular Pricing, A = More". Pressing "A" Key will bring up "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 "❋" Key to set more prices or "CLR" Key to return to SET PRICES. Press "CLR" Key again to return to SERVICE MODE.
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 "❋" Key and Display will show "PR $##.## B (tray letter) Row Set", press "❋" to set more prices or "CLR" Key to return to SET PRICES. Press "CLR" Key again to return to SERVICE MODE.
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 "❋" Key and Display will show "PR $##.## B1 Selection Set", press "❋" Key to set more prices or "CLR" Key to return to SET PRICES. Press "CLR" Key again to return to SERVICE MODE.

The last price entered for a selection is the price that will be 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 "SERVICE MODE".

SET NOT AVAILABLE TIMES

Password protected. Before entering or changing this setting you must enter the password if one has been assigned. This mode allows up to 4 different time periods that use of the Machine may be restricted. To Set Not Available Times enter "SETUP MODE 1" by opening the Service Door and pressing the Service Button 3 times. Press the number "3" Key; the Display will show "SET NOT AVAIL TIME". Press the "❋" Key and the Display will show "Select Block (1 – 4): Press number "1" Key to set Select Block 1 available settings, Key "2" for Select Block 2, etc… Once you select the Select Block # you wish to set the Display will show "Start MTWTFSS Stop 1 00:00 NNNNNNN 00:00" with the start time **hour** highlighted.

Press the numbers to enter the hour you wish to start Select Block (Note: hour setting is in 24 hour format.) and then the **minutes** will be highlighted. Press the number Keys to enter the minutes and then the first **day** of the week current setting will be highlighted. To change the setting to No press the "2" Key, to Yes press the "1" Key. This will change each setting left to right one day at a time until all are set then Stop time **hour** will be highlighted. Press the numbers to enter the hour you wish to stop Select Blocking and the **minutes** will be highlighted.

Press the numbers to set the minutes and the Display will show "Save? ❋ = Yes CLR = No" press the "❋" Key to save these settings or "CLR" Key not to save settings and Display will change to show which selections are assigned to this block. Press "❋" Key and Display will show "Enter Selection". Press the Keys of the selections you wish to disable followed by "❋" Key and Display will show "Disabled Continue? ❋ = Yes CLR = No". Note: If you press a tray letter (i.e. A) followed by the "❋" Key that entire tray will be set to be disabled. Once you have selected all settings and the Display shows "Disabled Continue? Or Enabled Continued? **Note: Display must show Display Enabled for the selection to shut down.** "❋ = Yes CLR = No" press the "CLR" to return to "SET NOT AVAIL TIME". Press "CLR" again to return to "SETUP MODE 1". Once completed go to Test Mode, Not Available Mode (Key 3) and turn on Not Available Mode.

New Electronics Platform BevMax 4 5800-4/3800-4 & 5800-E4/3800-E4 Board Programming Quick Reference

	Service Mode			Test Mode			Setup Mode 1			Setup Mode 2		
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		
C	Sales		C	Light Timer		C	Clear Message		C	Custom STS		
D	Display Temperature		D	Unavailable		D	Enable/Disable $		D	Default STS		
E	Set Refrig. Temp.		E	Keypad Test		E	Set Happy Hour Time		E	Display STS		
F	Clear Totals		F	***Factory Diagnostics**		F	Master Reset		F	Set No Vend Limit		
1	Number Sold		1	**Tube Fill/Dispense**		1	Machine Number		1	Multivend		
2	Enable Item (Disable)		2	Daylight Savings		2	Set Happy Hour		2	Select Language		
3	Sales by Column		3	Set Not Available		3	Set Not Available Time		3	Port Sensor Enable		
4	Escrow		4	Set Credit Timer		4	Consumer Overpay		4	Price Display		
5	Force Vend		5	Door Open		5	**Date/Time**		5	Storage Temp Enable		
6	Set Temp Units (F or C)		6	Power out		6	Total Sales		6	Interval Sales Reset		
7	**Set Prices** (Regular & Secondary)		7	Test Health Guard		7	Health Control		7	Set Lights Off		
8	*****Set Shelf Location** (D2, E3, E4, E5, E6, D8)		8	Display Health Guard		8	Update Software		8	Double Talk		
9	Relay Toggle Test		9	****Test Vend**		9	Set Lights Off Time		9	Set Storage Time		
0	Clear Errors		0	Show Checksum		0	Enter New Password		0	Set Storage Temp		

	*Factory Diagnostics – sub-menus
A	**Revision Numbers ####** = lists VMC, Cup, Environmental, Port, X Motor, & Y Motor Board software versions.
B	**Model #** = Set Model Number 5800-4, 3800-4, 5800-E4, 3800-E4
D	**Product Recovery** = Delivery Cup Dance movement.
F	Delivery (Picker) **Cup Sensor** Option = BevMax 4 5800-4 with cup sensor set ON, BevMax 4 5800-4 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; ☀ - All Stop.
3	**Delivery (Picker) Cup Test** = "On (status of cup sensor):#"; "In (detects product in cup):#"; "Out (picker out switch status):#"; "Hm (picker home switch status):#".
4	**Repeat Vend**
5	**Mixed Credit** = On / Off.
6	**Product Sensors** = All BevMax 4 5800-4 set ON
7	**Vend Mech** – On / Off
8	**Shelf Offset** = BevMax 4 5800-4 Shelf Location "D2" = 700
9	**Auto Calibrate Hook Offset** – On / Off
0	**Hook Swipe X** = sets far right travel distance to Delivery door (BevMax 4 5800-4 factory default = 93871). Note: Auto Cal Hook Offset has to be Off to be able to manually set Hook Swipe Offset.

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 4 5800-4 = D2 – Domestic, E3 - 5 Shelf, (default Shelf Offset is 700), see programming for more options.
Set Hook Swipe X = Test Mode press "F" and "☀" (enter) to get to "**Factory Diagnostics".** Press "9" turn Auto Cal Off. Go back to **Factory Diagnostics,** Press "0" and "☀" (enter) to get to Hook Swipe ##### (default is 93871).

SERVICE MODE MENU ITEMS

SERVICE MODE
Enter SERVICE MODE by opening the Service Door and pressing the Service Button once. The Display will read "**SERVICE MODE".** The following choices are now available:

NEXT ITEM - Press Key "A" to scroll through options.

CASH BOX - Press Key "B"
Shows the amount of change diverted to the cash box from the Coin Mechanism since the last CLEAR TOTALS or MASTER RESET. To view the cash box totals, press the letter "B" Key and the Display will show "CASH BOX", then press the "❋" Key and the Display will show Cash Box $#.##. Press the "CLR" Key to return to "CASH BOX". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

SALES Press Key "C"
Shows total sales since last CLEAR TOTALS or MASTER RESET. This total includes change not diverted to the cash box and still being held in Coin Mechanism escrow tubes. To view the total sales press the letter "C" Key and the Display will show "SALES", then press the "❋" Key and the Display will show Sales #.##. Press the "CLR" Key to return to "SALES".   Press the "CLR" Key to return to "SERVICE MODE".

