![Seaga logo]

Quick Break Combo QB4000
SERVICE AND PARTS MANUAL

SEAGA®

INTRODUCTION

Congratulations on the purchase of your Quick Break Combo, QB4000. This 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 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 trouble- shooting 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 questions you may have on this process.

It is important that you keep the original packaging for your vending machine at least through the warranty period. If your machine needs to be returned for repair, you may have to purchase this packaging if it is not retained.

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.seaga.com. Should any problems occur, refer to the section entitled "TROUBLESHOOTING". It is designed to help you quickly identify a problem and correct it.

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Seaga Manufacturing, Inc.
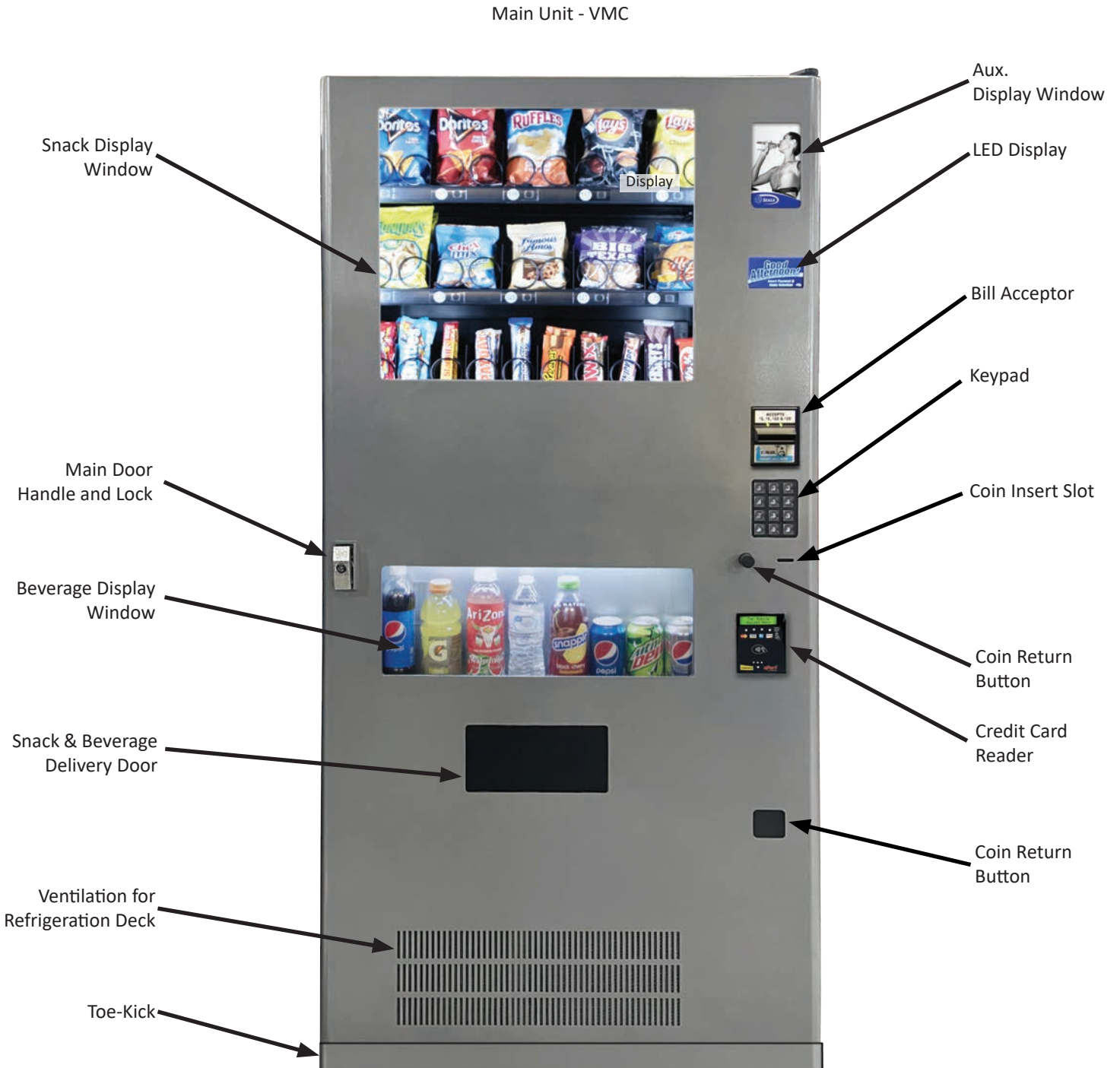700 Seaga Drive Freeport, IL 61032 U.S.A.

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Preliminary Information

Figure 1 – The QB4000 Vending Machine

Main Unit - VMC

Snack Display
Window

Display

Main Door
Handle and Lock

Beverage Display
Window

Snack & Beverage
Delivery Door

Ventilation for
Refrigeration Deck

Toe-Kick

Aux.
Display Window

LED Display

Bill Acceptor

Keypad

Coin Insert Slot

Coin Return
Button

Credit Card
Reader

Coin Return
Button

Machine Description	Main Unit
Model Number	QB4000
Height (in)	73.5
Width (in)	35
Depth (in)	34.5
Volts (V)	115
Frequency (Hz)	60
Watts (W)	360
Current (A)	3.8
Refrigerant	R290
Refrigerant Charge (oz)	1.59

Figure 2 - Interior of machine and controls

Power Requirements

The wall receptacle used for your vendor must be properly polarized, grounded and of the correct voltage. Operating the QB4000 system from a source of low voltage will VOID YOUR WARRANTY. Each QB4000 system should have its own 15 Amp electrical circuit that is protected by a circuit breaker or fuse conforming to local power safety regulations.

Unpacking the Vending System

Remove all packing materials from the interior of the vending machine. Keep all documents found packed inside which include payment system and accessory manuals as appropriate. Keep and set aside any accessory kits.

Controls and Indicators

The Display is how the vending system communicates with your customers while they are in front of the machine. The customer may see messages about how much an item costs, when a selection is sold out, and other communication. The Display also shows you, the operator, the programming mode and can show you errors or other important diagnostic information.

Keypad

The customer uses these buttons to make selections. The operator uses these buttons to program and/or test the system.

Coin Return Button

Pressing this button returns any credit that has been paid in to the vending machine prior to a vend unless Forced Vend is turned on.

Bill Acceptor

Accepts bills in various denominations depending upon the configuration of the bill validator unit.

VMC

The VMC is the Vending Machine Controller and is the heart of the vending system. The VMC is where the Menus button is located to put the system into programming mode.

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CAUTIONS

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Your vender is intended for indoor use only.

Excessive heat, cold or humidity levels will void your warranty; install only in climate controlled, indoor environments. For indoor machines the temperature range must be no higher than 32°C/90°F and no lower than 10°C/50°F with a relative humidity (Rh) level of no greater than 40%.
Your vender must be set on a level, well-supported location.
Always remove products before transporting it.

CAUTION!

It is important that this machine is hooked up to the proper voltage. Verify the voltage before connecting the machine to a wall outlet.

CAUTION!

Different countries may have different power arrangements. Ensure that the machine is properly grounded before operating.

CAUTION!

If the power cord is damaged, it must be replaced by the manufacturer, authorized service agent or a similarly qualified person to avoid electrical hazards.

ATTENTION!

This dispensing machine is very heavy. Ensure that sufficient personnel are available for lifting or transporting the machine. Use proper lifting procedures and equipment.

CAUTION!

Certain components of this machine are sensitive to static electricity. Precautions for handling sensitive devices should be observed when handling these items.

ATTENTION!

Leave at least 2" (5cm) between the back of the dispensing machine and the wall to allow for air flow.

CAUTION!

R290 refrigerant is used in this machine. R290 is a purified form of propane and can cause a fire or minor explosion if precautions are not observed.

Initial Setup

Moving the Vending System

Your QB4000 system should never be moved with product or coins loaded, it should be completely empty, and any moving parts must be secured.

The system can be located as close as 2 inches to the back wall but requires 6 inches clearance on either side for the doors to open properly while you service the machine.

After locating your vending system, plug in the power cord and the system will turn on.

Front Door

Unlocking – Insert the key into the lock and turn the key clockwise until the T-Handle pops out – then turn the T-Handle counter-clockwise 3 or more revolutions until the door can be pulled open.

Locking – Close the door firmly. Turn the lock housing one revolution clockwise and pull to test that the lock spear has engaged with the locking mechanism. If the door does not open, push the lock housing into its seated position in the door.

Location Requirements

The QB4000 is meant for operation indoors only – which not only means physical protection from the elements of sun, rain, etc. but also means a climate-controlled environment. Locating the QB4000 in excessively hot, cold, humid or dirty locations will VOID YOUR WARRANTY.

Tool Kit

Suggested tools for your tool kit are:
       Phillips screwdrivers
       Adjustable pliers
       Needle Nose pliers
       Socket Set including 5.5 mm, 7 mm and 10 mm

Leg Levelers

Leg Levelers have been provided in your parts pack as it is essential for proper operation to have a level vending machine. Installation requires two people; one to slightly tilt the machine while the other installs the leveler by screwing it into the base of the machine on all four corners.

Note: Care should be taken not to tip the vending machine more than a few degrees. Excessive tipping of the machine can ruin your refrigeration system and void your warranty.

Theory of Operation for Snack & Entree Trays

When a snack vends, power is sent to the motor (that drives the coil) and it turns until the motor hub is back to the internal "home switch" then it stops and the vend is considered to be complete. The motor simply rotates 360 degrees and stops.


Loading Snacks

Trays

Each snack tray has a release lever located on the right side. To place the tray in load position, hold down on the release lever and lift the tray up slightly; slide the tray forward (toward you) until the roller hits the stop built into the side rail. Gently lower the front of the snack tray until it is tilted down, and all coils are exposed (Figure 3).

Figure 3 – Snack Tray in Load Position

IMPORTANT: Make sure front wheels on both sides are properly engaged in the side rails when placing tray back in sales position

When loaded, lift the tray front up so that the tray is level and push back into position.
NOTE: Make sure the wheels on the front of the tray are engaged properly in the side rails and the release lever is in the forward position.
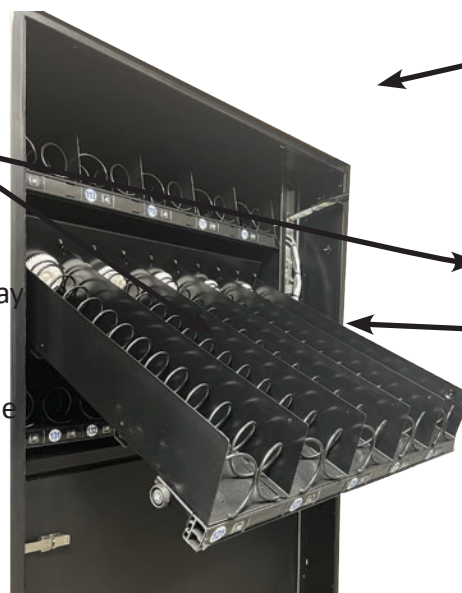
Each tray has a Release Lever

Tray in Load Position

Products

Make sure your products are appropriate for the column and coil you are placing them in. Do not force products that are too wide into a narrow tray or too tight coil as this will cause vend problems for your customers. The product must also pass under the tray immediately above the one you are loading and should not touch products on either side.

Once you have the appropriately sized products for each selection, correct loading of the products should be between the coils and resting on the product tray itself. See Figures 4 and 4a:

Figure 4 – Load products properly and neatly

Correct – load product between Helix Coils, resting on the product tray.

Helix Coil

Product Tray

Columns

Incorrect
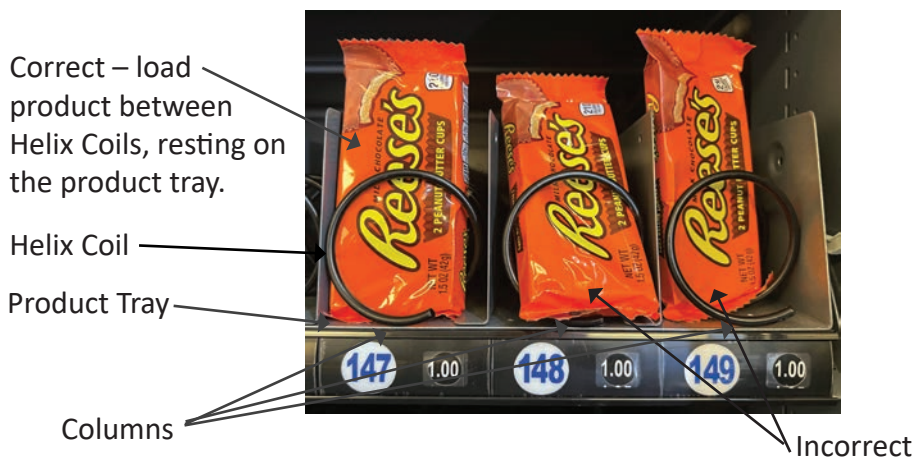
Figure 4a –Properly loaded products sell more and vend consistently

Correct – load product between Helix Coils, resting on the product tray.
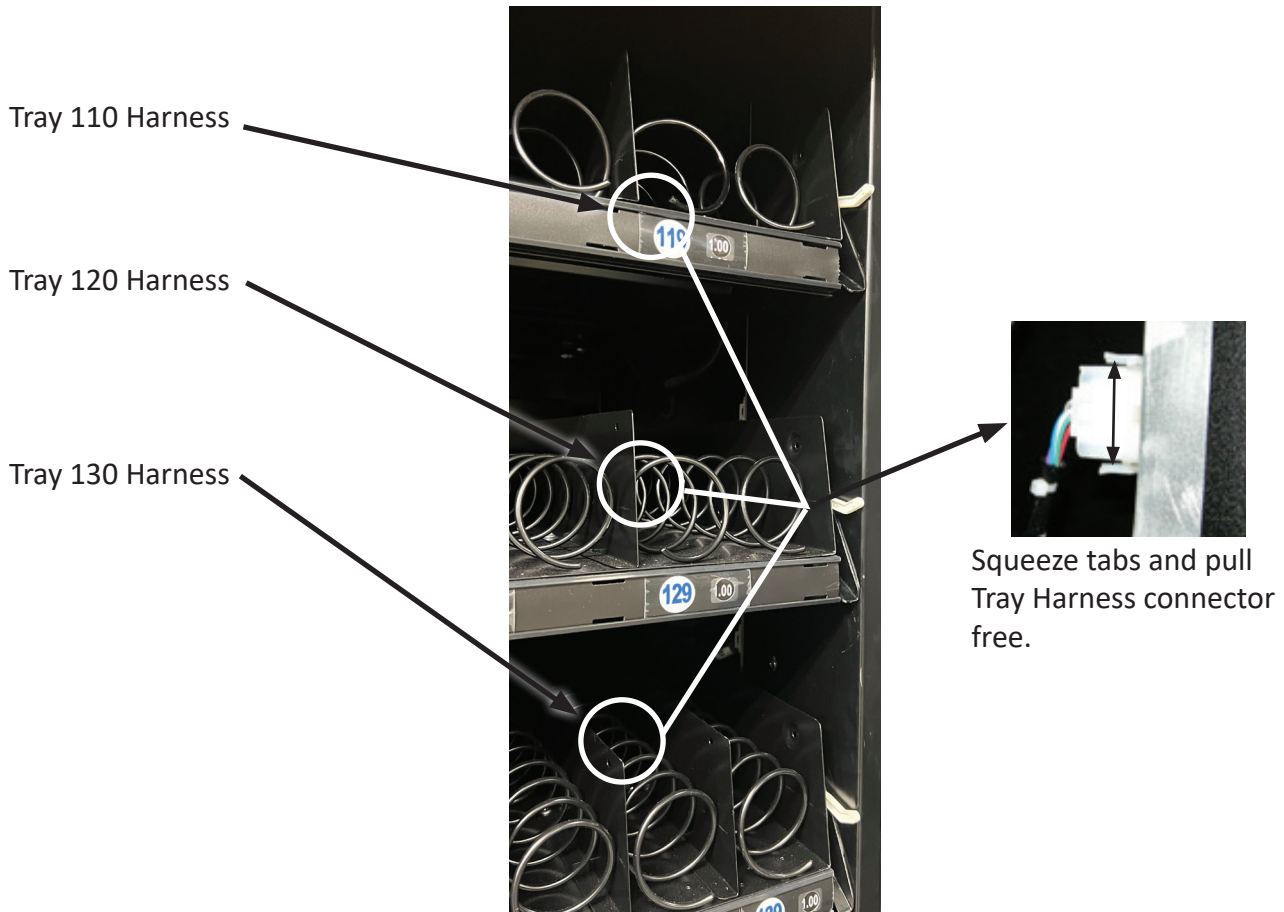
Incorrect

Incorrect
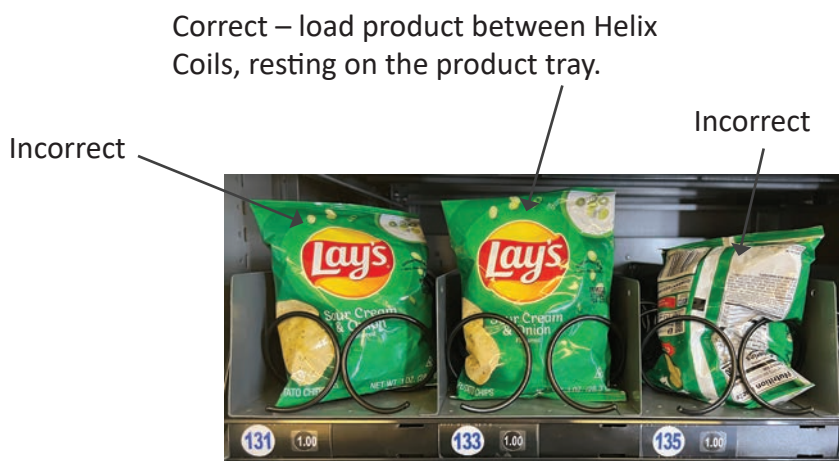
You should ensure that the products are loaded like a retail store shelf to entice customers and give a neat, professional appearance. Make sure packages are upright, facing front and in good condition.

