




Intelligent Inventory Control

A Division of  **SEAGA**

IQ640 Service and Parts Manual



EL950 Board

Visit: intelligentinventorycontrol.com email: iic@seaga.com

INTRODUCTION

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

READ THIS MANUAL COMPLETELY

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

EQUIPMENT INSPECTION

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

US Version 115 V

Specifications	
Height	72"
Width	39"
Depth	37"
Floor Space	9.75 Sq. Ft.
Packing Size	62.53 Cu. Ft.
Voltage (AC)	115V
Hertz	60Hz
Running Amperes	1Amp
Watts	115 Watts
Shipping Weight	528 lbs.

EU and India Version, 230 V

Specifications	
Height	184 cm
Width	99 cm
Depth	93 cm
Floor Space	0.90 S Mtr
Packing Size	1.77 Cu Mtr
Voltage (AC)	230V
Hertz	50Hz
Running Amperes	1Amp
Watts	230 Watts
Shipping Weight	239 kg

PHYSICAL CHARACTERISTICS

- Finish: Powder Coat paint

ENVIRONMENT

- Indoors only.

ELECTRICAL REQUIREMENT

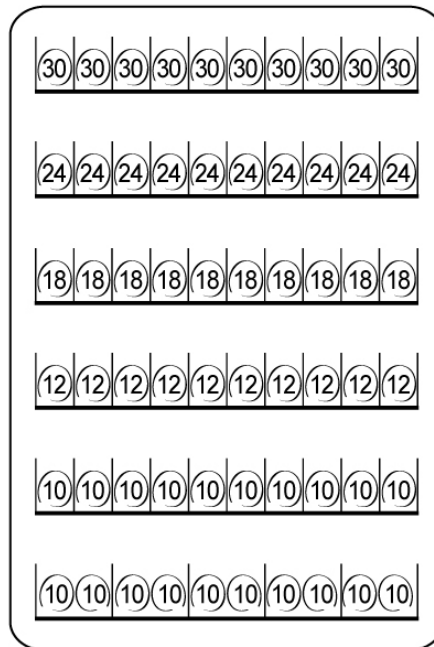
US version requires one (1) 115 VAC 12 Amps grounded outlet.

EU version requires one (1) 230 VAC 12 Amps grounded outlet.

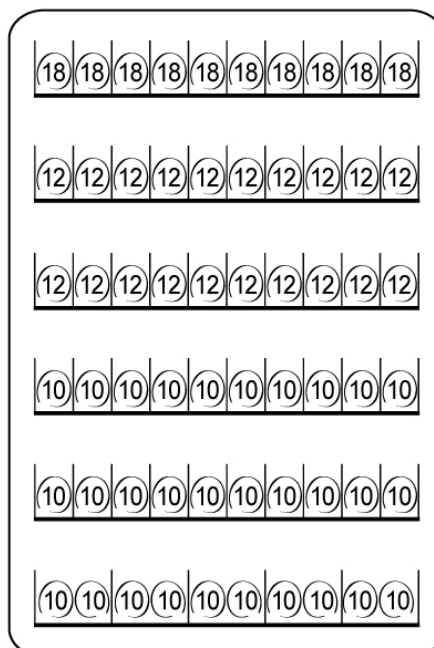
STANDARD COIL CONFIGURATION

Custom configurations are available. Several kits are also available including AA, 9 volt, C Cell and D Cell Battery kits, large and small blade kits, a spray can kit as well as an adhesives and marking kit.

Standard MRO Setup



Standard PPE Setup



MACHINE OVERVIEW

CAUTION: Certain procedures described in this manual require electrical power to the vending machine. Only trained personnel should perform these functions. Use extreme caution while performing the procedures marked with the voltage symbol shown here:



CAUTION: Certain procedures described in this manual require a qualified, trained technician to perform the particular task at hand. These procedures will be marked with the attention symbol shown here:



Fig. 1 - Exterior View (IQ640)

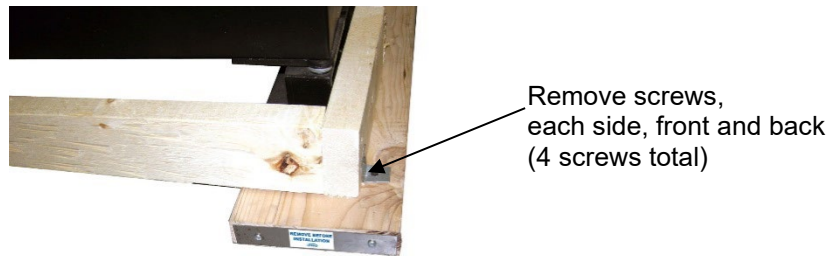


Your IQ machine arrives with a special protected skid that prevents damage to the door due to improper lifting. When installing the machine on location, the Door Protectors and Skid Feet must be removed. A Phillips head screwdriver is required.