DISPLAY TEMPERATURE - Press Key "D"
Shows the cabinet temperature in degrees Celsius or degrees Fahrenheit. Press the letter "D" Key. The Display will show "Display Temperature". Press the "❋" Key and the Display will show "Display: ON (or OFF) Press "❋" – turn OFF (or ON)". Press the ❋ Key to toggle on/off or press the "CLR" Key to not change settings. If "ON" is selected the Display will change to "Set Temperature Unit Degrees F (or C) showing how the current setting temperature will be displayed. Press "F" Key for Fahrenheit or "C" Key for Celsius. Press the "❋" Key to save and return to "Display Temperature."   Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

SET REFRIG TEMP – Press Key "E"
Allows the service technician to set the average product temperature (Set Point) for initial pull down and reload recovery. Press the letter "E" Key and Display will show "SET REFRIG TEMP". Press the "❋" Key and the Display will read "tt.tx" where x is F (Fahrenheit) or C (Celsius) and tt.t is the degrees. To change the Set Point press the Key numbers you wish the Set Point to be (temperature set must be between 32º and 75º F or 0º and 23.8º C). Press the "❋" Key to save the new Set Point temperature and return to "SET REFRIG TEMP". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

CLEAR TOTALS - Press Key "F"
Allows the service technician to clear totals in CASH BOX, SALES, NUMBER SOLD, DOOR OPENINGS, POWER OUTAGES, SALES BY COLUMN, and all other interval data. Press the letter "F" Key and the Display will show "CLEAR TOTALS". Press the "❋" Key, the Display will read "Clear Interval Data? ❋ = Yes CLR = No". Press the "CLR" Key to return to "Clear Totals" without resetting the totals. Press the selection you wish to use and Display will return to "Clear Totals". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

NUMBER SOLD - Press Key "1"

Shows the total number of items sold since the last CLEAR TOTALS or MASTER RESET. Press the number "1" Key and the Display will show "NUMBER SOLD". Press the "❋" Key and the Display will show "Number Sold #". Press the "CLR" Key to return to "Number Sold". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

ENABLE ITEM - Press Key "2"

Allows an individual selection, a complete tray, or the entire machine to be enabled or disabled. This is most commonly used when a selection is out of order and you are awaiting parts and do not want the customer to utilize that selection. Press the number "2" Key and the Display will show "ENABLE ITEM". Press the "❋" Key and the Display will read "Enter Selection". There are now three choices:

1. Pressing the "❋" Key will toggle between enabled and disabled for the entire machine, the Display will show the new state i.e. enabled or disabled and Display will show "Blocked (Unblocked) Continue? ❋ = Yes CLR = No".
2. Pressing a tray selection followed by "❋" will show the new state of that tray. For example, pressing "A❋" will show the new state for the A tray, the Display will show the new state i.e. enabled or disabled and Display will show "A Blocked (Unblocked) Continue? ❋ = Yes CLR = No".
3. Pressing an item selection will show the new state of that item; for example, pressing "A1" will show the new state of that item, the Display will show the new state i.e. enabled or disabled and Display will show "A1 Blocked (Unblocked) Continue? ❋ = Yes CLR = No".

If a selection has been disabled in this mode and the customer tries to purchase from the programmed selection(s), the Vender will Display "SELECT ANOTHER ITEM". Press the "CLR" Key to show all items that are blocked or the "❋" Key to disable more items. Press the "CLR" Key to return to "Enable Item". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

SALES BY COLUMN - Press Key "3"

Shows the total number sold from each selection since the last CLEAR TOTALS or MASTER RESET. Press the number "3" Key and the Display will show "SALES BY COLUMN". Press the "❋" Key and the Display will read "Select Column". Select the column to be checked (the total number sold from that selection will be on the right side of the Display and the item number will be on the left side of the Display). Press the "CLR" Key to return to "Sales by Column". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

ESCROW - Press Key "4"

Allows a bill to be returned if the change return lever is pressed before a selection is made. Factory setting is ESCROW OFF. Press the number "4" Key and the Display will read "ESCROW OFF" or "ESCROW ON", depending on the current state. Pressing the "❋" Key toggles the Vender from ESCROW OFF to ESCROW ON. Example: If "ESCROW OFF" is showing on the Display, pressing the "❋" Key will disable the escrow function and the Display will read ESCROW ON. This feature only affects those machines with a Bill Acceptor installed. Press the "CLR" Key to return to "Escrow". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

FORCE VEND - Press Key "5"

Forces the customer to make a vend by turning off the coin return lever function once the minimum vend price line has been met or exceeded. The coin return lever will not be turned off if there is not enough credit to vend the lowest priced item or if a vend failure has occurred. Factory setting is "FORCE OFF". Press the number "5" Key the Display will read "FORCE OFF" or "FORCE ON", depending on the current state. Pressing the "❋" Key will toggle the state. Press the "CLR" Key to return to "Force Vend". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

SET TEMP UNITS - Press Key "6"

Allows the service technician to change the scale of the temperature in the Vender to read in Fahrenheit or Celsius as needed. Press the number "6" Key and the Display will show "Set Temp Units". Press the "☀" Key and the Display will show "Set Temp Unit Degrees F (or C)". Press the "C" to Display in Celsius or "F" to Display in Fahrenheit. Press "☀" to save and Display will return to "Set Temp Units". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

SET PRICES – (Regular & Secondary) Press 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 Prices and Secondary Prices for an individual item, a complete tray, or the entire machine. Factory setting is $99.95. Press the number "7" Key and the Display will show "SET PRICE". Press the "☀" Key and the Display will show "1 = Regular Pricing, A = More". Pressing "A" Key will bring up "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 back 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 "☀" Key and the Display will show "1 = Regular Pricing, A = More". Pressing "A" Key will bring up "Secondary Pricing" "☀" = Yes "A" = More. Press "☀" Key to enter and Set Secondary Prices in the same manner as setting the Regular Prices. 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 D2. Press the number "8" Key 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 Keys: 1 = D2 setting, 2 = E3 setting, 3 = E4 setting, 4 = E5 setting, 5 = E6 setting, & 6 = D8 setting. D2 = BM4 5800-4 domestic setting. Note: D2 is setting used in most domestic BevMax 4 Venders and E3 (5 shelf), E4 (4 shelf), E5 (5 shelf), E6 (5 shelf), & D8 (5 shelf) initially developed for use in export and to vend special packages that require different shelf settings in BevMax 4 Venders. Once the desired setting is showing on the Display press the "☀" Key to save the setting. Note: all shelf support 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.

<u>RELAY TOGGLE</u> - Press Key "9"

Allows the service technician to test the vertical LED Lights, Evaporator Fan, and Compressor. Press the number "9" Key and the Display will show "Relay Toggle". Press the "❋" Key and Display will show "Light **A** – On or Off", "Fan **B** – On or Off", "Compressor **C** – On or Off". To toggle the state of a given component press the letter Key associated with it on the Display. **Caution**: Only toggle the Compressor On (or Off) once. Toggling the Compressor On/Off multiple times may result in damaging the Compressor. Press the "CLR" Key to return to "Relay Toggle". Press the "CLR" Key to return to "SERVICE MODE" or press the "A" Key to advance to the next menu item below.