Removing Snack Trays

It is sometimes necessary to replace a snack tray or you may find it easier to work on certain elements of a tray if it is removed from the vending system cabinet.

Figure 5 – Tray Harnesses

Tray 110 Harness

Tray 120 Harness

Tray 130 Harness

Squeeze tabs and pull Tray Harness connector free.

To remove a snack tray:

1. Remove all product from the tray you want to remove.
2. Reach in and squeeze the two cable release tabs on the top and bottom of the connector and unplug the proper tray harness.
3. Rest the tray harness on top of the tray you are removing to keep it out of the way.
4. Flip the release lever on the right side of the tray to face toward the back of the machine and raise the front wheels out of the side rails until you feel the roller come to the built in rail stop.
5. With a firm hold on the tray, lift up to release the roller from the rails on the sides of the cabinet.
6. Pull the tray free and place it on a sturdy, flat surface to complete your work.

Figure 6 – Remove the tray

Tray 130 Harness

Lift tray free
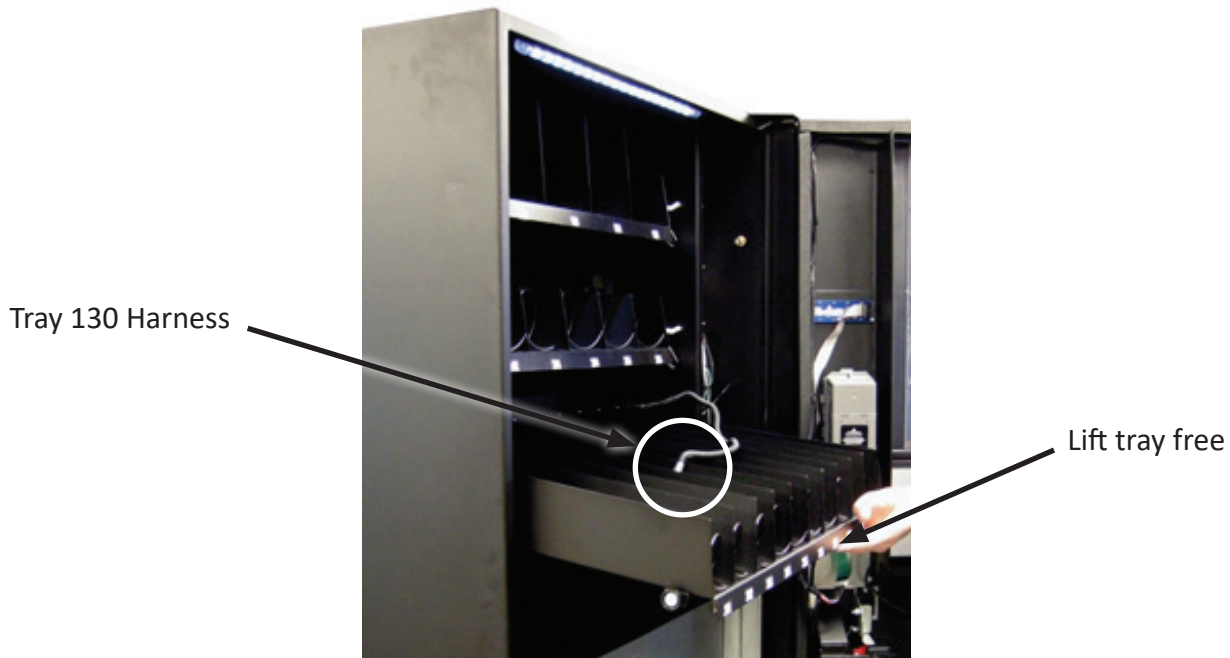
Adjusting Coils

If you are required by a location to vend a product of a non-standard size, you may need to order a different coil and install it. Replacing a coil is easier with the tray removed, as described in the last section. To replace a coil:

1. Remove the coil from the coil driver by lifting the back of the coil up off the coil driver. You will need to move the bottom of the coil clear of the coil driver to completely remove the coil. See Figure 9
2. Align the new coil end with the front of the product tray, which gives the coil better contact with the product. The position of the coil in the coil driver is adjustable to assist you in aligning the new coil at the front of the product tray. See Figure 7.

This coil adjustment can be done for all the selections on snack or entree product trays. See Figures 4 and 4a for examples of the location of home position on the coils.

Figure 7 – Removing and Aligning a Coil

Lift Coil

Apply pressure to the straight part of the coil that is inserted into the Coil Driver. Lift up the Coil to remove.

Coil Driver with three (3) adjustment options

Back of Product Tray
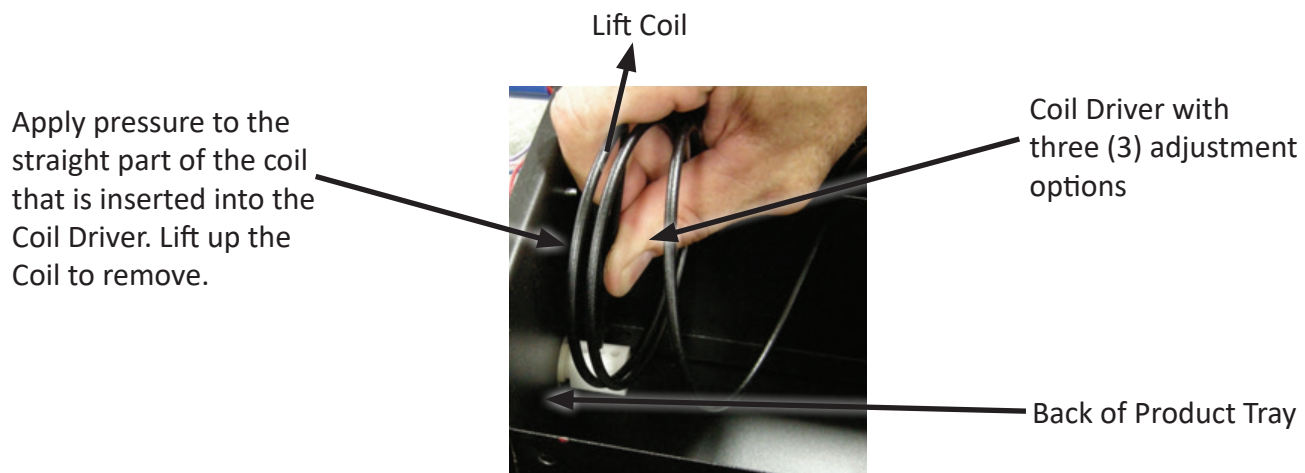
If you are experiencing vending issues with certain products, you may need to adjust the coil rotation to better provide the momentum to push the snack off the tray and into the delivery area. To adjust the coil rotation:

1. Squeeze the two tabs on the back of the coil driver and pull the coil driver and coil toward the front of the tray to remove it.
2. Turn the coil clock-wise 1/8 of a rotation.
3. Reinsert the coil driver with coil attached back into the motor, through the back wall of the tray.
4. Load the tray and perform at least 5 (five) test vends to insure a proper vend.
5. If the item does not vend consistently, repeat another 1/8 of a rotation until you are confident of consistent vend function.

Figure 8 – Coil Rotation Adjustment

Squeeze two tabs on the back of the Coil Driver

Pull the Coil Driver and Coil forward; Rotate 1/8 of a turn and reinsert back into product tray.
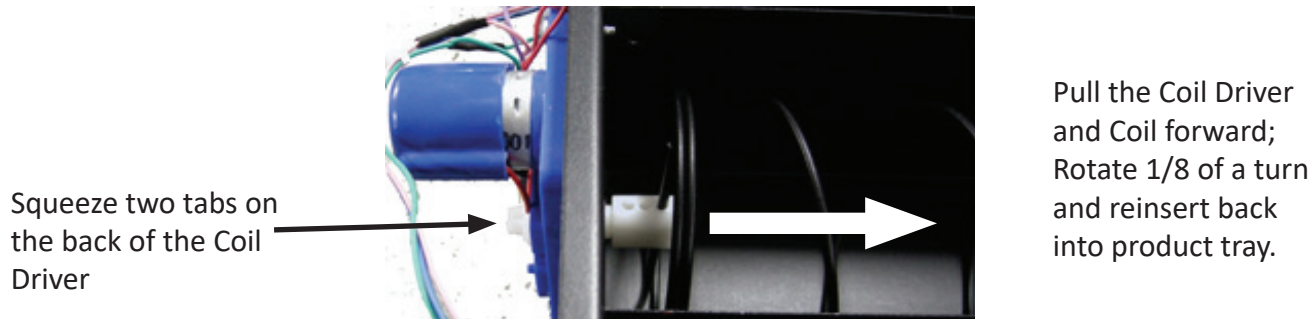
Replacing Snack Motors

As one of the moving parts of the vending system, vend motors experience regular wear and may need to be replaced on occasion. To replace a vend motor, remove the tray as instructed in the Remove Trays section of this manual and then remove the coil driver and coil as shown in Figure 10.
Note: Never use a Snack motor in the Beverage Section.

1. Unplug motor harness.
2. Unscrew the two screws as shown in Figure 9.
3. Replace motor and plug motor harness back in.
4. Reinstall coil driver so that coil is in home position
   (see Figures 4and 4a for coil home position examples).
5. Perform at least 5 (five) test vends to insure a proper vend.

Figure 9 –Motor on Snack Tray

Unplug motor harness

Unscrew two screws

Squeeze to remove coil driver
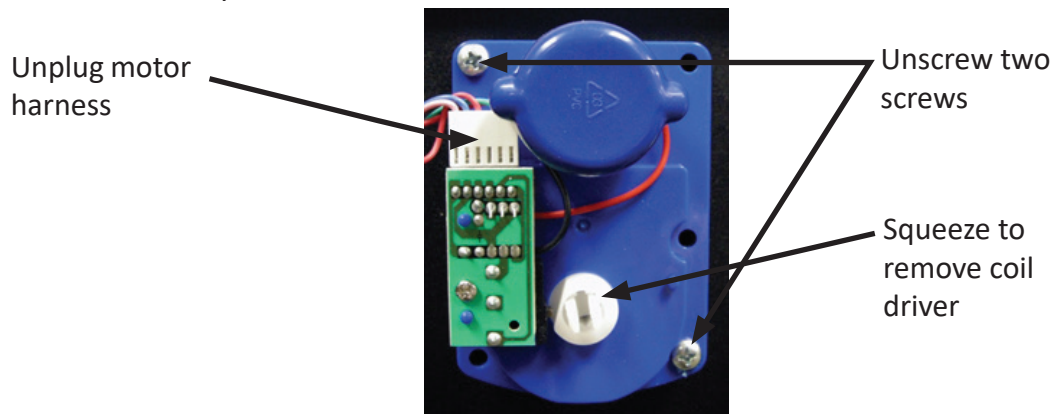
Theory of Operation of Beverage Vending

The beverage section uses two (2) Drop Sensors (vibration sensors) to detect the product drop. In normal operation, the auger will rotate counterclockwise to drop a product onto the delivery chute. Upon detection of the product drop by these sensors, the motor (driving the auger) will stop and the vend is considered complete.

Note: Never use a Snack motor in the Beverage Area.

Drop Sensors

Loading Product Lanes

The Product Columns in your machine use an Auger that rotates counter-clockwise to drop the drink into the Delivery Area.

1. Load products horizontally (laying down). Grasp Locking Tab and slide up to allow Retainer to move forward into Load Position.

Unlike the snack section of the vending system, the products that will vend are not viewable by your customers when they are positioned in the vertical drop columns. To provide a live display, a product display shelf has been provided. Take care to use packaging that is in perfect condition and products that are still within their expiration date to present the best possible retail store front to your potential customers. To load the live product display:

1. Remove the Drink Display Back Panel by loosening and removing the thumb screws located on either side of the panel.
2. Place each beverage, in order of selection, in the display window taking care to make them evenly spaced and oriented properly toward the front of the machine where the customer will see them.
3. Reinstall the beverage back panel.

Figure 10 – Live Drink Display

Thumb Screw   Thumb Screw

DISPLAY

The LCD Display (Fig. 11) is a character text display panel located on the front of your vending machine. The display interacts with the customer to show the amount of money entered into the vendor and the cost of their selection among other information as programmed. The display also shows the operator the Service Mode functions for setting the vendor.

Fig. 11 – LCD Display in Sales Mode

Display Formats	When in Sales Mode Display Reads
Normal Operation, no credit available	Good Morning, Good Afternoon & Good Evening
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 to display the credit available)	Price $00.01 – 99.99
Free Vend Mode (all prices set to zero)	Free Vend
If a selection is out of stock when a selection is pressed – this is displayed for a few seconds	Sold Out
All Items out of stock	Sold Out
Machine Out Of Order	Out of Order
During a Vend (Progress bar, dashes)	--------------
Exact Change required	Exact Change Only
Temperature Display Press the # button to display	Temp nnF (C)

If a calorie value is set for a selection, the value will be displayed when the product is vended or when a selection is made without any credit.

SERVICE MODE

The operation of the machine can be adjusted by entering service mode by pressing the MENU 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.***

Setting Up and Loading the Payment Systems

Coin Changer

The Coin Changer receives and returns change to customers. The Coin Changer will accept Dollar Coins, Quarters, Dimes, and Nickels. Once the coin tubes reach the required inventory level, all other coins will be routed into the coin overflow tray.

Loading Changer

As change is given to the customer in coins only, it is recommended that you initially load the coin tubes completely full when setting up your machine. In order for your VMC to keep an accurate coin inventory, enter MENUS Mode, then press 3 on the keypad to Qty/Tube, and load coins in through the front coin slot, as if you were inserting money to purchase items. Once the coins start dropping into the coin overflow tray, that means that the coin tubes are full and the VMC has an inventory of coins stored and will calculate transactions accordingly. This is also known as priming the changer.

Coin Retrieval

The Coin Overflow Tray holds all accepted coins except for coins needed to maintain inventory in the Tubes. The User Interface Buttons are located on the upper portion of the changer (Figure 12). Press a User Interface Button on the changer to dispense the coins in that tube. Note that the changer will empty that selection of coins. To stop this mode, press the selection's User Interface Button again.

Note: You may also physically remove the Coin Cassette to load and unload coins. Note that doing so will not maintain audit totals.

Figure 12 - Coin Changer

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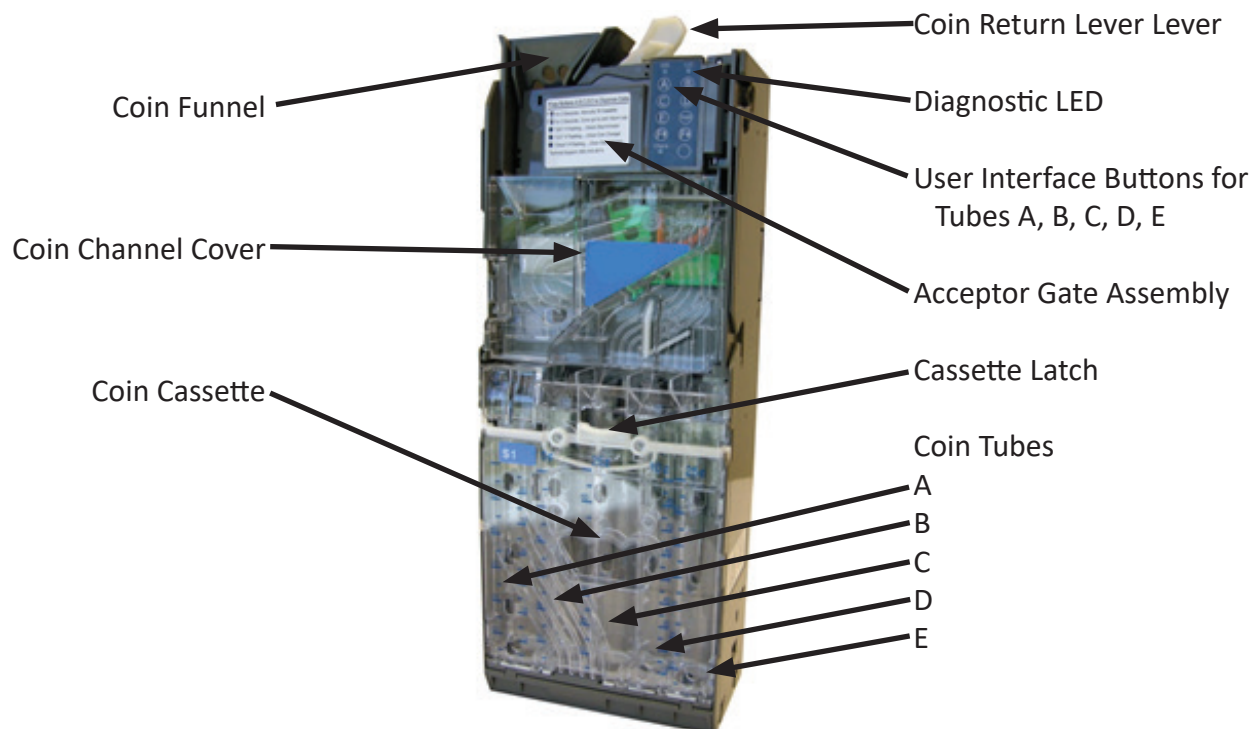
Clearing Coin Jams

1. Unplug the machine from the power source
2. Unlock and open the Front Door
3. Open the Acceptor Gate Assembly by pulling forward on the Coin Funnel

4. Check for coin jams in this area. Note: the ramp in this area should also be cleaned on a regular basis to insure trouble-free operation.

