



VISTA

Model VC630



Operator's Manual

Seaga
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Freeport, IL USA 61032
seagamfg.com

INTRODUCTION

Congratulations on the purchase of your new Vista Series Vending Machine. This vending machine has been designed to give you many years of dependable service. It requires little maintenance and is easy to set up and operate.

READ THIS MANUAL COMPLETELY

Your vending machine is designed to operate simply and reliably, but to take full advantage of your vendor, please read this owner's manual thoroughly. It contains important information regarding installation and operations, as well as a brief troubleshooting guide.

EQUIPMENT INSPECTION

After you have received your vendor and have it out of the box, place it on a secure surface for further inspection. **Note:** Any damages that may have occurred during shipping must be reported to the delivery carrier immediately. Reporting damages and the seeking of restitution is the responsibility of the equipment owner. The factory is willing to assist you in this process in any way possible. Feel free to contact our Customer Care Department with any questions you may have on this process.

Once you have your vendor located, we suggest that you keep this manual for future reference, or you can view this manual online at www.seagamfg.com. Should any problems occur, refer to the section entitled "COMMON QUESTIONS AND ANSWERS". It is designed to help you quickly identify a problem and correct it.

MANUFACTURER'S WARRANTY

WHAT IS COVERED:

Manufacturer warrants TO THE ORIGINAL PURCHASER ONLY that each item of equipment manufactured is free from defects in material and workmanship under normal use and service. Manufacturer's obligation under this warranty shall be limited to repair or replacement, at our plant, of any parts of the equipment which shall, within one year of the date of shipment to the original purchaser, be demonstrated to be defective. The original purchaser may obtain repair or replacement of the equipment under this warranty by returning the defective item or entire vendor to the Manufacturer, freight prepaid.

WHAT IS NOT COVERED:

Manufacturer's warranty obligations DO NOT EXTEND TO OR INCLUDE installation expenses, vandalism, or difficulties resulting from failure to operate equipment in accordance with Manufacturer's instructions under competent supervision and difficulties due to changes in vended products which are beyond the control of Manufacturer.

SPECIAL NOTE: Manufacturer is not responsible for any loss of income due to a vending machine being out of service due to a warrantable item.

This warranty is in lieu of all other warranties, expressed or implied, including the warranty of merchantability and fitness or use, and of all other obligations or liabilities on Manufacturer's part. Manufacturer neither assumes, nor authorizes any other person to assume for it, any other liability in connection with the sale of equipment manufactured by itself. This warranty shall not apply to equipment manufactured or any part thereof which is subject to accident, negligence, alteration, abuse, misuse or damage in shipment. The term "original purchaser," as used in this warranty, shall be deemed to mean that person for whom the equipment is originally installed.

Manufacturer is not liable for any incidental, consequential or other damages of any kind whatsoever, directly or indirectly, arising from the use of the equipment whether based upon theories of contract negligence or tort.

Effective 9/01

For Technical Support & Service

Contact our Customer Care Dept.

8:30 a.m. - 4:00 p.m. CST. Mon thru Fri
815.297.9500 ext 160, Domestic
815.297.9500 ext 160, International
815.297.1758 Fax
email: customercare@seagamfg.com

For Parts

Contact our Parts Dept.

8:30 a.m. - 4:00 p.m. CST. Mon thru Fri
815.297.9500 ext 160, Domestic
815.297.9500 ext 160, International
815.297.1758 Fax
email: parts@seagamfg.com



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INTRODUCTION

This manual is divided into four (4) main sections, Snack Vendor, Programming, Payment Systems, and Beverage Vendor. It is in your best interest to review this manual and even set up and test your machine prior to locating it. This will give you confidence when servicing the machine on location and enable you to present a competent, professional image to your locations.

IMPORTANT NOTICES

Your vendor(s) are intended for indoor use only.

Your vendor(s) must be set on a level, well-supported location.

If you have a combo snack and soda, your vendor has two (2) power cords. Both cords must be plugged in for full function of the machine.

Leave at least 6" (15 cm) between the left side of the vendor and wall.

Leave at least 6" (15 cm) between the back of the vendor and wall.

Condenser cooling air is taken in the left and exhausted out the back.

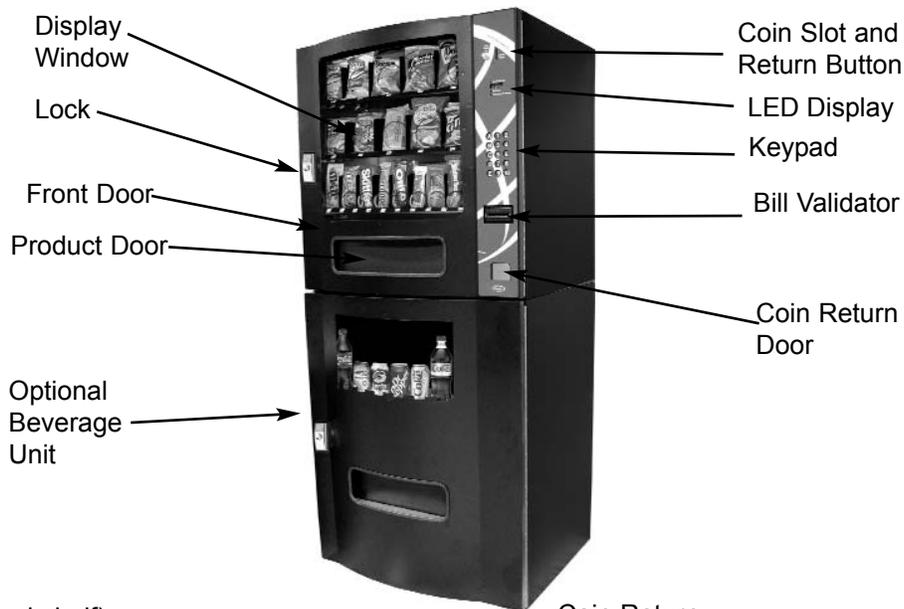
It is very important to ALWAYS unload your vendor before transporting it.

Do not load your vendor with disfigured or damaged product.

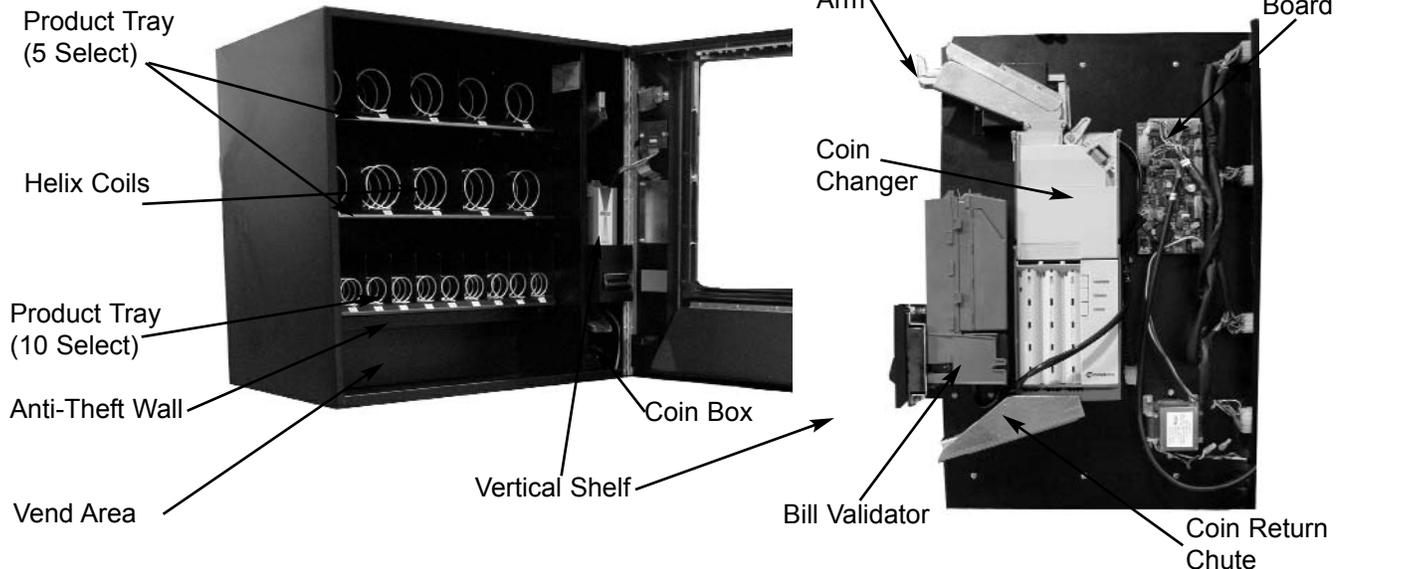
Temperature is factory set. Allow your vendor(s) to operate for twenty-four (24) hours before attempting any adjustments.

Always disconnect electrical supply to BOTH snack and beverage units before servicing the machine.

Section 1 SNACK VENDOR



(Interior view and vertical shelf)



Note: Vertical shelf shown above is an example; you may have different styles of payment systems installed.

LOCK

The Snack Vendor has one Lock, more commonly known as a "T" handle Lock. To unlock the Front Panel, insert key and turn clockwise ¼ turn. When unlocked the "T" of the Lock will pop out from the vendor. Turn ¼ turn clockwise to open Front Panel.

