PROGRAMMING MANUAL

GVC2 CONTROLLER SOFTWARE

This manual contains programming instructions for the GVC2 Controller used on the vending machines listed below. Please refer to your service manual for other information.

VENDOR	MODEL
HR23	3526, 3526A
HR32	3510, 3510A
HR40	3509, 3509A
RRF-G2 3W	3523, 3523A
RRF-G2 4W	3524, 3524A
RRF-G2 5W	3525, 3525A
SC100	3515, 3515A
COMBO II	3516, 3516A 3534, 3534A
3W COMBI	3532
DZF5000	3517, 3517A 3518, 3518A 3541, 3541A 3566, 3566A
SZF5000	3519, 3519A 3565, 3565A 3547, 3547A 3545, 3545A
DZF3000	3520, 3520A 3568, 3568A
SZF3000	3521, 3521A 3567, 3567A
WS7000	3536, 3536A
WS5000	3535, 3535A 3575, 3575A
WS4000	3538, 3538A 3574, 3574A
WS3000	3537, 3537A 3573, 3573A
ELEVATOR	3561, 3561A 3563, 3563A 3557

TABLE OF CONTENTS

Record the Model Number and Serial Number of your machine below. The Model and Serial numbers are needed to obtain quick service and parts information for your machine. The numbers are available on the identification plate located on the backside of the cabinet of the machine.

MODEL NUMBER: _____ SERIAL NUMBER: _____

<u>Revision History:</u>

<u>Rev</u>	<u>Date</u>	<u>Reason</u>
A	7/28/05	Initial Document Testing of GVC1 CB500
B	9/05/06	Corrections /Clarifications
C	10/10/10	Corrections/Clarifications
D	08/13/12	Additions/Corrections/Clarifications

SERVICE MODE

Use **Service Mode** to program and service the machine. Use the keypad as an input device. Watch the display for information while in Service Mode.

SERVICE MODE BUTTON

To enter **Service Mode**, press the **Service Mode Button** located on the top or upper right corner of the controller cover. See Figure 1. To exit Service Mode, press the Service Mode Button.

IMPORTANT NOTE: If credit exists when **Service Mode** is entered, it will be restored when the machine returns to **Sales Mode**.

If the display shows a message other than "Motors XX" then see the troubleshooting guide.

If no key is pressed for approximately 1 minute while in **Service Mode**, the controller will automatically return to **Sales Mode**.

Figure 1. Controller – Inside Door Mounted	**Figure 2. Controller – Cabinet Mounted**	**Figure 2.A Controller— Cabinet Mounted**
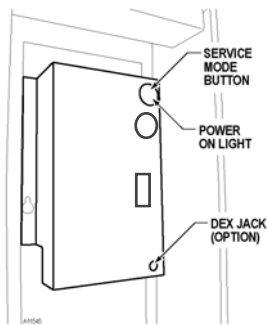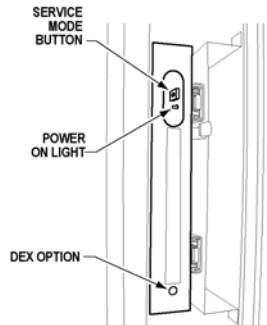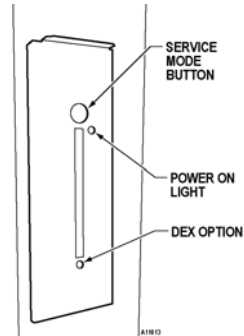
KEYPAD

To program the vendor, use the buttons on the keypad as directed in the step-by-step instructions below.

DISPLAY
Check the display after pressing the **Service Mode Button** and/or **Keypad Buttons** to make sure that the program is responding correctly.

Buttons 0-9 are used to move between the various modes, menus and sub-menus; while the ⊛ button is used to save a setting and the ⊛ button is used to exit menu without change or move to higher level menu (See Figure 3).
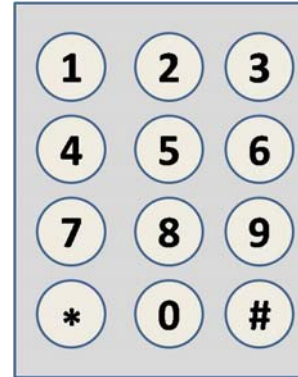
Figure 3. Keypad

1 TUBE FILL/DISPENSE COINS

TUBE FILL

Tube Fill counts coins as they are deposited and shows the dollar amount.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motor Count or Error Code **
2.	Press ① and deposit coins	At least 15 of each denomination
3.	Press ⊛ two times to exit	0.00

TUBE DISPENSE

Tube Dispense Pays out coins from the coin mech. coin tubes.

This mode also displays the current quantity of coins in the coin mech. coin tubes.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motor Count or Error Code **
2.	Press ① to dispense highest value coin	Value of Coin
3.	Press ② to dispense 2nd highest coin	Value of Coin
4.	Press ③ to dispense 3rd highest coin	Value of Coin
5.	Press ④ to dispense 4th highest coin	Value of Coin
6.	Press ⊛ two times to exit	0.00

IMPORTANT NOTE: For dispensing more than a four denomination coin mech. use keys greater in the same sequence as shown above.

2 MOTOR COUNT

	STEP	DISPLAY
Displays the total count of working motors.	1. Press Service Mode Button ▣	Motors (--)
	2. Press ② and wait	Motors (- -)
	3. Press ✱ to exit	(Sales Mode)

NOTE: Motor count includes tray motors, changer escrow motor, elevator motors, delivery lift and auto door motors briefly (example – shows 40 then goes back to 36d) to show the additional motors and then returns to show only tray count.

3 OPTIONS

This menu allows access to the following features:

- Force Vend
- Bill Escrow
- Multi Vend
- Free Vend
- Fast Change

- Optics
- Point Of Sale Message
- Temperature
- Keypad Backlight
- Drop Sensor Sensitivity

3.1 FORCE VEND

	STEP	DISPLAY
This option forces the customer to complete a purchase once they have deposited money of any form.	1. Press Service Mode Button ▣	Motors (--)
	2. Press ③ for Options menu	Options
	3. Press ① for Force Vend menu	Force Vend (Current Setting) *-exit 1-edit
	4. Press ① to toggle ON/OFF	Force Vend (Choice Flashing) *-exit #-save
	5. Press ⊕ to save the setting	Force Vend (New Setting) *-exit 1-edit
	6. Press ✱ three times to exit	(Sales Mode)

IMPORTANT NOTE: If a vend is attempted on a configured selection and the motor fails during this vend, the customer will be allowed to escrow the credit, regardless of the force vend status.

3.2 BILL ESCROW

This option allows the last bill accepted to be returned, provided the bill acceptor is capable of such a feature.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ② for Bill Escrow menu	Bill Escrow (Current Setting) *-exit 2-edit
4.	Press ② to toggle ON/OFF	Bill Escrow (Choice Flashing) *-exit #-save
5.	Press # to save the setting	Bill Escrow (New Setting) *-exit 2-edit
6.	Press ✱ three times to exit	(Sales Mode)

3.3 MULTI VEND

This option allows the customer to purchase more than one product if enough credit has been deposited.

When this option is active, any credit remaining after a vend attempt is *not* automatically returned. At this point, the customer has the option of:

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ③ for Multi Vend menu	Multi Vend (Current Setting) *-exit 3-edit
4.	Press ③ to toggle ON/OFF	Multi Vend (Choice Flashing) *-exit #-save
5.	Press # to save the setting	Multi Vend (New Setting) *-exit 3-edit
6.	Press ✱ three times to exit	(Sales Mode)

- Making another selection if there's enough credit.
- Depositing more money (cash credit from a changer or bill acceptor); or
- Pressing coin return to receive remaining credit.

IMPORTANT NOTE: After 5 minutes any credit left on the display will disappear. For card reader sessions, the **Multi Vend** feature will function only if the card reader supports multiple vend capability.

3.4 FREE VEND

This option allows you to set the **whole machine** to Free Vend.

With **Free Vend** enabled, every product is vended at no cost, no money is accepted by the machine, the message "**FREE ON US**" is on the display.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ④ for Free Vend menu	Free Vend (Current Setting) *-exit 4-edit
4.	Press ④ to toggle ON/OFF	Free Vend (Choice Flashing) *-exit #-save
5.	Press ⧣ to save the setting	Free Vend (New Setting) *-exit 4-edit
6.	Press ✱ three times to exit	(Sales Mode)

3.5 FAST CHANGE

Allows the vending machine to give change immediately after the customers makes a selection. If **Fast Change** is ON, it overrides the Multi Vend feature.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ⑤ for Fast Change menu	Fast Change (Current Setting) *-exit 5-edit
4.	Press ⑤ to toggle ON/OFF	Fast Change (Choice Flashing) *-exit #-save
5.	Press ⧣ to save the setting	Fast Change (New Setting) *-exit 5-edit
6.	Press ✱ three times to exit	(Sales Mode)

IMPORTANT NOTE: If "OPTICS" is turned ON, the amount of the product displays until a product drops.

3.6 OPTICAL VEND

Optical Sensor Control Options - This submenu provides the operator with options for designating product items or rows that are monitored for product delivery by an optical sensor. Default is ALL selections "ON" unless changed.

3.6.3 Optics All

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ⑥ for Optical Vend menu	Optical Vend
4.	Press ③ for All items menu	All Items (Current Setting) *- exit 3-edit

OPTICS ALL CONTINUED	DISPLAY
5. Press ③ to toggle ON/OFF	All Items (Choice Flashing) *-exit #-save
6. Press ⊛ to save the setting	All Items (New Setting) *- exit 3-edit
7. Press ✱ four times to exit	(Sales Mode)

3.6.2 Optics by Row

STEP	DISPLAY
1. Press Service Mode Button ▣	Motors (--)
2. Press ③ for Options menu	Options
3. Press ⑥ for Optical Vend menu	Optical Vend
4. Press ② to enter a row number	Row:- - *- exit
5. Enter the Row Number	Row: XX (Current Setting) *-exit 1-edit
6. Press ① to toggle ON/OFF	Row : XX (Choice Flashing) *-exit #-save
7. Press ⊛ to save the setting	Row : XX (New Setting) *-exit 1-edit
8 Repeat Steps 4 thru 7 until all desired rows are completed	
9. Press ✱ to enter another Row or four times to exit	(Sales Mode)

3.6.1 Optics by Item

STEP	DISPLAY
1. Press Service Mode Button ▣	Motors (--)
2. Press ③ for Options menu	Options
3. Press ⑥ for Optical Vend menu	Optical Vend
4. Press ① to enter the Item	Item: - - - *- exit
5. Enter Item Number	Item: XXX (Current Setting) *- exit 1- edit
6. Press ① to toggle ON/OFF	Item: XXX (Choice Flashing) *- exit #- save
7. Press ⊛ to save the setting	Item: XXX (New Setting) *- exit 1- edit
8. Repeat Steps 4 thru 7 until all desired selections are completed	
9. Press ✱ to enter another item or four times to exit	(Sales Mode)

3.6 OPTICAL VEND (continued)

The controller must be in **Sales Mode**. If the accumulated credit is equal to or larger than the selection price when a selection is entered, the motor corresponding to that selection is turned on. Selections that are designated as **Optical** have an associated vend operation that differs from the normal vend operation.

For 5 milliseconds at the start of a vend, the **iVend**™ optical sensor is checked for blockage.

If blocked - the normal home-switch-vend cycle is used and the optical sensors are ignored. Both the vend motor and a 10-second vend timeout timer are started.

- The selection motor rotates to the home-switch position.
- If there is a home-switch signal, the vend is considered successful.
- If after 10 seconds there is no home-switch signal, the vend failed. The vend motor is shut down and *MAKE ANOTHER SELECTION* is displayed. The customer can then press selection buttons to activate this or another motor, or press the Coin Return.

> **IMPORTANT NOTE**: Force Vend is overridden under this vend cycle.

If not blocked - the iVend™ Sensor System is used. The vend motor and a 10 second vend timeout timer are started.

- The selection motor rotates to the home-switch position.
- If a product is detected during this time period, the vend is considered successful.
- If after reaching the home-switch position, a product has not been detected, the vend motor will pause for 1 second while the controller continues to monitor the optical sensor for product delivery.
- If a product is detected during this pause, the vend is considered successful.
- If a product is not detected, the controller initiates a second vend cycle and a 9-second timer while continuing to monitor the optical sensor.
  - o If a product is detected during this second cycle, the motor is stopped immediately. The vend is considered successful. The 2nd Vend Count is increased by one.
  - o If a product is not detected before the motor reaches the home-switch position, or if a 9-second timer runs out, the vend has failed or the selection is sold out. Such a state will trigger the display message, *MAKE ANOTHER SELECTION*, and the amount of credit is displayed. The customer can press selection buttons to activate this or another motor <u>or</u> press the Coin Return.

3.7 POINT OF SALE MESSAGE (POS)

Turn OFF (or ON) the default scrolling display message.		STEP	DISPLAY
	1.	Press Service Mode Button ▣	Motors (--)
	2.	Press ③ for Options menu	Options
	3.	Press ⑦ for POS menu	POS Message (Current Setting) *- exit 7- edit
	4.	Press ⑦ to toggle ON/OFF	POS Message (Choice Flashing) *- exit # - save
	5.	Press � # to save the setting	POS Message (New Setting) *- exit 7- edit
	6.	Press ✶ three times to exit	(Sales Mode)

IMPORTANT NOTE: this does not affect the programmed POS message.

3.8 SETPOINT

This menu displays the factory default SET POINT temperature for each machine type. See section 4.0.7 TEMP for the specific machine refrigeration modes. Ambient snack machines without a refrigeration system will display 36F.

These temperatures may be adjusted, however it is *not* recommended. The temperatures have been set according to NAMA specifications for optimal product safety. **Before making any adjustment sees Temp and Health Safety section.**

	STEP	DISPLAY
1.	Press Service Mode Button ▣	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ⑧ for Setpoint menu	Setpoint (Current Setting)F *- exit 8- edit
4.	Press ⑧ to edit the Temperature Setpoint	Setpoint (Temp flashing)F *- exit #- save
5.	Continue pressing ⑧ until the desired temperature is reached	Setpoint (New Temp)F *- exit 8- edit
6.	Press # to save to save the setting	Setpoint (New Temp)F *- exit 8- edit
7.	Press ✶ three times to exit	(Sales Mode)

3.9 KEYPAD BACKLIGHT

This menu controls the brightness level of the keypad backlight (Default is 3).

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ⑨ for Backlight menu	KB Backlight (Current Setting) *- exit 9- edit
4.	Continue pressing ⑨ until the desired setting is reached *Note: 0=Off, 1=Low, 2=Med, 3=High, 4=Max*	KB Backlight (Choice Flashing) *- exit # - save
5.	Press �#️ to save the setting	KB Backlight (New Setting) *- exit 9- edit
6.	Press ✳️ three times to exit	(Sales Mode)

3.0 DROP SENSOR SENSITIVITY
FOR CLOSED FRONT CAN/BOTTLE MACHINE SELECTIONS ONLY.

This menu allows you to adjust the Drop Sensor sensitivity.
1 is most sensitive; **9** is the least sensitive.
Default is 3.
When Can/Bottle Mode is ON, the Drop Sensor is enabled for vending bottles or cans.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ③ for Options menu	Options
3.	Press ⓪ for Drop Sensor menu	Drop Sensor (Current Setting) *- exit 0- edit
4.	Continue pressing ⓪ until the desired setting is reached 1-9	Drop Sensor (Choice Flashing) *- exit # - save
5.	Press �#️ to save the setting	Drop Sensor (New Setting) *- exit 0- edit
6.	Press ✳️ three times to exit	(Sales Mode)

NOTE: The Drop Sensor setting will count up to 9 and then start over at 1.

4 CONFIGURATION

This menu allows access to the following features.

- Item
- Row
- All
- Language
- Auto-Reinstate
- Space to Sales (STS)
- Custom STS

- Date/Time
- Health Safety
- Advanced Configuration
- Selection Style
- Elevator
- Delivery Lift

This menu provides access to sub-menus that set Can, Bottle or Snack type of product to each item, entire row or entire machine.

4.3 ALL

To set **ENTIRE MACHINE** to Snack, Can, or Bottle

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ③ for All Items menu	All Items: (Current Setting) *- exit 1- edit
4.	Press ① to toggle between Snack, Can, Bottle	All Items: (Choice Flashing) *- exit #- save
5.	Press ⑧# to save the setting	All Items: (New Setting) *- exit 1- edit
6.	Press ✱ four times to exit	(Sales Mode)

4.2 ROW

Provides the option of designating rows that contain cans, bottles or snack.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ② to enter a row	Row: - - *- exit
4.	Enter Row number	Row: XX (Current Setting) *- exit 1- edit
5.	Press ① to toggle between Can, Bottle and Snack	Row: XX (Choice Flashing) *- exit # - save
6.	Press ⑧# to save the setting	Choice stops flashing and display returns to: Row: - - *- exit
7.	Press ✱ three times to exit	(Sales Mode)

IMPORTANT NOTE: For selections designated as either cans or bottles, the vend motor runs continuously during the vend cycle until a drop sensor signals the controller, or the maximum vend time of 9 seconds concludes.