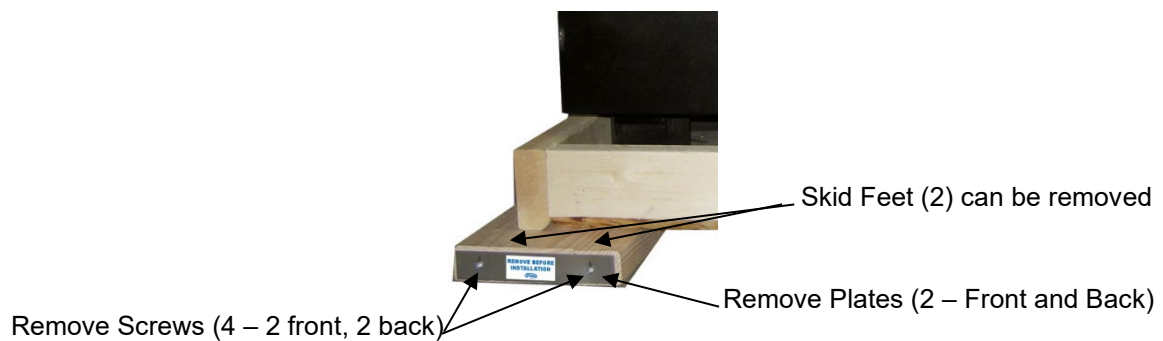
Fig. 2 – Door Protectors and Skid Feet



- 1.) Remove Front and Back Door Protectors by removing four screws (2 front, 2 back) from the skid feet. (Fig. 2a)



- 2.) On each side of the vending machine, remove four (4) screws from the front and back of the skid feet, remove plates. The boards will then come apart and off the leg levelers. (Fig. 2b)



Proper leveling is also necessary to allow easy opening and closure of the vending machine door and to insure proper vending operation.

Fig. 3 - Leg Levelers

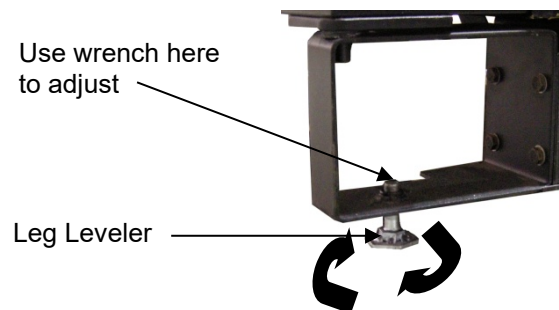
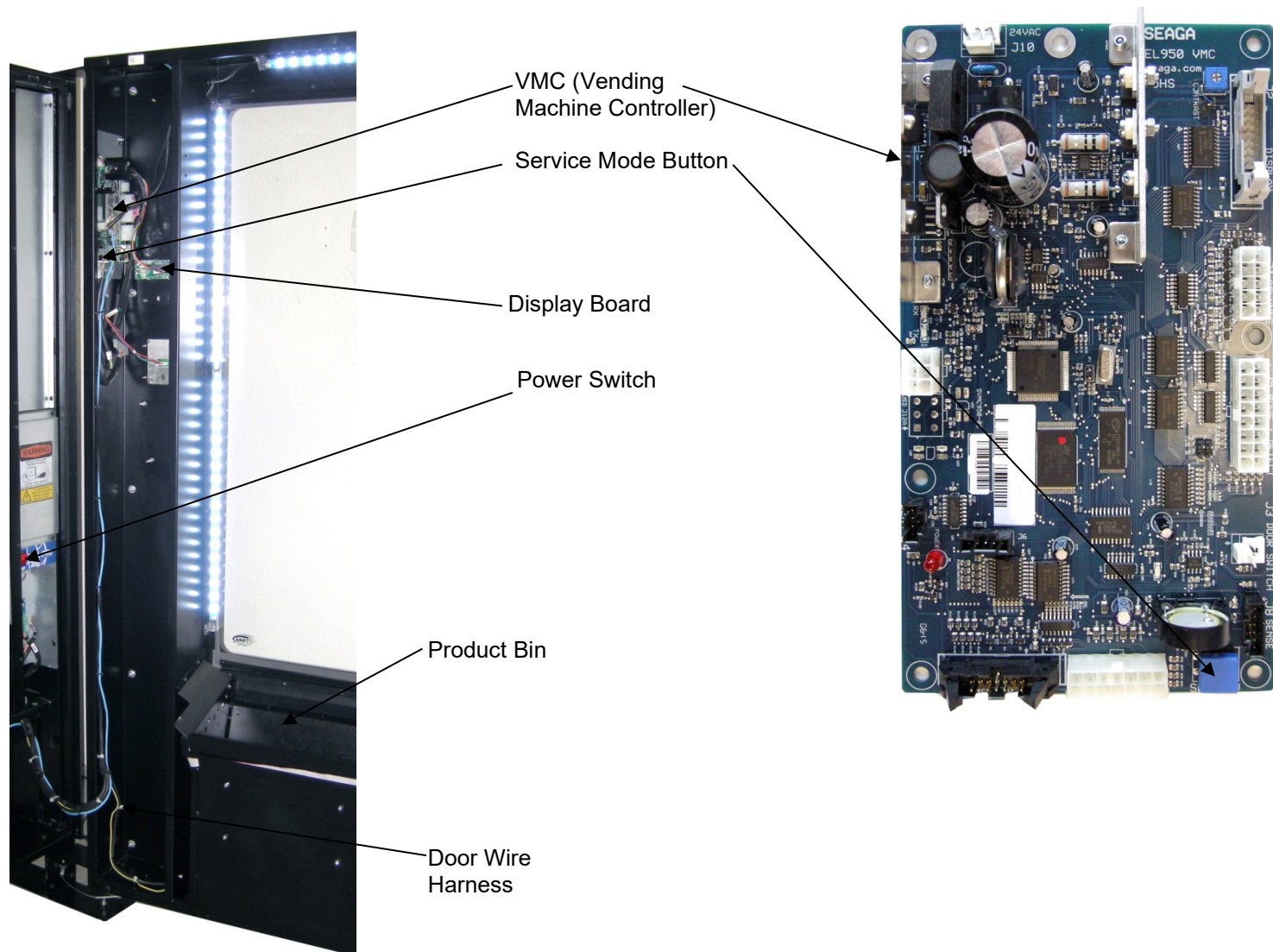