<u>CLEAR ERRORS</u> - 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? ❋ = Yes CLR = No". 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 MENU ITEMS

Enter TEST MODE by opening the Service Door and pressing the Service Button twice. The Display will read" TEST MODE". The following choices are now available:

<u>NEXT ITEM</u> - Press Key "A" to scroll through options.

<u>LIST ERRORS</u> - Press Key "B"

Allows the service technician to view a list of all recorded errors. Press the letter "B" Key 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.

<u>NONE</u> - No errors have occurred.

<u>VEND MECH ERROR</u>
      HORIZ – Horizontal Drive System issue.
      VERT – Vertical Drive System issue.
      XHOME – X Motor Board has tried to home the mechanism but has failed.
      YHOME – Y Motor Board has tried to home the mechanism but has failed.
      PICKI – Picker In sensor error issue.
      PICKO – Picker Out sensor error issue.
      PICKRS – Picker Return Spring issue.
      PORT – Port Drive System issue.
      VS – Port Vend Sensor issue.
      XLOST – X Motor has not been Home since power on.
      YLOST – Y Motor has not been Home since power on.
      XSWITCH – X Board reporting X Home Switch stuck open or closed.
      YSWITCH – Y Board reporting Y Home Switch stuck open or closed.

<u>VMC ERRORS</u>
      FRAM – Memory module read/write error.
      RTC – RTC read/write error, clock error.

SF – Decimal error.
RCRC – software not loaded properly.
LB – Low Battery.
DS – Door Switch has been open for more than 1 hour.
PWR OUT – Power has been off since the last time errors were cleared.
CTRL FCTRY TST – factory test not completed (does not always cause an issue).

KEYPAD ERROR

KEYPAD – Keypad not installed/not recognized as connected.

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 (disconnected).
CM ROUT – Coin Routing error.

NOTE ACCEPTOR ERROR

NA BC – Note Acceptor disconnected.
NA BFUL – Stacker Full.
NA BILL – Defective Motor.
NA BJ – Validator Bill Jam.
NA BRCH – ROM Checksum error.
NA BOPN – Stacker out of position (Open).
NA BS – Bill Sensor problem.

CARD READER ERROR

CRC – Card Reader disconnected.

REFRIG ERROR

RFRG – Temp. Sensor issue.
COLD – Temperature Too Cold.
HOT – Temperature Too Hot.
CMPR – Compressor not cooling.
HEALTH – Health Guard error.

CABINET CONTROL ERRORS

CC POWER – Power Error.
C Test – Cup Board factory test not completed. (does not always cause an issue)
E Test – Environmental Board factory test not completed. (does not always cause an issue)
P Test – Port Board factory test not completed. (does not always cause an issue)
X Test – X Motor Board factory test not completed. (does not always cause an issue)
Y Test – Y Motor Board factory test not completed. (does not always cause an issue)
C Comms – Cup Board Communication issue.
E Comms – Environmental Board Communication issue.
P Comms – Port Board Communication issue.

X Comms – X Motor Board Communication issue.
Y Comms – Y Motor Board Communication issue.
C Reset – Cup Board reset unexpectedly.
E Reset – Environmental Board reset unexpectedly.
P Reset – Port Board reset unexpectedly.
X Reset – X Motor Board reset unexpectedly.
Y Reset – Y Motor Board reset unexpectedly.

<u>END LIST</u> "✳ = Clear Errors CLR = No". Indicates you have scrolled through the list of all present errors. Press the "✳" Key to clear all errors and Display will change to "None". Press the "CLR" Key to return to "List Errors" without removing the recorded errors. Press "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

<u>LIGHT TIMER</u> - Press Key "C"

Allows the service technician to set the 2 vertical LED lights to shut off for added energy savings after selected time recorded is met for no activity of Keypad or peripherals. Press the letter "C" Key and Display will show "Light Timer: ## hrs." where ## is the current hour time recorded for meeting no activity to turn the two vertical LED lights off. To change the hour(s) setting press the Keypad numbers that you wish to set for no activity to be met for the LED lights to shut off. Press the "✳" Key to save and the Display will return to "Light Timer". Press the "CLR" Key to return to "TEST MODE", or the "A" Key to proceed to next available mode.

<u>KEYPAD TEST</u> - Press Key "E"

Allows the service technician to test any or all Keypad Keys. Press the letter "E" Key and the Display will show "KEYPAD TEST". Press the "✳" Key and the Display will show "Keypad Test", then press each Key. Each Key pressed will show on the Display until the "CLR" Key is pressed. The Display will return to "Keypad Test". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

<u>FACTORY DIAGNOSTICS</u> - Press Key "F"

Allows the service technician to test the XY, Port and Cup operations. The following are available in the test menu: 1 = Position Test, 2 = Port Test, 3 = Delivery Cup Test, 4 = Repeat Vend, 5 = Mixed Credit On/Off, 6 = Product Sensors, 7 = Vend Mech On/Off for software testing, 8 = Shelf Offset, 9 = Auto Calibrate Hook Offset On/Off, 0 = Adjust Hook Swipe "X" Offset, A = Software Revision Numbers, B = Model Number, D = Product Recovery (Cup Dance) On/Off, F = Cup Sensor On/Off. To enter the available modes press the "F" Key and Display will show "FACTORY DIAGNOSTICS". Press the "✳" Key and the Display will show "1 = Position Test, 2 = Port Test". Press the Key number or letter you wish to enter.

- **Key A** = Revision Numbers ####. Press "A" Key and the Display will show software Revision Numbers of each Controller in the Machine. Where :#### identifies each Controller and software revision significant to Crane Merchandising Systems engineering. Examples: VMC Board revision – V:0000, Cup Board revision – C:0000, Environmental Board revision – E:0000, Port Board revision – P:0000, X Motor Board revision – X:0000, & Y Motor Board revision – Y:0000. Press the "CLR" Key to return to "Factory Diagnostics".
- **Key B** = Reset Model Number. Press "B" Key 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 "A" Key to scroll through available model numbers 5800-4, 3800-4, 5800-E4, 3800-E4. Note: E4 model designation is ONLY to be used for 4 Shelf model Venders. It cannot be used for any 5 Shelf model Venders domestic or export. With the Vender model Displayed that you are installing a new VMC press the "✳" Key to save. Press the "CLR" Key to return to "FACTORY DIAGNOSTICS".
- **Key C** = Not Used at this time.
- **Key D** = Product Recovery On/Off. Also referred to as Cup Dance. This is used if you are experiencing issues with packages not making it all the way in the Delivery Cup before it moves to the Port Assembly. Important:

this function cannot be used with a Delivery Cup Sleeve Deflector installed on the Delivery Cup.   Press "D" Key and the Display will show "Product Recovery On". Press the "❋" Key to toggle the status On or Off.