4.1 ITEM

Before setting this option, a row or the entire machine must be set to *Can/bottle*.

Each item in that row or entire machine may be set to CAN or BOTTLE.

When Can/Bottle Mode is ON, the

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ① to enter an item	Item: - - - *- exit
4.	Enter selection number	Item: XXX (Current Setting) *- exit 1- edit
5.	Press ① to toggle Can/Bottle	Item: XXX (Choice Flashing) *-exit # - save

11

Drop Sensor is enabled for vending bottles or cans.

CONFIG BY ITEM CONTINUED		DISPLAY
6.	Press 🔘 to save the setting	Choice stops flashing and display returns to: Item: - - - *- exit
7.	Repeat Steps 4 thru 6 until all selections are completed	
8.	Press ✱ 3 times to exit	(Sales Mode)

4.4 LANGUAGE

Language Message		STEP	DISPLAY
This menu function allows the operator to choose a specific language in which sales mode messages are displayed. The following languages are available: • English • Spanish • French • Italian • German • Danish • Dutch • Turkish • Auxiliary	1.	Press Service Mode Button 🔘	Motors (--)
	2.	Press ④ for Configuration menu	Configuration
	3.	Press ④ for Language menu	Language (Current Setting) *- exit 4- edit
	4.	Press ④ to toggle between the languages	Language: (Choice Flashing) *- exit # - save
	5.	Press 🔘 to save the setting	Language (New Setting) *- exit 4- edit
	6.	Press Service Mode Button 🔘	(Sales Mode)

IMPORTANT NOTE: If auxiliary is selected, an alternative list of operator created sales mode messages is used (see Section 7.3).

4.5 AUTO-REINSTATE

CAUTION: *Auto-Reinstate affects both the host machine and all attached satellite units.*

Auto-Reinstatement of Failed Selections - This feature is for a satellite soft drink or similar vendor utilizing a **Sold Out** or **Empty** switch. Normally, when an empty selection is detected during an attempted vend, that selection is recorded as inoperative and requires resetting before it can be vended again. Satellite units utilize a range of selections within the controller. Programming this range of selections into **Auto-Reinstatement** eliminates the necessity of manually resetting the controller after re-loading a selection that is in a **Sold Out** condition.

IMPORTANT NOTE: If iVend™ Optical System is installed, then all selections are set to auto-reinstate "on" unless changed.

4.5.3 AUTO-REINSTATE WHOLE MACHINE

STEP		DISPLAY
1.	Press Service Mode Button 🔘	Motors (--)
2.	Press ④ for Configuration menu	Configuration

AUTO-REINSTATE MACH CONTINUED		DISPLAY
3.	Press ⑤ for Auto-Reinstate menu	Auto-Reinstate
4.	Press ③ for All Items menu	All Items (Current Setting) *- exit 3- edit
5.	Press ③ to toggle ON/OFF	All Items (Choice Flashing) *-exit # - save
6.	Press ⑥ to save the setting	All Items (New Setting) *- exit 3- edit
7.	Press ✱ four times to exit	(Sales Mode)

4.5.2 AUTO-REINSTATE BY ROW

STEP		DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑤ for Auto-Reinstate menu	Auto-Reinstate
4.	Press ② to enter a row	Row: - - *- exit
5.	Enter Row Number	Row: XX (Current Setting) *- exit 1- edit
6.	Press ① to toggle the Row ON/OFF	Row: XX (Choice Flashing) *- exit # - save
7.	Press ⑥ to save the setting	Row: XX (New Setting) *- exit 1- edit
8.	Press ✱ to enter another row or four times to exit	(Sales Mode)

4.5.1 AUTO-REINSTATE BY ITEM

STEP		DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑤ for Auto-Reinstate menu	Auto-Reinstate
4.	Press ① to enter an item	Item: - - - *- exit
5.	Enter Item Number	Item: XXX (Current Setting) *- exit 1- edit
6.	Press ① to toggle Item ON/OFF	Item: XXX (Choice Flashing) *- exit # - save
7.	Press ⑥ to save the setting	Item: XXX (New Setting) *- exit 1- edit
8.	Press ✱ to enter another item or five times to exit	(Sales Mode)

4.6 SPACE TO SALES (STS)

The following settings are available:	STEP		DISPLAY
• STS Off • Whole Rows • Half Rows • By 2's • Whole Machine • Custom MZF/SZF • Custom	1.	Press Service Mode Button ◉	Motors (--)
	2.	Press ④ for Configuration menu	Configuration
	3.	Press ⑥ for STS menu	StS (Current Setting) *- exit 6- edit
	4.	Press ⑥ to toggle through options	StS (Choice Flashing) *- exit # - save
	5.	Press ⑲ to save the setting	StS (New Setting) *- exit 6- edit
	6.	Press ✱ three times to exit	(Sales Mode)

IMPORTANT NOTE: If custom is chosen, see section 4.7 for instructions.

4.7 CUSTOM STS

IMPORTANT NOTE: Before setting this option, you must select "Custom" as your setting under menu 4.6.

This option is used to tie selections together that do not fall under any of the categories under menu 4.6 (Example: 10; 20; 24).

	STEP	DISPLAY
1.	Press Service Mode Button ◉	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑥ for STS menu	STS (Current Setting) *- exit 6- edit
4.	Press ⑥ to toggle to Custom	STS Custom *- exit # - save
5.	Press ⑲ to save the setting	STS Custom *- exit 6- edit
6.	Press ✱ to return to Configuration menu	Configuration
7.	Press ⑦ to STS selection	STS - - -: *- exit
8.	Enter first selection number	STS XXX: (Current Selection) *- exit # - Add 1-Clear
9.	Press ① to clear links menu	XXX: Clear links? *- exit # - clear?
10.	Press ⑲ to clear current links settings	XXX: Cleared *- exit # - Add 1- Clear
11.	Press ⑲ to add new Selection	XXX: - - - *- exit
12.	Enter Next Selection	XXX: YYY *- exit # - Add
13.	Press ⑲ to add another selection (to enter more selections repeat steps 11 and 12)	XXX: - - - YYY, ZZZ (The screen displays the selections you have entered. After 3 selections the screen will scroll the selections).
14.	Press ✱ six times to exit	(Service Mode)

14

4.8 TIME/DATE

Sets the time and date for timed operations.

The following submenus are available:

- Date
- Time
- Daylight Savings

4.8.1 DATE

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑧ for Date/Time menu	Date/Time
4.	Press ① for Date menu	(Current Date) *- exit # - edit
5.	Press # to edit the date	MM/DD/YYYY *- del # - save
6.	Enter the Date	MM/DD/YYYY *- del # - save
7.	Press # to save the Date	(New Date) *- exit # - edit
8.	Press ✱ four times to exit	(Sales Mode)

4.8.2 TIME

Time Setting - This menu controls and displays the current time of day. The display will show a 24-hour format.

Examples:
08:05 a.m. = TIME 08.05
01:15 p.m. = TIME 13.15
11:45 p.m. = TIME 23.45

TIME SETTING

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑧ for Date/Time menu	Date/Time
4.	Press ② for Time menu	(Current Time) *- exit # - edit
5.	Press # to edit the Time	09:00:25 *- del # - save
6.	Enter the Time	09:00:25 *- del # - save
6.	Press # to save the Time	(New Time) *- exit # - edit
7.	Press ✱ four times to exit	(Sales Mode)

4.8.3 DAYLIGHT SAVINGS

This menu controls and displays the currently active daylight savings rule.

	STEP	DISPLAY
1.	Press Service Mode Button ⬤	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑧ for Date/Time menu	Date/Time
4.	Press ③ for DST menu	DST (Current Setting) *- exit 3 - edit
5.	Press ③ to toggle between settings (North America, OFF, Australia, Europe)	DST (Choice Flashing) 8- edit # - save
6.	Press # to save the setting	DST (New Setting) *- exit 3- edit
7.	Press ✱ four times to exit	(Sales Mode)

4.9 HEALTH SAFETY (HS)

THE HEALTH SAFETY FEATURE CAN NOW BE CONFIGURED FOR 2 TEMPERATURE ZONES. A LOWER ZONE AND AN UPPER ZONE AS DETAILED IN THE HEALTH SAFETY MENUS BELOW.

The **HEALTH SAFETY** feature prevents the sale of perishable food if the air temperature inside the Food Vendor compartment rises above the Health Safety temperature limit for more than 15 minutes. The perishable products being vended must match the refrigeration configuration.

> **Warning:** These settings require specific refrigeration systems and options in a machine. Please review this document and consult the machine service manual and if necessary, Vendnet Service at 1-800-833-4411 before making any changes to the machine settings. Please have machine model number and serial number information when calling Vendnet Service,

HEALTH SAFETY MENUS - This menu allows the user to specify the operating zone to meet health safety requirements for cold and frozen food. The health safety requirements can also be applied to an individual Item(s), Row(s), or ALL (whole machine). If the health safety requirements are violated then the Item(s), Row(s) or the whole machine is shut down accordingly.

HEALTH SAFETY ZONES - Health Safety settings are split into two zones, Upper Zone and Lower Zone**. <u>Only the Lower Zone setting will be used when the machine is configured as a Cold, Cold Food, Single Zone (SZ), Dual Zone (DZ),Single Zone Frozen (SZF) or Single Zone Cold Food (SCF).</u>** The Upper Zone setting is used is for the Multi-Zone Frozen (MZF) temperature mode. On a machine using the MZF setting, the Upper Zone follows the HS rules for Cold Food and the Lower Zone follows the HS rules for Frozen Food.

16

> **IMPORTANT! The operator is responsible for ensuring the health safety of vended products and to verify the machine HS settings. Make sure to Enable All Items and Enable HS Zone Lower and/or Upper Zone before making any other changes.**

4.9.3 HS ALL ITEMS

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑨ for Health Safety menu	Health Safety
4	Press ② to edit the Lower Zone or Press ① to edit the Upper Zone	Lower Zone or Upper Zone
5.	Press ③ for All Items	All Items (Current Setting) *- exit 3- edit
6.	Press ③ to toggle ON/OFF	All Items (Choice Flashing) *- exit # - save
7.	Press ⑴ to save the setting	All Items (New Setting) *- exit 3- edit
8.	Press ✱ to exit All Items	Lower Zone or Upper Zone
9.	Press ⑨ to edit HS Zone ON/OFF	Enable (Current Setting) *- exit 9- edit
10.	Press ⑨ to toggle HS Zone ON/OFF	Enable (Choice Flashing) *- exit # - save
11.	Press ⑴ to save the setting	Enable (New Setting) *- exit 9- edit
12.	Press ✱ to exit back to main HS menu	Health Safety
13.	Repeat steps 4 thru 12 for another Zone or go to step 14.	
14..	Press ✱ five times to exit	(Sales Mode)

4.9.2 HS BY ROW

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⑨ for Health Safety menu	Health Safety
4.	Press ② to edit the Lower Zone or Press ① to edit the Upper Zone	Lower Zone or Upper Zone
5.	Press ② to enter a row number	Row: - - *- exit
6.	Enter Row Number	Row: XX (Current Setting) *- exit 1- edit
7.	Press ① to toggle row ON/OFF	Row: XX (Choice Flashing) *- exit # - save

HS BY ROW CONTINUED		DISPLAY
8.	Press (#) to save row ON/OFF	Row: XX (New Setting) *- exit 1- edit
9.	Press (*) to exit and enter another row or press (*) two times to go back to the Zone Choice screen	Lower Zone or Upper Zone
10.	Press (9) to edit HS Zone ON/OFF	Enable (Current Setting) *- exit 9- edit
11.	Press (9) to toggle HS Zone ON/OFF	Enable (Choice Flashing) *- exit # - save
12.	Press (#) to save the setting	Enable (New Setting) *- exit 9- edit
13.	Repeat steps 4 thru 12 for another Zone or go to step 14	
14.	Press (*) four times to exit	(Sales Mode)

4.9.1 HS BY ITEM

STEP		DISPLAY
1.	Press Service Mode Button (◼)	Motors (--)
2.	Press (4) for Configuration menu	Configuration
3.	Press (9) for Health Safety menu	Health Safety
4.	Press (2) to edit the Lower Zone or Press (1) to edit the Upper Zone	Lower Zone or Upper Zone
5.	Press (1) to enter an item	Item: - - - *- exit
6.	Enter Item Number	Item: XXX (Current Setting) *- exit 1- edit
7.	Press (1) to toggle Item ON/OFF	Item: XXX (Choice Flashing) *- exit # - save
8.	Press (#) to save Item setting	Item: XXX (New Setting) *- exit 1- edit
9.	Press (*) to enter another item or Press (*) two times for the Zone Choice screen	Lower Zone or Upper Zone
10.	Press (9) to edit HS Zone ON/OFF	Enable (Current Setting) *- exit 9- edit
11.	Press (9) to toggle HS ON/OFF	Enable (Choice Flashing) *- exit # - save
12.	Press (#) to save the setting	Enable (New Setting) *- exit 9- edit
13.	Repeat Steps 4 thru 12 for another Zone or go to step 14	
13.	Press (*) four times to exit	(Sales Mode)

4.0 ADVANCED CONFIGURATION

The following menus are available under this option:

- Beep Enable
- Optics Disables
- Motor Type
- Talker Password
- Set Defaults
- Temperature
- Selection Style

4.0.1 BEEP ENABLE
Use this option to choose whether a sound is heard when buttons are pressed.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password
4.	Enter Password (default 2314)	Advanced Config
5.	Press ① for Beep Enable menu	Beep Enable (Current Setting) *- exit 1- edit
6.	Press ① to toggle Beep ON/OFF	Beep Enable (Choice Flashing) *- exit # - save
7.	Press ⌗ to save the setting	Beep Enable (New Setting) *- exit 1- edit
8.	Press ✳ four times to exit	(Sales Mode)

4.0.2 OPTICS DISABLES
When set up — if the I-vend is not aligned, or sensors are blocked or unplugged, the "Out of Service" POS will display until the I-vend is repaired.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password:
4.	Enter Password (default 2314)	Advanced Configuration
5.	Press ② for Optics Disables menu	Optics Disables (Current Setting) *- exit 2- edit
6.	Press ② to toggle Optics Disables ON/OFF	Optics Disables: (Choice Flashing) *- exit # - save
7.	Press ⌗ to save the setting	Optics Disables (New Setting) *- exit 2- edit
8.	Press ✳ four times to exit	(Sales Mode)

4.0.3 MOTOR TYPE

Motor Type is preset at the factory. The

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration

only time this should be checked is after the installation of a new board to assure that the board is compatible.

MOTOR TYPE CONTINUED		DISPLAY
3.	Press ⓪ for Password menu	Password:
4.	Enter Password (default 2314)	Advanced Configuration
5.	Press ③ for Motor Type menu	Motor Type (Current Setting) *- exit 3- edit
6.	Press ③ to toggle from 2 wire, 2 wire 1m* or 3 wire motors	Motor Type (Choice Flashing) *- exit # - save
7.	Press # to save the setting	Motor Type (New Setting) *- exit 3- edit
8.	Press ✱ four times to exit	(Sales Mode)

*NOTE: The 2 wire 1M setting is used on select Frozen Food machines only. Contact Vendnet Service at 1-800-833-4411 for more information.

4.0.4 TALKER

Talker assists the vision impaired to service the machine.

STEP		DISPLAY
1.	Press Service Mode Button ◉	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password
4.	Enter Password (default 2314)	Advanced Configuration
5.	Press ④ for Talker menu	Talker (Current Status) *- exit 4- edit
6.	Press ④ to toggle Talker ON/OFF	Talker (Choice Flashing) *- exit # - save
7.	Press # to save the setting	Talker (New Status) *- exit 4- edit
8.	Press ✱ four times to exit	(Sales Mode)

4.0.5 PASSWORD

Allows the operator to change the password

IMPORTANT NOTE: If you forget your personal password after changing it from the default, contact Technical Service for help at 1-800-833-4411.