MOUNTING

Your Snack Vendor can be mounted to the Beverage Vendor, which is explained in the Beverage Vendor section of this manual.

LEVELING

Once your vendor is in its new location, you will need to level it to insure proper operation. You will need a level. We recommend a 3ft (1m) level, as it will give a more accurate reading than a small torpedo level. There are threaded Levelers included with your vendor. These Levelers screw into the bottom of the machine and can then be adjusted up or down as needed.

ELECTRICAL CONNECTION

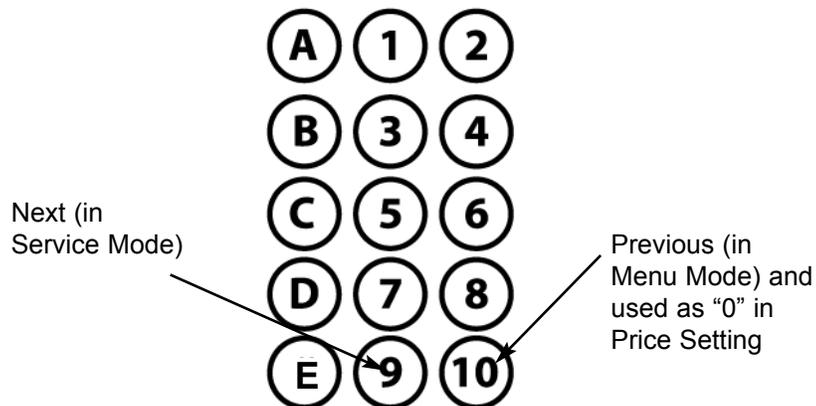
The Snack Vendor requires one (1) 120 VAC grounded outlet for each vendor(s).

Snack Vendor	120 Volts	Less than 1 Amp
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KEYPAD AND LED DISPLAY

Using the Keypad (Fig. 1) is a touch sensitive operation. Light pressure will be necessary to activate each number or letter. The vendor's Keypad is used by the customer to make their selection; it is also used by the operator to set and test many functions of the vendor.

Figure 1 Keypad Layout



The LED Display shows the customer the amount of money entered into the vendor, and the cost of their selection. In Service Mode, it shows the operator the menu for setting and testing the various functions of the vendor.

DELIVERY SYSTEM

The Delivery System of your Elite Snack Vendor consists of the Keypad, LED Display, Driver Motors, Product Trays, Product Chutes, and Helix Coils. The customer inserts money and enters their selection on the Keypad. The selection's Driver Motor turns the Helix Coil that vends the product.

LOADING PRODUCT

To present your product in as an attractive and professional manner as possible, do not load any damaged items, and make sure items are facing forward for easy identification by your customer.

Note: The size of the item being vended must be larger than the Helix Coil, but smaller than the Column, to vend correctly. Never force an oversized item into the Helix Coil or Column, nor attempt to vend an item that is smaller than the Helix Coil as this will create problems and deter customers. (Fig.2)

After loading product in a coil, lift up on the product. If the coil lifts from the tray when you lift the product, the product is probably too tight for that coil, which may cause problems during the vend cycle. Contact Seaga's Parts Department (see Page 2 of this Operator's Manual) for different coil options.

Figure 2 Loading Product



1. To Load Product:

- A.) Pull out desired Product Tray all of the way forward. Product Tray will tilt down.
Note: Pull out only one (1) Product Tray at a time.
- B.) Place product in proper size Helix Coil.
Note: Bottom of product must rest on the Product Tray and not on the Helix Coil. (Fig. 2)
Load each Column from front to back.
Note: Fill all Product Trays fully, do not leave any spaces behind or between items.
- C.) Once Product Tray is fully loaded, lift and push it back in.
Repeat above steps until all Product Trays are fully loaded.

To increase the length of the Helix Coil, white plastic Product Pushers can be snapped on the end. A supply of Product Pushers are provided in the vendors hardware bag.

Special Note: We suggest that you always partially fill the vendor with product and perform at least five (5) test vends. Test vends can be performed easily by entering Service Mode and running "Test Mode". (See: Programming section of this manual.)

PROPER COIL HOME POSITION

The Snack Vendor is shipped with the coils in their standard home position. Some products may require the coils to be in a different starting position for successful vend operation. The motor shaft and coil driver can be removed and repositioned in one of eight (8) positions. Trial and error test vending will prove the best possible position for the coil.

Generally, smaller products such as narrow candy bars will need to have the end of the coil advanced clock wise to keep the smaller product from falling past the end of the coil when loaded. The best position for any product is to protect the product from falling past the open end of the coil while making sure the product falls prior to the end of the vend cycle when the coil returns to Home Position.

Test vending with your standard products at least 5 times will help you determine if coil Home Position needs adjustment.

DRIVER MOTORS

Each selection is vended by the action of the Driver Motor. The Snack Vendor has 20 Driver Motors. The Driver Motors are clipped to the rear of each Product Tray.

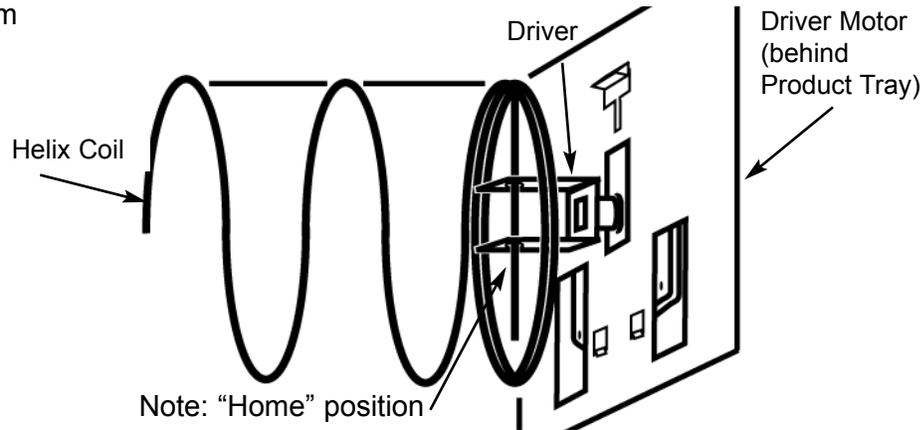
In the rare event of a jam a Driver Motor may need to be returned to its home position. The home position is when the shaft of the Helix Coil that is held by the Driver is vertical, with the end of the shaft pointing down. (Fig. 3)
Instructions to Home a Driver Motor are included in the Programming section of this manual.

1. To Remove a Driver Motor.

- A.) Unlock and open Front Door
- B.) Pull Product Tray fully forward, keeping it level.
- C.) Lift Product Tray to release from the track. Then can be pulled forward and lifted out.

Caution: The Product Tray Wire Harness will need to be unplugged prior to complete removal of the product tray. The Wiring

Figure 3 Delivery System



Harness is plugged into the inside right-hand side of the vendor. You may need assistance.

D.) Set back of Product Tray into Vend area, steady it with one hand, and disconnect the Wiring Harness.

E.) Remove Helix Coil from Driver by lifting the front end of the Helix Coil up with one hand while guiding the rear of the Helix Coil with the other.

Note: This operation is more difficult with the smaller Helix Coils.

F.) Depress the top tab on the Driver Motor, tilt the Driver Motor backwards, and lift the Driver Motor free. (Fig. 5)

G.) Disconnect Wires.

H.) Replace Driver Motor by repeating above steps in reverse order.

GENERAL NOTES

It is suggested that a toolbox accompany you to each of your locations. Suggested items for this toolbox would include a socket set, (up to a 1/2" - 12 mm - socket size suggested) a Phillips and a Standard screwdriver and needle nosed pliers. Additional items would be a soft rag and perhaps a Black Magic marker. The magic marker is useful in touching up light scratches that may occur to your vendor.

Figure 4 Driver Motor

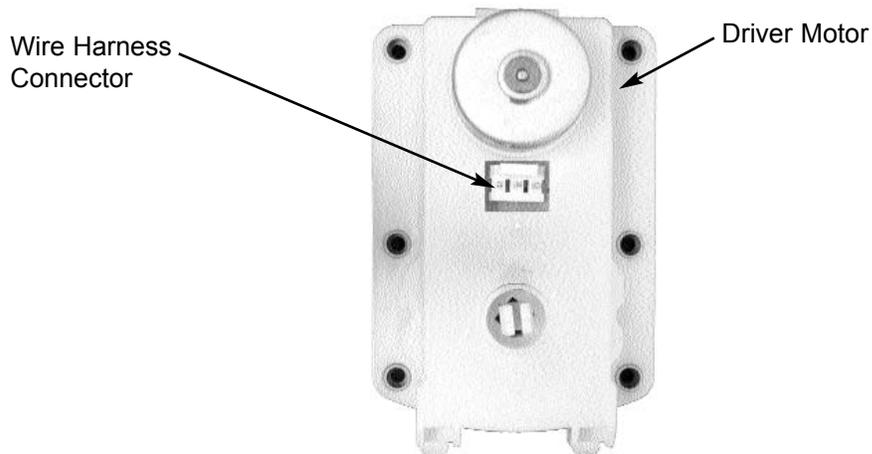
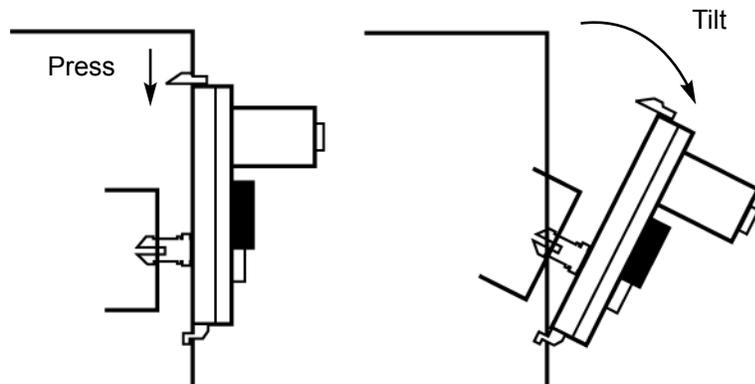