- **Key E** = Not Used at this time.
- **Key F** = Cup Sensor. Press Key "F" and the Display will show "Cup Sensor On/Off". Factory default setting is "On". Press the "❋" Key to toggle the Delivery Cup Sensor to the "Off" setting.
- **Key 1** = Position Test. Note: The left door switch must be activated to perform this test. **Caution: XY needs to be in the Home position before performing this test.** If you look at the VMC the D5 Red, D6 Yellow, and D7 Green lights should be on at this time. If not please check the following: VMC D4 Green light is for USB Power, D5 Red light is for Picker/Plunger Home Sensor, D6 Yellow light is for X Home Switch on top left side of Y Motor assembly, D7 Green light is for Y Home Sensor on bottom of Delivery Cup, D8 through D10 not used. Press the number "1" Key and the Display will show a set of numbers (i.e. ###### # ###### #). To position test press the following:
    a. Shelf letter (A,B,C,D,E) to travel to selected shelf. D7 Green light should go off once the Delivery Cup moves away from bottom Home position.
    b. Column number (1,2,3,4,5,6,7,8, & 9) to travel to selected column. D6 Yellow light should go off once the Delivery Cup moves away from left Home position.
    c. Key "0" to cycle Cup plunger to hit column target. D5 Red light should go off when the plunger cycles out and back on when it returns to home position.
    d. Key "F" to return the XY Assembly and Delivery Cup to the X & Y home positions.
    e. Key "❋" is All Stop.
- **Key 2** = Port Test. Note: The left door switch must be activated to perform this test. Press the number "2" Key and the Display will show four numbers "####". The 1st # is Port Open Sensor: "0" = Port Not Open or "1" = Port Opened. The 2$^{nd\,\#}$ is Port Closed Sensor: "0" = Port Not Closed or "1" = Port Closed. The 3rd # is Product Detection Sensor: "1" = Sensor On or "0" = Sensor Off. The 4th # is Product Detection Sensor: (only if Sensor is On) "0" = No Product in Port or "1" = Product in Port. When in Port Test the VMC D4 Green light is for USB Power, D5 Red light is for Port Sensor, D6 Yellow light is for Port Open Sensor, D7 Green light is for Port Closed Sensor, D8 through D10 not used. To test the Port press the following:
    a. Key "A" to Open Port. On VMC D6 Yellow light turns on, D7 Green light turns off.
    b. Key "B" to Close Port. On VMC D6 Yellow light turns off, D7 Green light turns on.
    c. Key "C" to turn Port Sensor On. When turned on and something is placed in the Port, VMC D5 Red light will turn on, when removed from Port, D5 Red light will turn off.
    d. Key "D" to turn Port Sensor Off.
    e. Key "E" not applicable.
    f. Key "F" not applicable.
    g. Key "❋" All Stop on any of these tests.
- **Key 3** = Delivery Cup Test. Press the number "3" Key and the Display will show "On:0 In:0 Out:0 Hm:1". **Note:** The left Door switch must be activated to perform this test. Press the "❋" Key and the Display will show "Cup Sensor On/Off On:0 In:0 Out:0 Hm:1". Press the "❋" Key to toggle the Delivery Cup Sensor to the "On" setting. With Cup Sensor "On", the Display will show "On:1 In:0 Out:0 Hm:1". In Cup Test the VMC D4 Green light is for USB Power, D5 Red light is for Picker/Plunger Home Sensor, D6 Yellow light is for Cup Sensor, D7 Green light is for Picker/Plunger Out Sensor, D8 through D10 not used. To perform Delivery Cup Checks press the following:
    a. "On:1" indicates the Delivery Cup Sensor if present is turned On. Press "❋" Key A "1" indicates it is On and a "0" indicates it is Off.
    b. "In:#" indicates whether the Delivery Cup Sensor detects product in the Delivery Cup. In order to be detected the product must be placed in the Cup after the Sensor was turned On. If a product is in the Cup when the Sensor is turned On, the Sensor will not detect it. "In:1" indicates product is detected and a "In:0" indicates it is not detected. When the Sensor is turned Off, "In:"0" will display regardless of whether product is in the Cup or not. The D6 Yellow light on the VMC also will be on when "In:1" is Displayed.

      c. "Out:#" indicates whether the Delivery Cup Picker Out Switch is closed. "Out:1" indicates that the Picker Out Switch is closed and a "Out:0" indicates it is opened (Plunger is at Home position). Please note that the switch is moved by the Cam, not the Plunger. Pulling the Plunger out by hand will not activate the Picker Out Switch. The Cam position activates the Picker Out Switch. The Cam position activates the Picker Out Switch. The Delivery Cup Motor must actually drive the Plunger out and it must be all the way out in order for the switch to detect it is out. Note: It is possible for the Picker Out Switch to be open and the plunger not home if something is blocking it from being home. (Example: if the return spring is broken.) Press the "0" Key to cycle the Plunger. When the Plunger is out, the VMC D7 Green light will flash and "Out:1" is displayed until Plunger returns to the Home position.

      d. "Hm:#" indicates whether the Delivery Cup Picker Home Switch is closed. "Hm:1" indicates that the Picker Home Switch is closed (Plunger is at the Home position) and "Hm:0" indicates it is opened (Plunger is stuck in out position). This switch is moved by the Plunger, pulling the Plunger out by hand will turn the Picker Home Switch off. The VMC D5 Red light will also be on when a "1" is displayed.

- **Key 4** = Repeat Vend. Press the number "4" Key and the Display will show "Current Vend: #########" and start auto test vending each column. Press the "CLR" Key to stop the test.
- **Key 5** = Mixed Credit On/Off". – When set to On, it allows Mixed Credit with both Cash and Cashless to purchase a product. When set to Off, it will only allow either Cash or Credit for payment for a purchase. Factory default is "Mixed Credit On".
- **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 On is used in all BevMax 4 5800-4/3800-4 Venders.
- **Key 7** = Vend Mech On/Off. Turns off Vend Mech for software testing. **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 the 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 Gate targets correctly.
- **Key 9** = Auto Calibrate Hook Swipe. Press "❋" Key to toggle "AutoCal Offset:On" and "AutoCal Offset:Off". When set to "AutoCal Offset:On" the VMC will automatically measure and set the Hook Swipe Offset during the first vend after each door closure and during the first vend after each power up thereafter. This measurement and setting of the Hook Offset is done during the normal vend process (after a package is in the Delivery Cup).
- **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". Note: To manually change the Hook Offset, Auto Calibrate Hook Offset must be turned "Off". The left Door switch must be activated 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 VMC memory. Use the number Keys to change the coordinates. Press the "❋" Key to save the new setting and the Delivery Cup Assembly will automatically go to the "Home" position, then move back to the Swipe position again. Press the "❋" Key to send the Delivery Cup 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 Assembly 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.