STEP		DISPLAY
1.	Press Service Mode Button ◉	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password
4.	Enter Password (default 2314)	Advanced Config
5.	Press ⑤ for Password menu	Password (Current) *- exit # - edit
6.	Press # to edit the Password	Password (Flashing) *- del # - save

PASSWORD CONTINUED		DISPLAY
7.	Press ✳ to delete the existing password, then use the keypad to enter a new password	Password (New) *- exit # - save
8.	Press # to save the new Password	Password (New) *- exit # - edit
9.	Press ✳ four times to exit	(Sales Mode)

4.0.6 SET DEFAULTS

Use these steps to reset the defaults for the following:

IMPORTANT NOTE: If you have previously changed your password, this will reset it back to the factory default of 2314

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password
4.	Enter Password (default 2314)	Advanced Config
5.	Press ⑥ for Set Defaults menu	Set Defaults
6.	Press ① for a standard default or Press ② for a custom* default	Set Defaults 1 or Set Defaults 2
7.	Press # for Reset menu	'0' to reset options *- exit
8.	Press ⓪ to Reset Options	Resetting…Done *- exit
9.	Press ✳ six times to exit	(Sales Mode)

*NOTE: Contact Vendnet Service at 1-800-833-4411 for more information on the Custom Default option

4.0.7 TEMP

This menu allows the board to electronically control the refrigeration system for a specific machine and refrigeration type.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (--)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password
4.	Enter Password (default 2314)	Advanced Config
5.	Press ⑦ for Temperature menu	Temp (Current Setting) *- exit 7- edit
6.	Press ⑦ to toggle between Snack, Cold, Cold Food, Slackened, Frozen, Dual Zone, Dual Upper -6, Chilled, MZF,MZF -2, MZF -5, SZ Frozen, SZ Frozen -2, SZ Frozen -5, SZ Cold, SZ Cold -1	Temp (Choice Flashing) *- exit # - save

21

	TEMP CONTINUED	DISPLAY
7.	Press (#) to save the setting	Temp (New Setting) *- exit 7- edit
8.	Press (*) four times to exit	(Sales Mode)

Warning: These settings require specific refrigeration systems and options in a machine. Please consult the machine service manual and Vendnet Service at 1-800-833-4411 before making any changes to this setting.

MODE	TEMPERATURE SET POINT	SERVICE MODE DISPLAY	SALES MODE DISPLAY	HEALTH SAFETY
Snack	**N/A**	**Snack**	**N/A**	
Cold	**36°F (2.2°C)**	**Cold**	**T1= 36F**	**Yes**
Cold Food	**38°F (2.2°C)**	**Cold Food**	**T1= 38F**	**Yes**
Slackened	**15°F (-9°C)**	**Slackened**	**T1= 15F T2= 15F**	**Yes**
Frozen	**-10°F (-23.2°C)**	**Frozen**	**T1= -10F T2=-10F**	**Yes**
Dual Zone with Upper Zone Heater	**Upper zone 63°F (17.2°C)**	**Dual Zone**	**T3= 63F**	**Yes**
	Lower zone 36°F (2.2°C)		**T1= 36F**	**Yes**
Dual Zone with Upper Zone Heater	**Upper zone 57°F (13.9°C)**	**Dual upper -6**	**T3= 57F** **T1= 36F**	**Yes**
	Lower zone 36°F (2.2°C)			**Yes**
Chilled	**61°F (16.7°C)**	**Chilled**	**T1= 61F**	**No**
Multi-Zone Frozen	**Upper zone 36°F (2.2°C)**	**MZF**	**T3= 36F** **T1= -10F T2= -10F**	**Yes**
	Lower zone -10°F (-23.2°C)			**Yes**
Multi-Zone Frozen -12°F	**Upper zone 36°F (2.2°C)**	**MZF-2**	**T3= 36F** **T1= -12F T2= -12F**	**Yes**
	Lower zone -12°F (-24.4°C)			**Yes**
Multi-Zone Frozen -15°F	**Upper zone 36°F (2.2°C)**	**MZF-5**	**T3= 36F** **T1= -15F T2= -15F**	**Yes**
	Lower zone -15°F (-26°C)			**Yes**
Single Zone Frozen Food	**-10°F (-23.2°C)**	**SZ Frozen**	**T3= -10F T2= -10F**	**Yes**
Single Zone Frozen Food -12°F	**-12°F (-24.4°C)**	**SZ Frozen -2**	**T3= -12F T2= -12F**	**Yes**
Single Zone Frozen Food -15°F	**-15°F (-26°C)**	**SZ Frozen -5**	**T3= -15F T2= -15F**	**Yes**
Single Zone Cold Food	**36°F (2.2°C)**	**SZ Cold**	**T3= 36F**	**Yes**
Single Zone Cold Food 35°F	**35°F (1.6°C)**	**SZ Cold -1**	**T3= 35F**	**Yes**

4.0.8 SELECTION STYLE
This menu programs the selection input.

<table>
<tr><td colspan="2">IMPORTANT NOTE: This is to be set ONLY if a USD satellite is used.</td></tr>
</table>

STEP	DISPLAY
1. Press Service Mode Button 🔲	Motors (--)
2. Press ④ for Configuration menu	Configuration
3. Press ⓪ for Password menu	Password
4. Enter Password (default 2314)	Advanced Config
5. Press ⑧ for Selection Style menu	Sel style (Current Setting) *- exit 8- edit
6. Press ⑧ to toggle between *or # USD (Default) Three Digit Two Digit +40 Two Digit Even	Sel Style (Choice Flashing) *- exit # - save
7. Press ⌗ to save the setting	Sel Style (New Setting) *- exit 8- edit
8. Press ✳ four times to exit	(Sales Mode)

<table>
<tr><td>IMPORTANT NOTE: *or # is pushed to select from a USD FROZEN or COLD FOOD
 Two Digit Even is used for the USD Combination
 Three Digit requires all selections to use a 3-digit input</td></tr>
</table>

4.0.9 OPEN DOOR MOTOR HOMING
With the Open Door Motor Homing feature set to ON every time the door of the machine is opened all motors not at the home position will be moved to the home position. This feature requires the machine to have a door switch assembly. To purchase a door switch assembly please contact Vendnet Parts by phone at 1-800-833-4411.

<table>
<tr><td>CAUTION: When motors are homed, product may be vended from tray location.</td></tr>
</table>

STEP	DISPLAY
1. Press Service Mode Button 🔲	Motors (--)
2. Press ④ for Configuration menu	Configuration
3. Press ⓪ for Password menu	Password
4. Enter Password (default 2314)	Advanced Config
5. Press ⑨ for Homing menu	Homing (Current Setting) *- exit 9- edit
6. Press ⑨ to toggle between ON/OFF	Homing (Choice Flashing) *- exit # - save
7. Press ⌗ to save new setting	Homing (New Setting) *- exit 9- edit
8. Press ✳ four times to exit	(Sales Mode)

4.0.0.1 ELEVATOR ENABLE

The function of the elevator machine is to gently vend an item to avoid breakage. This is done by having the delivery bin move to the shelf that item is on and back to the position for the customer to remove from the machine.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password:
4.	Enter Password (default-2314)	Advanced Config
5.	Press ⓪ for Peripherals menu	Peripherals
6.	Press ① for Elevator menu	Elevator Enable (Current Setting) *-exit 1-edit
7.	Press ① to toggle the setting ON/OFF	Elevator Enable (Choice Flashing) *-exit #-save
8.	Press ⌗ to save the setting	Elevator Enable (New Setting) *-exit 1-edit
9.	Press ✱ five times to exit	(Sales Mode)

4.0.0.2 AUTOMATIED DELIVERY BOX ENABLE

The function of the delivery lift is to lift the purchased product higher. This makes it easier for customer to get their product.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password:
4.	Enter Password (default-2314)	Advanced Config
5.	Press ⓪ for Peripherals menu	Peripherals
6.	Press ② for Auto Lift menu	Auto Lift (Current Setting) *-exit 2-edit
7.	Press ② to toggle the setting. Choices are: • **Button** – requires customer to push the blue button to raise the lift after each vend • **Auto** – lift will raise after each vend • **Off** – turns the lift off	Auto Lift (Choice Flashing) *-exit #-save
8.	Press ⌗ to save the setting	Auto Lift (New Setting) *-exit 2-edit
9.	Press ✱ five times to exit	(Sales Mode)

4.0.0.3 TOUCH COMM

With this feature turned on the controller will communicate with the optional touch screen.

	STEP	DISPLAY
1.	Press Service Mode Button ⬜	Motors (- -)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password:
4.	Enter Password (default-2314)	Advanced Config
5.	Press ⓪ for Peripherals menu	Peripherals
6.	Press ③ for Touch Comm menu	Touch Comm (Current Setting) *-exit 3-edit
7.	Press ③ to toggle the setting ON/OFF	Touch Comm (Choice Flashing) *-exit #-save
8.	Press ⌗ to save the setting	Touch Comm (New Setting) *-exit 3-edit
9.	Press ✱ five times to exit	(Sales Mode)

4.0.0.4 AUTO SERVICE

With this feature turned on the controller will automatically enter the service modes upon door opening.

NOTE: This feature requires the installation of the optional door switch assembly. To purchase a door switch assembly please contact Vendnet Parts by phone at 1-800-833-4411.

	STEP	DISPLAY
1.	Press Service Mode Button ⬜	Motors (- -)
2.	Press ④ for Configuration menu	Configuration
3.	Press ⓪ for Password menu	Password:
4.	Enter Password (default-2314)	Advanced Config
5.	Press ⓪ for Peripherals menu	Peripherals
6.	Press ④ for Auto Service menu	Auto Service (Current Setting) *-exit 4-edit
7.	Press ④ to toggle the setting ON/OFF	Auto Service (Choice Flashing) *-exit #-save
8.	Press ⌗ to save the setting	Auto Service (New Setting) *-exit 4-edit
9.	Press ✱ five times to exit	(Sales Mode)

5 PRICING

Price Setting - This menu allows three (3) methods for assigning prices:

- ITEM — by individual selections
- ROW— by shelf or tray
- ALL ITEMS — by entire machine.
- COUPONS — by Item, Row, or ALL
- TOKENS — by Item, Row, or ALL
- COMBO

The maximum price that can be set is $655.35.

5.3 ALL

This menu allows you to set the selection price of every item all at once.

Time Saving Tip:
Instead of setting the price of each item one at a time, it is much faster to set the common price of the entire machine; then go back and set the price of each item or row.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (--)
2.	Press ⑤ for Pricing menu	Pricing
3.	Press ③ for All Items menu	All Items: (Current Price) *- exit # - save
4.	Enter Price	All Items: (Current Price) *- del # - save
5.	press ⓛ to save the Price	All Items: (New Price) *- exit
6.	Press ✱ three times to exit	(Sales Mode)

5.2 ROW

Use this menu to set the price of a row (shelf) all at the same time.

Time Saving Suggestion:
Instead of setting the price of one item at a time, set the common price of a Row, then go back and set the price of each item.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (--)
2.	Press ⑤ for Pricing menu	Pricing
3.	Press ② to enter a row	Row: - - $0.00 *- exit
4.	Enter row number *Example: Top row=01, row below top row=02, etc.*	Row: XX $(New Price) *- exit # - next
5	Enter Price	Row: XX $(New Price) *- exit # - save
6.	Press ⓛ to save the new price, the program will automatically go to the next row	Row: XX $(Current Price) *- exit # - next
7.	Repeat steps 4 and 5 until all desired rows are completed	
8.	Press ✱ four times to exit	(Sales Mode)

5.1 ITEM

This menu allows price setting by each selection item.

	STEP	DISPLAY
1.	Press Service Mode Button ⬤	Motors (--)
2.	Press ⑤ for the Pricing menu	Pricing
3.	Press ① to enter an item	Item: --- $0.00 *- exit
4.	Enter Item number	Item: XXX $(New Price) *- exit # - next
5.	Enter Price	Item: XXX $(New Price) *- exit # - save
6.	Press ⌗ to save the new price. The program will automatically go to the next selection number	Item:XXX $(Current Price) *- exit # - next
7.	Repeat steps 4 and 5 until all desired selections are completed	
8.	Press ✱ four times to exit	(Sales Mode)

5.4 COUPON

Allows the operator to designate the values of coupons that are accepted by pre-programmed validators. There are 5 programmable settings.

Value Coupon - This menu enables the use of coupons – this option requires a programmed validator [MDB version]. Several sub-menus are available that allow setting of the values of coupons. This feature also allows coupons to be set by Item, Row, or All.

If space to sales whole machine is "on" and you are setting Coupons by Row the Row must be set as row1.

IMPORTANT NOTE: Coupon Value Setting - Sets the value of a coupon to be used with this vendor. Up to five different coupons can be set.

IMPORTANT NOTE: After one coupon is accepted, further coupons will not be accepted until a successful vend has taken place.

IMPORTANT NOTE: If no value is set, coupons will be shown as free vends. If using both coupons and tokens there are only five selection combinations available. Example: If coupon1 is set for "all" items, token1 is also set for all items.

5.4.3 COUPON "ALL"

	STEP	DISPLAY
1.	Press Service Mode Button ⬤	Motors (--)
2.	Press ⑤ for Price menu	Price
3.	Press ④ for Coupons menu	Coupons

COUPON "ALL" CONTINUED		DISPLAY
4.	Press ① for Coupon1 (Press corresponding number 2-5 for additional coupons)	Coupon1
5.	Press ③ for All items	All Items (Current Setting) *- exit 3- edit
6.	Press ③ to toggle ON/OFF	All Items (Choice Flashing) *- exit # - save
7.	Press ⊞ to save the new setting	All Items (New Setting) *- exit 3- edit
8.	Press ✳ to Coupon1 menu	Coupon1
9.	Press ④ to enter Coupon Value menu	Coupon1: $0.00 *- exit # - edit
10.	Press ⊞ to edit Coupon1 value	Coupon1: $0.00 *- exit # - OK
11.	Enter Coupon value	Coupon1: $0.00 *- del # - save
12.	Press ⊞ to save the value setting	Coupon1: $(New Value) *- exit # - edit
13.	Press ✳ two times to edit coupon 2-5 or press ✳ four times to exit menu	(Sales Mode)

5.4.2 COUPON BY ROW

STEP		DISPLAY
1.	Press Service Mode Button ▣	Motors (--)
2.	Press ⑤ for Pricing menu	Pricing
3.	Press ④ for Coupon menu	Coupons
4.	Press ① for Coupon1 (Press corresponding number 2-5 for additional coupons)	Coupon1
5.	Press ③ to Verify All Items "OFF" (If All Items "ON" refer to 5.4.3)	All Items: OFF *- exit 3- edit
6.	Press ✳ to return to the Coupon1 menu	Coupon1
7.	Press ② to enter a row	Row: - - *- exit
8.	Enter Row Number	Row: XX (Current Setting) *- exit 1- edit
9.	Press ① to toggle Row ON/OFF	Row: XX (Choice Flashing) *- exit # - save
10.	Press ⊞ to save the setting	Row: XX (New Setting) *- exit 1- edit
11.	Press ✳ twice to return to the Coupon1 menu	Coupon1
12.	Press ④ to enter Coupon Value menu	Coupon1: (Current Value) *- exit # - edit
13.	Press ⊞ to edit Coupon1 Value	Coupon1: (New Value) *- del # - save

COUPON BY ROW CONTINUED		DISPLAY
14.	Enter Coupon value	Coupon1: $0.00 *- del # - save
15.	Press 🔘(#) to save the value	Coupon1: (New Value) *- exit # - edit
16.	Press ✱ two times to edit next coupon, or press ✱ five times to exit menu	(Sales Mode)

5.4.1 COUPON BY ITEM

STEP		DISPLAY
1.	Press Service Mode Button🔳	Motors (- -)
2.	Press ⑤ for Pricing menu	Pricing
3.	Press ④ for Coupon menu	Coupon
4.	Press ① for Coupon1 (Press corresponding number 2-5 for additional coupons)	Coupon1
5.	Press ③ to Verify All Items "OFF" (If All Items "ON" refer to 5.4.3)	All Items: OFF *- exit 3- edit
6.	Press ✱ to return to the Coupon1 menu	Coupon1
7.	Press ① to enter an item	Item: - - - *-exit
8.	Enter Item Number	Item: XXX (Current Setting) *- exit 1- edit
9.	Press ① to toggle ON/OFF	Item: XXX (Choice Flashing) *- exit # - save
10.	Press 🔘(#) to save the setting	Item: XXX (New Setting) *- exit 1- edit
11.	Press ✱ twice to return to the Coupon1 menu	Coupon1
12.	Press ④ to enter Coupon Value menu	Coupon1: (Current Value) *- exit # - edit
13.	Press 🔘(#) to edit value	Coupon1: $0.00 *- del # - save
11.	Enter Coupon value	Coupon1: $0.00 *- del # - save
14.	Press 🔘(#) to save the value setting	Coupon1: (New Value) *- exit # - edit
15.	Press ✱ two times to edit Coupon 2-5 or press ✱ five times to exit to sales mode	(Sales Mode)

5.5 TOKEN

This option allows the operator to designate the values of tokens accepted by pre-programmed coin mechs.

Value Token- This menu enables the use of tokens; this option requires an MDB version coin mechanism/changer. Several sub-menus are available that allow setting token values. This feature also allows settings by Item, Row, or All.