Fig. 4 - Interior View



CAUTIONS**Your vendor 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 vendor must be set on a level, well-supported location.

Always unload vendor before transporting it.

Remove all wire ties and protective sheeting prior to vending.

**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. Insure 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 vending 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.

DOOR CLEARANCE

Allow 7" (18 cm) of clearance on the right side of the machine for the door to open and extend past the cabinet side.

LOADING PRODUCTS

To insure successful vending, do not load any damaged items and make sure items are facing forward for easy identification by your customer.

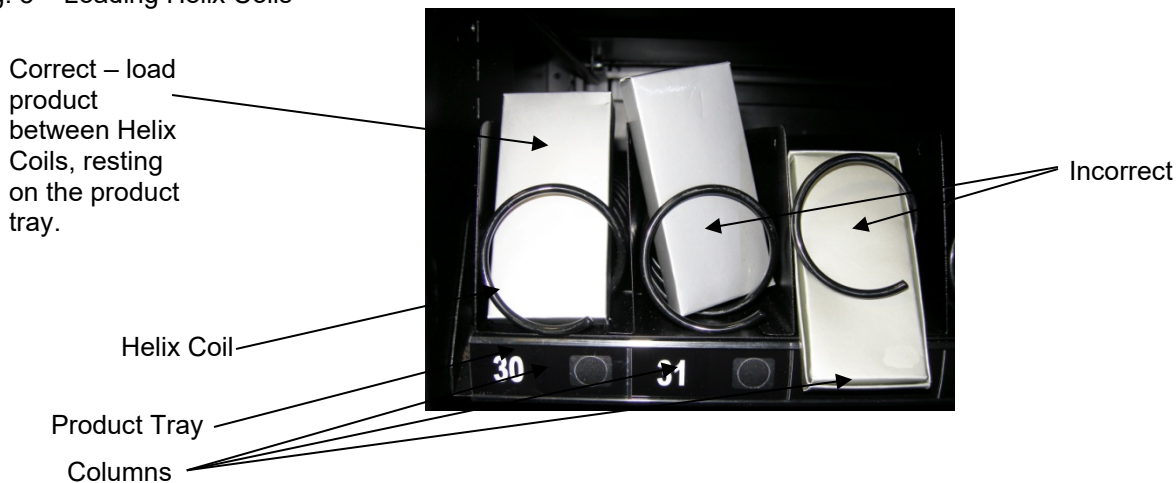
Note: The size of the item being vended must be larger than the Helix Coil, but smaller than the Product Column to vend correctly. Never force an oversized item into the Helix Coil or Product Column, or attempt to vend an item that is smaller than the Helix Coil as this will create issues with the vend operation. (Fig.5)

1. To Load Product:

- A. Push down and hold the release latch located on the right side of the tray and slide the Product Tray toward you, all of the way forward. Product Tray will tilt down for loading. **Note: Pull out only one (1) Product Tray at a time!**
- B. Place product in proper size Helix Coil. Note: Bottom of product must rest on the Product Tray and not on the Helix Coil. (Fig. 5) Load each Product Chute from front to back. Note: Do not leave any spaces between items.
- C. Once Product Tray is loaded, lift the front of the tray to level and push it back in. Repeat above steps until all Product Trays are fully loaded.

To increase the length of the Helix Coil, plastic Product Pushers can be snapped on the end. Product Pushers can be purchased from Seaga's Customer Care team.

Fig. 5 – Loading Helix Coils



LOADING BAGGED OR BOXED ITEMS

Vending small bagged items can be problematic if the products are not loaded properly. The flap edges of some product packages may get trapped under the spiral and cause the product to “hang up”. It is recommended that the bottom flap of this type of packaging be folded forward and up next to the product when loading.

1. The tray above where you will install your Spray Can Kit must be adjusted upward to accommodate the height of the cassette.
2. Remove the tray above by pushing the white tray release lever toward the back of the machine, unlocking the tray.

RELOCATION OF TRAYS

Taller items that do not fit may require you to adjust the position of a tray in the machine. After planning what items you will stock in your IQ system, measure and decide which tray can be successfully moved to accommodate taller items. To relocate a tray, first test fit your items and determine how much extra room you will need. The relocation of the TRAY ABOVE where you will place the tall item will require this information.