Figure 5 Motor Removal



COMMON QUESTIONS AND ANSWERS

- Q: Can customers reach up and help themselves to product?
A: No. The Product Door is a Triangle shape designed to deter reach up theft. When pushed, the back of the door will come in contact with the bottom Product Tray and the Anti-Theft Wall to act as a block.
- Q: My vendor is plugged into a live outlet, I have tested the outlet, but my vendor has no power.
A: Unplug the vendor for 5 minutes. This will reset the thermal breaker on the transformer.
- Q: Motor does not cycle.
A: Check the Wire Harness on the motor for a loose wire.
Check to see if the motor is jammed or out of home. Home the motor per "Driver Motors".
- Q: Motor cycles but product will not drop.
A: Check to see if the product is jammed in the Product Chute.
Check to see if the vendor is level.
Check product for damage, and make sure it is the proper size.
Install Product pushers on the ends of the Helix Coils to assist in vending.

Section 2 PROGRAMMING

Figure 6 Menu Mode Button

The VMC is located on the vertical shelf. See Pg. 2.

Menu Mode Button



MENUS MODE

Locate the Menu button on the Vending Machine Control (VMC) board inside the Front Door (Figure 6).

BASIC OPERATION

The following display formats are used:

	Display when Active	Exact LED	Check Price LED	ALT SEL LED
Normal Operation, no credit available	00.00			
Normal Operation, some credit available	00.01 – 99.99			
After Pressing a selection, if there is no credit, or the credit is less than the selection's price, the price of the selection is displayed for a few seconds, before reverting to one of the above credit display formats. (If a coin or other payment is made the display reverts immediately)	00.01 – 99.99		ON	
Free Vend Mode (all prices set to zero)	FrEE			
If a selection is out of stock when a selection is pressed – this is displayed for a few seconds	Sold Out (as two successive messages)			ON
All Items out of stock	Sold Out (as two successive messages repeated)			
Machine Out Of Order	Out of Ordn (as 3 successive messages)			
During a Vend (Progress bar, 1, 2, 3 and 4 dashes)	- - - -			
Exact Change required (MDB Change giver enabled)		ON		
Temperature Display (if control is enabled) – press the 10 button to display	nnC or nnF			
Timed Lockout or H & S lockout	OFF			

SERVICE MODE

The operation of the machine can be adjusted by entering service mode by pressing the MENUS button on the VMC circuit board and then accessing the appropriate operation. Price setting, audit display and operating modes can be read and adjusted from here. The user can also perform tests on the machine through this mode. Note: any Credit will be cancelled on entry to Service Mode.

Enter Service Mode by pressing the MENUS Button on the VMC Circuit board (Fig. 6). Each Service Code can then be accessed using the 9 (Next) and 10 (Previous) buttons on the keypad to scroll through the menus as follows:

AUDIT	Displays	Au.--	
PRICE SETTING	Displays	PS.--	
TEST MODE	Displays	tE.--	
CONTROL SETTING	Displays	Ct.**	Where ** is the current value
SOUND On/Off	Displays	So.0*	Where * is the current state (0 or 1)
DISPLAY ERRORS	Displays	Er.--	
CLEAR ERRORS	Displays	CE.--	
SET CLOCK	Displays	CL.--	
MDB PAYMENT DEVICES	Displays	Pd.**	Where ** is the current value
HOME & COUNT MOTORS	Displays	Ho.**	Where ** is the last count of motors
END Menu	Displays	En.--	

Service Mode can be exited by selecting the END option or it will exit automatically if there is no activity for 30 seconds.

AUDIT

Within Service Code AU (Audit) readings can be taken from the Display with regards to cash taken, and number of products vended. The following details can be obtained on the Display.

Total Cash IN : CA305 (up to 999999.99)
Total Product Sales Value: VA101 (up to 999999.99)
Total Count of Free Vend Tokens : TA202 (up to 49999)
Total Coins IN : CA306+CA307 (up to 999999.99)
Total Cash Out : CA403 (up to 999999.99) #
Total Bills IN : CA310 (up to 999999.99)
Total Card Payment : DA201 (up to 999999.99)
Total Manual Dispensed amount: CA404 (up to 999999.99)

Selection (alpha then numeric)

Display the total number of individual vends of that selection (up to 49999)

Press the Scroll buttons (9 and 10) repeatedly until the LCD Displays Au.
You are now in Audit Mode

Press Selection 1 to reveal the total cash (\$/£/¢) and (c/p) taken. Displays ****and **. **

Press Selection 2 to reveal the total sales value Displays **** and **. **

Values are displayed in parts as **** then **. ** for values up to 999999.99 and ** then **** for non decimal values up to 49999.

Note: Decimal values "roll-over" from 999999.99 to 0.00
Integer counts "roll-over" from 49999 to 0

PRICE SETTING

There are three (3) options for setting prices; individual selections, price by tray or all selections.

1.) Individual selections

- A.) Press the Scroll buttons (9 and 10) repeatedly until the LCD Displays PS.-
** You are now in Price Setting Mode **
- B.) Enter the selection to display its current price Display will show the selection and then **. **
- C.) Use the numeric keys to set the price. You will need to enter 4 numbers even if the price is less than \$1.00.
Example: to set a \$0.75 price, enter 0075. Remember that the 10 key is used for "0" during Price Setting.

2.) Price by Tray - this option will set the same price for all selections in the tray you specify.

- A.) Press the Scroll buttons (9 and 10) repeatedly until the LCD Displays PS.-
** You are now in Price Setting Mode **
- B.) Press the tray letter button TWICE then enter the 4 numbers (see #1 above) to set the price for all selections in that tray.
Example: to set all prices on the A Tray to \$0.80, Press AA then 0080. Remember that the 10 key is used for "0" during Price Setting.

3.) All Selections - this option will set the same price for all selections in the machine - including the beverage machine if included.

- A.) Press the Scroll buttons (9 and 10) repeatedly until the LCD Displays PS.-
** You are now in Price Setting Mode **
- B.) Press the tray letter button THREE TIMES then enter the 4 numbers (see #1 above) to set the price for all selections in that tray.
Example: to set all prices to \$1.50, Press AAa then 0150. Remember that the 10 key is used for "0" during Price Setting.

CONTROL WORD

- 1.) Press the Scroll buttons (9 and 10) repeatedly until the LCD (where ** is current value) Displays Ct. **

**** You are now in Control Word Setting ****

2.) Press Selection Button 1 to 4 to change the control word DisplaysCt.**
The control word is now set

The control word options supported are :

Code	Multivend*	Forced Vend**
1	No - single vend	No
2	Yes - multivend	No
3	No - single vend	Yes
4	Yes - multivend	Yes

Multivend* - with Multivend enabled, the machine will hold credit from a previous vend to prompt additional sales. More money can be inserted if necessary. The Coin Return button must be pressed by the customer when their transaction is completed.

Forced Vend** - with Forced Vend enabled, the machine will force the customer to make a purchase when money is inserted. Change (if any) can only be retrieved after the vend is made. This keeps locations from using the machine as a "change-maker".

SOUND (On/Off)

This feature turns the "beep" sound on or off.

- 1.) Press the scroll buttons (9 and 10) repeatedly until(where * is current value) DisplaysSo.0*
- 2.) Press Selection Button 1 to toggle the setting DisplaysSo.0*
- 3.) Press any other Button to exit to the next menu option

A value of 1 enables the "beep" sound, 0 disables the "beep" sound.

TEST MODE

WARNING : THIS MENU OPTION DOES NOT TIME OUT AFTER 30 SECONDS

- 1.) Press the scroll buttons (9 and 10) repeatedly until DisplaystE.- -

In Test Mode, making a selection (Alpha then numeric) will operate the selected motor.

Press selection button 1 to commence a single test vend on ALL motors.

Press selection button 3 to test Relay output 1 (Compressor).

Press selection button 4 to test Relay output 2 (Aux/Defrost).

Note: Test mode should be used for manual filling/emptying of a coin change giver.

DISPLAY ERRORS

1. Press the scroll buttons (9 and 10) repeatedly until DisplaysEr.- -

In this mode, press any selection button (other than 9 or 10) to display error codes in sequence, shown as Er.nn where nn is the error number.

CLEAR ERRORS

1. Press the scroll buttons (9 and 10) repeatedly until DisplaysCE.- -

In this mode, press any selection button (other than 9 or 10) to clear all errors - confirmed with a "CLr" display.