*If "**Space to Sales Whole Machine**" is "ON", and you are setting Tokens by Row, the Row must be set to Row1.*

5.5.3 TOKEN "ALL"

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (--)
2.	Press ⑤ for Pricing menu	Pricing
3.	Press ⑤ for Tokens menu	Tokens
4.	Press ① for the Token1 menu (Press corresponding number 2-5 for additional tokens)	Token1
5.	Press ③ for All Items	All Items: (Current Setting) *- exit 3- edit
6.	Press ③ to toggle ON/ OFF	All Items: (Choice Flashing) *- exit #- save
7.	Press �#️ to save the setting	All Items: (New Setting) *- exit 3- edit
8.	Press ✳️ to return to the Token1 menu	Token1
9.	Press ④ to enter Value menu	Token1: (Current Value) *- exit # - edit
10.	Press ⑀ then enter value	Token1: (New Value) *- del # - save
11.	Enter Token value	Coupon1: $0.00 *- del # - save
12.	Press ⑀ to save the value setting	Token1: (New Value) *- exit # - edit
13.	Press ✳️ two times to edit token 2-5 or press ✳️ three times to exit	(Sales Mode)

5.5.2 TOKEN BY ROW

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⑤ for Pricing menu	Pricing
3.	Press ⑤ for Tokens menu	Tokens
4.	Press ① for Token1 menu (Press corresponding number 2-5 for additional tokens)	Token1
5.	Press ③ to Verify All Items "OFF" (If All Items "ON" refer to 5.5.3)	All Items: OFF *- exit 3- edit
6.	Press ✳️ to return to the Token1 menu	Token1

TOKENS BY ROW CONTINUED		DISPLAY
7.	Press (2) to enter a row number	Row - - *- exit
8.	Enter Row Number	Row: XX (Current Setting) *- exit 1- edit
9.	Press (1) to toggle Row ON/OFF	Row: XX (Choice Flashing) *- exit #- save
10.	Press (#) to save the setting	Row: XX (New Setting) *- exit 1- edit
11.	Press (*) to return to the Token1 menu	Token1
12.	Press (4) to enter Value menu	Token1: (Current Value) *- exit # - edit
13.	Press (#) then enter the value	Token1: (New Value) *- del # - save
14.	Enter Token value	Coupon1: $0.00 *- del # - save
15.	Press (#) to save the value setting	Token1: (New Value) *- exit # - edit
16.	Press (*) two times to edit token 2-5 or press (*) three times to exit	(Sales Mode)

5.5.1 TOKEN BY ITEM

STEP		DISPLAY
1.	Press Service Mode Button (■)	Motors (- -)
2.	Press (5) for Pricing menu	Pricing
3.	Press (5) for Tokens menu	Tokens
4.	Press (1) for Token1 (Press corresponding number 2-5 for additional tokens)	Token1
5.	Press (3) to Verify All Items "OFF" (If All Items "ON" refer to 5.5.3)	All Items: OFF *- exit 3- edit
6.	Press (*) to return to Token1 menu	Token1
7.	Press (1) to enter an item	Item - - - *- exit
8.	Enter Item Number	Item: XXX (Current Setting) *- exit 1- edit
9.	Press (1) to toggle Item ON/OFF	Item: XXX (Choice Flashing) *- exit # - save
10.	Press (#) to save the setting	Item: XXX (New Setting) *- exit 1- edit
11.	Press (*) to return to Token1 menu	Token1
12.	Press (4) to enter Value menu	Token1: (Current Value) *- exit # - edit
13.	Press (#) to edit value	Token1: (New Value) *- del # - save

TOKENS BY ITEM CONTINUED	DISPLAY
14. Enter Token value	Coupon1: $0.00 *- del # - save
15. Press **#** to save the value	Token1: (New Value) *- del # - edit
16. Press **✱** two times to edit coupon 2-5 or press **✱** three times to exit menu	(Sales Mode)

5.7 COMBO

STEP	DISPLAY
1. Press Service Mode Button⬛	Motors (- -)
2. Press **5** for Pricing menu	Pricing
3. Press **7** to enter Combo menu (There are 5 available combo settings. For Combo 2 press **2**; 3 press **3**; etc. and follow the steps below.)	Combo
4. Press **1** for Combo 1 menu	Combo1: - - - $0.00 *- exit
5. Enter First Combo Item number and price	Combo1: 090 $1.00 *- exit # - next
6. Press **#** to save the setting	Combo1: 090 $1.00 *- exit # - edit 1- next
7. Enter Range number, then enter item numbers	Range1: --- to --- *- exit
8. Press **#** to save the setting	Range1: XXX to YYY *- exit # - edit 1- next
9. There are five settable ranges. To continue setting ranges repeat steps 7 & 8. When finished press **✱** repeatedly to exit out of the menu.	(Sales Mode)
TO DELETE A PREVIOUSLY SET COMBO	DISPLAY
1. Press Service Mode Button⬛	Motors (- -)
2. Press **5** for Pricing menu	Pricing
3. Press **7** to enter Combo menu (There are 5 available combo settings. For Combo 2 press **2**; 3 press **3**; etc. follow the steps below.)	Combo
4. Press **1** for Combo 1 menu	Combo1: 090 $1.00 *- exit # - edit 1- next
5. Press **#** to Edit the Combo	Combo1: 090 $0.00 *-del #OK
6. Press **✱** three times to delete the selection number	Combo1: - - - $0.00 *-exit # - save
7. Press **#** to save the setting	Combo1:- - - $0.00 *- exit # - next
8. press **✱** 4 times to exit menu	(Sales Mode)

32

6 ACCOUNTING

Use this menu to gain access to menus that display or reset data for various types of cash and vend totals. Counts can be viewed by individual items, rows or as the whole machine.

Historical totals: These are the counts since the initialization of the machine. They cannot be reset.

Resettable totals: These are totals since the last reset. These can be reset at any time. You have the option to reset just an item, row or the whole machine.

IIMPORTANT NOTE: Clearing by item and row will only clear the item or row entered.

6.3 ACCOUNTING "ALL"

This menu displays the total sales value and total vend count for the entire machine.

This includes satellite machines.

	ACCOUNTING ALL	
	STEP	**DISPLAY**
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑥ for Accounting menu	Accounting
3.	Press ③ for Accounting All menu	All Items
4.	Press ① Historical Count	Hist. Ct. 10
5.	Press ② Historical Cash	Hist. Cash $10.00
6.	Press ③ Resettable Count	Res. Count 10
7.	Press ④ Resettable Cash	Res. Cash $10.00
8.	Press ⑤ Historical Card	Hist. Card $0.00
9.	Press ⑥ Historical 2nd Vends	Hist. 2nd Vends 0
10.	Press ⑦ Resettable Card	Res Card $0.00
11.	Press ⑧ Resettable 2nd Vends	Res 2nd Vends 0
12.	Press ⓪ to clear all Resettable counters	Clear?
13.	Press ⓪ to confirm clear	Cleared
14.	Press ✱ four times to exit	Sales Mode

Confirming clear will clear ONLY the resettable counts for ALL ITEMS.

6.2 ACCOUNTING BY ROW

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑥ for Accounting menu	Accounting
3.	Press ② then enter Row Number	Row: -- *- exit

ACCOUNTING BY ROW CONTINUED		DISPLAY
4.	Press ① Historical Count by Row	Hist. Ct. 10
5.	Press ② Historical Cash by Row	Hist. Cash $10.00
6.	Press ③ Resettable Count by Row.	Reset. Ct. 10
7.	Press ④ Resettable Cash by Row	Reset Cash $10.00
8.	Press ⑤ Historical Card by Row	Hist. Card $0.00
9.	Press ⑥ Historical 2nd Vends by Row	Hist. 2nd vends 0
10.	Press ⑦ Resettable Card by Row	Reset Card $0.00
11.	Press ⑧ Resettable 2nd vends by Row	Reset 2nd Vends 0
12.	Press ⓪ to clear Resettable Counters	Clear?
13.	Press ⓪ to confirm clear	Cleared
14.	Press ✱ to enter another row or press ✱ four times to exit	(Sales Mode)

6.1 ACCOUNTING BY ITEM

STEP		DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑥ for Accounting menu	Accounting
3.	Press ① then enter Item Number	Item: --- *- exit
4.	Press ① Historical Count	Hist Ct. 10
5.	Press ② Historical Cash	Hist Cash $10.00
6.	Press ③ Resettable Count	Reset Ct. 10
7.	Press ④ Resettable Cash	Reset. Cash $10.00
8.	Press ⑤ Historical Card	Hist. Card $0.50
9.	Press ⑥ Historical 2nd vends	Hist. 2nd vends 2
10.	Press ⑦ Resettable Card	Reset Card $0.50
11.	Press ⑧ Resettable 2nd vends	Reset 2nd Vends 2
12.	Press ⓪ to clear Resettable Counters	Clear?
13.	Press ⓪ to confirm clear	Cleared
14.	Press ✱ to enter another Item or press ✱ four times to exit	(Sales Mode)

6.9 SHORT DEX REPORT

With the Short DEX Report feature set to ON the number of DEX-UCS data fields in a download file is shortened to fields required for machine sales and money accountability, along with active machine error messages. For a complete list of included DEX fields please see the GVC DEX Data Field Description document.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑥ for Accounting menu	Accounting
3.	Press ⑨ for Short Dex menu	Short Dex (Current Setting) *-exit 9-edit
4.	Press ⑨ to toggle Short Dex ON/OFF	Short Dex (Current Setting) *-exit 9-edit
5.	Press # to save the setting	# to Save
6.	Press ✳ three times to exit	(Sales Mode)

7 ADVANCED OPTIONS

To enter this menu you will be prompted to input a password. The following options are available:

- Discount
- Promo Vend
- Free Vend Rate
- Exact Change
- Unconditional Acceptance

- Max Change
- Programmable POS
- Shutdown
- Energy Savings
- Motor Pairing

7.1 DISCOUNT

This menu accesses the following sub-menus that allow the vending machine (controller) to charge a different price for selections at different times or on different days:

- Item
- Row
- All

- Start Time
- Day
- Stop Time

- Value
- Enable ON/OFF

7.1.3 DISCOUNT "ALL"

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default 2314)	Advanced
4.	Press ① for Discount menu	Discount
5.	Press ③ for All Items	All Items (Current Setting) *- exit 3- edit

DISCOUNT "ALL" CONTINUED		DISPLAY
6.	Press ③ to toggle All Items ON/OFF	All Items: (Choice Flashing) *- exit # - save
7.	Press ⧓ to save the setting	All Items (New setting) *- exit 3- edit
8.	Press ✶ to return to Discount menu	Discount
9.	Press ④ for Day menu	DAY
10.	Press ① for All Days	All Days (Current Setting) *- exit 1- edit
11.	Press ① to toggle All Days ON/OFF (To set individual days turn All Days OFF)	All Days (Choice Flashing) *- exit # - save
12.	Press ⧓ to save the setting	All Days (New Setting) *- exit 1- edit
13.	Press ② to toggle Monday ON/OFF	Mon (Choice Flashing) *- exit 2- edit
14.	Press ⧓ to save ON/OFF setting	Mon (New Setting)
Press number 3-8 to complete the other days of the week using steps 13 - 14		
15.	Press ✶ two times to return to Discount menu	Discount
16.	Press ⑤ two times for Start Time menu	(Current Time) *- exit # - edit
17.	Press ⧓ then enter Start Time in 24-hr time (HH:MM)	(New Time) *- del # - save
18.	Press ⧓ to save new Start Time	(New Time) *- exit # - edit
19.	Press ✶ to exit to return to Start Time menu	Start Time
20.	Press ⑥ two times for Stop Time menu	23:59 *- exit # - edit
21.	Press ⧓ then enter Stop Time in 24-hr time (HH:MM)	(New Time) *- del # - save
22.	Press ⧓ to save new Stop Time	(New Time) *- exit # -edit
23.	Press ✶ two times to return to Discount menu	Discount
24.	Press ⑦ for Discount Value menu	Discount (Current Value) *-del #-save
25.	Press ⧓ to save new Discount value	Discount (New Value) *- exit
26.	Press ✶ two times to return to Discount menu	Discount
27.	Press ⑨ for Enable Discount menu	Enable (Current Setting) *- exit 9- edit
28.	Press ⑨ to toggle Enable ON/OFF	Enable (Choice Flashing) *- exit # - save
29.	Press ⧓ to save the setting	Enable (New Setting) *- exit 9- edit
30.	Press ✶ five times to exit to Sales Mode	Sales Mode

7.1.2 DISCOUNT BY ROW

IMPORTANT NOTE: All items (7.1.3) must be turned to OFF.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default 2314)	Advanced
4.	Press ① for Discount menu	Discount
5.	Press ② for Row menu	Row: - - *- exit
6.	Enter row number	Row XX: (Current Setting) *- exit 1- edit
7.	Press ① to toggle Row ON/OFF	Row XX: (Choice Flashing) *- exit # - save
8.	Press ⌗ to save the setting	Row XX: (New Setting) *- exit 1- edit
9.	Press ✱ once to enter another row or 2 times to go to Discount menu	Discount
10.	Press ④ to enter Day menu	DAY
11.	Press ① for All Days	All Days (Current Setting) *- exit 1- edit
12.	Press ① to toggle All days ON/OFF (To set individual days turn All Days off)	All Days (Choice Flashing) *- exit # - save
13.	Press ⌗ to save the setting	Every Day (New Setting) *- exit 1- edit
14.	Press ② to toggle Monday ON/OFF	Mon (Choice Flashing) *-exit 2-edit
15.	Press ⌗ to save the setting	Mon (New Setting)
	Press number 3-8 to complete the other days of the week using steps 14 - 15	
16.	Press ✱ two times to return to Discount menu	Discount
17.	Press ⑤ two times to enter Start Time menu	(Current Time) *-exit #-edit
18.	Press ⌗ then enter Start Time in 24-hr time (HH:MM)	(New Time) *-del #-save
19.	Press ⌗ to save new Start Time	(New Time) *-exit #-edit
20.	Press ✱ to return to Start Time menu	Start Time
21.	Press ⑥ two times to Stop Time menu	23:59 *-exit #-edit
22.	Press ⌗ then enter Stop Time in 24-hr time (HH:MM)	(New Time) *-del #-save
23.	Press ⌗ to save new Stop Time	(New Time) *-exit #-edit

DISCOUNT BY ROW CONTINUED	DISPLAY
24. Press ✱ two times to return to Discount menu	Discount
25. Press ⑦ to enter Discount Value	Discount (Current Price) *-del #-save
26. Press # to save the new Discount Value	Discount (New Price) *- exit
27. Press ✱ two times to return to Discount menu	Discount
28. Press ⑨ for Enable menu	Enable (Current Setting) *- exit 9- edit
29. Press ⑨ to toggle Discount ON/OFF	Enable (Choice Flashing) *- exit # - save
30. Press # to save the setting	Enable (New Setting) *- exit 9- edit
31. Press ✱ five times to exit	(Sales Mode)

7.1.1 DISCOUNT BY ITEM

IMPORTANT NOTE: All items (7.1.3) must be set to OFF.