TUBE FILL/DISPENSE - Press Key "1"

Allows the service technician to inventory currency in the Coin Mechanism escrow tubes and "Teach" the VMC how many coins of each denomination are in that inventory. This allows for the maximum number of dollar bills

to be accepted prior to enabling the "USE EXACT CHANGE" function. This also provides for exact cash accountability in the audit functions. This function can also be used as a diagnostic tool to insure the Coin Mechanism is responding properly. Press the number "1" Key and the Display will read 'TUBEFILL/DISPENSE". Press the "✳" Key and the Display will show the lowest denomination accepted and the number of these coins inventoried. Press the letter "A" Key to scroll through the denominations available. With a given denomination Displayed, an inserted coin of this denomination via the coin chute will increase the inventory shown. Note: When you insert any denomination the Display will change to show the denomination inserted. To dispense: while in the tube fill/dispense mode go to the Coin Mechanism and press the Coin Mech dispense button(s) for the tube you wish to dispense from or press the "✳" Key and the denomination Displayed will be dispensed to the Coin Return Cup and the inventory will be decreased. Press the "✳" Key again to stop the coins from being dispensed. Press the "CLR" Key to return to "TUBE FILL/DISPENSE". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

DAYLIGHT SAVINGS TIME - Press Key "2"

Allows the service technician to enable Daylight Savings Time to be set as it applies to the selected Daylight Savings Rules Setting. Press the "✳" Key to show the current setting. Press the "A" Key to scroll through the different settings that are available. With the setting you wish to use showing on the Display, press the "✳" Key.

- OFF – No Daylight Savings Time.
- American Rules. If enabled, the VMC will set the clock back one hour on the first Sunday of November (2:00 AM), set the clock ahead one hour on the second Sunday in March (2:00 AM).
- European Rules. If enabled, the VMC will set the clock back one hour on the last Sunday of October (1:00 AM), set the clock ahead one hour on the last Sunday in March (1:00 AM).
- Australian Rules. If enabled, the VMC will set the clock back one hour on the last Sunday of March (1:00 AM), set the clock ahead one hour on the first Sunday in October (1:00 AM).

Press the "CLR" Key to return to "Daylight Savings Time". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

NOT AVAILABLE MODE - Press Key "3"

This setting works in conjunction with the "SET NOT AVAILABLE TIME" (option 3 in Setup Mode 1). This setting must be showing "Not Available # On" in order for the Not Available times to function as programmed. This mode can also be used to manually disable the times established in 'NOT AVAILABLE TIME" mode as long as the function is set to "Not Available # Off". Press the number "3" Key and the Display will show "NOT AVAILABLE MODE". Press the "✳" Key and Display will show "Select Block (1 – 4)". Press the # for the selection blocking group you wish to enter. Display will show "Not Available #: On (Off)", press "✳" turn Off (On) to change the status. Factory default for this setting is "Off". Pressing the "✳" Key will toggle the state and set the VMC to the new condition shown on the Display (pushing the "✳" Key with "On" on the Display will ALLOW the Not Available Mode to function as programmed). Press the "CLR" Key to return to "Not Available Mode". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

CREDIT TIMER MODE - Press Key "4"

Allows the service technician to set the Vender to cancel a credit or keep a credit showing on the Display after 5 minutes. Press the number "4" Key and the Display will show "CREDIT TIMER MODE". Press the "✳" Key and the Display will show "Credit Timer: Off (On)", press "✳" - turn On (Off). "Credit Timer: Off" will save a credit indefinitely. "Credit Timer On" will only save a credit for five minutes. Press the "CLR" Key to return to "CREDIT TIMER MODE". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

DOOR OPEN - Press Key "5"

Shows number of times the Service Door has been opened since last "CLEAR TOTALS" or "MASTER RESET". Press the number "5" Key and the following is an example of what will show on Display "Door opened 40 times 01:53 09 Jan 2020" will show on the Display. Door opened 40 times (number of times door has been opened) 01:53 (time shown in 24 hour format) on 09 (day) Jan (month) 2020 (year)" since the last Clear Totals or Master Reset. Press Key "A" to see the time of the 5 previous openings. Press the "CLR" Key to return to "DOOR OPEN". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

POWER OUT - Press Key "6"

Shows the number of times the Machine has lost power since last "CLEAR TOTALS" or "MASTER RESET". (This is a power outage for any reason including the Machine being unplugged or the Machine's master power switch being turned off). Press the number "6" Key and "POWER OUT" will show on the Display, press the "☀" Key and "Power Lost # Times" will show on the Display and the date and time of the last outage which is the number of times power has been lost to the VMC since the last "CLEAR TOTALS" or "MASTER RESET". Press Key "A" to see the time of the 5 previous outages. Press the "CLR" Key to return to "POWER OUT". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

TEST HEALTH GUARD - Press Key "7"

This setting is in place to test the functioning of the Health Guard system by simulating a Health Code Error. Once activated, any selections programmed in "HEALTH CONTROL MODE" in the Setup Mode 1 will be disabled even if the Machine temperature is within the safe Health Guard range. To test Health Guard, press the number "7" Key and the Display will show "TEST HEALTH GUARD". Push the "☀" Key and the Display will change to "Test Health Guard? ☀ = Yes CLR = No". Press "☀" and Display will show "Health Guard" then change to "Activated". The Display will then return to "TEST HEALTH GUARD". Within one minute of returning the Vender to service, items that were turned on in "HEALTH CONTROL MODE" setting in SETUP MODE 1 will be put Out of Service. Additionally, a "HEALTH" error will be displayed in 'LIST ERRORS". Errors must be cleared before programmed items can be returned to service. Press the "CLR" Key to return to "TEST HEALTH GUARD". Press the "CLR" Key to return to "TEST MODE" or press the "A" Key to advance to the next menu item below.

DISPLAY HEALTH GUARD - Press Key "8"

Allows the service technician to view the selections that are listed under the "HEALTH CONTROL MODE" in the SETUP MODE 1. Press the number "8" Key and the Display will read "DISPLAY HEALTH GUARD". Press the "☀" Key and the selection(s) that are listed under the health control will be Displayed or "NONE ASSIGNED" if no selections are listed. Press the "☀" Key to continue. Press the "CLR" Key to return to "DISPLAY HEALTH GUARD". 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 opened all the way so the Discharge Door does not hit the Delivery Port during the test vend process. **Caution**: You will need to catch the product if you test with the Service Door open. Press the number "9" Key and the Display will read "TEST VEND". The left Door switch must be activated for this test to work. Press the "☀" Key and the Display will read "ENTER SELECTION", you must close and lock the Service Door at this point if you wish to test with the Door closed. Select the item/column to be tested by pressing the corresponding Keys to test vend (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.

SHOW CHECKSUMS - Press Key "0"

This function is used to show the Checksum for the VMC and each of the 5 Cabinet Peripheral Control Boards (Cup Motor Board, Environmental Board, Port Board, X Motor Board, and Y Motor Board).