Coin Ramp – keep clean

5. Open the Coin Channel Cover by using the tab on the left side to pull forward
6. Check this area for any jammed coins

Removal of Coin Changer

To Remove the Coin Changer:

a. *Disconnect the power to the machine – this is very important to avoid damaging not only the coin changer but your VMC. Failure to disconnect power before performing this operation will void your warranty.*

b. Disconnect the Wire Harness to the changer

Disconnect Wire Harness

c. Lift up on the white lever on the top left side of the coin mechanism
d. Tilt the Discriminator assembly forward and lift off main housing. Note: the discriminator will still be attached by a cable.
e. Loosen the three (3) Mounting Screws

Push Up

Tilt Out

3 Mounting Holes

f. Lift Changer and remove.

Bill Validator

The Bill Validator allows your customers to pay for their purchase with paper currency. Your Bill Validator is installed at the factory, and is set to validate $1, $5 and $10 bills, but will not accept bills if the coin tubes are empty. The Bill Validator verifies, accepts and stores paper currency but change is given in coins only.

Bill Validator Capacity

The Bill Storage Box will hold approximately 250 bills.

Bill Retrieval

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

 a. Unlock and open the Front Door
 b. Open door located on top of bill collection box and lift out bills

 c. Close top door on bill collection box after bills are retrieved

Figure 13 – Bill Validator

Tab

Bill Collection Box

(4) Mounting Nuts

Lower Housing
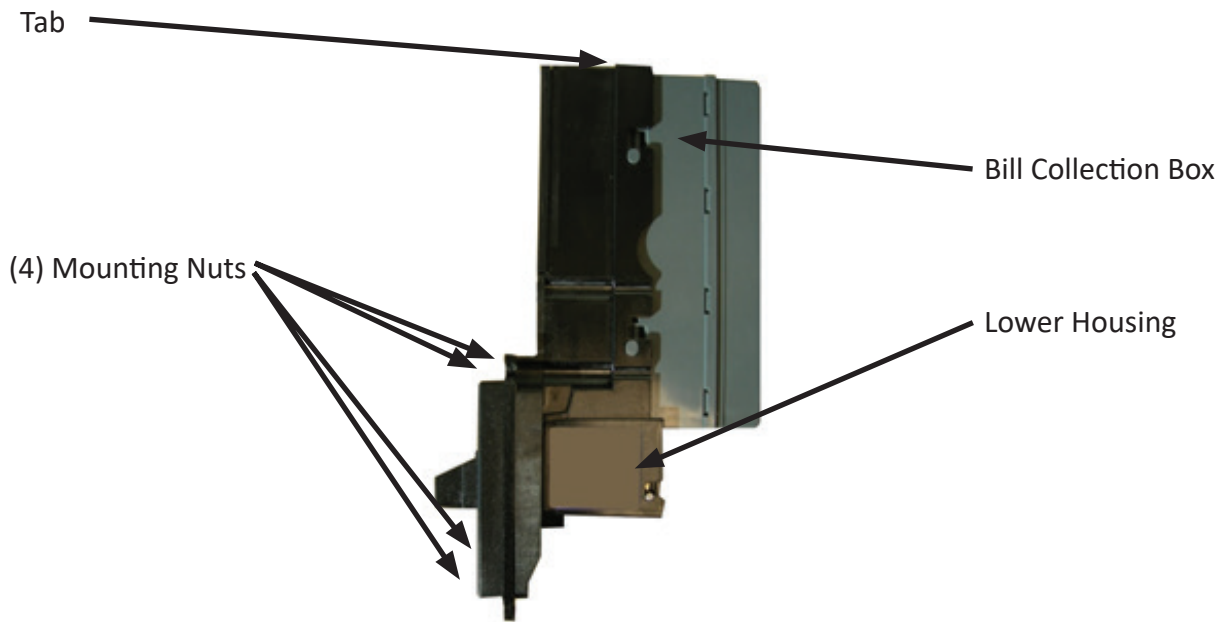
REMOVING BILL VALIDATOR

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

      a.Disconnect the power to the machine – this is very important to avoid damaging not only the bill validator but your VMC. Failure to disconnect power before performing this operation will void your warranty.
      b. Unlock and open the Front Door
      c. Push Bill Validator Tab forward and slide Bill Storage Box up to remove

Tab

      d. Disconnect Bill Validator from Wire Harness
      e. Remove the Four (4) Mounting Nuts.

Wire Harness

Four (4) Mounting Nuts
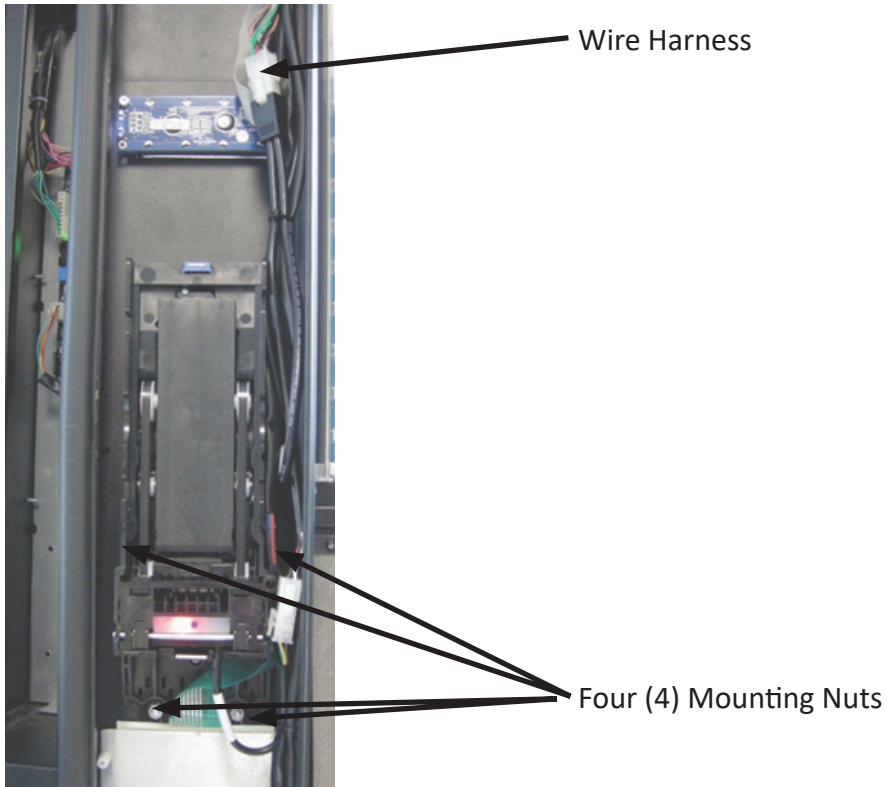
f. Remove Bill Validator

Clearing Bill 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 Collection Box as instructed in Bill Retrieval and inspect for a jammed bill

       b. Remove bill jam, and reassemble

       c. If no jam was found in the Bill Collection Box, lift up on the metal bar at the bottom of the bill
          validator and pull the lower unit out towards you.

d. Inspect and remove jammed bill.
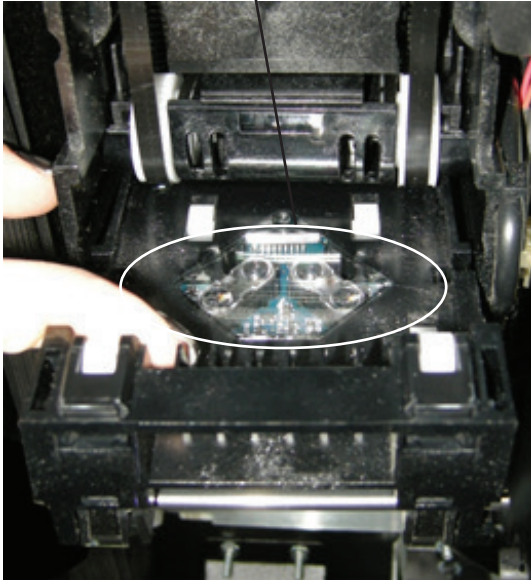
e. Replace lower unit to resume normal operation.

PROGRAMMING

Enter Service Mode by pressing the MENUS Button on the VMC Circuit board. (Fig. 14)

Figure 14 – VMC and Menus Button
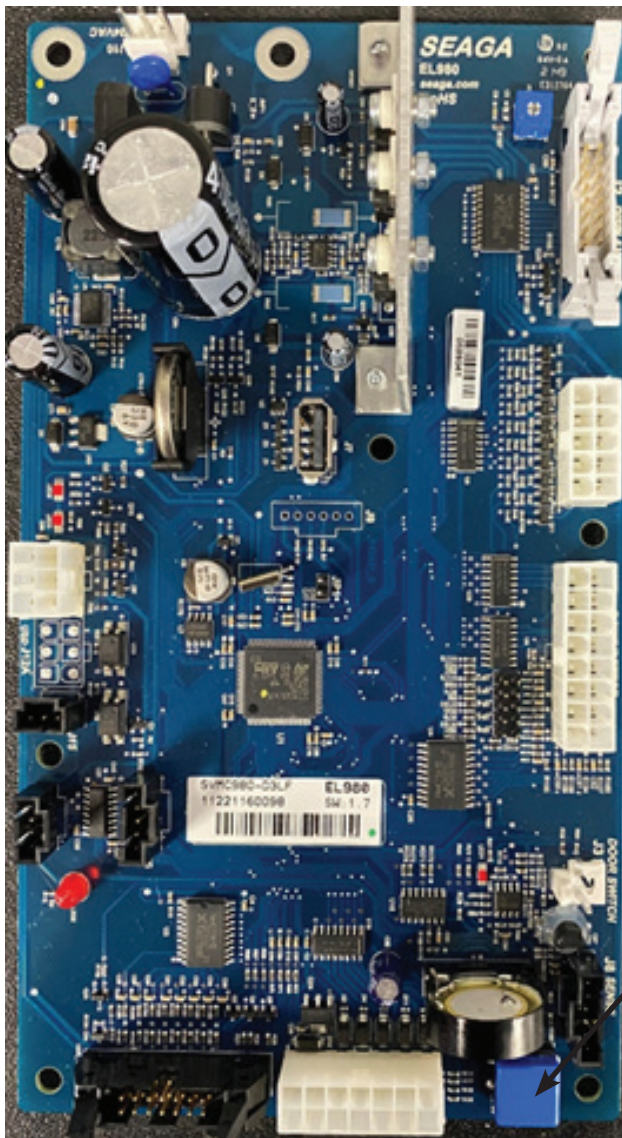
Menus Button

SERVICE MODE NAVIGATION

Use the 0 through 9 keys to access the various menus and sub-menus.
Use the "*" key on the keypad to Exit without changing or to go back (Previous).
Use the "#" key on the keypad to Save.

1. PRICE PROGRAM

Price Program is used to set the prices for All Items, by Row or by individual Selection. Save time and set All Items to the most common price, going back to Row or Selection for different prices as required. The value for Coupons accepted by pre-programmed validators and Tokens accepted by pre-programmed coin changers as well as Combo pricing are also set in this menu.

ALL ITEMS

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 1 for All Items
4. Use number keys to enter new price
5. Press # to Save changes
6. Press * to exit to previous menu

ROW

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 2 for Row
4. Use number keys to enter Row number
5. Use number keys to set new price, including cents.
6. Press # to Save changes
7. Press # to go to Next row or
8. Press * to exit to previous menu

NOTE: The row number would be the first 2 digits of any selection number in any row (top tray the row is 11, 2nd tray the row is 12, etc.)

SELECTION

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 3 for Selection
4. Use number keys to enter Selection number
5. Use number keys to set new price, including cents.
6. Press # to Save changes
7. Press # to go to Next selection or
8. Press * to exit to previous menu

COUPON

IMPORTANT: This option requires a programmed validator. Up to five different coupon values can be set. In sales mode, once a coupon is accepted, no further coupons will be accepted until a successful vend has been made. 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. For example, if Coupon1 is set for "All Items", Token1 is also set for "All Items".

COUPONS ALL ITEMS

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 4 for Coupons
4. Press 1 for Coupon1 (or corresponding number for additional coupons, up to Coupon5)
5. Press 1 for All Items
6. Press 1 to toggle On/Off
7. Press # to Save changes
8. Press * to Exit to previous menu
9. Press 4 to enter Coupon1 Value menu
10. Press # to edit
11. Use number keys to enter Coupon1 value
12. Press # to save changes, or * to delete Coupon value then # to Save
13. Press * to exit to previous menu
14. Select Coupon2 – 5 to continue or Press * to exit to previous menu

COUPON BY ROW

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 4 for Coupons
4. Press 1 for Coupon1 (or corresponding number for additional coupons, up to Coupon5)
5. Press 1 for All Items
6. Press 1 to toggle to Off
7. Press # to save changes
8. Press * to exit to previous menu
9. Press 2 to enter a Row Number
10. Press # to edit
11. Use number keys to enter Row Number
12. Press 1 to toggle Row On/Off
13. Press # to save the setting
14. Press * to exit to previous menu
15. Press 4 to enter Coupon Value menu
16. Use the number keys to enter Coupon1 value
17. Press # to save changes, or * to delete Coupon value then # to Save
18. Press * to exit to previous menu
19. Select Coupon2 – 5 to continue or Press * to exit to previous menu

COUPON BY SELECTION

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 4 for Coupons
4. Press 1 for Coupon1 (or corresponding number for additional coupons, up to Coupon5)
5. Press 1 for All Items
6. Press 1 to toggle to Off
7. Press # to save changes
8. Press * to exit to previous menu
9. Press 3 to enter a Selection
10. Use the number keys to enter a Selection number
11. Press 1 to toggle Item On/Off
12. Press # to save the setting
13. Press * to exit to previous menu
14. Press 4 to enter Coupon Value menu
15. Press # to edit Coupon1 value
16. Use the number keys to enter Coupon1 value
17. Press # to save changes, or * to delete Coupon value then # to Save
18. Press * to exit to previous menu
19. Select Coupon2 – 5 to continue or Press * to exit to previous menu

TOKEN

IMPORTANT: This option requires a programmed changer and allows you to set the value of tokens accepted. Note: If Space to Sales Whole Machine is On and you are setting Tokens by Row, the Row must be set to Row 1. If using both coupons and tokens, there are only five selection combinations available. For example, if Coupon1 is set for "All Items", Token1 is also set for "All Items".

TOKEN ALL ITEMS

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 5 for Tokens
4. Press 1 for Token1 (or corresponding number for additional tokens, up to Token5)
5. Press 1 for All Items
6. Press 1 to toggle On/Off
7. Press # to save changes
8. Press * to exit to previous menu
9. Press 4 to enter Token Value menu
10. Press # to edit
11. Use number keys to enter Token1 value
12. Press # to save changes, or * to delete Coupon value then # to Save
13. Press * to exit to previous menu
14. Select Token2 – 5 to continue or press * to exit to previous menu

TOKEN BY ROW

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 5 for Tokens
4. Press 1 for Token1 (or corresponding number for additional coupons, up to Token5)
5. Press 1 for All Items
6. Press 1 to toggle to Off
7. Press # to save changes
8. Press * to exit to previous menu
9. Press 2 to enter a Row Number
10. Use number keys to enter Row Number
11. Press 1 to toggle Row On/Off
12. Press # to save changes
13. Press * to exit to previous menu
14. Press 4 to enter Token Value menu
15. Press # to edit
16. Use number keys to enter Token value
17. Press # to save the setting
18. Press * to exit to previous menu
19. Select Token2 – 5 to continue or Press * to exit to previous menu

TOKEN BY SELECTION

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 5 for Tokens
4. Press 1 for Token1 (or corresponding number for additional coupons, up to Token5)
5. Press 1 for All Items
6. Press 1 to toggle to Off
7. Press # to save changes
8. Press * to exit to previous menu
9. Press 3 to enter a Selection Number
10. Use number keys to enter Selection Number
11. Press 1 to toggle Selection On/Off
12. Press # to save changes
13. Press * to exit to previous menu
14. Press 4 to enter Token Value menu
15. Press # to edit
16. Use number keys to enter Token value
17. Press # to save changes, or * to delete Coupon value then # to Save
18. Press * to exit to previous menu
19. Select Token2 – 5 to continue or Press * to exit to previous menu

COMBO

Combos are a group of 2-5 selections that can be sold together for one price. For example, a price of $7.50 the customer will be able to purchase a bagged snack (110), a snack from the third tray (131) and a drink (142) which will all vend when the Combo Selection is used. If the customer purchased these items separately it would cost them more. Combos are used to encourage higher vend amounts through discounted pricing.