STEP	DISPLAY
1. Press Service Mode Button ⬛	Motors (- -)
2. Press ⑦ for Password Menu	Password
3. Enter Password (default 2314)	Advanced
4. Press ① for Discount menu	Discount
5. Press ① then enter Item Number	Item: --- *- exit
6. Enter the Item Number	Item: XXX (Current Setting) *- exit 1- edit
7. Press ① to toggle Item ON/OFF	Item: XXX (Choice Flashing) *- exit # - save
8. Press # to save the setting	Item: XXX (New Setting) *- exit 1- edit
9. Press ✱ once to enter another item or 2 times to return to Discount menu	Discount
10. Press ④ to enter Day menu	DAY
11. Press ① for All Days	All Days (Current Setting) *- exit 1- edit
12. Press ① to toggle All Days ON/OFF (To set individual days All Days must be OFF)	All Days (Choice Flashing) *- exit # - save
13. Press # to save the setting	All Days (New Setting) *- exit 1- edit
14. Press ② to toggle Monday ON/OFF	Mon (Choice Flashing) *.exit 2-edit

38

	DISCOUNT BY ITEM CONTINUED	DISPLAY
15.	Press (#) to save the setting	Mon (New Status)
	Press number 3-8 to complete the other days of the week using steps 14 - 15	
16.	Press (*) two times to exit for Discount menu	Discount
17.	Press (5) two times for Start Time menu	(Current Time) *-exit #-edit
18.	Press (#) then enter Start Time in 24-hr time (HH:MM)	(New Time) *- exit # - save
19.	Press (#) to save the new Start Time	(New Time) *- exit # - edit
20.	Press (*) to exit return to Start Time menu	Start Time
21.	Press (6) two times to enter Stop Time menu	23:59 *-exit #-edit
22.	Press (#) then enter Stop Time in 24-hr time (HH:MM)	(New Time) *- exit # - save
23.	Press (#) to save the new Stop Time	(New Time) *- exit # - edit
24.	Press (*) two times to return to Discount menu	Discount
25.	Press (7) then enter Discount Value	Discount (Current Price) *- del # - save
26.	Press (#) to save the Value setting	Discount (New Price) *- exit
27.	Press (*) two times to return to Discount menu	Discount
28.	Press (9) for the Enable menu	Enable (Current Setting) *- exit # - edit
29.	Press (9) to toggle Enable ON/OFF	Enable (Choice Flashing) *- exit # - save
30.	Press (#) to save the setting	Enable (New Setting) *- exit # - edit
31.	Press (*) five times to exit	(Sales Mode)

7.2 PROMO VEND

Promotional Vend - This function allows a free promotional product to be given to a customer in response to their purchase of another product. The promotional product is limited to the next sequential selection installed in the machine Examples: 1) Selection #33 is not installed in the

	STEP	DISPLAY
1.	Press Service Mode Button (■)	Motors (- -)
2.	Press (7) for Password menu	Password
3.	Enter password (default 2314)	Advanced
4.	Press (2) for Promo Vend menu	Promo Vend
5.	Press (4) for Promo Vend setting	Promo Vend (Current Setting) *- exit 4- edit
6.	Press (4) to toggle ON/OFF	Promo Vend (Choice Flashing) *- exit # - save
7.	Press (#) to save the setting	Promo Vend (New Setting) *- exit 4- edit

machine. The purchase of selection #32 will give away selection #34; 2) Purchase selection #53 will give away selection #54. (Examples only—you are not limited to only two promo vends)

PROMO VEND CONTINUED	DISPLAY
8. Press ✱ to return to Promo Vend menu	Promo Vend
9. Press ① then enter Item Number	Item: - - - *- exit
10. Press ① to toggle ON/OFF	Item: XXX (Choice Flashing) *- exit # - save
11. Press # to save the setting	Item: XXX (New Setting) *- exit 1- edit
12. Press ✱ three times to exit	(Sales Mode)

7.3 FREE VEND RATE

Enter a number from 0-255.
This will set the number of paid vends between free vends.
Example: If set at 5; every 5th vend will be free.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default 2314)	Advanced
4.	Press ③ to enter Free Vend Rate menu	Free Vend Rate: (Current Rate) *- exit # - edit
5.	Press # then enter new Rate	Free Vend Rate: (New Rate) *- exit #- save
6.	Press # to save the setting	Free Vend Rate: (New Rate) *- exit #- edit
7.	Press ✱ three times to exit	(Sales Mode)

7.4 EXACT CHANGE

Exact Change - Sets the coin tube value that will trigger the display of the *Please Use Exact Change* message. Example: If Exact Change is set to $5.00. The *Please Use Exact Change* message will come on when the total of change available (nickels, dimes and quarters) in the coin tubes is at or below $5.00.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default 2314)	Advanced
4.	Press ④ then press ①	Exact Change: $0.00 *- exit # - edit
5.	Press # to edit	Exact Change: $1.00 *- exit # - save
6.	Press # to save the setting	Exact Change: $1.00 *- exit #- edit
7.	Press ✱ four times to exit.	(Sales Mode)

IMPORTANT NOTE: In software version prior to 8207, if "Uncond. Accept" is set, for example, at $20.00; exact change will also be $20.00 and cannot be set for a lower amount.

7.4.2 EXACT CHANGE - ALTERNATE RULE

Alternate Change Rule - This function prevents a vend from occurring, flashes the *Please Use Exact Change* message and will return the established credit amount, if one or more of the coin tubes are too low to give back the correct change for the vend.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default 2314)	Advanced
4.	Press ④ for Exact Change menu	Exact Change
5.	Press ② for Alt Rules menu	Alt Rules (Current Setting) *-exit 2-edit
6.	Press ② to toggle ON/OFF	Alt Rules (Choice Flashing) *- exit # - save
7.	Press ⃫# to save the setting	Alt Rules (New Setting) *- exit 2-edit
8.	Press ✱ four times to exit.	(Sales Mode)

7.5 UNCONDITIONAL ACCEPTANCE

Unconditional Acceptance - Sets the unconditional acceptance value. All cash box coins or bills equal to or less than this set value will be accepted even if the changer <u>cannot</u> return an equal amount of change. When set to "0.00" all changer tube coins are accepted. Bills are accepted once there is enough change in the changer to pay back the bill type.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default-2314)	Advanced
4.	Press ⑤ for Unconditional Accept menu	Uncond Accept: $0.00 *- exit # - edit
5.	Press ⃫# then enter Price	Uncond Accept: $5.00 *- del # - save
6.	Press ⃫# to save **the setting**	Uncond Accept: $5.00 *- exit # - edit
7.	Press ✱ three times to exit.	(Sales Mode)

The Unconditional Acceptance set value is adjustable but the maximum value is equal to the largest denomination of currency or coin accepted by the changer or validator.

7.6 MAX CHANGE

Maximum Change Option This option prevents change from being returned to the customer until the amount of credit has been reduced to a value less than or equal to the programmed maximum change limit.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default is 2314)	Advanced
4.	Press ⑥ for Max Change menu	Max Change
5.	Press ① for current Max Change setting	Max Change (Current Setting) *- exit 1- edit

41

Note:	MAX CHANGE CONTINUED	DISPLAY
The highest value that can be set for the maximum price is 655.35 for a scale factor of 1 and 999.95 for a scale factor of 5.	6. Press (1) to toggle ON/OFF	Max Change (Choice Flashing) *- exit # - save
	7. Press (#) to save setting	Max Change (New Setting) *- exit 1- edit
	8. Press (2) then enter dollar amount	Max Change: $50.00 *- exit # - save
	9. Press (#) to save the setting	Max Change
	10. Press (*) three times to exit	(Sales Mode)

7.7 PROGRAMMABLE POS MESSAGE

These are messages that can be edited. You must first turn ON the default POS message under the options menu 3.7.

7.7.1 PROGRAMMING the POS MESSAGE

	STEP	DISPLAY
1.	Press Service Mode Button (⬛)	Motors (- -)
2.	Press (7) for Password menu	Password
3.	Enter Password (default is 2314)	Advanced
4.	Press (7) for Programmable POS menu	Programmable POS
5.	Press (1) for POS setting	Programmable POS (Current Setting) *- exit 1- edit
6.	Press (1) to toggle ON/OFF	Programmable POS (Choice Flashing) *- exit # - save
7.	Press (#) to save setting	Programmable POS (New Setting) *- exit 1- edit
8.	Press (2) to enter message	...Enjoy A Snack
9.	Press (1); (4); (7); to move cursor to the left Press (3); (6); (9); to move cursor to the right Press (2); (5); (8); to move the cursor from top to bottom. Once the cursor is in the place you want to edit press (#) In edit mode (0) is space key, (*) is backspace (#) saves	
10.	Press (#) to save the message	
11.	Press (*) 4 times to exit	(Sales Mode)

42

7.7.2 AUXILLARY MESSAGES

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ④ for Configuration menu	Configuration
3.	Press ④ to toggle the language to auxiliary	Language: Auxiliary *- exit # - save
4.	Press ⌗ to save the setting	Language: Auxiliary *- exit 1- edit
5.	Press ✱ two times to exit the Configuration menu	Motors (- -)
6.	Press ⑦ and enter password (default is 2314)	Advanced
7.	Press ⑦ for Programmable POS menu	Programmable POS
8.	Press ③ to enter auxiliary messages	(Message Choice) *- exit #- edit 1-next
9.	Press ① to toggle through messages.	(Message Choice) *- exit #- edit 1-next
10.	Press ⌗ to edit the selected message. Press ① ; ④ ; ⑦ ; to move cursor to the left Press ③ ; ⑥ ; ⑨ ; to move cursor to the right Press ② ; ⑤ ; ⑧ to move the cursor from top to bottom. Once the cursor is in the place you want to edit press ⌗ In edit mode ⓪ is space key, ✱ is backspace; ⌗ saves	
11.	Press ⌗ to save the setting	
12	Press ✱ three times to exit; or Press ① and follow step 10. to edit more messages	(Sales Mode)

IMPORTANT NOTE: To edit the messages the language must be in set to Auxiliary in mode 4.4.

GVC KEY/CHARACTER MAPPING

Lower case key map (un-shifted):

KEY	FUNCTIONS			
1	SHIFT (FUNCTION CHANGE)			
2	a	b	c	
3	d	e	f	
4	g	h	i	
5	j	k	l	
6	m	n	o	
7	p	q	r	s
8	t	u	v	
9	w	x	y	z
0	SPACE			

Upper case key map (shifted):

KEY	FUNCTIONS			
1	SHIFT (FUNCTION CHANGE)			
2	A	B	C	
3	D	E	F	
4	G	H	I	
5	J	K	L	
6	M	N	O	
7	P	Q	R	S
8	T	U	V	
9	W	X	Y	Z
0	SPACE			

Symbol key map (shifted):

KEY	FUNCTIONS			
1	SHIFT (FUNCTION CHANGE)			
2	!	.	?	
3	`	"	→	
4	,	;	:	
5	$	@	%	
6	*	→	¥	
7	+	–	/	=
8	=	[	`	
9	(	[	{	)
0	SPACE			

44

7.7.3 TIME DISPLAY

This option will display the time and date. Programmable POS does not have to be "ON" for this to work.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Advanced menu	Advanced
3.	Enter Password (default is 2314)	Advanced
4.	Press ⑦ for Programmable POS menu	Programmable POS
5.	Press ④ for Time Display menu	Time Display: (Current Setting) *- exit 4- edit
6.	Press ④ to toggle ON/OFF	Time Display: (Choice Flashing) *- exit # - save
7.	Press ⌗ to save the setting	Time Display: (New Setting) *- exit 4- edit
8.	Press ✱ four times to exit	(Sales Mode)

7.8 SHUTDOWN

This option allows the controller to shut down a range of selections or the entire machine based on four (4) time-of-day intervals. If the time falls within one of these intervals and the entire machine has been selected for shutdown then the message *VENDING OPERATION TO RESUME AT hh.mm* is displayed.

If a range of selections has been chosen for shutdown that does not encompass the entire machine, the same message displays once every time the customer makes a selection that falls within the range.

> **IMPORTANT NOTE:** The correct time and date must be set so that the **SHUTDOWN** intervals work correctly. Refer to page 15. Also, for any given day these four time intervals may overlap one another. For each interval, the machine (controller) can be programmed from no days up to every day of the week on which the specified shutdown time intervals are active.

7.8.3 SHUTDOWN ALL

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default is 2314)	Advanced
4.	Press ⑧ for Shutdown menu	Shutdown
5.	Press ① for Interval1 (② for Interval 2, etc.)	Interval1
6.	Press ③ for All Items	All Items: (Current Setting) *- exit 3- edit
7.	Press ③ to toggle ON/OFF	All Items: (Choice Flashing) *- exit # - save

SHUTDOWN ALL CONTINUED	DISPLAY
8. Press (#) to save setting	All Items: (New Setting) *- exit 3- edit
9. Press (*) to return to Interval1	Interval1
10. Press (4) to enter Day Menu	Day
11. Press (1) to toggle All Days ON/OFF (To program individual days turn Every day OFF)	All Days (Choice Flashing) *- exit # - save
12. Press (#) to save the setting	All Days (Current Setting) *- exit 1- edit
13. Press (2) to toggle ON/OFF	Monday (Choice Flashing) *- exit # - save
14. Press (#) to save the setting	Monday (New Setting) *-exit 2-edit
Press number 3-8 to complete the other days of the week using steps 13-14	
15. Press (*) two times to return to Interval1 menu	Interval1
16. Press (5) for Start Time menu	Start Time
17. Press (5) for Current Time setting	(Current Time) *- exit # - edit
18. Press (#) then enter Start Time in 24-hr time (HH:MM)	(New Time) *- del # - save
19. Press (#) to save the Start Time	(New Time) *- exit # - edit
20. Press (*) to return to Start Time menu	Start Time
21. Press (6) two times to enter Stop Time menu	23:59 *-exit #-edit
22. Press (#) then enter Stop Time in 24-hr time (HH:MM)	(New Time) *- del # - save
23. Press (#) to save the Stop Time	(New Time) *- exit # - edit
24. Press (*) two times to return to Interval menu	Interval1
25. Press (8) to toggle Lighting ON/OFF **Lighting ON – turns off lights during a shutdown** **Lighting OFF – leaves lights on during a shutdown**	Lighting (Choice Flashing) *- exit # - save
26. Press (#) to save the setting	Lighting (New Setting) *- exit 8- edit
27. Press (9) for Shutdonw Enable menu	Enable (Current Setting) *- exit 9- edit
28. Press (9) to toggle ON/OFF	Enable (Choice Flashing) *- exit #- save
29. Press (#) to save the setting	Enable (New Setting) *- exit 9- edit
30. Press (*) two times to edit Interval 2-4	Shutdown
31. Press (*) three times to exit to sales mode	(Sales Mode)

7.8.2 SHUTDOWN BY ROW

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password:
3.	Enter Password (default is 2314)	Advanced
4.	Press ⑧ for Shutdown menu	Shutdown
5.	Press ① for Interval1 (② for Interval 2, etc.)	Interval1
6.	Press ② to set a Row	Row: - - *- exit
7.	Enter a Row	Row: XX (Current Setting) *- exit 1- edit
8.	Press ① to toggle Row ON/OFF	Row: XX (Choice Flashing) *- exit # - save
9.	Press ⑤ to save the setting	Row: XX (New Setting) *- exit 1- edit
10.	Press ✳ to enter another Row or press ✳ 2 times to return to Interval menu	Interval1
11.	Press ④ to enter Day menu	Day
12.	Press ① to toggle All Days ON/OFF (To program individual days turn every day OFF)	All Days (Choice Flashing) *- exit # - save
13.	Press ⑤ to save the setting	All Days (New Setting) *- exit 1- edit
14.	Press ② to toggle Monday ON/OFF	Monday (Choice Flashing) *- exit # - save
15.	Press ⑤ to save the setting	Monday (New Setting) *-exit 2-edit
	Press number 3-8 to complete the other days of the week using steps 14-15	
16.	Press ✳ two times to exit	Interval1
17.	Press ⑤ two times to for Start Time menu	(Current Time) *- exit # - edit
18.	Press ⑤ then enter Start Time in 24-hr time (HH:MM)	(New Time) *- del # - save
19.	Press ⑤ to save the setting	(New Time) *- exit # - edit
20.	Press ✳ to return to Start Time menu	Start Time
21.	Press ⑥ two times to enter Stop Time menu	23:59 *-exit #-edit
22.	Press ⑤ then enter Stop Time in 24-hr time (HH:MM)	(New Time) *- del # - save
23.	Press ⑤ to save the setting	(New Time) *- exit # - edit
24.	Press ✳ two times to exit to Interval menu	Interval1
25.	Press ⑨ for Shutdown Enable menu	Enable (Current Setting) *- exit 9- edit

SHUTDOWN BY ROW CONTINUED	DISPLAY
26. Press (9) to toggle ON/OFF	Enable (Choice Flashing) *- exit #- save
27. Press (#) to save **the setting**	Enable (New Setting) *- exit 9- edit
28. Press (*) two times to edit Interval 2-4	Shutdown
29. Press (*) five times to exit to sales mode	(Sales Mode)

7.8.1 SHUTDOWN BY ITEM

STEP	DISPLAY
1. Press Service Mode Button (■)	Motors (- -)
2. Press (7) for Password menu	Password
3. Enter Password (default is 2314)	Advanced
4. Press (8) for Shutdown menu	Shutdown
5. Press (1) for Interval1 ((2) for Interval 2, etc.)	Interval1
6. Press (1) for Item menu	Item: --- *- exit
7. Enter Item Number	Item: XXX (Current Setting) *- exit 1- edit
8. Press (1) to toggle ON/OFF	Item: XXX (Choice Flashing) *- exit # - save
9. Press (#) to save the setting	Item: XXX (New Setting) *- exit 1- edit
10. Press (*) to enter another item or press (*) 2 times for Interval1 menu	Interval1
11. Press (4) to enter Day Menu	Day
12. Press (1) to toggle All Days ON/OFF (To program individual days turn Every day OFF)	All Days (Choice Flashing) *- exit # - save
13. Press (#) to save the setting	All Days (New Setting) *- exit 1- edit
14. Press (2) to toggle Monday ON/OFF	Monday (Choice Flashing) *- exit # - save
15. Press (#) to save the setting	Monday (New Setting) *-exit 2-edit
Press number 3-8 to complete the other days of the week using steps 14-15	
16. Press (*) two times to return to Interval menu	Interval1
17. Press (5) two times for Start Time menu	(Current Time) *- exit # - edit
18. Press (#) then enter Start Time in 24-hr time (HH:MM)	(New Time) *- del # - save
19. Press (#) to save the setting	(New Time) *- exit # - edit

SHUTDOWN BY ITEM CONTINUED		DISPLAY
20.	Press ✱ to return to Start Time menu	Start Time
21.	Press ⑥ two times to enter Stop Time menu	23:59 *-exit #-edit
22.	Press # then enter Stop Time in 24-hr time (HH:MM)	(New Time) *- del # - save
23.	Press # to save the setting	(New Time) *- exit # - edit
24.	Press ✱ two times to exit to Interval menu	Interval1
25.	Press ⑨ for Shutdown Enable menu	Enable (Current Setting) *- exit 9- edit
26.	Press ⑨ to toggle ON/OFF	Enable (Choice Flashing) *- exit #- save
27.	Press # to save the setting	Enable (New Setting) *- exit 9- edit
28.	Press ✱ two times to edit Interval 2-4	Shutdown
29.	Press ✱ three times to exit	(Sales Mode)

7.9 ENERGY SAVINGS

This function allows you to set a **NON-health safety** machine to run at a higher than normal temperature during set times.