SET CLOCK

1. Press the scroll buttons (9 and 10) repeatedly until DisplaysCL.- -

In this mode, press the selection buttons listed below to set the current time, date and day of week:

- 1.) Time - displayed in a 24 hour clock format as HH.MM Press 4 digits in turn to set the time.
- 2.) Date - displayed as DD.MM Press 4 digits in turn to set the date and month.
- 3.) Year - displayed as y-YY Press 2 digits in turn to set the year (00 - 99).
- 4.) Day of Week - displayed as d-- n enter a single digit to set the day of week (1 = Sunday, 2 = Monday ... 7=Saturday)

MOTOR HOME and COUNT

1. Press the scroll buttons (9 and 10) repeatedly until Displays Ho.nn

In this mode, press and key other than 9 or 10 to home and count the Motors. The display will show the row/column being homed. If the selection is OK the count of motors so far is shown, otherwise Err is displayed for faulty or non-existent selections.

MDB PAYMENT DEVICES

1. Press the scroll buttons (9 and 10) repeatedly until(where ** is current value)You are now in Payment Device Setting DisplaysPd. **
2. Press a numeric selection (1 - 7) to change the value DisplaysPd. **
The Payment Device code is now set

The payment device values supported are :

Value	MDB Coin Change giver	MDB Bill Reader	MDB Card Reader
1	ON	OFF	OFF
2	OFF	ON	OFF
3	ON	ON	OFF
4	OFF	OFF	ON
5	ON	OFF	ON
6	OFF	ON	ON
7	ON	ON	ON
8	OFF	OFF	OFF

ERROR CODES

Soft Errors - unit will continue to operate, though failed motors will show as "Sold Out" and be blocked from operation if selected.

Hard Errors - the unit is put out of service. This mode can only be cleared via the Menus in the Clear Errors mode.

Error Code Number	Fault detected	Hard/Soft fault	Action
01 .. 60	Motor A1 .. F10 respectively	Soft	Repair/replace motor/home switch
80	MDB Coin Change giver fault	Hard	Repair/replace Coin Change giver or disable the change giver
81	Change giver Out Of Change	Soft	Fill Tubes
82	Error in credit value	Soft	None
85	MDB Bill Reader fault	Hard	Repair/replace Bill Reader or disable the bill reader
90	MDB Card Reader fault	Hard	Repair/replace Card Reader or disable the Card reader
91	Error in Bill credit value	Soft	None

Section 3

PAYMENT SYSTEMS

COIN CHANGER

Note: The manufacturer's Coin Changer manual is packed with your vendor. The following is intended as an addendum to the manufacturer's manual.

The Coin Changer receives and returns change to your customers. The Coin Changer is installed at the factory, and will accept quarters, dimes, and nickels. The Coin Changer can be set to accept the new golden dollar. Coins that are not needed to maintain inventory in the Coin Tube, and all other coins are diverted to the Coin Tray.

Note: It is recommended that you initially load the tubes at least half full when setting up your vendor and that you not allow your vendor's coin inventory to drop below that.

COIN RETRIEVAL

Coins can be retrieved from the vendor in three (3) ways; the Coin Tray, Manual Coin Retrieval Buttons (only in Test Mode), and the Coin Return Button. The Coin Tray sits below the Vertical Shelf. The Coin Tray holds all accepted coins, except for those needed to maintain inventory in the Coin Tubes. (Some overflow may occur if not emptied periodically.) The Manual Coin Retrieval Buttons are next to the Dime Tube, pressing a button will dispense one (1) of the selected coins. With the Vertical Shelf pulled out, you will need to catch the coins as they are dispensed to the coin return slide. The Coin Return Button moves the Coin Return Arm, and pushes the Coin Return Lever returning coins to the customer that have been inserted.

CAPACITY

If you intend to vend items costing \$1 and over through your vendor, or the vendor is in a high traffic area, you may want to set the Coin Validator to maintain a full Quarter Tube. The Bill Validator will not accept \$5 bills unless the quarter tube is nearly full. Refer to the manufacturer's manual to adjust option switch settings.

BILL VALIDATOR(if installed)

Note: The manufacturer's Bill Validator manual is packed with your vendor. The following is intended as an addendum to the manufacturer's manual.

The Bill Validator allows your customers to pay for their purchase with paper currency. Your optional Bill Validator is installed at the factory, and is set to validate \$1, \$2, and \$5 bills, but will not accept \$2 and \$5's unless the Coin Tubes are nearly full. The Bill Validator can be set to also accept \$10, and \$20 bills. Unless you intend to vend high-ticket specialty items from your vendor, your Bill Validator need not accept \$10 and \$20 bills as it will quickly run out of change.

CAPACITY

The Bill Storage Box will hold approximately 300 bills.

BILL RETRIEVAL

The bills your customers spend are kept in the Bill Storage Box.

1. To Retrieve Bills.
 - A.) Unlock and open the Front Door.
 - B.) Pull the Vertical Shelf out.
 - C.) Pull Tab forward and lift Bill Storage Box. (Fig. 7) Remove bills.
 - D.) Return empty Bill Storage Box.

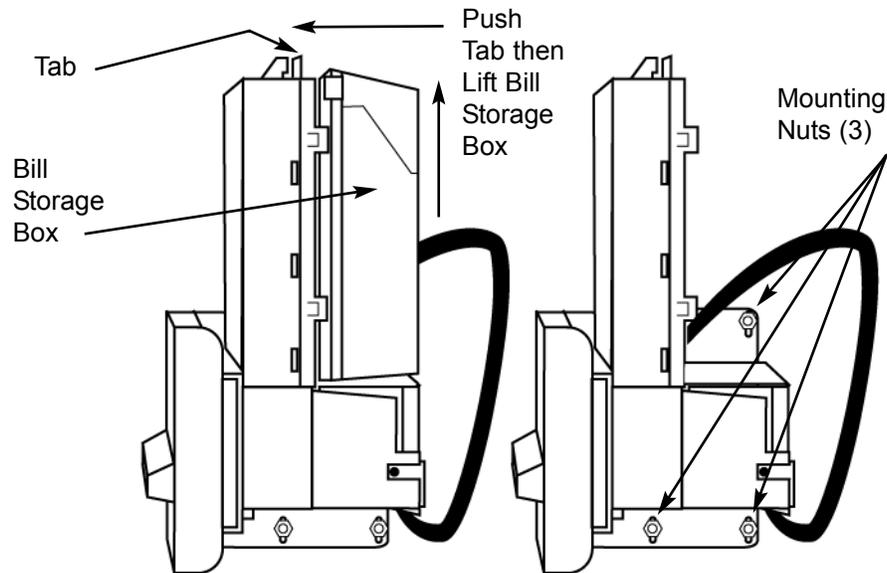
REMOVING BILL VALIDATOR

From time to time it may be necessary to remove the Bill Validator for cleaning and clearing jams.

1. To remove the Bill Validator.
 - A.) Unlock and open the Front Door, unplug vendor.
 - B.) Pull the Vertical Shelf out.
 - C.) Pull Tab forward and lift Bill Storage Box.
 - D.) Disconnect Bill Validator from Wiring Harness.

- E.) Remove the three (3) Mounting Nuts. (Fig. 7)
- F.) Remove Bill Validator and mounting bracket.

Figure 7 Bill Validator



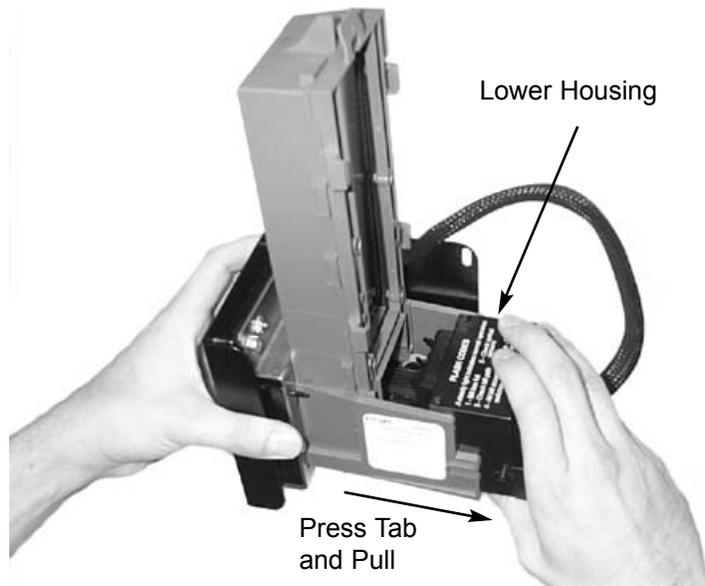
CLEARING JAMS

It is possible that a torn or damaged bill can jam within the Bill Validator, putting it out of service.

1. To Clear a Jam.

- A.) Remove Bill Validator as above.
- B.) Press Tab on bottom of Bill Validator, and pull Lower Housing free. (Fig. 8)
- C.) Remove Jam, and reassemble.

Figure 8 Lower Housing Removal



CLEANING

It is recommended that you clean your Bill Validator frequently to keep it in order. How frequently and how thoroughly you clean it will depend on the amount of traffic your vendor serves. Cleaning the Bill Validator can correct problems with service. There are three levels to the cleaning process. Cleaning with a Cleaning Card, cleaning the Optics, and washing the Lower Housing.