Up to five Combos may be set up. Combos are product specific so when you list the Combos for a machine you will want to list the specific products. We recommend that you show the savings with a Combo versus buying the selections individually via some sort of signage or electronic display.

Note: Do not use Space to Sales (Sts) with the Combo setting.

1. Press Service Mode Button
2.   Press 1 for Price Program
3.   Press 6 for Combo menu
4.   Press 1 for Combo1 (or corresponding number for additional combos, up to 5 options available)
5.   Press # to edit
6.   Use number keys to enter First Combo Item Number
7.   Press # to Save changes
8.   Use number keys to enter First Combo Item Price
9.   Press # to save changes
10.   Press 1 (next) to enter the Selection Ranges
11.   Enter Range number, then enter selection numbers

Note: A Range represents the first selection(s) in the combo. In our example, the range would be selection 110 to 110. A second range would be set for selection 131 to 131 and the third range for 142 to 142. This would complete the three item Combo.

12.   Press 1 to advance to the next Range.
13.   To continue setting Ranges, repeat steps 10 and 11. There are 5 ranges per combo.
14.   When finished press * to exit to previous menu

To delete a previously set Combo

1. Press Service Mode Button
2.   Press 1 for Price Program
3.   Press 6 for Combo menu
4.   Press 1 for Combo1 menu (or corresponding number for additional combos, up to 10 options   available)
5.   Press # to edit the Combo
6.   Press * to delete the selection number
7.   Press # to changes
8.   Press * to exit to previous menu
9.   Repeat steps 4-8 for other Combos

CALORIES

CALORIES ALL ITEMS

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 7 for Calories
4. Press 1 All Items
5. Using number keys enter Calorie Value
6. Press # to save changes
7. Press * to exit to previous menu

CALORIES BY ROW

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 7 for Calories
4. Press 2 Row
5. Use number keys to enter Row Number
6. Use number keys to enter Calorie Value
7. Press # to Save Changes
8. Press # for Next Row
9. Repeat Steps 5-8 until finished
10. Press * to exit to previous menu

CALORIES BY SELECTION

1. Press Service Mode Button
2. Press 1 for Price Program
3. Press 7 for Calories
4. Press 3 Selection
5. Use number keys to enter Selection Number
6. Use number keys to enter Calorie Value
7. Press # to Save Changes
8. Press # for Next Selection
9. Repeat Steps 5-8 until finished
10. Press * to exit to previous menu

2. CASH COUNTERS

Cash Counters displays the total vend count and the total sales value for the machine, for All Items, by Row or by individual Selection. Note: The resettable counters can be cleared.

ALL ITEMS (1)

1. Press Service Mode Button
2. Press 2 for Cash Counters
3. Press 1 for ALL ITEMS

4.   Press 1 to view Historical Count
5.   Press 2 to view Historical Cash
6.   Press 3 to Reset Count
7.   Press 4 to Reset Cash
8.   Press 5 to view Historical Card
9.   Press 6 to Reset Card
10.   Press 7 to Clear
11.   Press * to exit to previous menu

ROW (2)

1. Press Service Mode Button
2.   Press 2 for Cash Counters
3.   Press 2 for Row
4.   Use number keys to enter Row number
5.   Press 1 to view Historical Count
6.   Press 2 to view Historical Cash
7.   Press 3 to Reset Count
8.   Press 4 to Reset Cash
9.   Press 5 to view Historical Card
10.   Press 6 to Reset Card
11.   Press 7 to Clear
12.   Press * to exit to previous menu

SELECTION (3)

1. Press Service Mode Button
2.   Press 2 for Cash Counters
3.   Press 3 for Selection
4.   Use number keys to enter Selection number
5.   Press 1 to view Historical Count
6.   Press 2 to view Historical Cash
7.   Press 3 to Reset Count
8.   Press 4 to Reset Cash
9.   Press 5 to view Historical Card
10.   Press 6 to Reset Card
11.   Press 7 to Clear
12.   Press * to exit to previous menu

3. QTY/TUBE
Enter this menu when priming the changer with coins. As you load coins from the front door in the coin slot, this menu will keep track of the quantity and monetary amount which enables the VMC to know that change can be made during sales transactions.

1. Press Service Mode Button
2.   Press 3 for Coin Payout, then insert coins through front door coin slot
3.   Press * to exit to previous menu

4. CONFIGURATION

The following sub-menus are included in the Configuration Menu:

- Date/Time
- Health Safety
- Language
- All Items – Type
- Row – Type

- Selection – Type
- Auto Reinstate
- StS
- StS Custom
- Advanced Config*

DATE/TIME

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 1 for Date/Time
4. Press 1 to change Date (MM/DD/YY)
5. Press # to Edit Date
6. Use number keys to enter Date in format shown
7. Press # to Save changes
8. Press * to exit to previous menu
9. Press 2 to change Time (HH:MM) AM/PM
10. Press # to Edit Time
11. Use number keys to enter Time in format shown
12. Press # to Save changes
13. Press * to exit to previous menu
14. Press 3 to change DST (Daylight Savings Time)
15. Press 3 to toggle between OFF/ON
16. Press # to Save changes
17. Press * to exit to previous menu

HEALTH SAFETY
Not applicable. All Items should be OFF.

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 2 for Health Safety
4. Press 1 to change Upper Zone
5. Press 1 to change All Items
6. Press 1 to toggle On/Off to set to OFF
7. Press # to Save changes
8. Press * to exit to previous menu
9. Press * to exit to previous menu
10. Press 2 to change Lower Zone
11. Press 1 to change All Items
12. Press 1 to toggle On/Off to set to OFF
13. Press # to Save changes
14. Press * to exit to previous menu

LANGUAGE

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 3 for Language
4. Press 3 to toggle choices
5. Press # to Save changes
6. Press * to exit to previous menu

ALL ITEMS: TYPE

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 4 for All Items: Type*
4. Press 1 to Edit/Toggle between Snack, Can or SO Switch
5. Press # to Save changes
6. Press * to exit to previous menu

ROW: TYPE
Note: Trays 110, 120, 130 must be set to Snack. Tray 140 to Can.

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 5 for Row: Type*
4. Use number keys to enter Row number
5. Press 1 to Edit/Toggle between Snack, Can or SO Switch
6. Press # to Save changes
7. Press * to exit to previous menu

SELECTION: TYPE

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 6 for Selection: Type*
4. Use number keys to enter Selection number
5. Press 1 to Edit/Toggle between Snack, Can or SO Switch
6. Press # to Save changes
7. Press * to exit to previous menu

AUTOREINSTATE
This feature is not applicable in this model and must be set to OFF.

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 7 for AutoReinstate
4. Press 1 to change All Items
5. Press 1 to Toggle ON/OFF to set to OFF

6.   Press # to Save changes
7.   Press * to exit to previous menu

SPACE TO SALES (StS)
This feature is not applicable in this model and must be set to OFF.

1. Press Service Mode Button
2.   Press 4 for Configuration
3.   Press 8 for Space to Sales (StS)
4.   Press 8 to Edit
5.   Press 8 to toggle through options to StS Off
6.   Press # to Save changes
7.   Press * to exit to previous menu

CUSTOM SPACE TO SALES (StS)
This feature is not applicable in this model, see Space to Sales (StS) to turn this feature OFF.

ADVANCED CONFIG*

A password is required to enter this menu. The factory default password is 2314. The following sub-menus are available under this sub-menu:

- Beep Enable
- Optics Disables
- Motor Type
- Temp
- Selection Style

BEEP ENABLE

1. Press Service Mode Button
2.   Press 4 for Configuration
3.   Press 0 for Advanced Config
4.   Use number keys to enter Password (2314)
5.   Press 1 for Beep Enable menu
6.   Press 1 to toggle ON/OFF
7.   Press # to save changes
8.   Press * to exit to previous menu

OPTICS DISABLES
Note: Must be set to ON for this model.
1. Press Service Mode Button
2.   Press 4 for Configuration
3.   Press 0 for Advanced Config
4.   Use number keys to enter Password (2314)
5.   Press 2 for Optics Disables menu
6.   Press 2 to toggle ON/OFF to set to ON
7.   Press # to save changes
8.   Press * to exit to previous menu

MOTOR TYPE
Note: Must be set to 3-Wire for this model.

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 0 for Advanced Config
4. Use number keys to enter Password (2314)
5. Press 3 for Motor Type menu
6. Press 3 to toggle to 3-Wire (other options: Solenoid, 2-Wire, 2-Wire 1ms or 3-Wire Slow)
7. Press # to save changes
8. Press * to exit to previous menu

TEMP
Note: Must be set to COLD.

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 0 for Advanced Config
4. Use number keys to enter password (2314)
5. Press 4 for Temp menu
6. Press 4 to toggle to Cold
7. Press # to save changes
8. Press * to exit to previous menu

SEL STYLE
Note: Must be set to 3-Digit for this model

1. Press Service Mode Button
2. Press 4 for Configuration
3. Press 0 for Advanced Config
4. Use number keys to enter password (2314)
5. Press 5 for Sel Style
6. Press 5 to toggle to 3-digit
7. Press # to save changes
8. Press * to exit to previous menu

5. OPTIONS
The following sub-menus are included in the Options Menu:
- Forced Vend
- Bill Escrow
- Multi Vend
- Free Vend
- Fast Change
- Optical Vend
- POS Message
- Set Point
- Sensitivity Adjust

FORCED VEND

Forces the customer to complete a purchase once they have made payment in any form. NOTE: If a customer chooses a Forced Vend selection and the motor fails, the customer will be allowed to escrow the credit.

1. Press Service Mode Button
2.   Press 5 for Options Menu
3.   Press 1 for Forced Vend Menu
4.   Press 1 to toggle between ON and OFF
5.   Press # to save changes
6.   Press * to exit to previous menu

BILL ESCROW

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

1. Press Service Mode Button
2.   Press 5 for Options Menu
3.   Press 2 for Bill Escrow Menu
4.   Press 2 to toggle between ON and OFF
5.   Press # to save the setting
6.   Press * to exit to previous menu

MULTI VEND

Allows the customer to purchase more than one product if enough credit has been deposited. When Multi Vend is active, any credit remaining after a vend is NOT automatically returned. The customer makes the choice to make another selection (with sufficient credit), make further payment to make another selection or press the coin return to return any remaining credit.

NOTE: After 5 minutes, any credit remaining will be erased by the machine. For card reader sessions, the Multi Vend feature will function only if the card reader supports multiple vend capability.

NOTE: If Fast Change is set to ON, it will override Multi Vend and change will be made immediately after a selection.

1. Press Service Mode Button
2.   Press 5 for Options Menu
3.   Press 3 for Multi Vend Menu
4.   Press 3 to toggle between ON and OFF
5.   Press # to save changes
6.   Press * to exit to previous menu

FREE VEND

Sets the WHOLE MACHINE to Free Vend. Every product is at no cost, no money is accepted by the machine and the display reads "FREE ON US".

1. Press Service Mode Button
2. Press 5 for Options Menu
3. Press 4 for Free Vend Menu
4. Press 4 to toggle between ON and OFF
5. Press # to save changes
6. Press * to exit to previous menu

FAST CHANGE

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

1. Press Service Mode Button
2. Press 5 for Options Menu
3. Press 5 for Fast Change Menu
4. Press 5 to toggle between ON and OFF
5. Press # to save changes
6. Press * to exit to previous menu

OPTICAL VEND

Note: Not used on this model. All items must be set to OFF.

1. Press Service Mode Button
2. Press 5 for Options Menu
3. Press 6 for Optical Vend Menu
4. Press 3 for All Items Menu
5. Press 3 to Edit/Toggle to OFF
6. Press # to save changes
7. Press * to exit to previous menu

POINT OF SALE MESSAGE (POS)

Turns ON or OFF the default scrolling display message.

1. Press Service Mode Button
2. Press 5 for Options Menu
3. Press 7 for POS Options
4. Press 7 for POS Message
5. Press 7 to Edit/Toggle between ON/OFF
6. Press # to save changes
7. Press * to exit to previous menu

SET POINT

Displays the factory default Set Point temperature for each machine type. See Temp section for the

specific machine refrigeration modes. Ambient snack machines without a refrigeration system will display 43 °F.

These temperatures may be adjusted; ***however, it is not advised without direction by an authorized technician.*** The optimal temperatures have been set according to NAMA specifications for optimal product safety. Before making any adjustment see Temp and Health Safety section.

1. Press Service Mode Button
2. Press 5 for Options Menu
3. Press 8 for Set Point
4. Press 8 to edit the temperature Set Point
5. Continue pressing 8 until the desired temperature is shown on the display (0-250)
6. Press # to save changes
7. Press * to exit to previous menu

SENSITIVITY ADJUST

The drop sensor sensitivity is factory set as follows:

Selections 140-144 Medium; Selections 145 and 146 High; Selection 147 Low

These settings should not be changed unless advised by technical support staff. Please see the Troubleshooting section for instances that require adjustment under advisement.

1. Press Service Mode Button
2. Press 5 for Options Menu
3. Press 9 for Sensitivity Adjust
4. Press 3 for Selection
5. Use number to enter Selection number (140-146)
6. Press 1 to toggle through Low, Mid or High
7. Press # to save changes
8. Press * to exit to previous menu

6. ADVANCED FEATURES*

This menu requires a password. The factory default password is 2314. The following sub-menus are included in the Advanced Features menu:

- Discount
- Exact Change
- Unconditional Acceptance
- Max Change

- Shutdown
- Energy Savings
- Pair
- Degrees

DISCOUNT ALL ITEMS

This menu uses various sub-menu settings to allow a different price for selections at different times or on different days. Only one discounted price can be set for each item, whether by All Items, Row or Selection but various time intervals can be applied.

1. Press Service Mode Button
2. Press 6 for Advanced Menu
3. Use number keys to enter Password (2314)

4.   Press 1 for Discount
5.   Press 7 for All Items
6.   Use keypad to enter discount price for All Items
7.   Press # to save changes
8.   Press * to exit to previous menu
9.   Press 1 for Interval1 (up to 4 Intervals may be chosen)
10.   Press 1 for All Items
11.   Press 1 to toggle ON/OFF
12.   Press # to save changes
13.   Press * to exit to previous menu
14.   Press 4 for Day menu
15.   Press 1 for All Days
16.   Press 1 to toggle All Days ON/OFF
17.   Press # to save changes
18.   Press * to exit to previous menu
19.   Press 2 for Monday menu
20.   Repeat steps 16-18 as needed using 2 to toggle
21.   Press 3 for Tuesday menu
22.   Repeat steps 16-18 as needed using 3 to toggle
23.   Press 4 for Wednesday menu
24.   Repeat steps 16-18 as needed using 4 to toggle
25.   Press 5 for Thursday menu
26.   Repeat steps 16-18 as needed using 5 to toggle
27.   Press 6 for Friday menu
28.   Repeat steps 16-18 as needed using 6 to toggle
29.   Press 7 for Saturday menu
30.   Repeat steps 16-18 as needed using 7 to toggle
31.   Press 8 for Sunday menu
32.   Repeat steps 16-18 as needed using 8 to toggle
33.   Press * to exit to previous menu
34.   Press 5 for Start Time menu
35.   Press # to edit
36.   Use number keys to enter Start Time in 12-hr time format (HH:MM:SS) AM/PM
37.   Press # to save changes
38.   Press * to exit to previous menu
39.   Press 6 for Stop Time menu
40.   Press # to edit
41.   Use number keys to enter Stop Time in 12-hr time format (HH:MM:SS) AM/PM
42.   Press # to save changes
43.   Press * to exit to previous menu

DISCOUNT BY ROW

Note: Make sure the All Items setting in the Discount Interval menu is set to OFF. See Discount All Items.