1. Remove the tray above by pushing the white tray release lever toward the back of the machine, unlocking the tray.



2. Slide the tray toward you slowly, lifting slightly when the wheel hits the first tray stop on the rail. At this point, reach back on the right side of the cabinet and unplug the tray harness.



3. Lay the tray harness plug on top of the tray you're removing and continue sliding the tray forward until it can be removed completely by lifting up slightly on the last tray wheel to free it from the side rails.
4. Use caution! The tray is heavy. Make sure you have room to set the tray down and/or a helper to assist you with the weight.

5. Unscrew the left side rail at the front and lift up and out. Relocate rail keeping your measurement in mind, using the notches in the side wall up from the original position. Make sure that the rail is level from front to back.



6. Repeat for the right side rail.



7. Reinstall tray, taking care to position white locking lever in proper place.

COMBINING COLUMNS FOR WIDER PRODUCTS

By combining two, three, four, five or even six columns into one, you can easily load wider items in your IQ system. This conversion requires kit SAI330 in different quantities depending on your column requirements. Please contact Seaga Customer Care for assistance and parts purchasing.

After planning what items you would like to stock in your IQ system, determine which tray and columns would be best, keeping in mind that heavier items should be placed on the lowest possible tray.

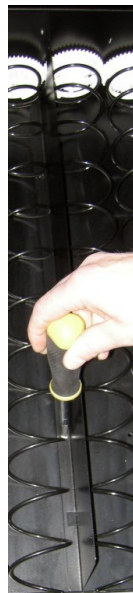
To combine columns – tools required are a Phillips head screwdriver and needle nosed pliers.

1. Push down and hold the release latch located on the right side of the selected tray and slide the Product Tray toward you until it is in the Load Position.

Tray in Load Position



2. Removing the column divider.



3. Remove the coil and coil driver on the right by using the needle nosed pliers to squeeze the ends of the coil driver. Pull the coil and coil driver toward you to remove.



Note: To convert three single selections, remove both dividers and the right most coil as shown in steps 1 through 3.

4. Next, push down and hold the release latch located on the right side of the tray and lift the Product Tray slightly to clear the first tray stop only.
5. Slowly slide the Product Tray toward you and down until it is in the Maintenance Position.

Tray in Maintenance Position

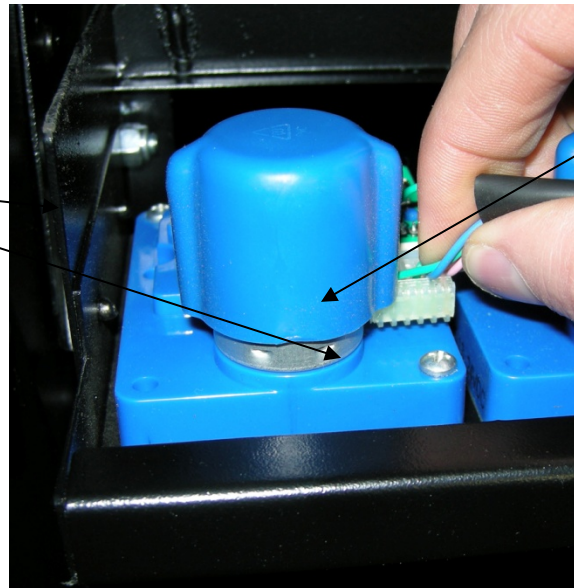


- Using the needle nosed pliers, gently press on the back of both Coil Drivers to remove them from the Motors.



- On the left motor of the two selections you are converting to a dual selection, remove two (2) screws fastening motor to tray back and unplug wire harness. Remove motor.

Remove two
(2) screws



Unplug Wire Harness

- Continue by installing the Coil Drivers into the Gears.



9. On one of the Gears, which will be installed on the left side of the dual selection, install the Spacer onto the post of the coil driver. Note: This will be installed inside the tray as shown in #10 below.

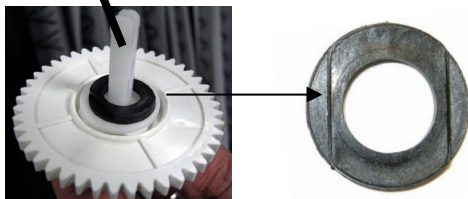


Note: It is very important to install the spacer in the tray with the flat sides of the spacer aligned into the grooves **INSIDE** the tray to prevent rotation of the spacer.

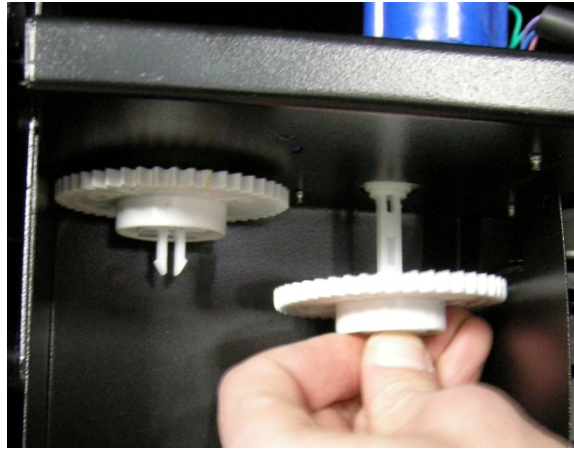
Align flat sides with grooves **INSIDE** the tray



10. Install Gears and Drivers on back of Tray, using the Non Drive Gear Retainer to install the Gear with Spacer on the left side:



11. Then install the gear into the motor on the right side, making sure teeth on the two gears mesh properly.



Note: as one motor has been taken out of service, you must go into Service Mode on the VMC and run the Motor Home and Count (or Hardware, Motor Count on some VMCs) for proper operation of your new dual coil selection.