1. Cleaning with a Cleaning Card, will perform a basic clean. The vendor does not need to be opened. Seaga Manufacturing recommends CLEAN TEAM cards that can be obtained online at www.cleanteam.com or by calling 1-800-888-8830.

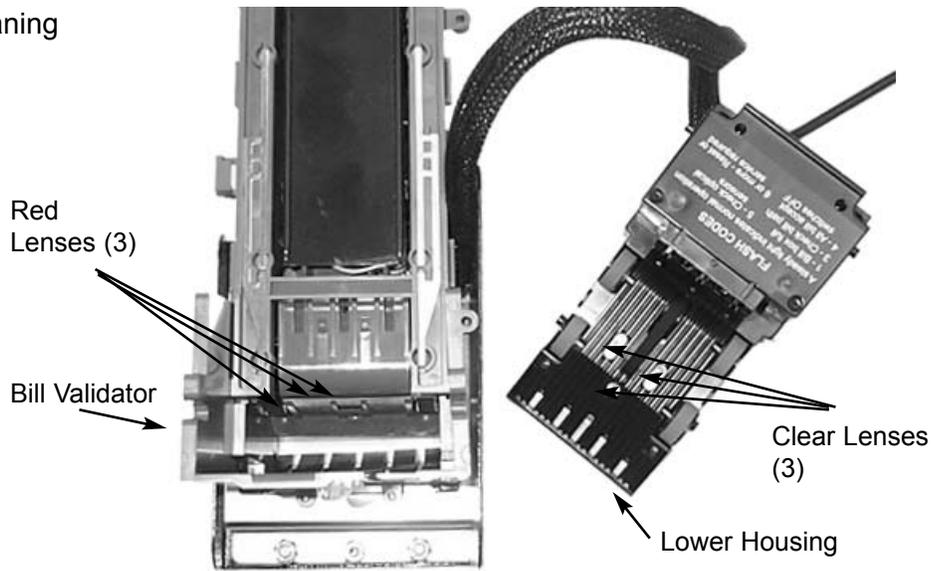
- A.) Insert the cleaning card in the same manner you would a regular dollar bill, the card will be rejected.

Do not re-use the card. Please read the instructions on the cleaning card package.

2. Cleaning the Optics is the second level of cleaning. You will need cotton swabs (Q-tips), and a mild soap and water solution.

- A.) Remove the Bill Validator as described earlier in the manual.
- B.) Remove the Lower Housing. There are three (3) Clear Lenses on the Lower Housing and three (3) Red Lenses inside the Bill Validator. (Fig. 9)
- C.) Swab the lenses with the solution, and reassemble.

Figure 9 Lens Cleaning



3. Washing the Lower Housing is recommended at least once per year. You will need a mild soap and water solution and a cloth.

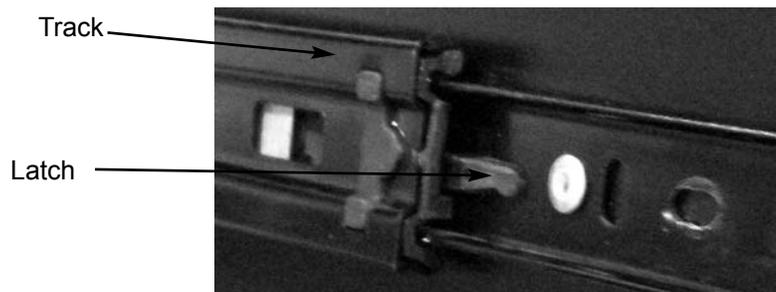
- A.) Remove the Bill Validator as described earlier in the manual.
- B.) Remove the Lower Housing.
- C.) Moisten the cloth. You will want the cloth moist, but not dripping.
- D.) Wipe down the Lower Housing and the inside of the Bill Validator and reassemble.

VERTICAL SHELF REMOVAL

1. To Remove the Vertical Shelf.

- A.) Unlock and open the Front Door, unplug vendor.
- B.) Pull the Vertical Shelf out completely.
- C.) Disconnect Wiring Harnesses to shelf.
- D.) Push Latches in both Tracks up, (Fig. 10) and pull Vertical Shelf free.

Figure 10 Vertical Shelf Removal



Press latches (one top and one bottom) to slide vertical shelf off tracks and remove. **You may need assistance as the tray is heavy.**

COMMON QUESTIONS AND ANSWERS

- Q: Coin Validator will not accept coins.
 A: Lenses may be dirty.
 Coins may be damaged or worn.
 Wire Harness may not be connected properly.

Coin Validator may not have power.

Q: Optional Bill Validator will not accept bills.

A: Stacker may be full.

There may not be enough coins in the Coin Validator.

Wire Harness may not be connected properly.

Bill Validator may not have power.

Section 4 Beverage Vendor

LOCK

Your Beverage Vendor has one Lock, more commonly known as a "T" handle lock. This Lock is different from that of the Snack Vendor in that it has a Threaded Stud that screws into the Cagenut. To unlock the Front Door, insert key and turn clockwise $\frac{1}{4}$ turn. When unlocked the "T" of the Lock will pop out from the vendor. Turn the Lock counter-clockwise until the Front Door opens. To lock, push Front Door closed and turn Lock clockwise until the Gasket is firmly engaged. **Note:** Do not over tighten, as you could damage the Lock and Gasket.

ELECTRICAL CONNECTION

The Beverage Vendor requires one 120 VAC grounded outlet for each vendor(s).

Beverage Vendor	120 Volts	4 Amps
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TEMPERATURE CHECK

Once your vendor is unboxed you will need to plug in your vendor and allow the vendor to come to operating temperature. We recommend that you perform this check prior to mounting the vendor to the Elite Snack Combo. It will take about 24 hours for the vendor to reach operating temperature of 38°- 45° F (3-7° C). Temperature fluctuation is normal, and will depend upon your local climate. **Note: Never lay your vendor on its side.** The temperature in your vendor has been pre-set at the factory and tested prior to shipment. You should not have to adjust your temperature.

MOUNTING

You mount the Snack Vendor to the Beverage Vendor to form the Combo. The vendor comes with mounting hardware. You will need tools for mounting.

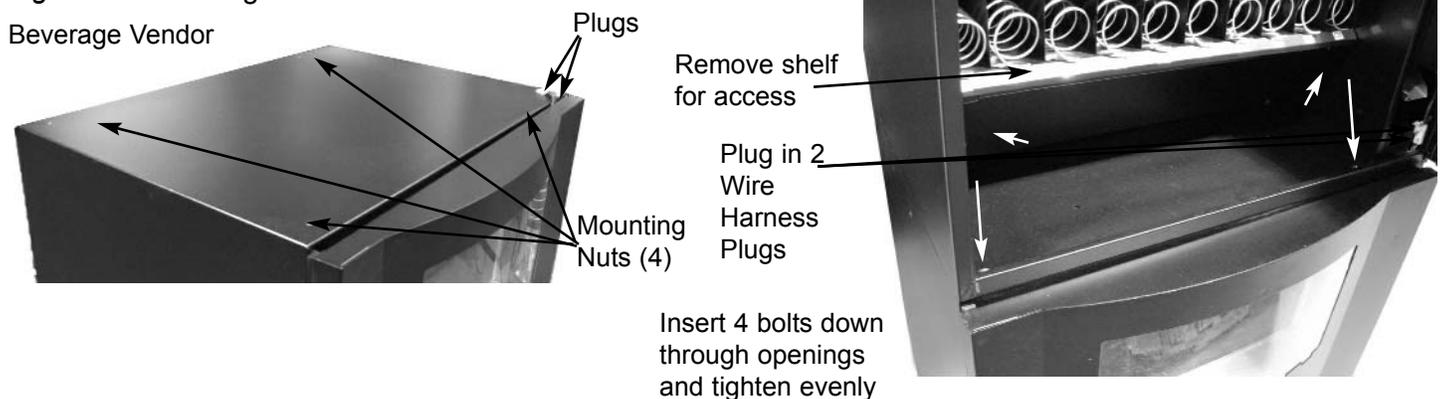
1. To Mount to the Snack Vendor.

A.) Make certain that both vendors are unplugged..

B.) Set Snack Vendor on top of the Beverage Vendor, mating the Wiring Harness Plugs to the opening in the bottom of the Snack Vendor. The harness plugs are located in the front right corner of the Beverage Vendor (Fig. 11).

Figure 11 Mounting

Beverage Vendor



CAUTION: Be careful not to damage the Wiring Harness Plug on top of the Beverage Vendor.

C.) Unlock and open the Front Door of the Snack Vendor. The Beverage Vendor does not need to be opened. (The following is to be done within the Snack Vendor.)

D.) Remove bottom Product Tray. To do so, pull Product Tray fully forward, keeping it level. E.) Lift Product Tray to release from the track. Then it can be pulled forward and lifted out.

CAUTION: The Product Tray Wire Harness will need to be unplugged prior to complete removal of the product tray. The Wire Harness is plugged into the inside right-hand side of the vendor. You may need assistance.

F.) Set back of Product Tray into Vend area, steady it with one hand, and disconnect the Wiring Harness.

G.) Attach the Snack Vendor to the top of the Beverage Vendor. Insert 4 bolts down through the vendor into nuts in the top of the Beverage Vendor. Tighten evenly. Holes to insert the bolts down through the snack vendor are located in all four corners of the bottom of the snack vendor.