1. Press Service Mode Button

2. Press 6 for Advanced Menu
3. Use number keys to enter Password (2314)
4. Press 1 for Discount
5. Press 8 for Row
6. Use keypad to enter Row number and discount price for the entire row
7. Press # to save changes
8. Press * to exit to previous menu
9. Press 1 for Interval1 (up to 4 Intervals may be chosen)
10. Press 2 for Row
11. Use number keys to enter row number
12. Press 1 to toggle ON/OFF
13. Press # to save changes
14. Press * to exit to previous menu
15. Press 4 for Day menu
16. Press 1 for All Days
17. Press 1 to toggle All Days ON/OFF
18. Press # to save changes
19. Press * to exit to previous menu
20. Press 2 for Monday menu
21. Repeat steps 17-19 as needed using 2 to toggle
22. Press 3 for Tuesday menu
23. Repeat steps 17-19 as needed using 3 to toggle
24. Press 4 for Wednesday menu
25. Repeat steps 17-19 as needed using 4 to toggle
26. Press 5 for Thursday menu
27. Repeat steps 17-19 as needed using 5 to toggle
28. Press 6 for Friday menu
29. Repeat steps 17-19 as needed using 6 to toggle
30. Press 7 for Saturday menu
31. Repeat steps 17-19 as needed using 7 to toggle
32. Press 8 for Sunday menu
33. Repeat steps 17-19 as needed using 8 to toggle
34. Press * to exit to previous menu
35. Press 5 for Start Time menu
36. Press # to edit
37. Use number keys to enter Start Time in 12-hr time format (HH:MM:SS) AM/PM
38. Press # to save changes
39. Press * to exit to previous menu
40. Press 6 for Stop Time menu
41. Press # to edit
42. Use number keys to enter Stop Time in 12-hr time format (HH:MM:SS) AM/PM
43. Press # to save changes
44. Press * to exit to previous menu

DISCOUNT BY SELECTION

Note: Make sure the All Items setting in the Discount Interval menu is set to OFF. See Discount All Items

1. Press Service Mode Button
2. Press 6 for Advanced Menu
3. Use number keys to enter Password (2314)
4. Press 1 for Discount
5. Press 9 for Selection
6. Use keypad to enter Selection number and discount price
7. Press # to save changes
8. Press * to exit to previous menu
9. Press 1 for Interval1 (up to 4 Intervals may be chosen)
10. Press 3 for Selection
11. Use number keys to enter Selection number
12. Press 1 to toggle ON/OFF
13. Press # to save changes
14. Press * to exit to previous menu
15. Press 4 for Day menu
16. Press 1 for All Days
17. Press 1 to toggle All Days ON/OFF
18. Press # to save changes
19. Press * to exit to previous menu
20. Press 2 for Monday menu
21. Repeat steps 17-19 as needed using 2 to toggle
22. Press 3 for Tuesday menu
23. Repeat steps 17-19 as needed using 3 to toggle
24. Press 4 for Wednesday menu
25. Repeat steps 17-19 as needed using 4 to toggle
26. Press 5 for Thursday menu
27. Repeat steps 17-19 as needed using 5 to toggle
28. Press 6 for Friday menu
29. Repeat steps 17-19 as needed using 6 to toggle
30. Press 7 for Saturday menu
31. Repeat steps 17-19 as needed using 7 to toggle
32. Press 8 for Sunday menu
33. Repeat steps 17-19 as needed using 8 to toggle
34. Press * to exit to previous menu
35. Press 5 for Start Time menu
36. Press # to edit
37. Use number keys to enter Start Time in 12-hr time format (HH:MM:SS) AM/PM
38. Press # to save changes
39. Press * to exit to previous menu
40. Press 6 for Stop Time menu
41. Press # to edit

42.   Use number keys to enter Stop Time in 12-hr time format (HH:MM:SS) AM/PM
43.   Press # to save changes
44.   Press * to exit to previous menu

EXACT CHANGE

Sets the coin tube value that will trigger the display to show "Please Use Exact Change" message. For example, if Exact Change is set to $5.00, the message will display when the total of coins in the tube, as counted by the VMC, is at or below $5.00 total.

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 2 for Exact Change
5.   Press 1 to edit Exact Change
6.   Press # to Edit
7.   Use number keys to enter an amount
8.   Press # to save changes
9.   Press * to exit to previous menu

ALTERNATE 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.

> Note: This setting must be OFF if using a bill validator only. If using a bill validator only, prices must be divisible by the denominations accepted by the bill validator.

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 2 for Exact Change
5.   Press 2 to set Alt Rules
6.   Press 2 to toggle ON/OFF (default ON)
7.   Press # to save changes
8.   Press * to exit to previous menu

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 cannot return an equal amount of change. When set to 0 (zero), all changer tube coins are accepted. Bills are accepted once there is enough change in the changer to pay back the bill type.

> Note: 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.

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 3 for Unconditional Acceptance menu
5.   Press # to edit

6.   Use number keys to enter value
7.   Press # to save changes
8.   Press * to exit to previous menu

MAX CHANGE

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.

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 4 for Max Change menu
5.   Press 1 for current Max Change setting
6.   Press 1 to toggle ON/OFF
7.   Press # to save changes
8.   Press * to exit to previous menu
9.   Press 2 and use number keys to enter dollar amount
10.   Press # to save changes
11.   Press * to exit to previous menu

SHUTDOWN

This menu sets the VMC to shut down All Items, by Row or by Selection, 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," will be displayed.
If a row or individual selection has been set for Shutdown, the same message displays once every time the customer makes that selection or selections (row).

NOTE: The correct time and date must be set so that the shutdown intervals work correctly. See Time and Date section of this manual. Also, for any given day these four time intervals may overlap each other. For each interval, the VMC can be programmed from no days up to every day of the week on which the specified shutdown time intervals are active.

SHUTDOWN BY ALL ITEMS

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 5 for Shutdown
5.   Press 1 for Interval1 (2 for Interval2, and so on)
6.   Press 1 to for All Items
7.   Press 1 to toggle ON/OFF
8.   Press # to save changes
9.   Press * to return to previous menu
10.   Press 4 for Day menu
11.   Press 1 for Every Day
12.   Press 1 to toggle All Days ON/OFF
13.   Press # to save changes

14.   Press 2 for Monday menu
15.   Press 2 to toggle Monday ON/OFF
16.   Press # to save changes
17.   Use numbers 3-8 to complete the other days of the week using steps 14 thru 16.
18.   Press * to return to previous menu
19.   Press 5 for Start Time menu
20.   Press 5 again or press #
21.   Press # to Edit
22.   Use number keys to enter Start Time in 12-hr time format (HH:MM:SS) AM/PM
23.   Press # to save changes
24.   Press * to return to previous menu
25.   Press 6 for Stop Time menu
26.   Press 6 again or press #
27.   Press # to Edit
28.   Use number keys to enter Stop Time in 12-hr time format (HH:MM:SS) AM/PM
29.   Press # to save changes
30.   Press * to return to previous menu
31.   Press 8 for Lighting menu
32.   Press 8 to toggle Lighting ON/OFF
33.   Press # to save changes
34.   Press * to return to previous menu
35.   Press 2, 3 or 4 to edit Intervals 2, 3 or 4
36.   Press 9 for enable menu
37.   Press 9 to toggle On/Off
38.   Press # to save changes
39.   Press * to exit to previous menu

SHUTDOWN BY ROW
Note: Must set ALL ITEMS to OFF before selecting Rows for shutdown

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 5 for Shutdown
5.   Press 1 for Interval1 (2 for Interval2, and so on)
6.   Press 2 for Row menu
7.   Use number keys to enter Row number (First 2 character of any selections in the row)
8.   Press 1 to toggle Row ON/OFF
9.   Press # to save changes
10.   Press * to exit to previous menu
11.   Press 4 for Day menu
12.   Press 1 for Every Day
13.   Press 1 to toggle All Days ON/OFF
14.   Press # to save changes
15.   Press 2 Monday menu
16.   Press 2 to toggle Monday ON/OFF
17.   Press # to save changes

18.   Use numbers 3-8 to complete the other days of the week using steps 15 thru 17.
19.   Press * to return to previous menu
20.   Press 5 for Start Time menu
21.   Press 5 again or press #
22.   Press # to Edit
23.   Use number keys to enter Start Time in 12-hr time format (HH:MM:SS) AM/PM
24.   Press # to save changes
25.   Press * to return to previous menu
26.   Press 6 for Stop Time menu
27.   Press 6 again or press #
28.   Press # to Edit
29.   Use number keys to enter Stop Time in 12-hr time format (HH:MM:SS) AM/PM
30.   Press # to save changes
31.   Press * to return to previous menu
32.   Press 8 for Lighting menu
33.   Press 8 to toggle Lighting ON/OFF
34.   Press # to save changes
35.   Press * to return to previous menu
36.   Press 2, 3 or 4 to edit Intervals 2, 3 or 4
37.   Press 9 for enable menu
38.   Press 9 to toggle On/Off
39.   Press # to save changes
40.   Press * to exit to previous menu

SHUTDOWN BY SELECTION
Note: Must set ALL ITEMS to OFF before editing Selections for shutdown

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 5 for Shutdown
5.   Press 1 for Interval1 (2 for Interval2, and so on)
6.   Press 3 for Selection menu
7.   Use number keys to enter Selection number
8.   Press 1 to toggle Selection ON/OFF
9.   Press # to save changes
10.   Press * to exit to previous menu
11.   Press 4 for Day menu
12.   Press 1 for Every Day
13.   Press 1 to toggle All Days ON/OFF
14.   Press # to save changes
15.   Press 2 Monday menu
16.   Press 2 to toggle Monday ON/OFF
17.   Press # to save changes
18.   Use numbers 3-8 to complete the other days of the week using steps 15 thru 17.
19.   Press * to return to previous menu
20.   Press 5 for Start Time menu

21.   Press 5 again or press #
22.   Press # to Edit
23.   Use number keys to enter Start Time in 12-hr time format (HH:MM:SS) AM/PM
24.   Press # to save changes
25.   Press * to return to previous menu
26.   Press 6 for Stop Time menu
27.   Press 6 again or press #
28.   Press # to Edit
29.   Use number keys to enter Stop Time in 12-hr time format (HH:MM:SS) AM/PM
30.   Press # to save changes
31.   Press * to return to previous menu
32.   Press 8 for Lighting menu
33.   Press 8 to toggle Lighting ON/OFF
34.   Press # to save changes
35.   Press * to return to previous menu
36.   Press 2, 3 or 4 to edit Intervals 2, 3 or 4
37.   Press 9 for enable menu
38.   Press 9 to toggle On/Off
39.   Press # to save changes
40.   Press * to exit to previous menu

ENERGY SAVINGS

Use this menu to set a **non-health safety machine** to run at a higher-than-normal temperature during set times. This will save energy during off peak hours of sales. Two intervals are available.

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 6 for Energy Savings
5.   Press 1 for Interval1 (2 for Interval2, and so on)
6.   Press 4 for Day menu
7.   Press 1 for Every Day
8.   Press 1 to toggle All Days ON/OFF
9.   Press # to save changes
10.   Press * to exit to previous menu
11.   Press 2 for Monday menu
12.   Press 2 to toggle Monday ON/OFF
13.   Press # to save changes
14.   Press * to exit to previous menu
15.   Use numbers 3-8 to complete the other days of the week using steps 11 thru 14.
16.   Press * to exit to previous menu
17.   Press 5 for Start Time menu
18.   Press 5 again or press #
19.   Press # to edit
20.   Use number keys to enter Start Time in 12-hr time format (HH:MM:SS) AM/PM
21.   Press # to save changes

22.   Press * exit to previous menu
23.   Press 6 for Stop Time menu
24.   Press 6 again or press #
25.   Press # to edit
26.   Use number keys to enter Stop Time in 12-hr time format (HH:MM:SS) AM/PM
27.   Press # to save changes
28.   Press * to exit to previous menu
29.   Press 7 to enter Storage Temp (default is 62°F)
30.   Press 7 to edit Storage Temp (39°F to 62°F)
31.   Press # to save changes
32.   Press * to exit to previous menu
33.   Press 8 for Lighting menu
34.   Press 8 to toggle Lighting ON/OFF

Note: Lighting ON turns lights off during Energy Saving interval
         Lighting OFF leaves lights on during Energy Saving interval

35.   Press # to save changes
36.   Press * to exit to previous menu
37.   Press 9 for Enable menu
38.   Press 9 to toggle ON/OFF
39.   Press # to save changes
40.   Press * to exit to previous menu

PAIR
Not applicable. No motors should be paired.

DEGREES
This function allows you to change from Fahrenheit to Celsius.

1. Press Service Mode Button
2.   Press 6 for Advanced Menu
3.   Use number keys to enter Password (2314)
4.   Press 8 for Degrees menu
5.   Press 8 to toggle between F and C
6.   Press # to save changes
7.   Press * to exit to previous menu

7. MOTORS
This function displays the motor count. It is a useful, quick diagnostic tool in case of selection
    failure and can point out a motor issue if the count is not correct.

1. Press Service Mode Button
2.   Press 7 for Motor count display menu
3.   Press * to exit to previous menu

8. TEST VEND

This function tests the motor on one specified selection.

1. Press Service Mode Button
2. Press 8 for Selection motor test menu
3. Use number keys to enter selection to test and wait
4. Repeat for any other selections
5. Press * to exit to previous menu

9. SELECTION: ALL

This function tests all motors in sequence automatically. To stop the test, press * to exit.
NOTE: All selections should be empty prior to performing this test.

1. Press Service Mode Button
2. Press 9 for Selection motor test menu
3. Press * to exit to previous menu

10. TEST MODES

This menu contains diagnostic tests and settings for the following systems:

- Relays
- Vigilant Vend Sensor
- Drop Bias Setting*
- System Logs*
- On Door
- Manual Defrost

TEST RELAYS

1. Press Service Mode Button
2. Press 0 for Test Modes
3. Press 1 to test relays
4. Press 1 to test Relay1
5. Press 1 to toggle relay ON/OFF
6. Press 2 to test Relay2
7. Press 2 to toggle relay ON/OFF
8. Repeat steps 6 and 7 for remaining relays 3 thru 6
9. Press * twice to exit to previous menu

OPTICS
Note: Not used on this model

LOG
Note: Do not use unless requested by trained personnel

1. Press Service Mode Button
2. Press 0 for Test Modes
3. Press 3 for Log
4. Use number keys to enter password (2314) to view log

ON DOOR

1. Press Service Mode Button
2. Press 0 for Test Modes
3. Press 4 for On Door
4. Press 4 to toggle SHOW ERRORS/OFF when door opens
5. Press * to exit to previous menu

MANUAL DEFROST
Note: Do not use unless requested by trained personnel

1. Press Service Mode Button
2. Press 0 for Test Modes
3. Press 5 for Manual Defrost, which will enable you to set a manual defrost period for the machine
4. Press 5 to toggle ON/OFF
5. Press # to save changes
6. Press * to exit to previous menu

MENU HIERARCHY

1 – Price Program
      1-1   All Items
      1-2   Row
      1-3   Selection
      1-4   Coupon – 1 All, 2 Row, 3 Item
      1-5   Token – 1 All, 2 Row, 3 Item
      1-6   Combo
      1-7   Calories – 1 All, 2 Row, 3 Item

2 – Cash Counters
      2-1 All Items
      2-2 Row
      2-3 Selection

3 – Qty/Tube

4 – Configuration
      4-1 Date/Time
      4-2 Health Safety
      4-3 Language
      4-4 All Items – Type
      4-5 Row – Type
      4-6 Selection – Type
      4-7 Auto Reinstate
      4-8 Space to Sales (StS)
      4-9 StS Custom
      4-0 Advanced* (Password required)

4-0-1 Beep Enable
4-0-2 Optics Disables
4-0-3 Motor Type
4-0-4 Temp
4-0-5 Selection Style

5 – Options

5-1 Forced Vend
5-2 Bill Escrow
5-3 Multi-Vend
5-4 Free Vend
5-5 Fast Change
5-6 Optical Vend
5-7 POS Message
5-8 Set Point
5-9 Sensitivity Adjust

6 – Advanced* (Password required)

6-1 Discount
6-2 Exact Change
6-3 Unconditional Acceptance
6-4 Max Change
6-5 Shutdown
6-6 Energy Savings
6-7 Pair
6-8 Degrees

7 – Motors

8 – Selection

9 – Selection: All

0 – Test Modes

0-1 Relays
0-2 Vend Sensor
0-3 System Logs*
0-4 On Door
0-5 Manual Defrost

ERROR CODE MESSAGES

VMC Errors		
Error Message	Description	Possible Solutions
VMC Settings Reset	VMC has been reset to factory default.	If a software upgrade has just been performed, the VMC has been reset to default settings. Change your prices and other settings as required. Cycle power and verify your changes and any error messages.
VMC Door Switch	Door switch is seen as open for greater than the allowed time.	Check the door switch for correct operation. Check door wire harness.
VMC Scale Factor	There is a conflict with one or more MDB setting from the installed MDB devices.	Review manuals and settings for installed MDB devices to make sure they are compatible.
VMC Selection SW	A keypad selection button is stuck in the depressed position.	Determine reason why keypad button is stuck and repair.
VMC Low AC	The incoming AC power is lower than required to properly run your vending machine.	Determine why voltage is low. Remove any voltage reducing devices not authorized by the vending machine manufacturer.
VMC RAM Checksum	A RAM checksum error indicates that accounting data or a VMC setting was in error. The VMC will use a backup copy of the data where possible.	Check the VMC settings and accountability data for correctness. Cycle power to the vending machine and recheck error messages.

Motor Errors		
Error Message	Description	Possible Solutions
Motor [Number] Open	The motor indicated or harness to that motor has an open electrical connection.	Check the motor and motor harness for open connections. Test vend motor. Replace if necessary.
Motor [Number] Short	The motor or harness has an electrical short.	Check motor and motor harness for short. Replace if necessary.
Motor [Number] 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 if necessary.

Motor [Number] Jam	A motor jam has been detected.	Check motor and spiral for blockage.
Motor [Number] 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 VMC.

Temperature Sensor Errors		
Error Message	Description	Possible Solutions
Refrig Sensor # Open	A temperature sensor or harness is considered to have an open electrical connection. Where # is the 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 the sensor number.	Check sensor and sensor harness for shorted connections. Replace if necessary.
Refrig Health Safety	The cabinet temperature and time limit settings have been exceeded.	Check sensor readings and sensor harness for shorted connections. Check for sensor readings. Replace sensor if necessary.