SETUP MODE 1 MENU ITEMS

Enter SETUP MODE 1 by opening Service Door and pressing the Service Button three times. The Display will read "SETUP MODE 1". NOTE: Several areas in SETUP MODE 1 are password protected. When entry into one of these areas is attempted the Display will read "Password" if a password has been entered in SETUP MODE 1. The password must be entered at this point before the service technician is allowed to proceed. The password need only be entered once during a service call provided the Service Door is not closed. If the Door is closed and then re-opened, the password must be entered again before accessing a protected area. The factory default password is 0000. If the password is set at "0000" you will not be required to enter a password to access password protected modes. The Display will show "✳'s" as the password is entered. When the last character is entered, the Display will read "OK", and then will shift into the requested area. If the Display reads "BAD" after the last character is entered this means the password was not accepted.

NEXT ITEM - Press Key "A" to scroll through options.

ENTER MESSAGE - Press Key "B"

(PASSWORD REQUIRED)
Allows the entry of a Custom Idle Message to replace the Default Idle Message. Press the letter "B" Key and "ENTER MESSAGE" will show on the Display. Press the "✳" Key and "Edit Idle Message Enjoy a Refreshing Drink" will show on Display with the first character on the left highlighted. The program is now ready to accept the new message. The "A" Key will move forward through the alphabet, numbers, space, punctuation marks, $, AND an "L". The "B" Key will move backwards through the same list. When the desired character is Displayed, press the "✳" Key. That character is now entered and the Display moves to the right one space as the new message is built. Press "✳" with the curser showing "{" and the curser will back up one space. Press the "✳" Key with the curser showing "|" will clear all characters to the right of the curser. When the new message is complete, press the "CLR" Key and return to "Enter Message". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below.

CLEAR MESSAGE - Press Key "C"

(PASSWORD REQUIRED)
Allows the service technician to clear any Custom Idle Message and return to the Default Idle Message. Press the letter "C" Key and the Display will show "CLEAR MESSAGE". Press the "✳" Key and the Display will read "Clear Message? ✳ = Yes CLR = No", pressing the "✳" Key will set Idle Message back to factory default and then will return to "Clear Message". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below.

ENABLE/DISABLE $ - Press Key "D"

(PASSWORD REQUIRED)
Allows the service technician to remove the dollar sign ($) from the Display when a product price, customer credit, or change due is displayed. When enabled, the dollar sign will appear in the Display; when disabled it will not appear. Press the letter "D" Key; the Display will show "ENABLE/DISABLE $". Press the "✳" Key and Display will show "Dollar Sign: On (Off)", press "✳" - turn Off (On). Press the "✳" Key to toggle. Press the "CLR" Key to return to "Enable/Disable $". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below.

SET HAPPY HOUR TIME - Press Key "E"

(PASSWORD REQUIRED)

Allows the service technician to set times and days for Happy Hour operation. Press the letter "E" Key and "SET HAPPY HOUR TIME" will show on the Display. Press the "❋" Key again and Happy Hour start time, end time, and days of the week can now be programmed into the system. All times must be entered in military time format (24 hour clock). Setting Happy Hour is covered in detail in the "SET NOT AVAIL TIME" in the INITIAL PROGRAMMING section of this manual. Press the "CLR" Key to return to "SETUP MODE 1"

MASTER RESET - Press Key "F"

(PASSWORD REQUIRED)

Allows the service technician to restore factory defaults to the Machine or reset the VMC's memory after installing new software. NOTE: Since this feature resets Interval Sales Data, care should be taken prior to using. Press the letter "F" Key and "MASTER RESET" will show on the Display. Press the "❋" Key and the Display will read "Master Reset Continue? ❋ = Yes CLR = No". To reset press the "❋" Key and Display will show "Resetting" then show software version and then the idle message will scroll. Press the "CLR" Key to return to "MASTER RESET". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below. Please see the table following for programming options effected by "MASTER RESET". NOTE: A Power Out error message will be generated when a Master Reset is performed. The table outlines the results of using "MASTER RESET".

CASH BOX	$0.00	STS ENABLE	OFF
SALES	$0.00	CUSTOM STS	CLEARED
NUMBER SOLD	0	NOVEND LIMIT	0
SALES PER COLUMN	0	SOLD OUT	ENABLED
ESCROW	OFF	PRICE DISPLAY	ON
FORCE	OFF	SHELF CONFIG	D2
SET REGULAR PRICES	99.95	INTERVAL CLEARING	OFF
SET HAPPY HOUR PRICES	99.95	DISPLAY TEMPERATURE	ON
LIST ERRORS	Pwr Out	TEMPERATURE UNITS	DEG F
TUBE FILL/DISPENSE	CLEARED	SERIAL #	UNCHANGED
DAYLIGHT SAVINGS	OFF	LOCATION ID	UNCHANGED
NOT AVAILABLE	OFF	CR ASSET #	UNCHANGED
CREDIT TIMER	OFF	NA ASSET #	UNCHANGED
DOOR OPEN	0	CM ASSET #	UNCHANGED
POWER OUT	1	SOLD OUT TIMES	CLEARED
IDLE MESSAGE	RESET	DEX PASSWORD	000000
ENABLE DOLLAR SIGN	ON	DOOR OPEN TIME	CLEARED
MACHINE NUMBER	UNCHANGED	POWER OUT TIME	CURRENT TIME
SET HAPPY HOUR	CLEARED	STORAGE TEMP	57° F (13.8° C)
NOT AVAILABLE TIME	CLEARED	FEFRIG TEMP	37° F (2.7° C)
HEALTH CONTROL	OFF	CONSUMER OVERPAY	OFF
PASSWORD	0000		

MACHINE NUMBER - Press Key "1"

(PASSWORD REQUIRED)

Allows assigning a user code to the Machine for audit and/or inventory control requirements. Press the number "1" Key and "MACHINE NUMBER" will show across the Display and then change to the code currently assigned to the Machine (i.e. ID 1). Press the "❋" Key to keep the current code. To change just enter new code (letter/numeric field, 20 characters maximum/1 character minimum) and then press the "❋" Key to save, Display will read "OK" momentarily and will return to "SETUP MODE".

SET HAPPY HOUR - Press Key "2"

(PASSWORD REQUIRED)
Allows the service technician to turn Happy Hour ON or OFF. Press the number "2" Key and "SET HAPPY HOUR" will show across the Display. Press the "❋" Key and Display will show "Happy Hour: Off (On)". Press "❋" - turn On (Off). Press the "CLR" Key to return to "Set Happy Hour". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below.

SET NOT AVAIL TIME - Press Key "3"
(PASSWORD REQUIRED)
Password protected. Before entering or changing this setting you must enter the password if one has been assigned. This mode allows up to 4 different time periods that use of the Machine may be restricted. Refer to Initial Set Up section Set Not Available Times on page 5.