The new dual selection will be identified on the VMC as the selection on the right side of the new dual space. Remove the selection identification label on the left side.

LOCK

Your vendor has one Lock, more commonly known as T-handle lock. To unlock the front door, insert key and turn clockwise $\frac{1}{4}$ turn. When unlocked the 'T' of the Lock will pop out from its base. Turn the 'T' counter clock wise to unlock the door.

To Lock the door, firmly close the door and turn the 'T' handle clockwise 1 to 2 times and then pull on the door to test that the lock has engaged. If so, then push the 'T' inside the Lock to lock the door and remove the key. Note: Do not over-tighten when locking – this could strip the threads and damage your machine.

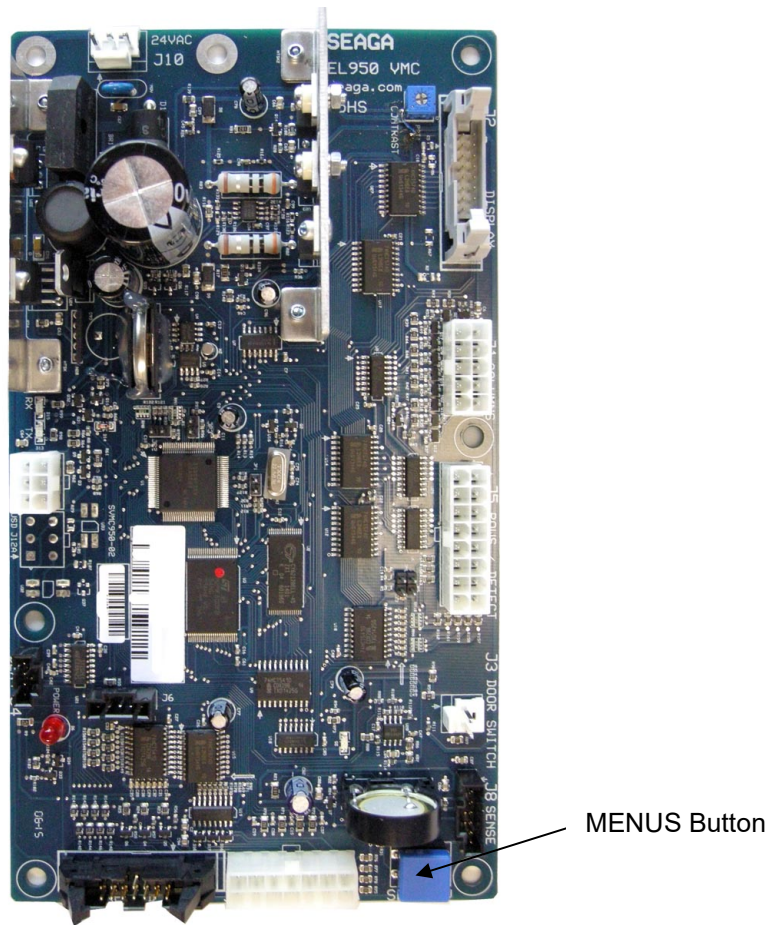
SERVICE MODE

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

VMC – VENDING MACHINE CONTROLLER

Enter Service Mode by pressing the MENUS Button on the VMC Circuit board. (Fig. 11)

Figure 11 – VMC and 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	2	3
4	5	6
7	8	9
*	0	#

* = Exit or Next

= Save

MENU HIERARCHY

1 PRICE	2 CASH	3 QTY/TUBE	4 CONFIGURATION	5 OPTIONS
All Items Row Selection Coupon Token Combo	All Items Row Selection	<i>Enter this mode when priming/filling the changer</i>	Date/Time Health Safety Language All Items – Type Row – Type Selection – Type Auto Reinstate Space to Sales (StS) StS Custom Advanced (pw) Beep Enable Optics Disable Motor type Temp Selection Style Touch Comm	Forced Vend Bill Escrow Multi-Vend Free Vend Fast Change Optical Vend POS Message Set Point Drop Sensor
6 ADVANCED	7 MOTORS	8 SELECTION	9 SELECTION: ALL	0 TEST MODES
Discount Exact Change Unconditional Acceptance Max Change Shutdown Energy Savings Pair	<i>Enter this mode to verify motor count after changing selections or trays or as a test to verify all motors are operating</i>	<i>Enter this mode to perform a single test vend on a selection of your choice</i>	<i>Enter this mode to perform a loop style test vend on all selections USE ONLY WHEN COILS ARE EMPTY! To stop the loop test, press *</i>	Relays Vend Sensor Drop Bias Setting* <i>Do not use</i> System Logs* <i>Do not use</i> On Door Manual Defrost

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.