IMPORTANT NOTE: Energy Savings runs OUTSIDE of the HS Standards. There are two programmable intervals.

STEP		DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (Default is 2314)	Advanced
4.	Press ⑨ for Energy Savings menu	Energy Savings
5.	Press ① for Interval1(to edit Interval 2, Press ②)	Interval1/ or Interval2
6.	Press ④ for Day menu	Day
7.	Press ① to toggle All Days ON/OFF (To program individual days turn every day OFF)	All Days (Choice Flashing) *- exit # - save
8.	Press # to save the setting	All Days (New Setting) *- exit 1- edit
9.	Press ② to toggle Monday ON/OFF	Monday (Choice Flashing) *- exit # - save
10.	Press # to save the setting	Monday (New Setting) *-exit 2-edit
	Press number 3-8 to complete the other days of the week using steps 9-10	
11.	Press ✱ two times to return to Interval menu	Interval1
12.	Press ⑤ two times for Start Time menu	(Current Time) *- exit # - edit

ENERGY SAVINGS CONTINUED		DISPLAY
13.	Press (#) then enter Start Time in 24-hr time (HH:MM)	(New Time) *- del # - save
14.	Press (#) to save the setting	(New Time) *- exit # - edit
15.	Press (*) to return to Start Time menu	Start Time
16.	Press (6) two times to enter Stop Time menu	23:59 *-exit #-edit
17.	Press (#) then enter Stop Time in 24-hr time (HH:MM)	(New Time) *- del # - save
18.	Press (#) to save the setting	(New Time) *- exit # - edit
19.	Press (*) two times to return to Interval menu	Interval1
20.	Press (7) to enter Storage Temp (default is 62ºF)	Storage (Current temp)F *- exit 7- edit
21.	Press (7) to set Storage Temp (available range: 36ºF to 62ºF)	Storage (Choice Flashing)F *- exit # - save
22.	Press (#) to save the setting	Storage (New temp)F *- exit 7- edit
23.	Press (*) two times for INTERVAL menu	Interval1
24.	Press (8) to toggle Lighting ON/OFF **Lighting ON-turns off lights during Energy Savings.** **Lighting OFF- leaves lights On during Energy Savings**	Lighting (Choice Flashing) *- exit # - save
25.	Press (#) to save **setting**	Lighting (New Setting) *- exit 8- edit
26.	Press (*) two times to return to Interval menu	Interval1
27.	Press (9) for Energy Savings Enable menu	Enable (Current Setting) *- exit 9- edit
28.	Press (9) to toggle enable ON/OFF	Enable (Choice Flashing) *- exit #- save
29.	Press (#) to save the setting	Enable (New Setting) *- exit 9- edit
30.	Press (*) five times to exit to Sales mode	(Sales Mode)

7.0 MOTOR PAIRING

This function is so two motors, on the same shelf, can be ran at the same time. This allows for wide or bigger items to be vended.

<u>Setting Dual Motors</u>

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑦ for Password menu	Password
3.	Enter Password (default-2314)	Advanced
4.	Press ⓪ for Motor Pairing menu	Pair - - - *-exit
5.	Enter the first motor number	Pair 012 to - - - *-exit #-add
6.	Press Ⓟ enter the 2nd motor number	Pair 012 to 013 *-exit #-save
7.	Press ✱ two times to add another pair or press ✱ five times to exit to sales mode	(Sales mode)

If first motor is even, 2nd motor must be odd. Motors 12 and 13 will turn at the same time to vend a large product. Motor 13 will need to be a motor that runs backward from motor 12. If first motor is odd, 2nd motor must be even. Both motors have to be on same shelf.

8 TEST MOTOR

Use this menu to test vend individual motors. The selection displays with the test vend. If a test vend attempt on a particular motor fails, controller beeps.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⑧ for Test Motor menu	Item - - - *-exit
3.	Press selection number and wait	Item 010 *-del
4.	Repeat step 3 for other selections.	
5.	Press ✱ two times to exit.	(Sales Mode)

9 TEST ALL MOTORS

This menu tests vend all motors. The selection displays the test vend. If a test vend attempt on a particular motor fails, then the controller beeps. Satellite machines are also included in the test.

IMPORTANT NOTE:		STEP	DISPLAY
Pressing ✱ at any time stops the test.	1.	Press Service Mode Button ⬛	Motors (- -)
	2.	Press ⑨ and wait.	Item
		The motor selection number displays while it is being tested.	Item 010
	3.	Press ✱ two times to exit.	(Sales Mode)

0 DIAGNOSTICS MENU

0.1 SYSTEM DIAGNOSTIC
This menu is used to perform a self-diagnostics check and display results.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪ for Diagnostic menu	Diagnostic...
3.	Press ① to start test	Checksum Temp Sensor Optical Vend Coin Acceptor Bill Validator Card Reader1 Card Reader2 Tests Completed
4.	Press ✱ four times to exit.	(Sales Mode)

0.2 TEST RELAY
Testing of Relays - This menu provides functions that allow the operator to test the operation of the individual relay lines 1 through 6.

RELAY1 - Refrigeration Compressor.
RELAY2 - Evaporator Fan
RELAY3 – Defrost heater Upon exit from the function the corresponding relay control line reverts to a state that is dependent on the controller's normal relay control algorithm.
RELAY4 – controls the upper zone heater when configured as MZF

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪ for Diagnostic menu	Diagnostics
3.	Press ② for Relays menu	Relays
4.	Press ① to toggle Relay 1 ON/OFF	Relay 1 ON/OFF
5.	Press ② to toggle Relay 2 ON/OFF	Relay 2 ON/OFF
6.	Press ③ to toggle Relay 3 ON/OFF	Relay 3 ON/OFF
7.	Press ④ to toggle Relay 4 ON/OFF	Relay 4 ON/OFF
8.	Press ⑤ to toggle Relay 5 ON/OFF	Relay 5 ON/OFF
9.	Press ⑥ to toggle Relay 6 ON/OFF	Relay 6 ON/OFF
10.	Press ✱ four times to exit	(Sales Mode)

0.3 LOG

Note: *Engineering data download for service technician ONLY!*

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ③ for Log	Log
4.	Press ✱ three times to exit	(Sales Mode)

0.4 COIN REJECT RATE

This feature tracks the percentage of coins that have been rejected by the coin mech. This resets when in accounting "ALL" has been cleared.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ④ to view percentage	Coin Rej. Rate 10%
4.	Press ✱ three times to exit	Sales Mode

0.5 BILL REJECT RATE

This feature tracks the percentage of bills that have been rejected by the bill validator. This resets when in accounting "ALL" has been cleared.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑤ to view percentage	Bill Rej. Rate 20%
4.	Press ✱ three times to exit	Sales Mode

0.6 IVEND ALIGNED

When a machine is equipped with the iVend™ optical vend sensors this feature provides an audible and visual indication of when the vend sensors are aligned or not aligned correctly.
If the iVend™ sensors are blocked or not aligned a continuous series of audible beeps is heard and the display shows NO, until the sensors are properly aligned.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑥ to check iVend alignment	iVend aligned NO/OK

0.7 ADVANED DIAGNOSTICS

0.7.1 REFRIG LOG

This feature allows data on the current state of the refrigeration sensors, relays, timer and error conditions to be output to the serial port.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑦ for Password menu	Password:
4.	Enter Password (default-2314)	Log
5.	Press ① for Refrigeration Log status	Refrig Log (Current Status) *- exit 1- edit
6.	Press ① to toggle ON/OFF	Refrig Log (Choice Flashing) *- exit # - save
7.	Press ⌗ to save the setting	Refrig Log (New Status) *- exit 1- edit
8.	Press ✳ four times to exit	(Sales Mode)

0.7.2 DAQ LOG

This feature sends display vibration sensor values. For Engineering use only.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑦ for Password menu	Password:
4.	Enter Password (default-2314)	Log
5.	Press ② for DAQ Log	DAQ Log (after a few seconds, display changes to Log)
6.	Press ✳ three times to exit	(Sales Mode)

0.7.3 STS LOG

This feature sends the current space to sales settings to the serial port.
For Engineering use only.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑦ for Password menu	Password:
4.	Enter Password (default-2314)	Log
5.	Press ③ for STS	StS (after a few seconds, display changes to Log)
6.	Press ✳ three times to exit	(Sales Mode)

0.7.4 HEALTH SAFETY TEST

The **HEALTH SAFETY** feature prevents the sale of perishable food if the air temperature inside the Satellite Food Vendor compartment rises above the Health Safety temperature limit for more than 15 minutes. The factory default for health safety limit is automatically set when the refrigeration configuration is set. The perishable products being vended must match the refrigeration configuration.

Important Note: Make sure that the **Health Safety** setting is enabled prior to starting this test. See Service Mode 4.9.1 below.

1. Close the door and wait 75 minutes for the temperature stabilize

2. Simulate Warm Temperature
   a. Open the door
   b. Locate the sensor at the back of the cabinet above the top tray.
   c. Remove the mounting screw; place the sensor in a cup of warm water.
   d. Enable **HS Test software setting** in control board service mode. See Below.
   e. Close the door.

3. Perform Test

   a. Press ⓪ on the host machine numerical keypad to check the temperature.
   b. Wait until the temperature is above the upper health safety limit of 41ºF for 15 minutes.
   c. Try to vend a product from the Satellite Food Vendor.
   d. If the health safety is working properly the vend should fail; the machine should have automatically been disabled by the controller board.

4. After Test is Completed
   a. Open the Satellite Food Vendor door
   b. Remove the sensor from the cup of water and put the sensor back in place.
   c. Close the door and time how long it takes for the Satellite Food Vendor to get below the refrigeration set point. . Cold should be below the set point within 30 minutes.

When HS test ON (HS Door switch override ON) is saved in Service mode, and the machine door is closed the Health Safety Activation Delay Time is set to the 15 minute value rather than the extended 30 minutes for Cold and 75 minutes for Frozen that is allowed after a normal door closure. To allow for multiple door open/closes and door close debounce the HS test mode is active for 3 minutes after "HS test ON" is set in Service Mode, so that if the door is opened/closed multiple times the 15 minute timer would be set again and still be used. Also, when "HS test ON" is set the refrigeration OFF timer should also be reset at this time so that when it is time for the minimum off time to expire the "HS test ON" mode is also cleared. Once the door is closed Health Safety feature now functions as if the machine door had been closed for a long period of time and any temperature value over the HS limit, for the refrigeration mode in use, causes the normal 15 minute HS limit timer to start a count and if the temperature limit is exceeded for 15 minutes disables vending from the machine. Refrigeration Modes affected are: Cold, Frozen and MZF

STEP		DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑦ for Password menu	Password:
4.	Enter Password (default-2314)	Log
5.	Press ④ for Health Safety test	HS Test (Current Setting) *- exit 4- edit
6.	Press ④ to toggle ON/OFF	HS Test (Choice Flashing) *- exit # - save
7.	Press �# to save the setting	HS Test (New Setting) *- exit 4- edit
8.	Press ✱ four times to exit	(Sales Mode)
Press ⓪ in Sales Mode to see current teperatures and "HS Test" message		

0.7.5 CAN/BOTTLE DROP SENSOR BIAS

With the can/bottle drop sensor bias feature, the value of the internal controller setting for the vend detection can be viewed. This feature requires the machine to have a can/bottle drop sensor attached.

Caution: This feature is only used on closed front can and bottle vending machines.

STEP		DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑦ Password menu	Password:
4.	Enter Password (default-2314)	Log
5.	Press ⑤ for Drop Bias menu	Drop Bias
6.	Press ⑤ to view the setting	Drop Bias 0-125
8.	Press ✱ five times to exit	(Sales Mode)

0.8 DOOR ALERT

This feature allows for an alarm to sound if the machine door is left open, on a machine that has a door switch.

STEP		DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑧ for Door Alert setting	Door Alert (Current Setting) *- exit 8- edit
4.	Press ⑧ to toggle ON/OFF	Door Alert (Choice Flashing) *- exit # - save
5.	Press # to save the setting	Door Alert (New Setting) *- exit 8- edit
6.	Press ✱ three times to exit	(Sales Mode)

0.9 MANUAL DEFROST

This feature allows a machine to begin a manual defrost of a refrigeration system. The sequence continues after the machine door is closed and the machine is in the sales mode.

	STEP	DISPLAY
1.	Press Service Mode Button ⬤	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⑨ for Manual Defrost setting	Manual Defrost (Current Setting) *- exit 9- edit
4.	Press ⑨ to toggle ON/OFF	Manual Defrost (Choice Flashing) *- exit # - save
5.	Press Ⓗ to save the setting	Manual Defrost (New Setting) *- exit 9- edit
6.	Press ✶ three times to exit	(Sales Mode)

0.0 ELEVATOR

With the Elevator feature set to ON the Elevator controller commands are sent from the GVC control board to the Elevator control board. This allows for the elevator tray motor and baffle commands, along with monitoring all related sensors. Caution: This feature requires the machine to have the Elevator features present from the factory.

0.0.1.1 ELEVATOR BOARD SOFTWARE REVISION

This menu displays the current information sent to the GVC control board from the Elevator control board. This information will include the Elevator control board model number and software revision. This information is also reported in the full DEX data download.

	STEP	DISPLAY
1.	Press Service Mode Button ⬤	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⓪ for Peripherals menu	Peripherals
4.	Press ① for Elevator menu	Elevator
5.	Press ① for Software Version	SW vEC 4218988.XXX *-exit
6.	Press ✶ four times to exit	(Sales Mode)

0.0.1.2 NUMBER OF TRAYS

With the Elevator feature set to ON the number of trays in the machine can be verified with this mode.

Note: The main door must be closed to perform this function.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪	Diagnostics
3.	Press ⓪	Peripherals
4.	Press ①	Elevator
5.	Press ②	e.g. Found 5 Rows *-exit 1-start
6.	Press ① to start – the elevator will search for trays.	e.g. Finding 5 Rows *-exit
7.	At Completion	e.g. Found 5 Rows *-exit 1-start
8.	Press ✱ 3 times to exit	(Sales Mode)

0.0.1.3 BAFFLE OPEN/CLOSED

With the Elevator feature set to ON the Elevator machine sliding anti-cheat Baffle door can be OPEN or CLOSED. In the OPEN position the vend space between the glass and the product trays is open for the elevator tray to move to any product tray. The Product Delivery door is also closed and locked when the Baffle is OPEN. When the Baffle is CLOSED the Product Delivery door of the machine is opened after the Elevator moves to the bottom position in the machine.

Note: The main door must be closed to perform this function.

> IMPORTANT: Do not attempt to open the main door with the baffle CLOSED, this can cause severe damage.

	STEP	DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⓪ for Peripherals menu	Peripherals
4.	Press ① for Elevator menu	Elevator
5.	Press ③ for Baffle status	Baffle (Current Status) 1-open 2-closed *-exit
6.	Press ② to close the baffle	2 – Closing (Flashes)
7.	At completion	Baffle Closed 1-open 2-closed *-exit
8.	Press ① to open the baffle	1 – Opening (Flashes)
9.	At completion	Baffle Open 1-open 2-closed *-exit
10.	Press ✱ 3 times to exit	(Sales Mode)

0.0.2 AUTO-DOOR MOTOR

The function of the Auto-Door motor is to automatically open the delivery door after each vend. This makes it easier for people to get the product.

How to get Auto-Door motor to run
The way to get the Auto-door motor to run is to do a motor count once the Auto-door motor has been plugged in.

Auto-Door Test – Opens and closes the Delivery Lift box product door and indicates if the control board detects the motor cam switch to be in the correct position.

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⓪ for Peripherals menu	Peripherals
4.	Press ② for Auto Door status	Auto Door (Current Status) 1-open 2-closed *-ext
5.	Press ① to open the delivery door	Auto Door Closed (Flashes)
6.	At completion	Auto Door Open 1-open 2-closed *-ext
7.	Press ② to close the delivery door	Auto Door Open (Flashes)
8.	At completion	Auto Door Closed 1-open 2-closed *-ext
9.	Press ✱ 4 times to exit	(Sales Mode)

NOTE: The display may show "Unknown" while the Auto Door is moving to the "Open" or "Closed" position. If the control board can't determine an Auto Door motor cam position, the "Unknown" message will also appear.