Vend Sensor Errors		
Error Message	Description	Possible Solutions
Optical Sensor Error	Not Applicable	NA

Coin Changer Errors		
Error Message	Description	Possible Solutions
Coin Mech Comm	VMC does not have communication with the coin changer.	Check MDB Harness to changer. Check for power on changer. See changer service manual.
Coin Mech Tube Sns	The coin changer has reported a tube sensor error.	See changer service manual.
Coin Mech Inlet	The coin changer has reported an acceptor blockage.	Check changer tubes. See changer service manual.
Coin Mech Tube Jam	The coin changer has reported a tube payout error.	Check changer tubes. See changer service manual.
Coin Mech ROM	The coin changer has reported a program memory error.	See changer service manual.

Coin Mech Excess Esc	The coin changer has reported that a large number of coin escrow requests have occurred.	Check changer escrow lever position.
Coin Mech Coin Jam	The coin changer has reported that a coin is jammed in the coin path.	Check changer coin path. See changer service manual.
Coin Mech Low Accept	The VMC has seen a low acceptance rate on coins.	Review inserted coins. See changer service manual.
Coin Mech Accpt Disc	The coin changer has reported that the coin validation acceptor is disconnected.	Re-connect the coin changer's acceptor. See changer service manual.
Coin Mech Route Err	The coin changer reported that a coin did not follow the correct path.	Check changer coin path. See changer service manual.

| Bill Validator Errors		
Error Message	Description	Possible Solutions
Bill Val Comm	VMC does not have communication with the bill validator.	Check MDB Harness to validator. Check for power on validator.
Bill Val Stack Full	The bill validator has reported that the stacker is full of bills.	Check bill stacker box for bills. See validator service manual.
Bill Val Motor Err	The bill validator reports that a validator motor error has occurred.	See validator service manual.
Bill Val Jam	The bill validator reports a bill is stuck in the bill path.	Check validator bill path for bills. See validator service manual.
Bill Val Stack Open	The bill validator is reporting a bill box is open or not installed.	Check bill stacker box for open lid. See validator service manual.
Bill Val Sensor Err	The bill validator reports a sensor error.	See validator service manual.

Card Reader 1 and 2 Errors		
Error Message	Description	Possible Solutions
Card RDR1 or 2 Comm	VMC does not have communication with the card reader.	Check MDB Harness to card reader. Check for power on card reader.
Card RDR1 or 2 Err	The card reader reports an error	See card reader service manual.

REFRIGERATION

Your beverages are kept cold by a high efficiency refrigeration system having two air circulation fans to chill the cans and bottles. The refrigeration unit can be easily accessed by opening the Front Door. Remove the single blue thumbscrew from the center floor of the refrigeration deck and remove the partition wall. Remove the two screws holding the handles in place Figure 20.

The refrigeration deck is a modular system consisting of Compressor, Condenser, Condenser fan, Evaporator, Evaporator Fans, Accumulator or Dryer, and Temperature Sensor which communicates to the VMC. The temperature is pre-set at the factory for efficient and effective operation.

Figure 20 – Refrigeration unit

Condenser Gently clean fins on a regular basis

Compressor

Remove three screws
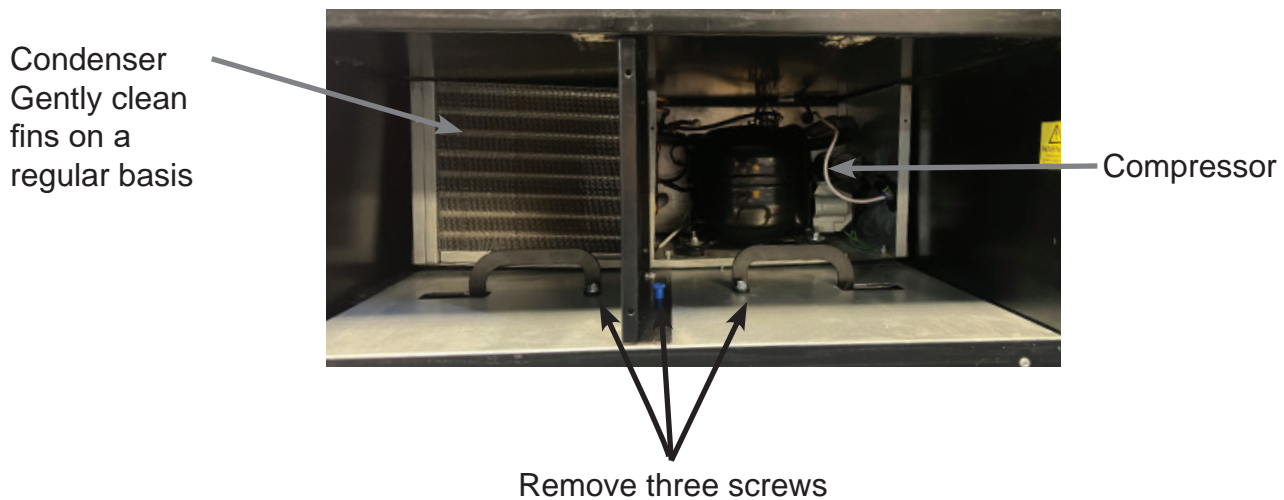
Make sure you unplug wire harnesses and feed the harnesses back through the divider wall before pulling the refrigeration deck all the way out of the machine. Do not tip the refrigeration deck more than 20° in any direction.

Unplug the wire harnesses on the right side of the deck and feed the connectors back through the grommet (Fig. 21). This will prevent damage to the connectors when the deck is removed.

Figure 21 – Refrigeration deck wire harnesses
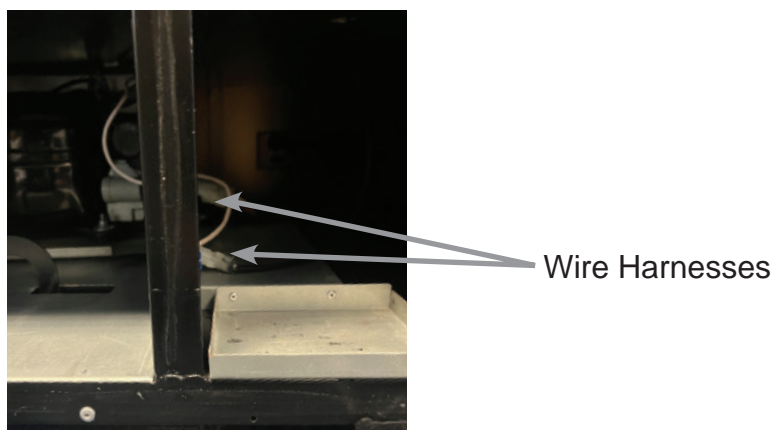
Wire Harnesses

Rotate both handles outward and pull them toward you to remove them. Remove the guide bolt in the center of the refrigeration deck (Figure 22). The deck can now be pulled out from the vendor. Please make sure you unplug wire harnesses prior to pulling all the way out. Do not tip the refrigeration deck more than 20° in any direction.

Figure 22 – Refrigeration deck removal

Guide Bolt
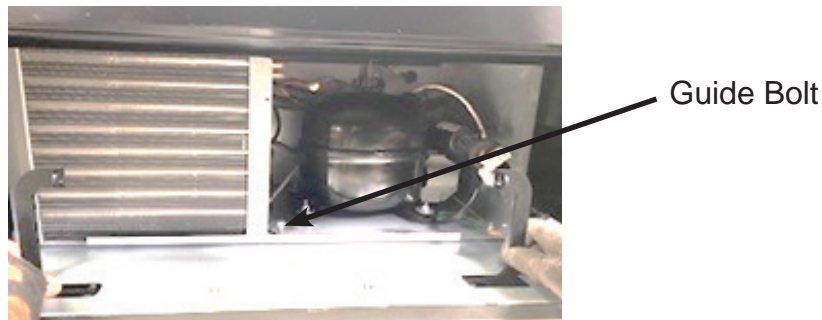
CLEANING THE CONDENSER

Dust and dirt restrict good airflow and cooling of the condenser, which will not allow the refrigeration unit to chill the beverages properly. Brush the dirt and dust from the condenser fins every thirty (30) days as routine maintenance. You can also blow canned air (available at computer and office supply stores) through the condenser or vacuum clean it. Do not damage the fins of the condenser while cleaning. You should also clean the grate located on the inside of the Front Door refrigeration vents (see Figure 1).

REFRIGERATION

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 beverage 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 beverages the colder they become.

This process is accomplished using a sealed compressing system using an ozone friendly gas commonly known as R290 refrigerant. The system is comprised of several key mechanical components: the condenser, the evaporator and the compressor. The condenser is located in the lower front 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 is located inside the machine towards the back of the cooling system underneath the beverage unit section being cooled. Its purpose is to absorb the heat from the drink selections and provide the cool air needed to refrigerate the beverages. 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, two evaporator fans, temperature sensor, VMC, and the start and overload components located on the side of the compressor. The line voltage from the outlet in the room is fed to the three fans, the condenser fan and the evaporator fans, and they run continuously as long as the machine is plugged into power coming from the wall. The temperature sensor and VMC control the on and off cycling of the compressor. The temperature sensor is located on the back side of the refrigeration deck.

To determine if the compressor system is running it is sometimes difficult due to the fact that the compressor tends to be very quiet. The sound and slight vibration from the fans running can sometimes be mistaken for the compressor running. One way to tell if the compressor system is running is to cautiously place your hand on the compressor to feel if it is warm. **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 front 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.

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.

REFRIGERATION STATUS DISPLAY

Use the "#" key on the Keypad to display the current temperature:

Figure 23 – Refrigeration Indicators on LCD Display

Current Temperature in Beverage Area
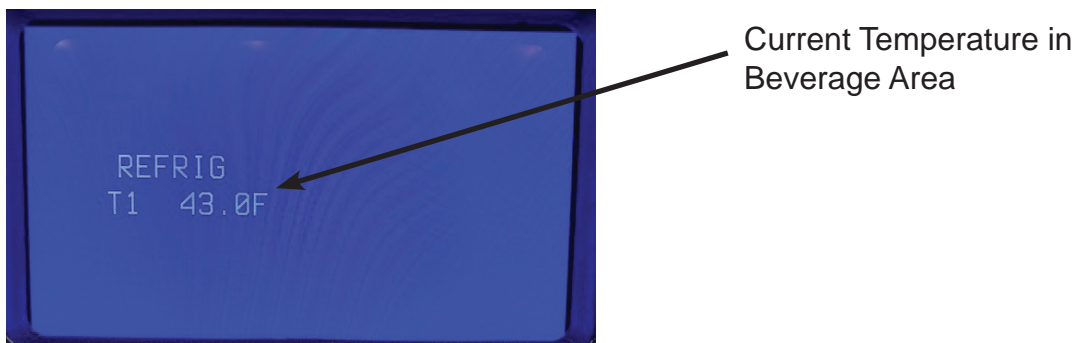
Troubleshooting

1. **SELECTION DISPLAYS SOLD OUT WHEN PRODUCT IS PRESENT**
   a. Product is not loaded correctly. Ensure product is located to the front of the column and depresses sold out indicator.
   b. A jam caused an error and Lockout – Press menu button then 7 to reactivate all lanes.

2. **NO DISPLAY ON THE FRONT PANEL**
   a. Harness may be unplugged
   b. Transformer circuit breaker tripped
   c. Restart machine
   d. Faulty display harness
   e. Display board defective

3. **SELECTION WILL NOT VEND**
   a. Tray or Motor connection unplugged or faulty connection
   b. Vend mechanism binding on tray
   c. Product jammed
   d. Defective motor
   e. Damaged tray/Beverage harness

4. **MULTIPLE VENDS FROM ONE SELECTION**
   a. Broken or disconnected wire to motor
   b. Defective motor switch
   c. Beverage lane not setup properly
   d. Beverage sensitivity adjustment set wrong

5. **MULTIPLE VENDS MORE THAN ONE SELECTION SIMULTANEOUSLY**
   a. Harness faulty
   b. Motor harness not plugged into the vend motor correctly
   c. Defective motor
   d. Beverage "sensitivity adjust" needs to be changed
   e. Optical vend accidentally turned on

6. **UNIT WILL NOT ACCEPT MONEY**
   a. All Prices are set to zero or machine is set to Free Vend
   b. Note: Will not accept bill if coins in coin changer below the minimum level
   c. Note: Will not accept more than one bill if the bill equal or exceeds the highest priced item.
   d. No power to system control board
   e. Coin Mechanism or Bill acceptor defective.
   f. Harness to payment system is disconnected or faulty.

7.   **MACHINE WILL NOT COOL**
   a.   Press the "#" key on the keypad to get a temperature reading
   b.   Verify that Temp Set is 43° F in Service Mode. Note: Setting the temperature too cold will put your evaporator at risk of freezing up.
   c.   Verify that all fans are running
   d.   Clean the condenser
   e.   Remove your refrigeration deck and inspect for ice.

Frequently Asked Questions

Keypad

What do I do if my keypad isn't responding, displays double the number pressed or displays a different number?

   1. If not responding, check the connection at the VMC to make sure it's secure. Examine the whole keypad harness to make sure there is no damage to the harness.

Changer

My vendor won't accept change, how do I fix this?

   1. Check to make sure the changer has power.
   2. Check to make sure there are no coins jammed in the changer.
   3. Check to make sure the coin return mechanism is releasing all the way.

What does it mean when the lights on top of the changer are flashing?

   1. If the amber C/C light is flashing, it means that the lower coin cassette is not fully engaged. Remove the lower coin cassette, line up correctly and reinsert.
   2. If the red DIS light is flashing, it means that there is a jam located in the upper cassette. You can clear that by opening the clear center access door or opening the flap on top to check for interior jams.

Bill Validator

My vendor won't accept bills, what do I do?

   1. In Menus, Settings, check Qty/Tube for your coin values. Your bill validator operates only if it knows that there is enough change in the Coin Changer to make transactions. The best way to make sure your bill acceptor has this information is to make sure all coins are loaded when in the Qty/ Tube Menus mode and inserted through the front of the vendor.
   2. Make sure the bill acceptor is clean and there are no jams or debris inside of the acceptor.

Beverage Vending

My beverages aren't vending at all.

   1. Make sure all items are loaded correctly.

2. Make sure all product loaded is installed in the correct selection. Load product according to the machine Plan-O-Gram. A change from the Plan-O-Gram may require new setup. See the Loading Beverage Lanes section of this manual and study the Product Groups and how to load them and accessories required (if any).

3. Make sure the Sensitivity Adjust (Menu > 5 Options > 9 Sensitivity Adjust, see Programming section of this manual) is set properly. If the sensitivity is set too high, the sensor may trip before the product drops and stop the vend process prematurely. Under advisement from technical support, change the sensitivity from high to medium or medium to low and test vend.

My beverages are vending more than one at a time.

1. Make sure all items are loaded correctly. Review Loading Beverage Lanes section of this manual and verify all recommendations and steps are followed for your type of packaging.

2. Make sure the Drop Sensor Sensitivity (Menu > 5 Options > 9 Drop Sensor, see Programming section of this manual) is set properly. If the sensitivity is set too low, the sensor may not trip when the product drops and perform a second vend. Under advisement from technical support, change the sensitivity from medium to high or low to medium and test vend.

The selection vends fine in Test Mode, but during Sales Mode says Make Alternate Selection.

1. You have an error code or a jam blocking the use of that particular selection. You will need to empty all products and make sure there are no jams. Return the auger to the home position and reload the product. Then go to the menu and press 7 to recapture motors. This will allow you to resume vending from that particular selection(s).

Power

I can see and hear the cooling deck fans, but there is no power to the rest of the machine. What does this mean?

1. Check the transformer on the floor of the machine. There is a cover that goes over the transformer with access to the small breaker switch on top of the transformer. Press the breaker switch to reset the transformer. This should cause the machine to power back up.

2. Check to make sure that the main power harness that runs from the transformer to the VMC. Make sure all connections are good.