ALL ITEMS

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 1 for All Items	All Items: \$--.-- (flashes current price) *-Exit, no change
4.	Use number keys to enter new price	All Items: (New Price) *-Exit, no change #Save Press # to Save
5.	Press * two times to exit to Sales Mode	Price Program

ROW

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 2 for Row	Row: -- \$--.-- Use keypad to choose Row. *-Exit, no change
4.	Use keypad to choose Row. Use number keys on the keypad to set new price, including cents.	Row: (New Row and Price) *-Exit, no change #Save
5.	Press * two times to exit to Sales Mode	Price Program

SELECTION

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 3 for Selection	Selection: -- \$--.-- *-Exit, no change
4.	Use the keypad to choose one Selection. Use number keys on the keypad to set new price, including cents.	Selection: (New Selection and Price) *-Exit, no change #Save
5.	Press * two times to exit to Sales Mode	Price Program

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 4 for Coupons	Coupons *-Exit, no change
4.	Press 1 for Coupon1 (or corresponding number for additional coupons, up to Coupon5)	Coupon1 *-Exit, no change #Save
5.	Press 1 for All Items	All Items (Current Setting) *-Exit, no change 1-Edit
6.	Press 1 to toggle On/Off	All Items (Choice Flashing) *-Exit, no change #Save
7.	Press # to Save the new setting	All Items (New Setting) *-Exit, no change #Save
8.	Press * to return to Coupon1	Coupon1
9.	Press 4 to enter Coupon Value menu	Coupon1: \$0.00 *-Exit, no change #Edit
10.	Press # to edit Coupon1 value	Coupon1: \$0.00 *-Exit/Del #Save
11.	Enter Coupon1 value	Coupon1: \$0.00 *-Exit, no change #Save
12.	Press # to Save the Coupon1 Value setting	Coupon1: \$(New Value) *-Exit, no change #Save
13.	Press * two times to continue to Coupon2 – 5 or press * four times to exit.	Price Program

COUPON BY ROW

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 4 for Coupons	Coupons *-Exit, no change
4.	Press 1 for Coupon1 (or corresponding number for additional coupons, up to Coupon5)	Coupon1 *-Exit, no change #Save
5.	Press 1 for All Items to verify Off	All Items (Current Setting) *-Exit, no change #Save
6.	Press 1 to toggle On/Off if necessary	All Items (Choice Flashing) *-Exit, no change #Save
7.	Press # to Save the new setting to Off if necessary	All Items (New Setting) *-Exit, no change #Save
8.	Press * to return to Coupon1	Coupon1
9.	Press 2 to enter a Row Number	Row: -- *-Exit
10.	Enter Row Number	Row: XX (Current Setting) *-Exit/Del #Edit
11.	Press 1 to toggle Row On/Off	Row: XX (Choice Flashing) *-Exit, no change #Save
12.	Press # to save the setting	Row: XX (New Setting) *-Exit, no change #Edit
13.	Press * twice to return to the Coupon1 menu	Coupon1

14.	Press 4 to enter Coupon Value menu	Coupon1: \$0.00 *-Exit, no change #-Edit
15.	Press # to edit Coupon1 value	Coupon1: \$0.00 *-Exit, no change #-Save
16.	Enter Coupon1 value	Coupon1: \$0.00 *-Exit, no change #-Save
17.	Press # to Save the Coupon1 Value setting	Coupon1: \$(New Value) *-Exit, no change #-Save
18.	Press * two times to continue to Coupon2 – 5 or press * five times to exit.	Price Program

COUPON BY ITEM

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 4 for Coupons	Coupons *-Exit, no change
4.	Press 1 for Coupon1 (or corresponding number for additional coupons, up to Coupon5)	Coupon1 *-Exit, no change #-Save
5.	Press 1 for All Items to verify Off	All Items (Current Setting) *-Exit, no change #-Save
6.	Press 1 to toggle On/Off if necessary	All Items (Choice Flashing) *-Exit, no change #-Save
7.	Press # to Save the new setting to Off if necessary	All Items (New Setting) *-Exit, no change #-Save
8.	Press * to return to Coupon1	Coupon1
9.	Press 3 to enter an Item	Selection: -- *-Exit
10.	Enter Item Number	Selection: XX (Current Setting) *-Exit, /Del 1-Edit
11.	Press 1 to toggle Item On/Off	Selection: XX (Choice Flashing) *-Exit, no change 1-Edit
12.	Press # to save the setting	Selection: XX (New Setting) *-Exit, no change #-Edit
13.	Press * twice to return to the Coupon1 menu	Coupon1
14.	Press 4 to enter Coupon Value menu	Coupon1: \$0.00 *-Exit, no change #-Edit
15.	Press # to edit Coupon1 value	Coupon1: \$0.00 *-Exit, no change #-Save
16.	Enter Coupon1 value	Coupon1: \$0.00 *-Exit, no change #-Save
17.	Press # to Save the Coupon1 value setting	Coupon1: \$(New Value) *-Exit, no change #-Save
18.	Press * two times to continue to Coupon2 – 5 or press * five times to exit.	Price Program