IMPORTANT: If the control board cannot determine the Auto Door position when the sales mode is entered the machine will be placed out of service.

0.0.3 DELIVERY LIFT TEST

	STEP	DISPLAY
1.	Press Service Mode Button⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⓪ for Peripherals menu	Peripherals
4.	Press ③ for Delivery Lift status	Lift (Current Status) 1-open 2-closed *-exit
5.	Press ① to raise the Delivery Lift	Lift Down (Flashes)

DELIVERY LIFT TEST CONTINUED		DISPLAY
6.	At completion	Lift Up 1-open 2-closed *-ext
7.	Press ② to lower the Delivery Lift	Lift Up (Flashes)
8.	At completion	Lift Down 1-open 2-closed *-ext
9.	Press ✱ 4 times to exit	(Sales Mode)

NOTE: The display may show "Lift Unknown" while the Delivery Lift is moving to the up or down position. If the control board can't determine a lift motors cam position the "Lift Unknown" message will also appear.

IMPORTANT: Do not attempt to run the Delivery Lift Test diagnostic if the Delivery Lift plate may be jammed or appears with one end near the Delivery lift sensors and the other end near the bottom of the Delivery Box. Manually correct this issue before running the test. Contact Vendnet Service at 1-800-833-4411 for assistance.

0.0.6 LIFT OPTICS ALIGN
This indicates if the Delivery Lift Sensors are functioning and aligned so that they can detect when a product is lifted to the correct height. The Green LED on the lift optics board (located behind the iVend Red LED sensor board) will also be illuminated when sensors are aligned.

STEP		DISPLAY
1.	Press Service Mode Button ⬛	Motors (- -)
2.	Press ⓪ for Diagnostics menu	Diagnostics
3.	Press ⓪ for Peripherals menu	Peripherals
4.	Press ⑥ for Lift Optics status	Lift Opt Align: (Current Status) XXXXXms
9.	Press ✱ 5 times to exit	(Sales Mode)

CUSTOMER LEAD THROUGH MESSAGES
The following messages are affected by the language selection and are stored in the controller memory.

MESSAGE 1	
English	YOU ARE GETTING HUNGRY TIME TO ENJOY A SNACK
Italian	GRAZIE
Dutch	DANK U
Spanish	GRACIAS
Danish	TAK
French	MERCI
German	VIEL DANK
Turkish	ACIKIYOR MUSUNUZ? ATISTIRMA ZAMANI
Auxiliary	ENJOY A SNACK NOW [maximum length: 40]

MESSAGE 2	
English	PLEASE INSERT MORE MONEY
Spanish	POR FAVOR DEPOSITE MAS DINERO
French	MONTANT INSUFFISANT INTRODUISEZ D'AUTRES PIECES
Italian	PER FAVORE INTRODURRE PIU SOLDI
German	INDKAST FLERE PENGE
Danish	MEHR GELD EINWERFEN
Dutch	MEER GELD IN WERPEN
Turkish	LUTFEN DAHA\nPARA ATINIZ
Auxiliary	[maximum length: 30]

MESSAGE 3	
English	PLEASE USE EXACT CHANGE
Spanish	POR FAVOR DEPOSITE CANTIDAD EXACTA
French	FAITES L'APPOINT S'IL VOUS PLAIT
Italian	PER FAVORE INTRODURRE I PRECISI SOLDI
German	ABGEZAHLTES GELD EINWERFEN
Danish	INDKAST AFTALTE PENGE
Dutch	AFGEPAST GELD IN WERPEN
Turkish	PARA USTU\n VERMEZ
Auxiliary	[maximum length: 30]

MESSAGE 4	
English	OUT OF SERVICE
Spanish	FUERO DE SERVICIO
French	DEMANDEZ LE RESPONSABLE
Italian	PER FAVORE CHIAMARE SERVIZIO
German	BITTE KUNDENDIENST RUFEN
Danish	TILKALD SERVICEMONTOR
Dutch	SERVICEDIENST BELLEN
Turkish	SERVIS DISI
Auxiliary	[maximum length: 25]

MESSAGE 5	
English	PLEASE MAKE ANOTHER SELECTION
Spanish	SELECIONE OTRO PRODUCTO
French	FAITES UNE AUTRE SELECTION
Italian	FARE UNA ALTRE SCELTA
German	ANDERE WARE WAHLEN
Danish	VAELG ANDEN VARE
Dutch	ANDERE KEUZE MAKEN
Turkish	LUTFEN BASKA\nSECIM YAPINIZ
Auxiliary	[maximum length: 25]

MESSAGE 6:	
English	THANK YOU …Enjoy!
Italian	GRAZIE
Dutch	DANK U
Spanish	GRACIAS
Danish	TAK
French	MERCI
German	VIEL. DANK
Turkish	TESEKKUR
Auxiliary	[maximum length: 40]

MESSAGE 7	
English	DISCOUNT AVAILABLE
Italian	DISCOUNT AVAILABLE
Dutch	DISCOUNT AVAILABLE
Spanish	DESCUENTO DISPONIBLE
Danish	DISCOUNT AVAILABLE
French	DISCOUNT AVAILABLE
German	DISCOUNT AVAILABLE
Turkish	INDIRIM IMKANI
Auxiliary	[maximum length: 40]

MESSAGE 8	
English	FREE ON US
Italian	FREE *
Dutch	FREE **
Spanish	FREE ***
	Only: GRATIS
Danish	FREE ****
French	FREE *****
German	FREE******
Turkish	UCRETSIZDIR
Auxiliary	[maximum length: 20]

MESSAGE 9	
English	CREDIT
Italian	CREDIT
Dutch	CREDIT
Spanish	CREDITO
Danish	CREDIT
French	CREDIT
German	CREDIT
Turkish	KREDI
Auxiliary	[maximum length: 10]

MESSAGE 10	
English	SELECTION
Italian	SELECTION
Dutch	SELECTION
Spanish	SELECCION
Danish	SELECTION
French	SELECTION
German	SELECTION
Turkish	SECIM
Auxiliary	[maximum length: 10]

MESSAGE 11	
English	PRICE
Italian	PRICE
Dutch	PRICE
Spanish	PRECIO
Danish	PRICE
French	PRICE
German	PRICE
Turkish	FIYAT
Auxiliary	[maximum length: 10]

ERROR CODE MESSAGES

Troubleshoot error code messages with the table below.

GVC2 Message	Message Description	Possible Actions
CONTROL BOARD ERRORS		
[VMC] [OK]	Control board diagnostic test. Ok or Good indicates no active errors.	For any error condition troubleshooting please have the specific machine manual
[VMC xxxx] Where xxxx is message shown below.	Diagnostic Test error present	
[Settings Reset]	Control board settings reset to defaults. Displayed after software updates.	If a software upgrade has just been done change control board settings and prices as desired. Check control board settings. Cycle power to board power and recheck error messages.
[Door Switch]	Door switch is seen as open for greater than allowed time	Check door switch for correct operation with door and check door harness.
[Scale Factor]	There is a conflict with one or more MDB settings from the attached MDB devices	Review manuals and settings for MDB devices to make sure they are compatible.
[Selection SW]	A keypad selection button is stuck in the pressed position.	Determine reason why keypad button is stuck and correct issue.
[Low AC]	The incoming AC power is very low	Determine why low AC voltage is getting to the control board.
[VMC RAM checksum] or No Message	A RAM checksum error indicates that accounting data or a control board setting were in error. The control board will use a backup copy of the data where possible.	Check the control board settings and accountability data for correctness. Cycle power to the control board and recheck error messages.

GVC2 Message	Message Description	Possible Actions
MOTOR ERRORS		
No Message	Motors do not have any errors present.	
[Motor ### xxxx]	Motor error present from sales mode vend. [Esc oPEn] message is for machines with a motorized changer escrow function.	
[Motor ### OPEN]	The motor or harness has an open electrical connection.	Check motor and motor harness for open connections. Test vend motor. Replace motor if necessary.
[Motor ### SHORT]	The motor or harness has an electrical short.	Check motor and motor harness for short. Replace motor if necessary.
[Motor ### Home Sns]	The motor home switch was not detected while the motor was in operation. This may also indicate a motor JAM condition.	Check motor type service mode setting, motor, motor switch and then spiral for blockage. Test vend selection motor. Replace motor if necessary.
[Motor ### Jam]	A motor JAM has been detected.	Check motor and spiral for blockage.
[Motor ### ERRORS]	One or more motor errors have been detected.	Test vend selection motor and review information on motor open, short, home switch and jam conditions.
[Motor Under Voltage]	The detected motor voltage is not high enough to run the selection motors.	Test vend selection motor for correct operation. Replace Motor. Replace Board

GVC2 Message	Message Description	Possible Actions
TEMPERATURE SENSOR ERRORS		
No Message or [REFRIG xxxx]	Refrigeration temperature sensor test.	
[REFRIG Sensor # Open]	A Temperature sensor or harness is considered to have an open electrical connection. Where "#" is sensor number	Check sensor and sensor harness for open connections. Check for sensor readings. Replace sensor if necessary
[REFRIG Sensor # Short]	A temperature sensor or harness is considered to have an electrical short. Where "#" is sensor number.	Check sensor and sensor harness for shorted connections. Check for sensor readings. Replace sensor if necessary
[REFRIG Health Safety]	The cabinet temperature and time limits for food health safety have been exceeded.	Check sensor readings and sensor harness for shorted connections. Check for sensor readings. Replace sensor if necessary
DROP SENSOR ERRORS		
Fail: [VMC Drop Sensor]	The can and bottle delivery sensor for closed front machines is not detected.	Check sensor and sensor harness for open connections. Check for sensor readings. Replace sensor if necessary.
Pass: No Message		
OPTICAL VEND SENSOR ERRORS		
[Optical Sensor Error]	The iVend optical delivery for glass front machines is blocked, out of alignment or not detected.	Check sensor and sensor harness for open connections. Check for sensor readings. Replace sensor if necessary.

GVC2 Message	Message Description	Possible Actions
COIN CHANGER ERRORS		
[Coin Mech xxxxx] or [OK]		
Fail: [Coin Mech xxxxx] where xxxx is message below		
[Comm]	Control board does not have communication with the coin mechanism.	Check MDB Harness to changer. Check for power on changer, See changer service manual.
[TubeSns]	The coin mechanism has reported a tube sensor error.	See changer service manual.
[Inlet]	The coin mechanism has reported an acceptor blockage	See changer service manual.
[Tube Jam]	The coin mechanism has reported a tube payout error.	Check changer tubes. See changer service manual.
[ROM]	The coin mechanism has reported a program memory error	See changer service manual.
[Excess Esc]	The coin mechanism has reported that a large number of coin escrow requests have occurred	Check changer escrow lever position. See changer service manual.
[Coin Jam]	The coin mechanism has reported that a coin is jammed in the coin path.	Check changer coin path. See changer service manual.

GVC2 Message	Message Description	Possible Actions
[Low Accept]	The control board has seen a low acceptance rate on coins.	Review inserted coins. See changer service manual.
[Accpt Disc]	The coin mechanism has reported that the coin validation acceptor is disconnected.	Re-connect changers' acceptor. See changer service manual.
[Route Err]	The coin mechanism reported that a coin did not follow the correct path.	Check changer coin path. See changer service manual.
Pass: [OK] or No message		
BILL VALIDATOR ERRORS		
[Bill Val xxxxx] or [OK]		
Fail: [Bill Val xxxxx] where xxxx is message below.		
[Comm]	Control board does not have communication with the bill validator.	Check MDB Harness to validator. Check for power on validator. See validator service manual.
[Stack Full]	The bill validator reports that the stacker is full of bills.	Check bill stacker box for bills. See validator service manual.
[Motor Err]	The bill validator reports that a validator motor error has occurred	See validator service manual.

GVC2 Message	Message Description	Possible Actions
[Jam]	The bill validator reports a bill is stuck in the bill path.	Check validator bill path for bills. See validator service manual.
[ROM]	The bill validator reports a program memory error.	See validator service manual.
[Stack Open]	The bill validator reports a bill box is open or not installed.	Check bill stacker box for open lid. See validator service manual.
[Sensor Err]	The bill validator reports a sensor error.	See validator service manual.
CARD READER 1 ERRORS		
[Card rdr1 xxxxx] or [OK]	Card Reader Address	
Then		
Fail: [Card rdr1 xxxxx] where xxxx is message below or reader error code		
[Comm]	Control board does not have communication with the card reader.	
[Err]	The card reader reports an error.	
CARD READER 2 ERRORS		
[Card rdr2 xxxxx] or [OK]		
Then		
Fail: [Card rdr2 xxxxx] where xxxx is message below or reader error code		
[Comm]	Control board does not have communication with the card reader.	
[Err]	The card reader reports an error.	

GVC2 Message	Message Description	Possible Actions
DELIVERY LIFT ERRORS		
[Lift Optic Error]	Lower I-Vend optical sensor/s is/are not functioning correctly.	1. Check that the Green LED on the control board for the lower I-Vend sensors is lit and steady. 2. If the Green LED is not lit check for correct alignment and that all connections to control/sensor boards are secure/good. 3. If the Green LED fails to light replace each board starting with the control board for the lower I-Vend sensors.
[Optic Vend Error]	Upper I-Vend optical sensor/s is/are not functioning correctly.	1. Check that the Red LED on the Upper I-Vend hinge side board is lit and steady. 2. If The Red LED is not lit check for correct alignment and that all connections to control/sensor boards are secure/good. 3. If Red LED fails to light replace the pair of upper I-Vend boards.
[Lift Motor Open]	An electrical issue with one or both of the Lift Motors.	1. Do a "Motor Count", the first number total displayed include the: a) Coin return Motor b) Delivery Lift Motor c) RH Bin Floor Lift Motor d) LH Bin Floor Lift Motor After a short delay the number should reduce by 4 if all the above are correctly detected. 2. Check that the wiring to each of the motors/switches are correct and secure. 3. Power cycle the controller and observe both motors, one should move a little which signifies it is good. Replace the motor that does not move.
[Auto Door Open]	An electrical issue with the Auto Door Motor.	1. Manually operate to check that the mechanism is free and is not binding-up. 2. Check that the wiring to the motor/switch is correct and secure. 3. Check the adjustment of the index switch. 4. Replace switch/lever and adjust correctly. 5. Replace motor.

GVC2 Message	Title	Description
ELEVATOR ERROR CODES		
EFL 1	Elevator Position Vend (EPVD) Failed.	Failed to get to the Vend position following a position vend command.
EFL 2	Lock switch 1 and 2 both high (invalid condition).	Logically both slide switches can never be operated at the same time.
EFL 3	Baffle close (EBCL) failed to complete.	Failed to close the security baffle following a "close baffle" command.
EFL 4	Baffle open (EBOP) failed to complete.	Failed to open the security baffle following an "open baffle" command.
EFL 5	Elevator position standby (EPSB) failed.	Failed to get to the standby position following a "position standby" command.
EFL 6	Elevator shelf position (ESELx) failed.	Failed to get to the required shelf position following a position shelf command.
EFL 7	Motor fails to move.	No motor movement for a period of 1 second, as determined by the dual encoder signals.
EFL 8xy	Shelf Number Mismatch	A mismatch of shelf numbers between the VMC controller & Elevator Controller after a reset sequence (ERST). E.G. EFL8-04_05 = 4 shelves were identified by the Elevator controller when it was told there are 5. Both numbers will always be 2 digit. EFL8-00_05 would mean no shelves were identified which would indicate there is a sensor or wiring failure.
EFL 9	Delivery door opened unexpectedly.	Should the delivery door be opened outside of a vend cycle the elevator will be immediately sent to the "vend" position and an ELF9 will be reported. The VMC controller will then issue a go to standby command once the delivery door has been closed.
EFL 98	Command out of sequence	Will be returned as part of the elevator status reply if any other command is issued other than a "reset" or "position standby" command at power up.
EFL 99	At top limit switch.	Will be returned as part of the elevator status reply if a command is issued if the elevator is stationary at the top limit for any reason.