H.) Remove coin box.

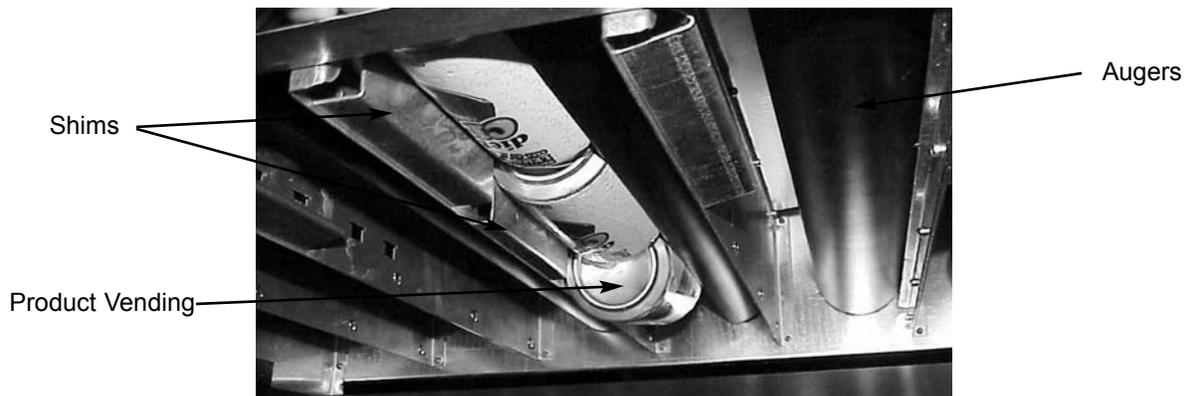
I.) Connect Wiring harness plugs from Snack to Beverage Vendor.

J.) Reassemble product tray, making sure to plug in the tray harness.

Special Note: We suggest that you always partially fill the vendor with product and perform at least five (5) test vends, and test vend each selection. Test vends can be performed easily by entering Menu Mode and running "Motor Testing". (See: Programming section of this manual.)

Vertical Drop Delivery System

Show from the underside (vend area) during a vend of a 12 oz. Can



DELIVERY SYSTEM

The Beverage Delivery System consists of the Vertical-Drop Product Chutes, Back Gate, Large and Small Shims, Driver Motors, and the Can Auger. The customer inserts money and enters their selection on the Keypad. The selection's Driver Motor turns the Can Auger that vends the product.

There is a sold out switch at the front of each Vertical-Drop Product Chute that will indicate "Sold-Out" when it does not detect product. **Note:** When the "Sold-Out" Light is indicated, either 2 cans or 1 bottle will be remaining in the Product Chute.

PRODUCT CHUTE SET-UP

Each Vertical-Drop Product Chute can be reconfigured to vend product from 2.5" (64mm) diameter to 3.125" (79mm). Because package sizes vary in height and diameter, and are constantly being changed, it is difficult to define exact back gate settings for every customer. You absolutely must configure the beverage selections to your individual product and perform test vends to insure correct configuration.

Due to vibration during shipping, you may need to reset the Shims or Back Gate. This is normal. The standard configuration for the 6 selections in the Beverage Vendor is Bottle | Can | Can | Can | Can | Bottle.

Common Configurations:

1. 12oz (355ml) cans.

A.) The Back Gate (Fig. 13) is to be located in the 12th slot of the Left Wall. (Fig. 12)

B.) The Triangular Shim is to be in Slots 1,2 and 3.

C.) The Square Shim is to be in Slots 4, 5 and 6.

D.) The replaceable Motor Cam (beverage only) should be the 3 stop Cam.

E.) Load Product with top of can facing the front of the vendor. (Fig. 12)

2. 20oz (591ml) bottles.

A.) The Back Gate (Fig. 13) is to be located in the 19th slot of the Left Wall (Fig. 12)

B.) The Triangular Shim is to be in Slots 1-4.

C.) The replaceable Motor Cam (beverage only) should be the 2 stop Cam.

E.) Load Product with bottom of the bottle facing the front of the vendor. (Fig. 14)

There are three steps in changing a soda selection from can to bottle or vice versa. The only tool needed will be a phillips head screw driver.

1. The back gate needs to be adjusted to fit your product. This is done by sticking your fingers thru the holes in the back gate and lifting to release the retaining tabs that secure it in the slots in the delivery system sides. Once released the gate can be moved forward or back to accommodate a variety of different sized products. It is important to note that the gate needs to be vertical when installed correctly and that the sold out switch (located to the front of the column) is depressed when there is product in the column. If this is not done correctly the product may not move down the column smoothly and become jammed. It may also cause the sold out operation to work incorrectly.

Figure 12 Vertical Product Chute Left Wall

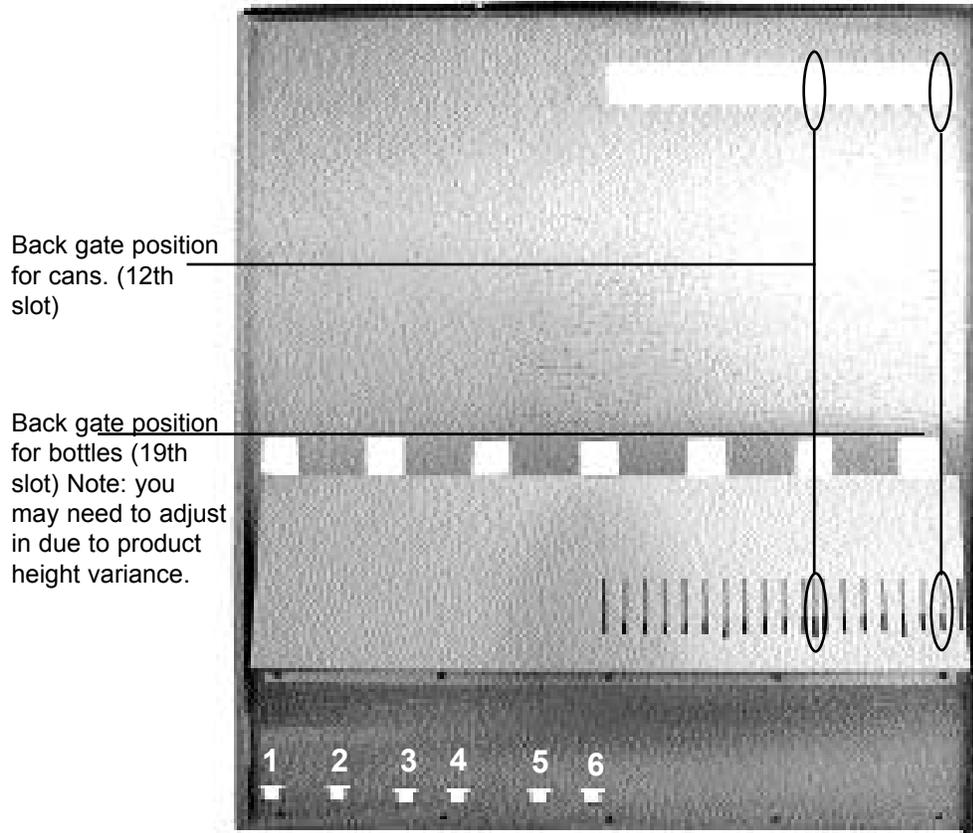
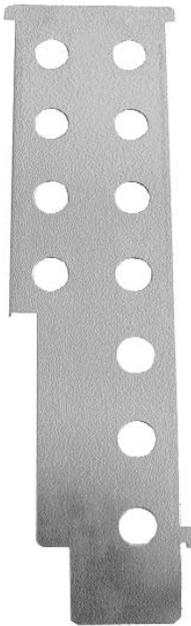
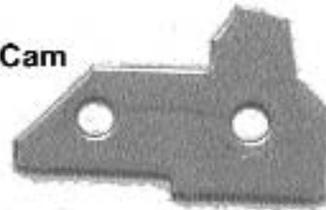


Figure 13 Product Chute Parts

Back Gate
Shown smaller than actual size.



Bottle Cam

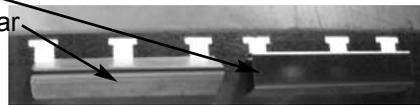


Can Cam



Square Shim position - Cans

Square
Triangular



Triangular Shim position - Bottles

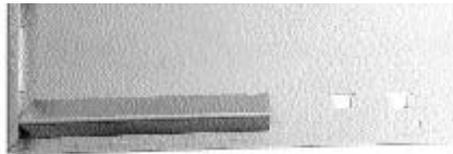
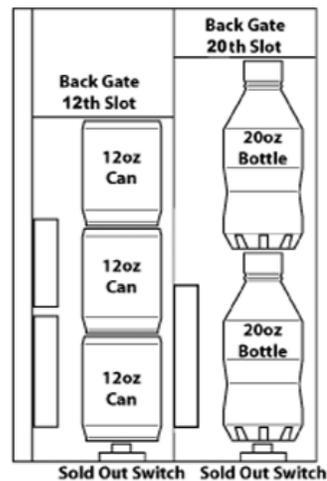


Figure 14 Product Configuration

Presented here are the two applications for the Vertical-Drop Delivery system. Other configurations may take some experimentation.