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 5 for Tokens	Tokens *-Exit, no change
4.	Press 1 for Token1 (or corresponding number for additional tokens, up to Token5)	Token1 *-Exit, no change #Save
5.	Press 1 for All Items	All Items (Current Setting) *-Exit, no change 1-Edit
6.	Press 1 to toggle On/Off	All Items (Choice Flashing) *-Exit, no change #Save
7.	Press # to Save the new setting	All Items (New Setting) *-Exit, no change #Save
8.	Press * to return to Token1	Token1
9.	Press 4 to enter Token Value menu	Token1: \$0.00 *-Exit, no change #Edit
10.	Press # to edit Token1 value	Token1: \$0.00 *-Exit, no change #Save
11.	Enter Token1 value	Token1: \$0.00 *-Exit, no change #Save
12.	Press # to Save the Token1 Value setting	Token1: \$(New Value) *-Exit, no change #Save
13.	Press * two times to continue to Token2 – 5 or press * four times to exit.	Price Program

TOKEN BY ROW

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 5 for Tokens	Tokens *-Exit, no change
4.	Press 1 for Token1 (or corresponding number for additional tokens, up to Token5)	Token1 *-Exit, no change #Save
5.	Press 1 for All Items to verify Off	All Items (Current Setting) *-Exit, no change 1-edit
6.	Press 1 to toggle On/Off if necessary	All Items (Choice Flashing) *-Exit, no change 1-edit
7.	Press # to Save the new setting to Off if necessary	All Items (New Setting) *-Exit, no change #Save
8.	Press * to return to Token1	Token1
9.	Press 2 to enter a Row Number	Row: -- *-Exit
10.	Enter Row Number	Row: XX (Current Setting) *-Exit, no change #Edit
11.	Press 1 to toggle Row On/Off	Row: XX (Choice Flashing) *-Exit/del #Save
12.	Press # to save the setting	Row: XX (New Setting) *-Exit, no change #Edit
13.	Press * twice to return to the Token1 menu	Token1

COMBO

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 6 for Combo	Combo
4.	Press 1 for Combo1 (or corresponding number for additional combos, up to Combo5)	Combo1: --- \$0.00 *-Exit, no change
5.	Enter First Combo Item Number and Price. Press # to Save. Press 1 to enter the Selection Ranges.	Combo1: ### \$-.- *-Exit, no change #Edit 1-Next
6.	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.	Range1: --- to --- *-Exit, no change #Save
7.	Press 1 to set the next Range.	Range2: ### to ### *-Exit, no change 1-Next
8.	To continue setting Ranges, repeat step 6 and 7. There are 5 ranges available per combo. When finished press * five times to exit.	Price Program
To delete a previously set Combo		
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 1 for Price Program	Price Program
3.	Press 6 for Combo menu	Combo
4.	Press 1 for Combo1 menu	Combo1: ### \$(Price) *-Exit, no change #Edit 1-Next
5.	Press # to edit the Combo	Combo1: ### \$(Price) *-Exit/del #OK
6.	Press * three times to delete the selection number	Combo1: ### \$(Price) *-Exit, no change #Save
7.	Press # to save the setting	Combo1: -- \$0.00 *-del #OK
8.	Press # five items to exit.	Price Program

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

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 2 for Cash Counters	Cash Counters
3.	Press 1 for All Items	All Items
4.	Press 1 for Historical Count	Hist Count --
5.	Press 2 for Historical Cash	Hist Cash \$--.--
6.	Press 3 for Reset Count	Res Count --
7.	Press 4 for Reset Cash	Res Cash \$--.--
8.	Press 5 for Historical Card	His Card \$--.--
9.	Press 6 for Reset Card	Res Card \$--.--
10.	Press 7 for Clear	Clear? *-Exit, no change #Clear Display shows Cleared

ROW

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 2 for Cash Counters	Cash Counters
3.	Press 2 for Row	Row: -- Use keypad to choose Row.
4.	Press 1 for Historical Count	Hist Count --
5.	Press 2 for Historical Cash	Hist Cash \$--.--
6.	Press 3 for Reset Count	Res Count --
7.	Press 4 for Reset Cash	Res Cash \$--.--
8.	Press 5 for Historical Card	His Card \$--.--
9.	Press 6 for Reset Card	Res Card \$--.--
10.	Press 7 for Clear	Clear? *-Exit, no change #Clear Display shows Cleared

SELECTION

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 2 for Cash Counters	Cash Counters
3.	Press 3 for Selection	Selection -- Use keypad to choose an individual Selection
4.	Press 1 for Historical Count	Hist Count --
5.	Press 2 for Historical Cash	Hist Cash \$--.--
6.	Press 3 for Reset Count	Res Count --
7.	Press 4 for Reset Cash	Res Cash \$--.--
8.	Press 5 for Historical Card	His Card \$--.--
9.	Press 6 for Reset Card	Res Card \$--.--
10.	Press 7 for Clear	Clear? *-Exit, no change #Clear Display shows Cleared

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 3 for Qty/Tube	Qty/Tube : X/\$--.-- (Current Quantity and Total)
3.	Press * two times to exit to Sales Mode	0.00