Wiring Diagram

WIRING DIAGRAM QB4000

WIRING DIAGRAM QB4000

DETAIL-C
(HARNESS, AUXILIARY TRAY)

J5 ROWS/DETECT

BLUE
PURPLE
BROWN
GRAY
WHITE
RED
BLACK
YELLOW
RED/WHITE
BLACK/WHITE

1 2 3 4 5 6 7 8 9 10

PINK/RED
PINK/WHITE
PINK/BLACK
PINK
GREEN/RED
GREEN/WHITE
GREEN/BLACK
GREEN
PINK/YELLOW
PINK/GREEN
GREEN/YELLOW
GREEN/PINK

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

DETAIL-F
(RELAYS)

WHITE
RED
GRAY
BLACK
BROWN

BLACK
BLUE

DETAIL-D
(HARNESS, REFRIGERATION)

THERM

RED
BLACK
WHITE
GRAY
BLUE
BROWN

1 2 3 4 5 6 7 8 9 10 11 12 13 14

DETAIL-E
(HARNESS, MDB)

1 2 3 4 5 6

BLACK
BROWN
YELLOW
ORANGE
GREEN

DETAIL-B
(HARNESS, AUXILIARY TRAY)

BLUE
PURPLE
BROWN
GRAY
WHITE
RED
BLACK
YELLOW
RED/WHITE
BLACK/WHITE
GREEN
PINK

1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12

BLUE
PURPLE
BROWN
GRAY
WHITE
RED
BLACK
YELLOW
RED/WHITE
BLACK/WHITE
GREEN/YELLOW
PINK/YELLOW

1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12

BLUE
PURPLE
BROWN
GRAY
WHITE
RED
BLACK
YELLOW
RED/WHITE
BLACK/WHITE
GREEN/PINK
PINK/GREEN

1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12

DETAIL-A
(HARNESS, AUXILIARY TRAY)

BLUE
PURPLE
BROWN
GRAY
WHITE
RED
BLACK
YELLOW
RED/WHITE
BLACK/WHITE
GREEN/RED
PINK/RED

1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12

BLUE
PURPLE
BROWN
GRAY
WHITE
RED
BLACK
YELLOW
RED/WHITE
BLACK/WHITE
GREEN/WHITE
PINK/WHITE

1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12

BLUE
PURPLE
BROWN
GRAY
WHITE
RED
BLACK
YELLOW
RED/WHITE
BLACK/WHITE
GREEN/BLACK
PINK/BLACK

1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12

EXPLODED VIEWS
Machine Assembly QB4000
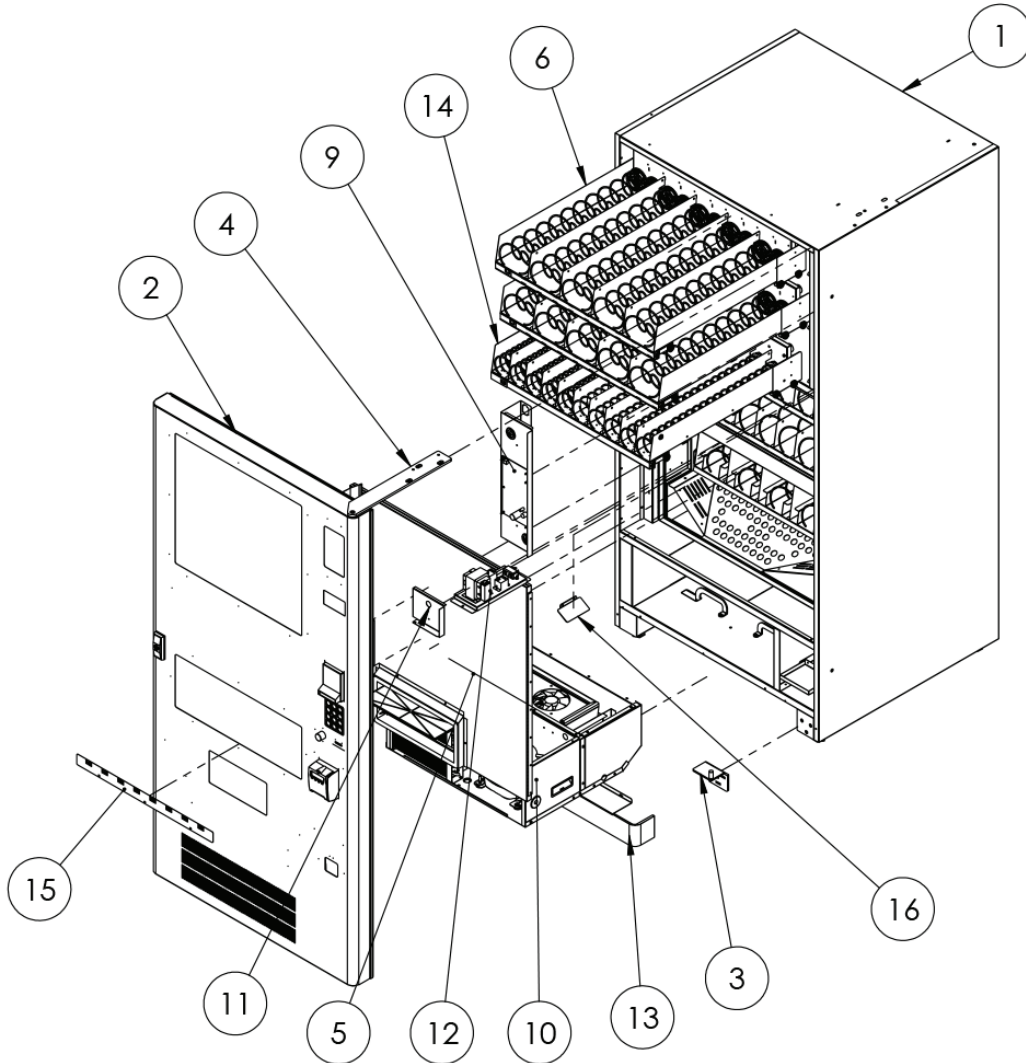
PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SAI56202	CABINET ASSEMBLY	1
2	SAI56217	MAIN DOOR ASSEMBLY	1
3	STI662	HINGE, BOTTOM	1
4	SAI864	HINGE, TOP	1
5	SAI56211	INNER DOOR ASSEMBLY	1
6	SAI786	5 SELECTION DUAL TRAY ASSEMBLY	2
9	SAI56214	ELECTRONIC PANEL ASSEMBLY	1
10	REI921	REFRIGERATION DECK	1
11	STI56228	COVER ELECTRONICS	1
12	SAI56018	TRANSFORMER PANEL ASSEMBLY	1
13	SAI56210	SKIRT	1
14	SAI787	10 SELECTION TRAY ASSEMBLY	1
15	STI56287	SELECTION LABEL HOLDER	1
16	STI56289	PRODUCT GUIDE,DELIVERY CHUTE	2

Cabinet Assembly QB4000
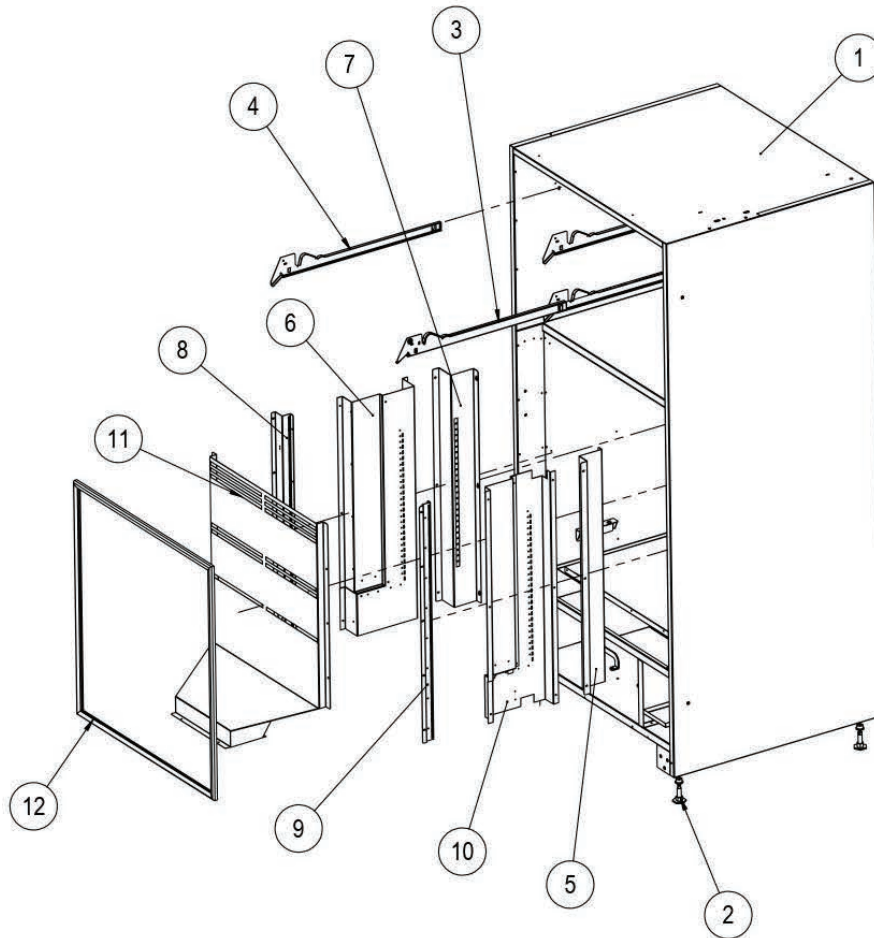
Parts List

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SAI56203	CABINET	1
2	HAI705B	LEVELLER_LEG	4
3	STI901B	RAIL TRAY, RIGHT	3
4	STI900B	RAIL TRAY, LEFT	3
5	STI56232	SLIDE HOLDING BRACKET RH REAR	1
6	SAI56219	SLIDE HOLDING BRACKET LH FRONT	1
7	STI56231	SLIDE HOLDING BRACKET LH REAR	1
8	STI56229	DOOR MOUNTING BRACKET, LH	1
9	STI56234	DOOR MOUNTING BRACKET, RH	1
10	SAI56218	SLIDE HOLDING BRACKET RH FRONT	1
11	SAI56217	PLENUM	1
12	PLI2254	GASKET, INNER DOOR	1

Door Assembly QB4000
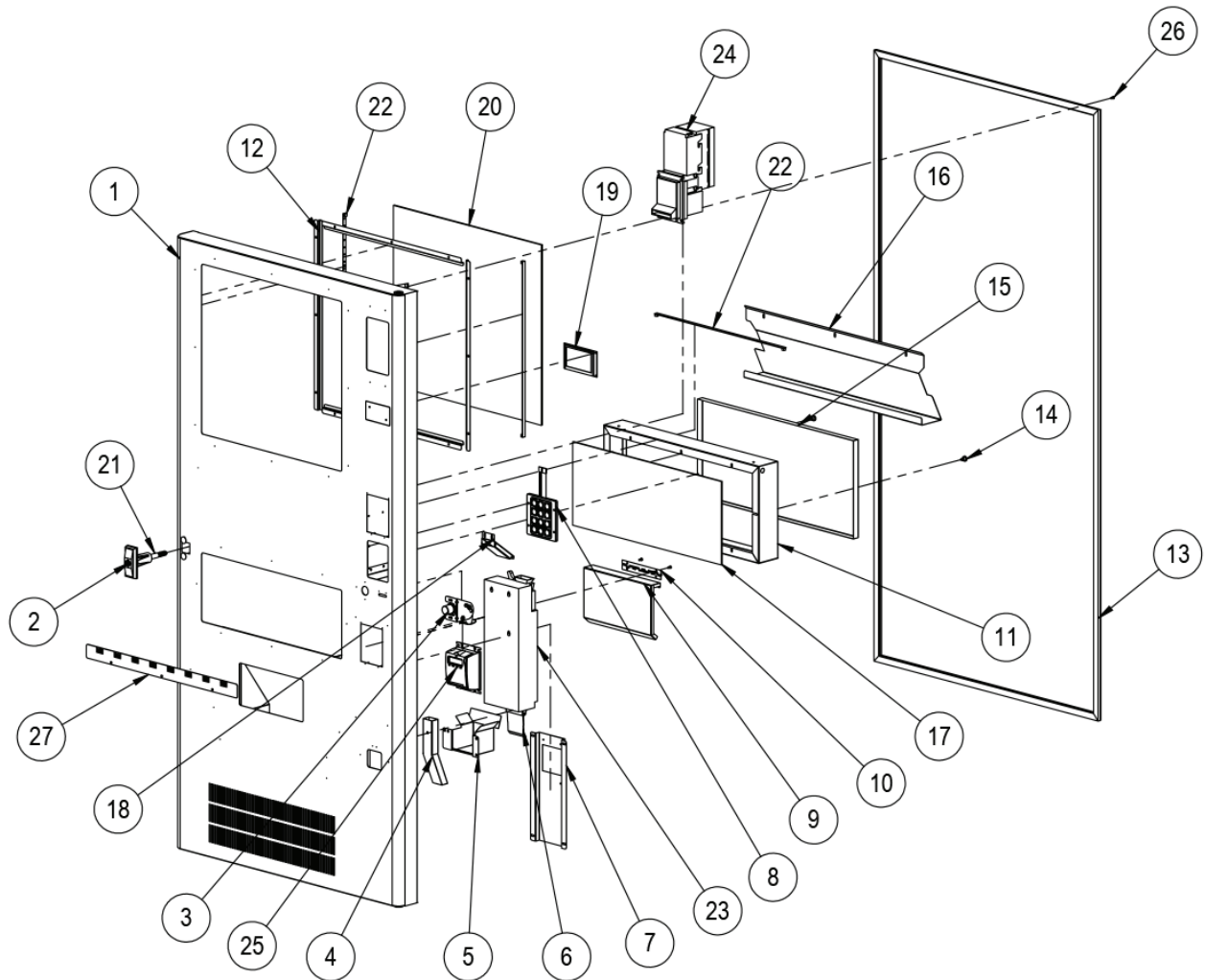
Parts List

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SAI56207	DOOR WELDED	1
2	HAI909	T-HANDLE	1
3	SAI818	COIN RETURN	1
4	SAI56009	CHUTE COIN OVERFLOW	1
5	SAI56010	RETURN COIN CUP	1
6	SAI920	COIN RETURN FLAP	1
7	VS173	BRACKET COIN CHANGER	1
8	SAI821	KEYPAD ASSEMBLY	1
9	UT121	FLAP PUSH DOOR	1
10	HAI402	HINGE	1
11	SAI56015	CAN DISPLAY ASSEMBLY	1
12	STI56282	GLASS RETAINER	4
13	PLI2253	GASKET DOOR	1

ITEM NO.	PART NO.	DESCRIPTION	QTY.
14	PLI613	KNOB	2
15	STI56030	COVER PRODUCT DISPLAY	1
16	STI56246	PRODUCT GUIDE	1
17	GLI971	GLASS WINDOW BEVERAGE	1
18	VS120	CHUTE COIN INSERT	1
19	ELC2422	DISPLAY	1
20	GLI970	GLASS WINDOW SNACK	1
21	HAI975	SPEAR	1
22	ELC2369	LED LIGHT	3
23	-	COIN CHANGER	1
24	-	BILL ACCEPTOR	1
25	-	CASHLESS DEVICE	1
26	FAI884	SCREW	39
27	STI56287	SELECTION LABEL HOLDER	1

Inner Door Assembly QB4000
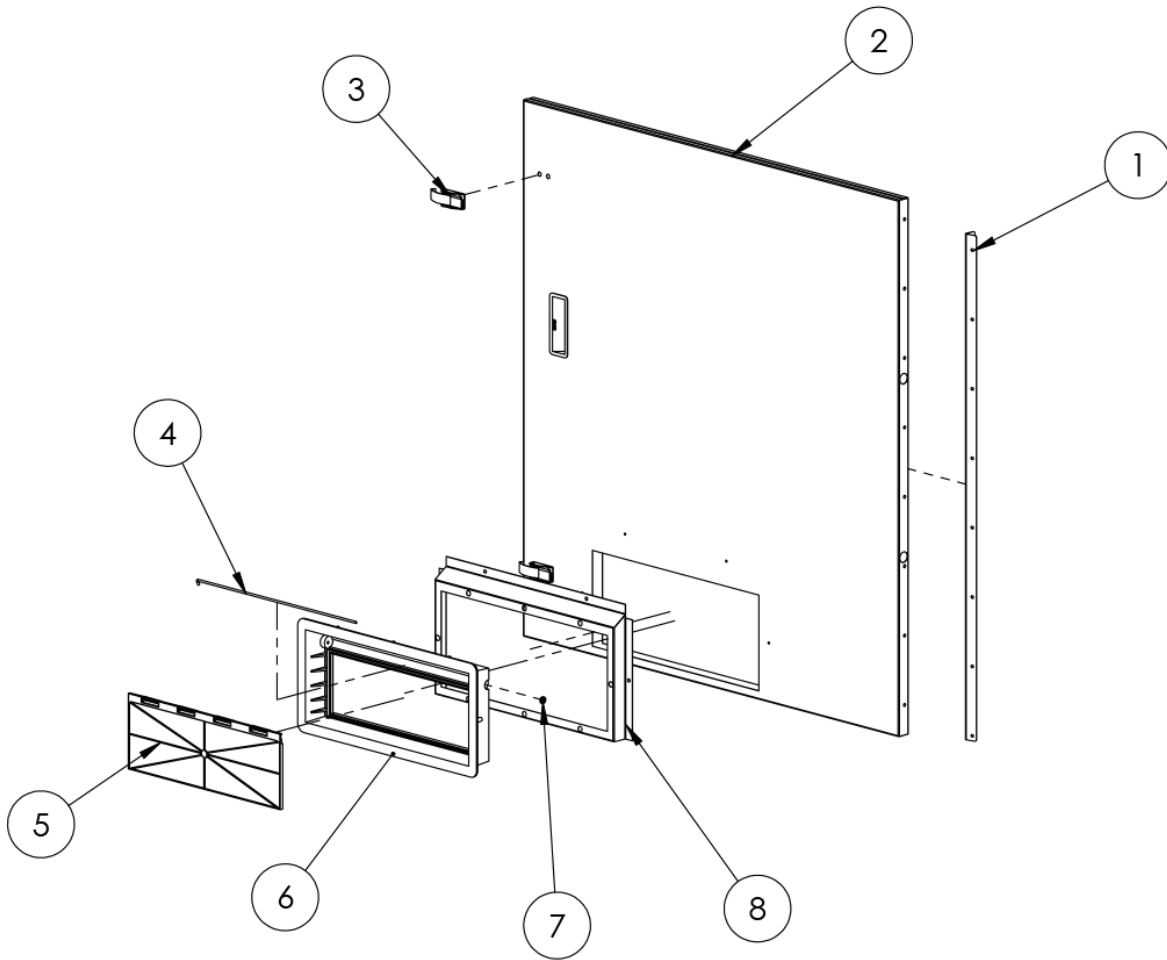
PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HAI777	HINGE	1
2	SAI56212	INNER DOOR	1
3	HAI826	SNAP LATCH	2
4	HAI2044	ROD PUSH DOOR	1
5	PLI2173	PUSH DOOR	1
6	PLI2172	FRAME PUSH DOOR	1
7	HAI784	LOCK WASHER	1
8	STI56267	SPACER PUSH DOOR FRAME	1