Front of Vendor



2. The correct shims need to be installed to correspond with the product to be vended. For bottles, the triangular shim is used and is mounted into the first four slots at the bottom of the delivery system side. For cans, both the triangular and square shims are needed. The triangular shim is mounted in the first three slots, and then the square shim mounted in next three slots. The slots in the delivery system sides and tabs on the shims are spaced so that there is no possibility of installing them in the wrong location.

3. The correct cam needs to be installed to correspond with the product to be vended. For bottles the "bottle cam" is used and for cans the "can cam" is used. To install the cam, the soda vend motor may need to be ran to locate the cam into the position for changing. To locate the cam, look below the soda vend motor on the black auger that rotates to drop the products. This auger will stop in various positions as it rotates, depending on which cam is installed on it. There is one position that all of the augers will stop that leaves the cam at the bottom of the auger (about the 6 o'clock position). Once in this position, the screws that hold the cam onto the auger may be loosened and the correct cam installed. Note the cam and auger are constructed in such a way that the cam can not be installed upside down.

The soda vend motor should not need to be removed, but if required to do so, they can be removed by removing the two screws that hold the motor bracket onto the motor panel. There are wires connected to a switch that is mounted on this bracket, once the screws are out, the entire bracket and switch can be carefully pulled off the motor and lowered out of the way. The motor can then be slid off of the auger shaft that sticks into it. Note that the motor harness will still be pulled into the top of the motor and can be unplugged for total removal of motor.

PRODUCT VIEWING AND ADVERTISEMENT

Your Beverage Vendor features "live" product display. This means that empty containers should be used to represent items available.

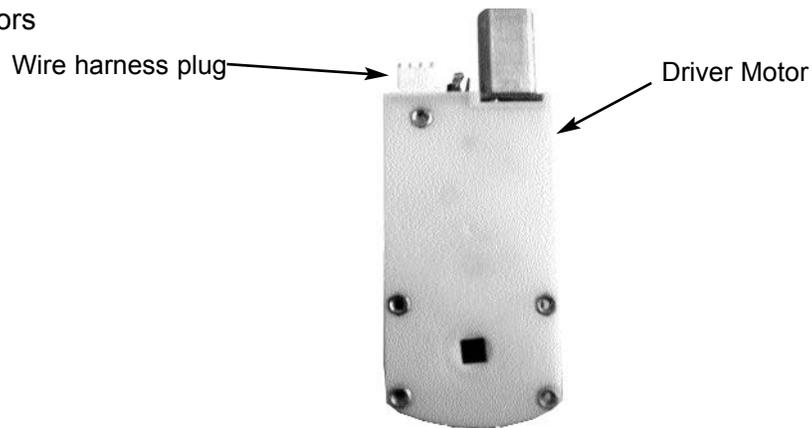
- 1.) Set-Up of "Live" Display.
 - A.) Unlock and open the Front Door.
 - B.) Remove cover on inside of door by removing the screws located on the top and bottom of the cover.
 - C.) Place cans or bottles inside the window area in order of selections, facing out.
 - D.) Replace cover.

BEVERAGE DRIVER MOTORS

Each selection is vended by the action of the Driver Motor. The Driver Motors are attached with 2 screws to the front the Motor Bracket (Fig. 15).

1. To Remove a Driver Motor.
 - A.) Unlock and open the Front Door, unplug vendor.
 - B.) Unload any product from the Product Chute in question.
 - C.) Disconnect Wires.
 - D.) Remove 1 screw from each side of motor bracket.

Figure 15 Beverage Driver Motors

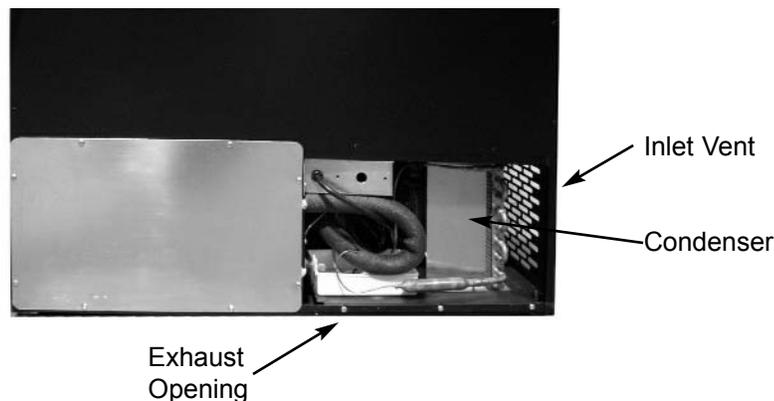


CLEANING THE CONDENSER

Dust and dirt restricts good airflow and function of the condenser and causes the refrigeration unit to not chill properly. It is extremely important to keep your condenser clean. First, unplug your vendor from its power source. Locate the inlet vent for the condenser on your machine. Brush the dirt and dust from the condenser and grill. Locate the exhaust opening for the cooling system. Blow air on the condenser or vacuum clean it. Do not damage the fins of the condenser while cleaning. Depending on your location, your grill and condenser may need to be cleaned as often as once a week, but should be checked regularly. **Note:** The cleaner you keep the cooling system, the better the machine will perform. You will also increase the life-span of the unit.

Figure 16 Condenser

Beverage vendor shown from back.



COMMON BEVERAGE QUESTIONS AND ANSWERS

Q: Motor does not cycle.

A: Check the Wire Harness on the motor for a loose wire.
Check to see if the motor is jammed or out of home. Home the motor per "Driver Motors".

Q: Motor cycles but can will not drop.

A: Check to see if the can is jammed in the Product Chute.
Check to see if the vendor is level.
Check product for damage, and make sure it is the proper size.

Q: Cans occasionally stick in my Delivery System.

A: This is not uncommon. Some cans may have defects or foreign matter that may cause them to hesitate, resulting in delayed advancement of product.

Q: How does my Beverage Vendor know it's out of product?

A: There is a sold out switch near the end of each Product Chute that will turn on the "Sold-Out" Light when it does not detect product.
Note: When the "Sold-Out" Light is lit, there will be no product remaining in the Product Chute.

Q: The Compressor is running, but the vendor is too warm.

A: Make sure that the air flow is not restricted, there should be 6" of clearance on left and rear sides.

Thermostat may not be working properly.
Check for an air leak in the door seal.
Compressor may be undercharged with R134a.

Q: Why doesn't the Compressor cycle?
A: Compressor may be undercharged with R134a.
Compressor may be defective.

Q: Why is my Evaporator freezing?
A: Check and make sure the Air Circulation Fan is working.

TROUBLESHOOTING

Q: Money was inserted and a selection was made, but no product was vended and the money was kept.

A: To check the selection manually, enter into the service mode by pressing the "Mode" button on the VMC. Scroll to "Slct" and enter in the selection with the keypad. If the motor runs but the helix coil does not turn- Check to make sure the helix coil didn't come detached from the vend motor drive. Check to make sure the vend motor shaft or the helix coil adaptor is not broken. Check for any unusual noises coming from the motor possibly indicating a defective gear drive inside the motor. Replace or reattach any parts as necessary.

Q: Money was inserted, a selection was made, nothing happened and the machine display shows "Choose alternate selection" but there is product in the selection. It only happens with one selection.

A: Enter into the service mode by pressing the "Menus" button on the VMC. Scroll to "tE" and enter in the selection with the keypad you are having trouble with. One of several things will happen at this point.

1. The selection will run fine without issue. If this is the case there may have been an intermittent problem possibly in a connection somewhere in the circuitry to that selection. Check the connections on that particular vend motor and tray harness and retest several times to check.

2. The display will show the message "FAIL" immediately upon making a selection. This indicates that there is no communication going on between the vend motor and the VMC. You can also scroll to "Cnt" for a vend motor count and see if the count is correct for the number of selections in the machine. This will further confirm a communication issue between the VMC and vend motor. The problem could be the selection vend motor is unplugged, the tray harness is unplugged, loose or intermittent connection on either the vend motor connector or tray harness connector, defective motor, or a cut or broken wire. Identify and repair as needed.

3. The display will show the message "FAIL" approximately 3 seconds upon making a selection. This indicates that the selection vend motor is trying to turn but is stuck or jammed. Check the products and helix coil in that selection to make sure there is not an issue allowing the helix coil to turn. Could also be a stuck vend motor. Disconnect the helix coil from the vend motor and test again. If you have the same result then replace the vend motor. Important note - Do not perform multiple subsequent tests whenever you get the delayed FAIL message. Performing too many tests too quickly can cause the VMC motor drive section to unnecessarily heat up and fail prematurely.

4. The selection vend motor will run but then the message "FAIL" appears on the display. This indicates that the home switch signal is not being returned to the VMC. If this happens for anything less than the whole tray suspect tray harness connector first most likely at the individual vend motor connectors or the vend motor itself. Remember that it is very unusual for several vend motors to fail simultaneously so if you have several that do not work on a tray then suspect the tray harness is bad. Replace parts and test as necessary.

Q: None of the selections in a tray will work.