ELEVATOR TROUBLE SHOOTING

Problem	Symptoms	Possible Cause/s
ELEVATOR TROUBLESHOOTING		
The Elevator or Baffle do not move or operate	No activity from the elevator system **ERROR CODES NONE**	Delivery Door Optical Switch (J4 of Elevator Control Board, Black, Brown & White wires, GREEN LED D11 is lit when the delivery door is CLOSED): 1. Check that the delivery door is fully closed 2. Move the elevator down to unlock the delivery door and check VERY slowly that the delivery door is completely free in its motion and closes under its own weight – VERY IMPORTANT 3. Check that the GREEN LED D1 on the elevator control board is lit indicating the delivery door is CLOSED 4. Check that the optical switch actuator plate mounted to the back of the delivery door is not blocking the switch when the door is CLOSED. Adjust plate such that LED D11 comes ON when the door is $\frac{1}{4}$"– $\frac{3}{8}$" away from the closed position at the bottom edge of the door. 5. Check the inline connection next to the switch 6. Check the connection to the Elevator Control Board at J4. 7. Faulty Optical Switch, replace
Baffle does not open after a vend	At the end of a vend, after the item has been retrieved, the baffle does not re-OPEN for 1 minute. During the 1 minute delay the message "Please Remove Your Product" is shown and the beeper sounds every 10 seconds **ERROR CODES NONE**	Delivery Door Optical Switch (J4 of Elevator Control Board, Black, Brown & White wires, GREEN LED D11 is lit when the delivery door is CLOSED): 1. Check that the GREEN LED D11 goes out when the delivery door is opened by $\frac{3}{8}$" at the bottom edge. 2. If necessary adjust the actuator plate as described in d) above 3. Faulty Optical Switch, replace

Problem	Symptoms	Possible Cause/s
Out of Service	Power cycle with main door closed and baffle fully open/home – Elevator is driven to VEND and stops, baffle cycles out/in 3 times and stops **ERROR CODES EFL 2 EFL 99** Power cycle with main door closed and the baffle partly out or fully closed – Elevator ascends and hits baffle and stops **ERROR CODES EFL 2 EFL 5 EFL 99**	UPPER Lock Slide Switch (Orange & Black wires, GREEN LED D8 is lit when switch is not actuated): 1. Check that the lock slide is not hitting the underside of the delivery door because it is not closing correctly 2. Move the elevator up to give good access & visibility of the lock-slide. Operate the lock slide very slowly by hand to ensure the motion is free and both switches are correctly actuated. 3. Check connection at switch 4. Check connection at elevator control board 5. Switch open-circuit/damaged, replace switch
Out of Service	Power cycle with main door closed - Elevator attempts to drive very slowly to STANDBY; if baffle is partly out or closed the elevator is stopped/stalled, GVC attempts 2 further resets which fail. If the baffle is fully in/open the elevator will continue to the top limit switch and stop. **ERROR CODES EFL 5**	UPPER Lock Slide Switch (Orange & Black wires, GREEN LED D8 is lit when the switch is not actuated): 1. Switch contacts do not open when lever is actuated, replace switch 2. Wiring to switch is 'short-circuit'

72

Problem	Symptoms	Possible Cause/s
Out of Service	Power cycle with elevator in STANDBY, baffle fully open and main door closed – The baffle closes, elevator is moved to PARK then back to STANDBY, baffle cycles a couple of times and stops in an unpredictable position, then there 4 short pulses which move the baffle by approx. 1/16" each time, then the system goes out of service **ERROR CODES** **EFL 2** **EFL 5** **EFL 99**	LOWER Lock Slide Switch (Yellow & Black wires, GREEN LED D9 is lit when the switch is not actuated): 1. Check connection at switch 2. Check connection at elevator control board 3. Switch open-circuit/damaged, replace switch
	Power cycle with elevator is in the STANDBY position and the baffle is partly out - The baffle is pulsed 4 times, then a 2 second delay and then a 2nd set of 4 pulses before going out of service again. **ERROR CODES** **EFL 99**	
Out of Service	Power cycle with elevator is in the STANDBY position – The baffle closes, then a dull 'thump' can be heard and the timing belt may jump a couple of times on the pulleys as the elevator is	LOWER Lock Slide Switch (Yellow & Black wires, GREEN LED D8 is lit when the switch is not actuated): 1. Switch contacts do not open when lever is actuated 2. Wiring to switch is 'short-circuit'

Problem	Symptoms	Possible Cause/s
	driven against the bottom stop/end limit. **ERROR CODES EFL 1**	
Out of Service	The elevator successfully completes the initializing sequence after a power cycle or main door closure. When attempting to do a vend the elevator goes to the top limit switch and stops. GVC sends a reset and subsequently there could be varying errors. GVC continues to issue resets several times before the system is ultimately put out of service. **ERROR CODES EFL 5 EFL 8xy EFL 99**	Elevator Motor Encoder #1 (Green/White wire): 1. Check connection at motor 2. Check connection at elevator control board 3. Faulty/Open Circuit encoder, replace motor
Out of Service	In most cases the initializing sequence after a power cycle or door closure is successful; the elevator sometimes stops momentarily halfway down. When attempting a vend it is possible that an item is dispensed from the shelf without the elevator moving, as if the elevator functionality had not been	Elevator Motor Encoder #2 (Red/White wire): 1. Check connection at motor 2. Check connection at elevator control board 3. Faulty/Open Circuit encoder, replace motor

Problem	Symptoms	Possible Cause/s
	enabled. After this a 2nd vend can result in nothing vending and the elevator starts to pulse between PARK & STANDBY indefinitely. **ERROR CODES** **EFL 3** **EFL 4** **EFL 5** **EFL 6** **EFL 7** **EFL 8xy** **EFL 99**	
Out of Service	Power cycle with elevator is in the STANDBY position with main door closed – Baffle closes, elevator moves to VEND then immediately to STANDBY, baffle opens and elevator starts moving up and stops shortly after (top of elevator is approx. 1" above the bottom of the glass) **ERROR CODES** **EFL 7**	Elevator Motor Encoders #1 & #2 (Green/White & Red/White wires): 1. Check connections at motor 2. Check connections at elevator control board 3. Faulty encoders, replace motor
Out of Service	Power cycle with elevator is in the STANDBY position with main door closed - Elevator moves to PARK, baffle moves out, elevator moves to VEND, elevator moves to STANDBY, baffle moves in, elevator to PARK then	Top Limit Switch (Orange & Black wires, GREEN LED D13 is lit when the switch is not actuated): 1. Check connections at switch 2. Check connections at elevator control board 3. Switch open-circuit/damaged, replace switch

Problem	Symptoms	Possible Cause/s
	immediately to STANDBY. The above is repeated 2 further times before system goes out of service. **ERROR CODES EFL 8-00_05 EFL 99**	
Out of Service	Power cycle with elevator is in the STANDBY position with main door closed – The elevator & baffle perform normal process at the start of the initializing sequence, then the elevator ascends and hits frame at top and stops/stalls. 2 furthers resets are issued which results in the same behavior, elevator remains at top of frame and goes out of service. Condition is recoverable from a reset command. **ERROR CODES EFL 7**	Top Limit Switch (Orange & Black wires, GREEN LED D13 is lit when the switch is not actuated): 1. Switch contacts do not open when lever is actuated, replace switch 2. Wiring to switch is 'short-circuit'
Out of Service	Power cycle with elevator is in the STANDBY position with main door closed – The elevator moves to PARK, the baffle moves out to close. Baffle remains closed and elevator ascends and hits baffle and stops. GVC issues 2	Baffle 'Open/Front' Limit Switch (Yellow & Black wires, GREEN LED D10 is lit when the switch is not actuated): 1. Check connections at switch 2. Check connections at elevator control board 3. Switch open-circuit/damaged, replace switch

Problem	Symptoms	Possible Cause/s
	further resets and the above is repeated before going out of service **ERROR CODES EFL 7 EFL 8-00_05**	
Out of Service	Power cycle with elevator is in the STANDBY position with main door closed - Elevator moves to PARK, the baffle moves out and cycles 2 times then stops. GVC issues 2 further resets and the above is repeated before going out of service **ERROR CODES EFL 5**	Baffle 'Open/Front' Limit Switch (Yellow & Black wires, GREEN LED D10 is lit when the switch is not actuated): 1. Switch contacts do not open when lever is actuated, replace switch 2. Wiring to switch is 'short-circuit'
Baffle does not move	Power cycle with elevator is in the STANDBY position with main door closed – The elevator moves to PARK, the baffle doesn't move, the elevator goes to VEND and then to TOP LIMIT and returns to PARK – the reset is successful. **ERROR CODES NONE**	Baffle 'Closed' (rear) Limit Switch (Orange & Black wires, GREEN LED D11 is lit when the switch is not actuated): 1. Check connections at switch 2. Check connections at elevator control board 3. Switch open-circuit/damaged, replace switch

Problem	Symptoms	Possible Cause/s
Out of Service	Power cycle with elevator is in the STANDBY position with main door closed – The elevator goes to PARK, the baffle operates continuously for 3 ½ cycles. GVC issues 2 further resets and the above is repeated before going out of service **ERROR CODES EFL 1**	Baffle 'Closed' (rear) Limit Switch (Orange & Black wires, GREEN LED D11 is lit when the switch is not actuated): 1. Switch contacts do not open when lever is actuated, replace switch 2. Wiring to switch is 'short-circuit'
Baffle Closes when a selection is made	Power cycle with elevator is in the STANDBY position with main door closed – System will reset/initialize normally. When making a vend the baffle is closed and the elevator is sent to VEND and "Please Remove Your Product" is displayed; this simulates an item blocking the I-vend. **ERROR CODES NONE**	I-Vend Input to GVC J8_Pin 5 (White wire): 1. The RED LED on the 'hinge' side I-Vend board should be lit & steady? 2. I-Vend is physically blocked in the elevator tray 3. The I-Vend red filter lens is/are dirty 4. The sides of the elevator tray have been bent/misaligned 5. One or both of the I-Vend boards is/are faulty or damaged, replace as pair.
Machine may be 'Free Vending'	The elevator successfully completes the initializing sequence after a power cycle or main door closure – System will dispense the item from the shelf but it will not be detected	I-Vend Input to GVC J8_Pin 5 (White wire): 1. The RED LED on the 'hinge' side I-Vend board should be lit and when something blocks/interrupts the array it will go out 2. There is a short circuit in the wiring 3. One or both of the I-Vend boards is/are faulty or damaged, replace as pair.

Problem	Symptoms	Possible Cause/s
	and credit will not be deducted, the display shows "Please Select Another Selection". The elevator returns to STANDBY and item/s can be retrieved by unlocking the delivery door by pressing the # key **ERROR CODES NONE**	
The Elevator or Baffle do not move or operate	No activity from the elevator system **ERROR CODES NONE**	Main Door Switch (GVC J3, Elevator Control Board J5, Black/Yellow & Black/Green wires): 1. Check that the striker plate in the top RH corner of the cabinet is actuating the Door Switch mounted on the door 2. Check that GVC J3 is connected and secure 3. Check that Elevator Control Board J5 is connected and secure
Out of Service The Elevator does not operate	Elevator in 'Standby' – Power-up/close main door and nothing happens **ERROR CODES EFL 1**	1. Check the 6-Way connector to the elevator motor is fully home/connected 2. Set-up a voltage meter to take a 24VDC reading across pins 1 & 3 of the elevator motor connector on the elevator control board (P2), remove one wire from the main door switch, and a few seconds later after check to see if there is a voltage output to the motor. If there is 24-30VDC, replace the motor If no voltage replace the control board
	Elevator in 'Park' - Power-up/close main door, if baffle is fully open it will close, then nothing. **ERROR CODES EFL 1**	
	Elevator in 'Vend' - Power-up/close door. a) If baffle is fully open it cycles 1 ¾ times, this repeats 3	

Problem	Symptoms	Possible Cause/s
	times and then stops. b) If baffle is not fully open it will not move. **ERROR CODES EFL 1 EFL 5**	
Out of Service **(Only relates to Elevator Control Boards with pre Revision 1.07 Firmware)**	Power-up/close main door with elevator & Baffle in any position, 'Out of Service' is displayed after a few moments, nothing happens. **ERROR CODES ELEVATOR COMM**	1. Check the DEX harness connecting between the GVC & Elevator control boards are properly connected 2. If there is a card system with its DEX plug engaged with the DEX socket in the machine, ensure that it is pushed **fully** home (if it is partially out the transmit line is shorted to ground) **3.** Having eliminated the above two possibilities, with the machine switched ON, remove the power connector (P1) from the elevator board, leave for 20 seconds, then reconnect and close door **If this solves the problem then the elevator firmware should be upgraded to > Rev 1.07** 4. Having eliminated the above three possibilities, first replace the elevator control board, then the GVC

QUICK REFERENCE GUIDE

1. Tube Fill / Coin Dispense
2. Motor Count
3. Options (ON / OFF)
   1. Force Vend
   2. Bill Escrow
   3. Multi Vend
   4. Free Vend
   5. Fast Change
   6. Optic Vend (1-Item/2-Row/3-All)
   7. POS (Default Message)
   8. Set Point (Temperature)
   9. Keypad Backlight (Level)
   0. Drop Sensor (Sensitivity)
4. Configuration
   1. Item (Can / Bottle / Snack)
   2. Row (Can / Bottle / Snack)
   3. All Items (Can / Bottle / Snack)
   4. Language
   5. Auto-reinstate (1-Item/2-Row/3-All)
   6. Space-to-Sales (ON / OFF)
   7. Custom Space-to-Sales
   8. Time/Date
      1. Date
      2. Time
      3. Daylight Savings
   9. Health Safety (ON / OFF 1-Item/2-Row/3-All)
   0. Advanced Config (See Next Column)
5. Pricing
   1. Item (Selection)
   2. Row
   3. All Items
   4. Coupon (See Manual)
   5. Token (See Manual)
   7. Combo (See Manual)
6. Accounting
   1. Item 2. Row 3. All Items
   2. Historical Count 2. Historical Cash
   3. Resettable Count 4. Resettable Cash
   5. Historical Card 6. Historical 2nd Vends
   7. Resettable Card 8. Resettable 2nd Vends
   9. Short form DEX (ON / OFF)
   0. Clear Resettable 0. Clear ?
7. Advanced Options (Next Column)
8. Test Vend Item
9. Test Vend All Items
0. Diagnostics
   1. Machine Self Test
   2. Relay Test 1 2 3 4 5 6 (0-All Off)
   3. Log (Engineering)
   4. Coin Reject Rate
   5. Bill Reject Rate
   6. I-Vend Aligned
   7. Log (Engineering) – Password (2314)
   8. Door Alert (ON/ OFF)
   9. Manual Defrost (ON/OFF)
   0. Peripherals
      1. Elevator
         1. Elevator Board Software Version
         2. Manual Reset / Count Rows
         3. Open / Close Baffle
      2. Auto Door (Open/Close)
      3. Lift Motor (Open/Close)
      6. Lift optics align

Password Protected Menus (Password: 2314)
   0. Advanced Configuration
      1. Beep (ON / OFF)
      2. Optics Disable (I-Vend Disables Vendor)
      3. Motor Type (2 / 3 Wire)
      4. Talker (ON / OFF)
      5. Password Change
      6. Set Defaults
         1. Default 1 (Standard Default)
         2. Default 2 (Customer Specific Default)
         0. Reset to Defaults
      7. Refrigeration Mode
         (Snack, Cold, Cold Food, Slackened, Frozen, Dual Zone, Dual Upper -6, Chill, MZF, MZF-2, MZF-5, SZ Frozen, SZ Frozen-2, SZ Frozen-5, SZ cold, SZ cold-1)
         Note: Use cold if no cold food
      8. 2 / 3 Digit Selection Style
      9. Home Motors with Door Switch (ON / OFF)
      0. Peripherals
         1. Elevator (ON / OFF)
         2. Auto Lift Button (Auto/Off/Button)
         3. Touch Comm (ON / OFF)
         4. Auto Service (ON / OFF)
   7. Advanced Options (Password: 2314)
      1. Discount
         1. Item
         2. Row
         3. All Items
         4. Day
         5. Start Time 5. Set Start Time
         6. Stop Time 6. Set Stop Time
         7. Discount Value
         9. Enable ON / OFF
      2. Promo Vend
         1. Item
         4. Promo (ON / OFF)
      3. Free Vend Rate
      4. Exact Change (Message Level)
         2. Alternate Change Rules (ON / OFF)
      5. Unconditional Accept (Level)
      6. Maximum Change
         1. Enable Max Change
         2. Set Amount
      7. Programmable POS / Auxiliary
         1. POS (ON / OFF)
         2. Enter POS Message
         3. Auxiliary Messages
         4. Time Display (ON / OFF)
      8. Shutdown Machine
         1 2 3 4 Interval Number
         1. Item
         2. Row
         3. All Items
         4. Day
         5. Start Time 5. Set Start Time
         6. Stop Time 6. Set Stop Time
         8. Lighting (ON / OFF - hardware option)
         9. Enable (ON / OFF)
      9. Energy Savings
         1. Interval 1
         2. Interval 2
         4. Day
         5. Start Time 5. Enter Time
         6. Stop Time 6. Enter Time
         7. Target Temperature
         8. Lighting (ON / OFF - hardware option)
         9. Enable (ON / OFF)
      0. Motor Pairing (Item/Item)
         Note: Must be odd/even motors and same tray

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82

P/N 4215507 RevD