CONSUMER OVERPAY - Press Key "4"

(PASSWORD REQUIRED)
Allows the service technician to set the Machine up to allow Consumer Overpay to vend. This will allow a vend if there is not enough change in the Coin Mech to be paid back to the consumer. Factory default setting is "Off". Press the number "4" Key and Display will show "CONSUMER OVERPAY". Press "❋" Key and Display will show "CONSUMER OVERPAY OFF (ON). Press "❋"current state "ON (OFF)" will show on the Display. Press the "❋" Key to toggle setting and press "CLR" to return to "Consumer Overpay". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below.

DATE/TIME - Press Key "5"
Shows the year, month, date, and time setting currently in the system in following format: 2005 Apr 28 15:45. Setting the day, date, and time is covered in the INITIAL PROGRAMMING section of this manual on page 5. Press the "CLR" Key to return to "SETUP MODE 1".

TOTAL SALES - Press Key "6"

Shows Total Sales since Machine manufacture. This total is not cleared by CLEAR TOTALS. Press the number "6" Key, the Display will show "TOTAL SALES" press the "❋" Key and "Sales: ### and Vend ### totals will show on Display. Press the "CLR" Key to return to "Total Sales". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below.

HEALTH CONTROL - Press Key "7"

Allows the service technician to select items to ENABLE HEALTH CONTROL. When enabled, if the temperature in the Vender does not reach 41º F (5º C) within 30 minutes after the Service Door is closed, a "HEALTH TIME" error will occur and lockout the enabled selection(s) from vending until after the error is cleared. Also, if the temperature in the Vender goes above 41º F (5º C) for more than 15 minutes after the initial cool down period, a "HEALTH CONTROL" error will occur and lockout the enabled selection(s) from vending until the error is cleared. Press the number "7" Key and the Display will show "HEALTH CONTROL". Press the "❋" Key and the Display will show 'ENTER SELECTION". To set:

1. **All selections.** Press the "❋" Key and Display will show "Disabled (Enabled) Continue? ❋ = Yes CLR = No". When enabled all selections in the Vender will now be set for Health Control. Press "CLR" to show all selections assigned. Then press "CLR" and the Display will change to "ENTER SELECTION". Press "CLR" to return to "HEALTH CONTROL".

2. **One tray.** Pressing the letter of the Shelf followed by the "☀" Key and Display will show "Disabled (Enabled) Continue? ☀ = Yes CLR = No". When enabled all selections on that Shelf will now be set for Health Control. For example, to control the "A" Shelf push Key "A" followed by "☀" Key. The Display will change to "ENTER SELECTION". Press "CLR" to Display all selections assigned then press "CLR" to return to "HEALTH CONTROL".

3. **Single selection.** Pressing the desired selection followed by the "☀" Key and Display will show "Disabled (Enabled) Continue? ☀ = Yes CLR = No". When enabled desired selection will now be set for Health Control. For example, to control the A1 push Keys "A1" followed by "☀" Key. The Display will show "Disabled (Enabled)" etc… Press "CLR" to Display all selections assigned then press "CLR" to return to "HEALTH CONTROL".

Priority will be given to the higher ranked method. If one selection on the "A" Shelf was set to ENABLE using option 3 above and you wish to change the remaining selections on that Shelf using option 2, the Setting for the entire Shelf would take precedence. Conversely, if the Shelf was set using option 2 first followed by the single selection using option 3, the setting for the remainder of the Shelf would remain and the new price for the single selection would change to the new value. Press "CLR" to return to "SETUP MODE".

SOFTWARE UPDATE - Press Key "8"

(PASSWORD REQUIRED)
This function displays the progress of pending software updates from the internal VMC memory to the Cabinet Peripheral Control Boards. It can also be used to manually start an update to a particular Cabinet Control Board.

New software automatically loads on power up.

Note: Updating the VMC is done with a USB Flash Drive. There is no menu to update the VMC Board software. Refer to Operation Guide for VMC Software Installation Procedure.

SET LIGHTS OFF TIME - Press Key "9"

Allows the service technician to set times and days for Light operation of the Vertical Lights. Press the number "9" Key and "SET LIGHTS OFF TIME" will show across the Display. Lights Off start time, end time, and days of the week can now be programmed into the system. All times must be entered in military time format (24 hour clock). Set Lights Off Time can be set the same way as Set Not Available Time in the Initial Programming section of the manual.

ENTER NEW PASSWORD - Press Key "0"

(PASSWORD REQUIRED)
Allows the service technician to enter a 4 number personalized password. IF YOU DECIDE TO CHANGE FROM THE DEFAULT PASSWORD, PLEASE ENTER THE NEW FOUR NUMBER PASSWORD SLOWLY AND CAREFULLY!!! Press the number "0" Key and "ENTER PASSWORD" will show across the Display. Press the "☀" Key and the Display will read "ENTER PASSWORD". Enter the new password, the Display will show "☀" for each character Key pressed. Once new password is complete press "☀" Key to save. Display will show "Verify new password", press new password, then the "☀" Key. Display will show "Password recorded Continue? ☀ = Yes CLR = No". Press the "CLR" Key to return to "ENTER NEW PASSWORD". Press the "CLR" Key to return to "SETUP MODE 1" or press the "A" Key to advance to the next menu item below.

SETUP MODE 2 MENU ITEMS

Enter SETUP MODE 2 by opening the main door and pushing the Service Button four times. The Display will read "SETUP MODE 2"

NEXT ITEM - Press Key "A" to scroll through options.

STS ENABLE/DISABLE - Press Key "B"

Turns Space-to-Sales Mode On and Off. When On, Space-to-Sales vends are performed according to the configurations defined using "DEFAULT STS" and/or "CUSTOM STS". Press the "B" Key. The Display will show the current state of the Space to Sales vend mode as "STS ON" or "STS OFF". Press the "❋" Key, there are now two choices:

1. Press the "CLR" Key to leave the Space to Sales vend mode unchanged and return to "SETUP MODE 2" or
2. Press the "❋" Key to toggle the state "On or Off". The Display will show a new message indicating the updated state.

Press the "CLR" Key to return to "STS ENABLE". Press the "CLR" Key to return to "SETUP MODE 2" or press the "A" Key to advance to the next menu item below.

CUSTOM STS - Press Key "C"

Configures the Vender Space to Sales according to what is set. Press the "C" Key. The Display will show "Custom STS". Press the "❋" Key and Display will show "Enter Start Location".

1. Pressing the "❋" Key will set STS to a one to one configuration such that each selection is mapped only to its corresponding column. **Note: This setting overrides any previously defined Space to Sales blocks**.
2. Pressing a Tray selection followed by "❋" will configure an entire Tray as a single Space to Sales block. Example: selections A1 through A9 vend from columns A1 through A9 sequentially.
3. Pressing an item selection (A1) will specify the first product of the Space to Sales block. After the first item is programmed, the Display will change to "Enter end location". Press the item selection corresponding to the last item in the block. This option may transcend more than one shelf, i.e. A1 to B9.

In all of the above options, after a selection is made, Display will show "OK? ❋ = Yes CLR = No". You must press "❋" at this prompt to save your setting.   Press "CLR" at any time to return to SETUP MODE 2.