Tray 8 Selection QB4000
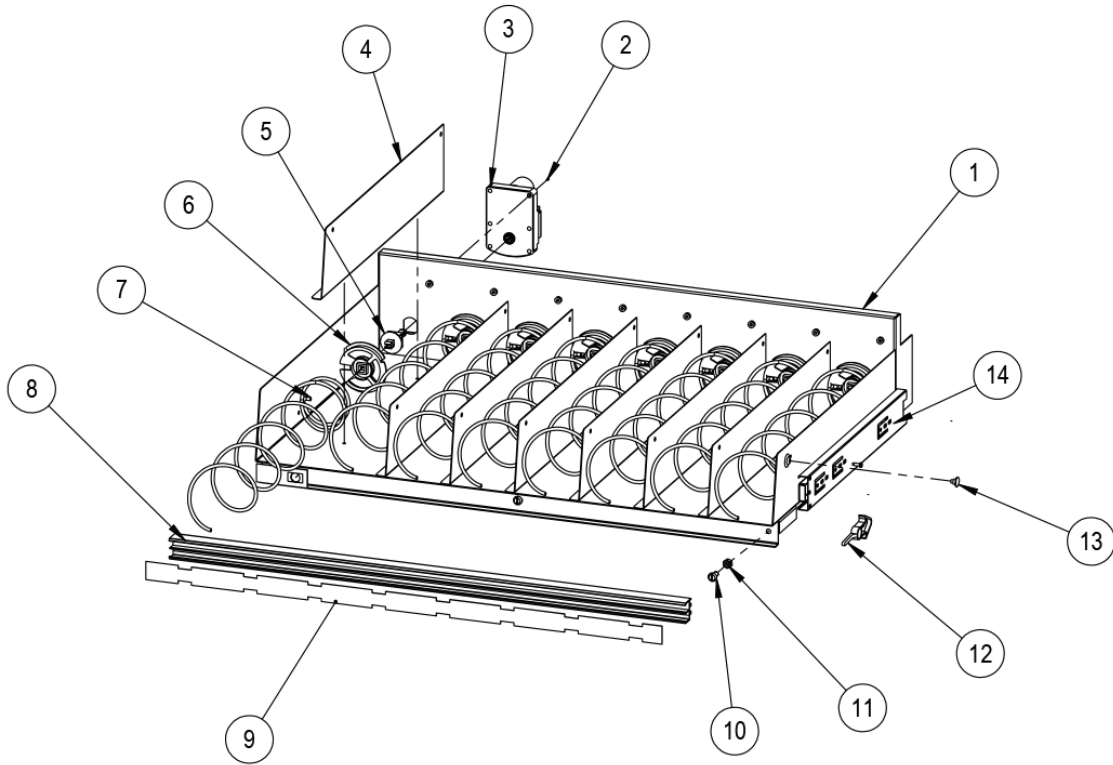
Parts List

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SAI56209	TRAY WELDED	1
2	FAI932	SCREW	16
3	ELC925	MOTOR	8
4	STI56256	DIVIDER TRAY	7
5	PLI721C	SHAFT	8
6	PLI331	COIL RETAINER	8
7	WFI642	COIL	8
8	PLC958	PRICE SELECTION PROFILE	1
9	PLI87002	PRICE SCROLL HOLDING STRIP	1
10	HAI976	PROFILE LABEL HOLDING PIN	3
11	FAI923	NYLOCK NUT	3
12	HAI896	LATCH	1
13	HAI783	RIVET LATCH	1
14	HAI861	TELESOCPIC RAIL	2

High Capacity Tray Assembly QB4000
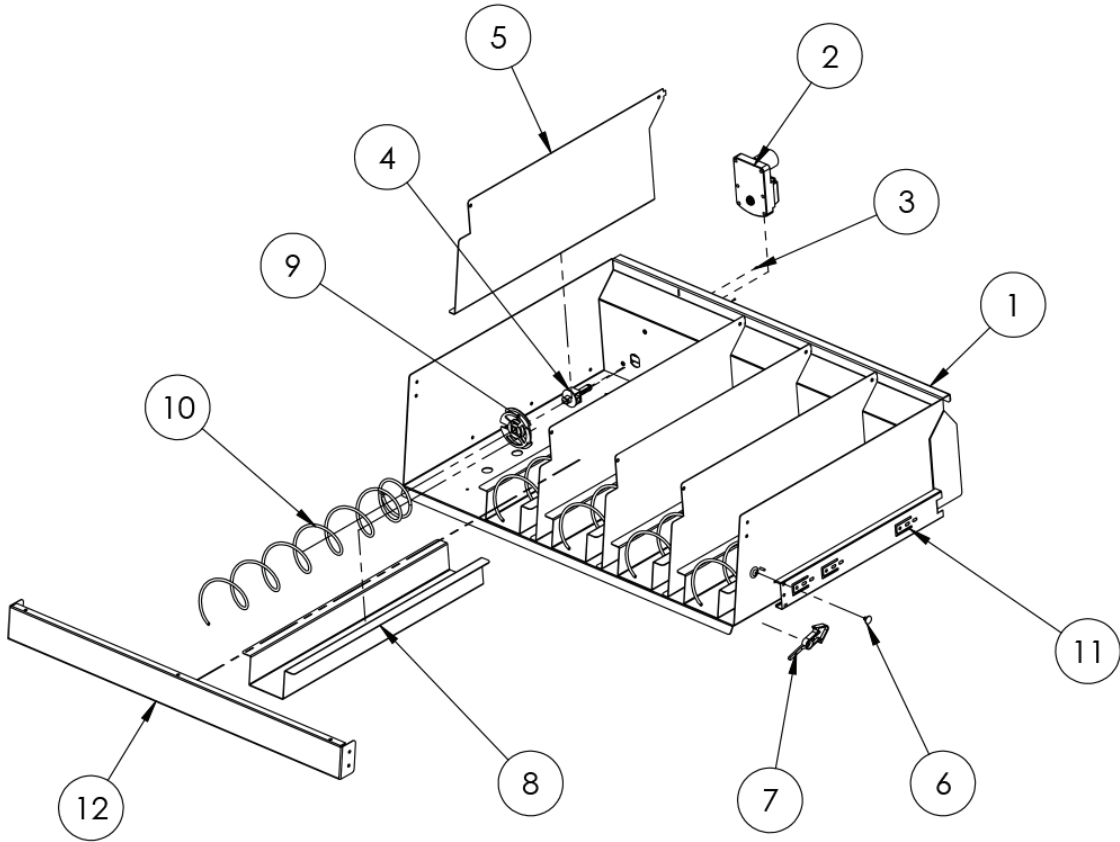
PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SAI56206	HC- 5 SELECTION TRAY	1
2	ELC925	MOTOR	5
3	FAI932	SCREW	10
4	PLI721C	SHAFT	5
5	STI56259	DIVIDER TRAY	4
6	HAI783	RIVET LATCH	1
7	HAI896	LATCH	1
8	STI56260	COIL GUIDE	5
9	PLI331	COIL RETAINER HUB	5
10	WFI641	COIL	5
11	HAI861	TELESCOPIC RAIL	2
12	STI56263	CAN GUIDE SUPPORT	1

Refrigeration Unit QB4000 (REI921)
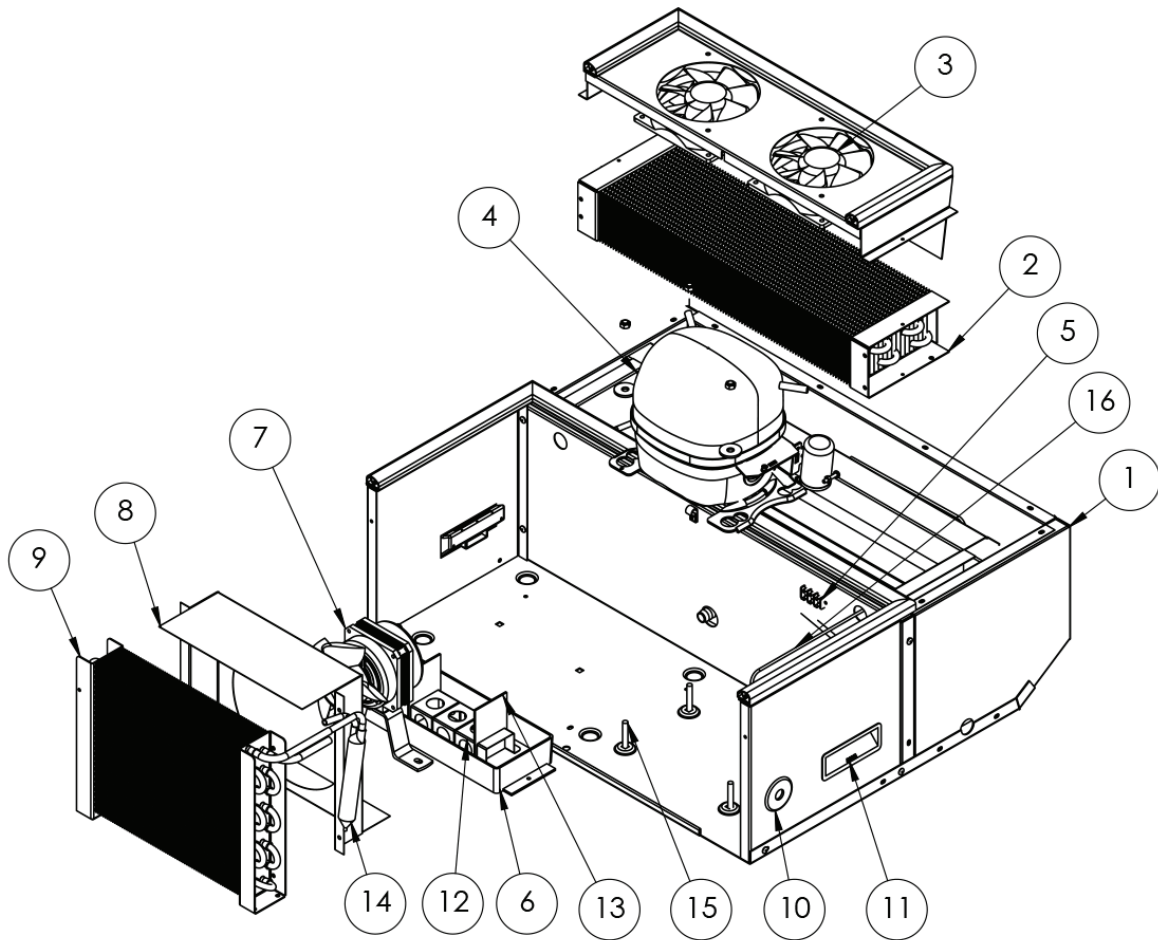
Parts List

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	SAI59016	REFRIGERATION DECK, FOAMED	1
2	REC936	EVAPORATOR	1
3	REC300A	FAN MUFFIN	2
4	REI929	COMPRESSOR	1
5	ELI595	TERMINAL BLOCK	1
6	PLI612	CONDENSATE TRAY	1
7	REC928	MOTOR	1
8	STI94076	SHROUD, CONDENSER	1
9	REC934	CONDENSER	1
10	HAI796	GROMMET	1
11	HAI907	HANDLE	2
12	VS198	BRACKET, SPONGE PAD	1
13	REC355	WICK SPONGE	1
14	REI818C	DRYER	1
15	FAI864	BOLT	4
16	REI831	THERMISTER	1

Transformer Panel QB4000
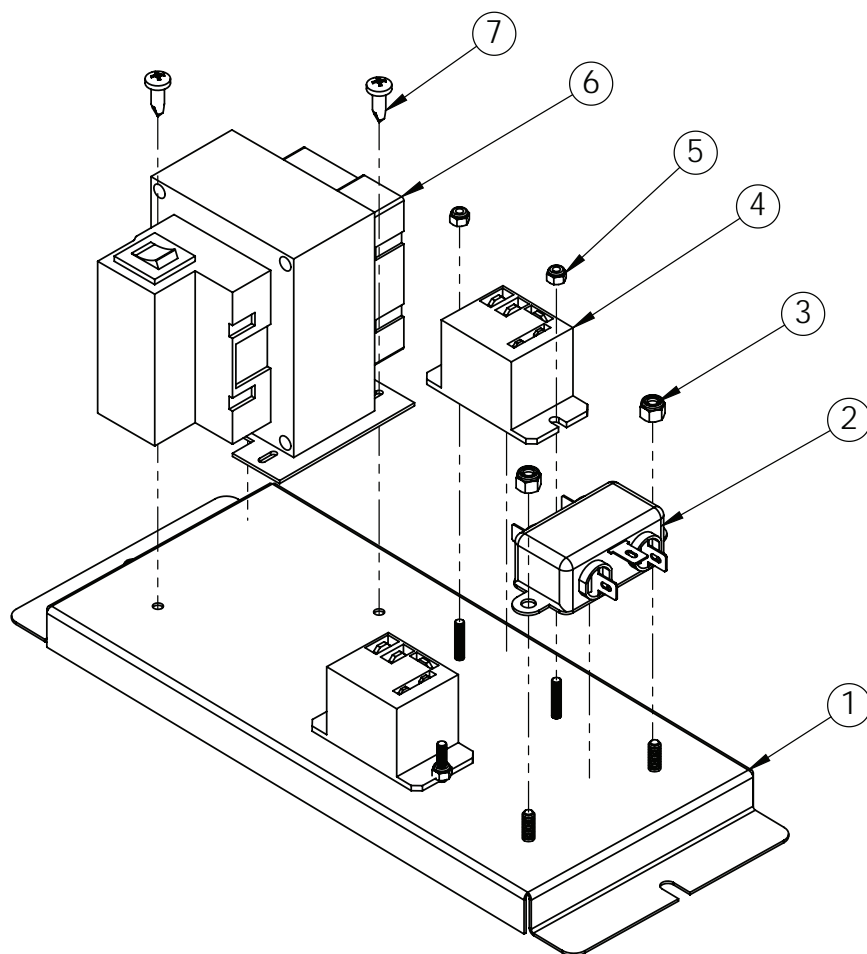
Parts List

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	STI57042	BASE TRANSFORMER	1
2	ELC946A	FILTER	1
3	FAI898	NYLOCK NUT	2
4	ELI764	RELAY	2
5	FAI922	NYLOCK NUT	4
6	ELC478	TRANSFORMER	1
7	FAI884	SCREW	2

LIMITED WARRANTY

Seaga warrants to the original purchaser that the equipment is free from defects in material and factory workmanship for a period of one (1) year from date of shipment.

This warranty applies only if the equipment has been serviced and maintained in strict accordance with the instructions presented in the Operator's Manual and no unauthorized service, repair, alteration or disassembly has been performed. Any defects caused by improper power source, poor water quality or pressure, an installed water filtration system not fully functioning, abuse of the product, accident, alteration, vandalism, improper service and maintenance schedules, neglecting to de-scale and sanitize on a regular basis, use of products or ingredients not allowed in the machine, corrosion due to use of non-approved detergents or cleaning solutions, or damage incurred during return shipment will not be covered by this warranty. Further, equipment that has had the serial number removed, altered or otherwise defaced will not be covered by this warranty.

Lighting components, refrigerant, glass, paint, decals, fuses, filters or hygiene replacement parts, labor and/or installation are not covered by this warranty.

Follow proper maintenance procedures and use of equipment, as described in the Operator's Manual provided on Seaga's web site at seagamfg.com, which include but are not limited to:

- Cleaning of equipment including regular maintenance
- Proper installation and location of equipment with respect for the indicated temperature and humidity levels
- Proper use of equipment including loading, programming and setup

THIS WARRANTY IS EXCLUSIVE AND IS GIVEN BY SEAGA AND ACCEPTED BY BUYER IN LIEU OF ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ALL SUCH OTHER WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED BY SEAGA AND WAIVED BY BUYER. Seaga neither assumes nor authorizes any person to assume for it any obligation or liability in connection with the sale of said unit(s) or any part(s) thereof.

Repair or replacement of proven defective parts is limited to manufacturing defects demonstrated under normal use and service during warranty period. Contact Seaga's Customer Care Department to be assigned a Return Authorization (RA) number. Seaga requires complete information including the serial number(s) of the machine(s), date of purchase and description of the part and/or suspected defect. Seaga may also be contacted, with complete information, by phone: 815.297.9500, by fax: 815.297.1700 and also by email: customercare@seaga.com

Send defective part(s), assembly or complete unit, Attention to the RA Number, prepaid or delivered to:

700 Seaga Drive
Freeport IL 61032

Seaga will repair or replace, at our option, any covered part which meets the provisions herein during the warranty period. It is our discretion to replace defective parts with comparable parts. Seaga reserves the right to make changes or improvements in its products without notice and without obligation, and without being required to make corresponding changes or improvements in equipment already manufactured or sold.

SMI2456321