A: Enter into the service mode by pressing the "Menus" button on the VMC. Scroll to "Ho" and see if the vend motor count is less than the number of total selections in the machine. You can also enter into "tE" and make some tray selections for the tray you are having problems with. You should see the "FAIL" message immediately. The most likely culprit here would be the tray harness itself or the connection where the tray harness plugs into the machine. Try "swapping" the tray harness plugs and retesting to determine where the problem is. For example lets assume that none of the A tray vend motors will work. Unplug the A tray harness from the machine, unplug the B tray harness from the machine and now plug the A tray harness into the B tray receptacle and plug the B tray harness into the A tray receptacle. Enter into the service mode by pressing the "Mode" button on the VMC and scroll to "tE". Now enter your test selections using the B selections such as B1 etc. If you still get the immediate "FAIL" message then the tray harness for the A tray is the most likely culprit. However if the A tray motors work, test the B tray using the A selections such as A1 etc. If the B tray does not work then suspect something in the A tray machine connection or any connection between there and the VMC. The least likely problem is the VMC. Identify, repair and reconnect the tray connectors back to their correct positions.

Q: None of the selections work. I enter the service mode and all I get for motor count is 0.

A: This is one of two possibilities; either the main vend motor harness is unplugged from the VMC or the VMC is bad. Check the connection or replace parts as necessary. If you had a jam where you had repeatedly tried running the vend motor before fixing the problem, this will possibly be the cause for the VMC failure. Make sure you identify and fix the root cause problem before replacing the VMC or you will damage the replacement VMC as well.

Q: I make one selection, for example A1, but A1 and another vend motor on that tray run at the same time. Problem only happens on one tray.

A: Could be several possibilities here. If the problem is only happening on one tray, it is most likely the vend motor that runs all the time with the other selections on that tray either has its tray harness electrical connection plugged on backwards on the back of that vend motor or the vend motor itself could be defective.

Q: I make one selection on any tray and another vend motor runs at the same time. I make a selection on another tray and the same thing happens - the selection plus another motor runs.

A: The most likely culprit is the VMC. Replace and test.

Q: I press one selection on the keypad but another selection vends. For example I select A1 but A2 vends. I select B1 but B2 vends.

A: This problem is most likely the keypad. The way to test this is, without putting any money in, press your selection on the keypad. Watch closely at the display. The display should mimic the keys that you pressed briefly before the price shows for that selection. For example press A1. A1 should show on the display momentarily before it's price shows. If something other than what you pressed shows in the display, suspect the keypad to be at fault. In very rare cases the VMC has also caused this problem but very unlikely.

Q: I continually have a letter showing in the display (A, b, C or d).

A: The keypad is damaged and needs to be replaced. To confirm this disconnect the keypad harness from the VMC. If the display goes back to .00 then you have confirmed the problem. Replace the keypad. You may also notice that you cannot enter the service mode by pressing the "Menus" button on the VMC. By disconnecting the keypad harness you should notice that now you will be able to enter the service mode.

Q: Display shows .00 but keypad is unresponsive to key press.

A: Check to make sure keypad is plugged into VMC. The keypad is connected to the VMC by way of a keypad harness cable. Check any connections associated with the keypad and keypad harness. Keypad is most likely at fault as it gets the most abuse from customers making selections. If one of the number buttons is stuck this will cause the same problem. It's possible you may also notice that you cannot enter the service mode by pressing the "Menus" button on the VMC. By disconnecting the keypad harness you should notice that now you will be able to enter the service mode. Check and replace as necessary.

Q: The service "Menus" button is unresponsive.

A: Most likely the keypad on the front of the machine is at fault. Temporarily disconnect the keypad and test "Menus" button. If the "Menus" button now works replace the keypad. If disconnecting the keypad does not make any difference then suspect the VMC itself. Replace any necessary parts and retest.

Q: The display is off but the machine still accepts money and vends even though you can't see anything in the display.

A: There are several possibilities here. The most likely in order are:

- 1.) The display harness connector may be unplugged
- 2.) Connections on either end of the display harness connector are faulty or intermittent
- 3.) The display board itself or the VMC.

Examine connections mentioned for loose or faulty connections.

Q: I make a drink selection and 2 cans come out every other time. I just changed the selection from a bottle to a can.

A: Referring to the setup section in the manual, look at the part concerning the can and bottle cam installation. If you forgot to change the cam from the single cam style to the double cam style, this is your problem. Install the correct cam to correct the problem.

Q: Every once in a while the drink selection will vend out multiple drinks. The next time I select it, it does not vend anything.

A: Each drink selection has a cam located on the product "auger" The auger is what rotates and delivers the drink selections. There is a home switch located in behind the drink selection vend motor. For a can drink setup the auger will make three stops in one revolution of the auger. For bottles it is only two stops per revolution. One of the wires may have come loose from the home switch or the wire has been pinched or cut. Or if the cam misses hitting the home switch then the auger will over-run and deliver more than it should.

You can enter the service mode by pressing the "Menus" button on the VMC and scroll to "Slct" and make the selection on the keypad for the column you are having trouble with. If the cam is missing the home switch you will see your product possibly vend more than one item (or maybe non at all if the previous vend produced a multiple vend) and then the display will show "FAIL". If the home switch wire is loose or broken it will also run but then show "FAIL" in the display. A third possibility is a faulty home switch. Identify the problem, replace parts if necessary and retest.

REFRIGERATION TROUBLESHOOTING

In order to aid you in troubleshooting the refrigeration system a little background on how the system works is in order first to help you understand its operation.

Refrigeration is the transfer of heat from one area to another. In the case of this machine we are transferring the heat from the area containing the drink selections to the outside of the machine and dissipating the heat throughout the room. The more heat we are able to transfer away from the drinks the colder they become.

This process is accomplished by the use of a sealed compressing system using a gas commonly known as Freon. The system is comprised of several key mechanical components. The condenser coil, the evaporator coil and the compressor. The condenser coil is located in the lower back left of the machine and it is where the heat is dissipated from the cooling process and blown to the outside of the machine. The evaporator coil is located inside the machine towards the back of the cooling system underneath the drink section we are trying to cool. Its purpose is to absorb the heat from the drink selections and provide the cool air needed to refrigerate the selections. The compressor is the heart of the cooling system and its purpose is to provide pressure and circulation of the refrigeration gas.

The refrigeration system is monitored and controlled by several key electrical components. The condenser fan, evaporator fan, VMC thermostat, VMC defrost timer and the start and overload components located on the side of the compressor. The line voltage from the 115 volt AC outlet in the room is fed to the two fans, the condenser and the evaporator fans, and they run continuously as long as the machine is plugged into 115 volt AC power coming from the wall. The VMC thermostat and VMC defrost timer control the on & off cycling of the compressor. The purpose of the defrost timer is to interrupt the operation of the compressor at a set interval to avoid the possibility of an air flow blockage due to a freeze up in the evaporator coil.

To determine if the compressor system is running it is sometimes hard to tell due to the fact that the compressor tends to be very quiet running. The sound and slight vibration from the fans running can sometimes be mistaken for the compressor running. One way to tell if it is running is to cautiously place your hand on the compressor to feel its warmth. CAUTION as it may be hot to the touch. If the compressor is stone cold and stays that way for an extended period of time you can assume there is an electrical problem in the circuitry or components that operate the compressor. Another way to see if the compressor is running is to feel the air exiting the condenser coils from the back left to see if there is any heat.

Any problems with the fans running can also lead to a cooling system failure. In order for any cooling system to operate properly it is most important that all fans are running and that the condenser coil is kept clean and free of any dust, dirt or obstructions.

Drinks are Too Cold...

The factory setting for the beverage unit operating temperature range is 39 to 42 degrees F. Any temperature setting changes made will require a settling time of several hours in order to see any results.

If the temperature setting is already at a much higher number and the unit seems unresponsive to the changes after waiting several hours between changes, then troubleshooting the cooling system will be necessary.

If any further help is needed you may need to contact Customer Care or a local refrigeration technician.

Drinks are Cool, but Not Cool Enough...

The factory setting for the beverage unit operating temperature range is 39 to 42 degrees F. Any temperature setting changes made will require a settling time of several hours in order to see any results.

If the temperature setting is already at a much higher number and the unit seems unresponsive to the changes after waiting several hours between changes, then troubleshooting the cooling system will be necessary. Try the following:

1. Are the fans running properly with no obstructions?
2. Is the compressor running for a very brief period (10 to 30 seconds) then turns off?
3. Does the compressor feel extremely hot?
4. Observe the evaporator coil to see if there is any unusual blockage due to ice forming on the coil. If so you will need to leave the power disconnected for a period of several hours in order to manually defrost the coil completely. To help speed the process you may find it advantageous to use a heat gun (hair dryer) on the coil. Be aware of any excess water while doing this. This may be caused by a faulty (stuck) thermostat, faulty timer or the evaporator fans are not running.

If any further help is needed you may need to contact customer service or a local refrigeration technician.

Drinks are Warm or Not Cool at All...

1. If there appears to be no fan or compressor running check to make sure the cooling system cord is plugged in to a known working 115 volt AC wall outlet.
2. Remove the lower front panel and check the Molex connector to the right of the cooling deck assembly to see if it is properly and tightly plugged together.
3. If the fans are running and the compressor or condenser coil feels warm, remove the bolt securing the cooling assembly, unplug the Molex connector to the right of the cooling deck and slide the cooling assembly forward to feel the evaporator coil to see if it feels cold. If not you will need to have the cooling deck serviced.

If any further help is needed you may need to contact customer service or a local refrigeration technician.