DEFAULT STS - Press Key "D"

Configures the Vender Space to Sales to the preset mappings. Press "D" Key and the Display will show "DEFAULT STS". Press the "❋" Key to configure Space to Sales in preset blocks of three (A1-A3, A4-A6, A7-A9, B1-B3…). Display will show "Set Default STS? ❋ = Yes CLR = No". You must press "❋" at this prompt to accept Default STS. Press "CLR" at any time to return to SETUP MODE 2.

DISPLAY STS - Press Key "E"

Allows verification of the Vender Space to Sales settings for an individual selection block. Press the "E" Key. The Display will show "DISPLAY STS". Press the "❋" Key and the Display will change to "ENTER SELECTION". Enter any selection item, press the "❋" Key, and the Display will read "##-## ## Continue? ❋ = Yes CLR = No". The first ## indicates the first column in the selection's block. The second ## indicates the last column in the selection's block. The last ## indicates the column that the next vend will come from in this STS block. For example, entering "A2" might Display "A1-A3 A1, indicating that selection A2 is part of the block that spans between A1 and A3 and that A1 selection is next in line to be vended. Press "CLR" at any time to return to SETUP MODE 2.

SET NOVEND LIMIT – Press Key "F"

The NOVEND limit specifies the number of times a location can be vended empty before it is blocked as "Sold Out". A column is only marked as "Sold Out" if product is not detected by both the Cup and Port product sensors and there is no other vend error. If there are other vend errors, then the location will not be marked as "Sold Out". If the Space to Sales is enabled, the product column will be removed from the Space to Sales rotation and the VMC will attempt to vend from the next column in the Space to Sales block. If the Vender is unable to vend any products from a Space to Sales block, the customer's credit will be returned and the entire block will be marked as "SOLD OUT". Press the "F" Key. The Display will show "SET NOVEND LIMIT". Press the "❋" Key and the Display will show "NOVEND LIMIT #". The value # is the current vend limit which is applied to each selection. When # is 0, no vend limits are enforced. Enter the desired vend limit and press the "❋" Key to accept this value or press the "CLR" Key to cancel changes and return to SETUP MODE 2.

**MULTIVEND - Press Key "1"

This function, when turned on, allows credit to be retained after a vend so the customer can vend from another Selection. (i.e..50 vend price, put in $1.00, push a Selection Keys and product vends, .50 still shows on the Display, push a second Selection Keys and product vends). Credit is cancelled after 5 minutes of inactivity. Credit is limited to 3 times the maximum Product Price in the Vender. If a customer wants their credit (money) back, the Coin Return Lever must be pressed. To show the current "MULTIVEND" condition, press the "❋" Key and the Display will show the current setting. Press the "❋" Key to toggle "MULTIVEND" On and Off.

SET LANGUAGE - Press Key "2"

This function is used to set the language that will be used for sales mode messages. To Display the current language selected, press the "❋" Key. To change the language selected, with the current setting displayed, press the "❋" Key to scroll through the available languages in the menu (English, French, German, Spanish, Italian, Russian, Indonesian, Turkish, Czech, Slovak, & Portuguese). Once the desired language is shown on the Display, press the "❋" Key to save and return to Set Language.

PORT SENSOR ENABLED/DISABLED - Press Key "3"

Controls sold out detection by the Port Sensor. When "On", the Port Board will use the Port Sensor to detect product in the Port and will use the Port Sensor to help determine if a location is sold out if product is not delivered to the Port. When "Off" the Port Board will not use the Port Sensor to detect product in the Port and will always assume product is delivered to the Port by the Vend Mechanism. Press the number "3" Key. The Display will show "PORT SENSOR ENABLED (DISABLED)". Press the "❋" Key and Display will show "Use Port Sensor: Off (On)", press "❋" - turn On (Off). Press "CLR" to exit without making changes and return to "PORT SENSOR ENABLE/DISABLE". Press "CLR" to return to "SETUP MODE 2".

PRICE DISPLAY - Key "4"

This setting controls whether the Vender Displays a Price when a selection is made. Note: Machines with a Card Reader capable of displaying selection prices may be configured to prevent displaying prices on two separate Displays. Press the number "4" Key and Display will show "PRICE DISPLAY". Press the "❋" Key and Display will show "Price Display: On (Off)", press "❋" to turn Off (On). Press the "❋" Key to toggle or press the "CLR" Key to exit without making changes and return to "PRICE DISPLAY". Press "CLR" to return to "SETUP MODE 2".

STORAGE TEMP ENABLE/DISABLE – Press Key "5"
This function is used to Display the current state of "STORAGE TEMP ENABLE/DISABLE". Press "❋" Key and Display will show "Storage Temp On (Off)", press "❋" to turn Off (On). Press the "❋" Key to toggle or press the "CLR" Key to exit without making changes and return to "STORAGE TEMP ENABLE/DISABLE". Press "CLR" to return to "SETUP MODE 2".

INTERVAL CLEARING – Press Key "6"
This function is used to indicate the state of the Interval Clearing setting. Press the "6" Key and "INTERVAL CLEARING" will show on Display. Press the "❋" Key and Display will show "Interval Clear: Off (On)", press ❋ to turn On (Off). When turned "ON", the Interval (resettable) Data will automatically be cleared upon successful completion of a DEX audit. When turned "OFF" it allows for remote auditing devices that clear Interval (resettable) Data manually to be used to clear the data. Press the "❋" Key to toggle or press the "CLR" Key to return to "INTERVAL CLEARING". Press "CLR" to return to "SETUP MODE 2".

SET LIGHTS OFF – Press Key "7"
The function is used to turn on the "SET LIGHTS OFF TIME" set in "SETUP MODE 1". Press the number "7" Key and "SET LIGHTS OFF" will show on Display. Press the "❋" Key and Display will show "Lights Off: Off (On)", press "❋" to turn On (Off). Press the "❋" Key to toggle or press "CLR" to return to "SET LIGHTS OFF". Press "CLR" to return to "SETUP MODE 2".

DOUBLE TALK – Press Key "8"
Note: Double Talk has not been tested in this application as of the release date of this manual.
The function is used to turn On or turn Off the "Double Talk" feature. Press the number "8" Key and "Double Talk" will show on Display. Press the "❋" Key and Display will show current state "On" or "Off". Press "❋" to toggle from On to Off. With the Display showing the state you wish the mode to be in, press the "CLR" Key to return to "DOUBLE TALK". Press "CLR" to return to "SETUP MODE 2".

SET STORAGE TIME – Press Key "9"
This function is used set the Time, Date, and Day when Storage Temperature will be ON. Press the number "9" and "SET STORAGE TIME" will show across Display. Set Storage Time can be set in the same manner as "SET NOT AVAIL TIME" covered in the Initial Programming Section of this manual.

SET STORAGE TEMP – Press Key "0"
This function is used to set Storage Temperature. Press the number "0" Key and "SET STORAGE TEMP" will show on Display. Set Storage Temp can be set in the same manner as "SET TEMPERATURE" covered in "SERVICE MODE" section of this manual.

NOTES:_____