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

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 1 for Date/Time	Date/Time
4.	Press 1 to change Date	MM/DD/YY current setting *-Exit, no change # -Edit Use number keys to enter new date
5.	Press 2 to change Time	HH:MM current setting *-Exit, no change # -Edit Use number keys to enter new time
6.	Press 3 to change DST (Daylight Savings time)	DST ON/OFF *-Exit, no change 3 – Toggle On/Off. Press # to Save
7.	Press * two times to exit to Sales Mode	0.00

HEALTH SAFETY

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 2 for Health Safety	Health Safety
4.	Press 1 to change Upper Zone	Upper Zone
5.	Press 1 to change All Items	All Items ON/OFF *-Exit, no change 1- Toggle On/Off # to Save
6.	Press 2 to change Row	Row – Use keypad to select row ON/OFF *-Exit, no change 2- Toggle On/Off # to Save
7.	Press 3 to change one Selection	Selection – Use keypad to select row ON/OFF *-Exit, no change 3- Toggle On/Off # to Save
8.	Press 2 to change Lower Zone	Lower Zone
9.	Press 1 to change All Items	All Items ON/OFF *-Exit, no change 1- Toggle On/Off # to Save
10.	Press 2 to change Row	Row – Use keypad to select row ON/OFF *-Exit, no change 1- Toggle On/Off # to Save
11.	Press 3 to change one Selection	Selection –

		Use keypad to select row ON/OFF *-Exit, no change 1- Toggle On/Off # to Save
12.	Press * two times to exit to Sales Mode	0.00

LANGUAGE

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 3 for Language	Language English *-Exit, no change 3 – Edit 3 to Toggle between English, Spanish or French Press # to Save
12.	Press * two times to exit to Sales Mode	0.00

ALL ITEMS: TYPE

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 4 for All Items: Type *NOTE: This should ALWAYS be set on Snack; setting to other Types will cause vend sensor failure.	All Items: Snack, Can or Bottle *-Exit, no change 1 – Edit 1 to Toggle Press # to Save
12.	Press * two times to exit	0.00

ROW: TYPE

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 5 for Row: Type *NOTE: This should ALWAYS be set on Snack; setting to other Types will cause vend sensor failure.	Row – Use keypad to enter Row *-Exit, no change 1 – Edit 1 to Toggle Snack, Can or Bottle Press # to Save
12.	Press * two times to exit	0.00

SELECTION: TYPE

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 6 for Selection: Type* *NOTE: This should ALWAYS be set on Snack; setting to other Types will cause vend sensor failure.	Selection – Use keypad to enter Selection *-Exit, no change 1 – Edit 1 to Toggle Snack, Can or Bottle Press # to Save
12.	Press * two times to exit	0.00

AUTOREINSTATE

This feature reinstates a selection after a vend failure, per the Vigilant vend sensor system. Normally, when an empty selection is detected during an attempted vend, that selection is recorded as inoperative and requires resetting before it can be vended again. Note: AutoReinstate affects both the host machine and all attached satellites.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 7 for AutoReinstate	Autoreinstate
5.	Press 1 to change All Items	All Items ON/OFF *-Exit, no change 1- Toggle On/Off # to Save
6.	Press 2 to change Row	Row – Use keypad to select row ON/OFF *-Exit, no change 2- Toggle On/Off # to Save
7.	Press 3 to change one Selection	Selection – Use keypad to select row ON/OFF *-Exit, no change 3- Toggle On/Off # to Save
12.	Press * two times to exit	0.00

SPACE TO SALES (StS)

Space to Sales (or StS) is a feature that rotates products so that First In First Out (FIFO) is assured and a popular item isn't sold out. This feature is only recommended for your beverage area, as the live display in the snack section would make product rotation confusing for your customer.

However, if you have a popular brand of water that keeps selling out before you can restock, it may be useful to set StS for two selections to work in tandem, make more sales by having fresh product readily available in a larger capacity. As an example, loading 16 oz. bottled water in selections 150 and 151.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 8 for Space to Sales	StS (Current setting) *-Exit, no change 8-Edit
4.	Press 8 to toggle through options	StS Off Whole Rows Half Rows By 2's Whole Machine Custom MZF/SZF Custom (See next menu item) With your choice flashing, press # to Save *-Exit, no change
5.	Press * two times to exit	0.00

By using Space to Sales to join selections 150 and 151 and loading 16 oz. water bottles in both columns, you have insured that this popular item is dispensing from both selections evenly, have allocated more capacity to a best seller to prevent sold out status and made your location more satisfied with your service.

CUSTOM SPACE TO SALES (StS)

Now that you have chosen a Space to Sales setting – Whole Row, Half Row, By 2's, Whole Machine, you must tell the vending machine which selection is under Space to Sales and which selections are to work together.

Back to our example of 16 oz. bottled water in 150 and 151, we have used the StS menu (4 > 8) to set By 2's. In this menu, we would set Selection 150 to link up 150 and 151.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 8 for StS	StS --: (Current setting) *-Exit, no change 8-Edit
4.	Press 8 to toggle to your setting (in our example, By 2's)	StS By 2's *-Exit, no change # to Save
5.	Press * to return to Configuration menu	Configuration
6.	Press 9 to go to Custom Space to Sales	StS ---: *-Exit
7.	Enter Selection (in our example, 150)	StS XXX: *-Exit, no change # to Save 1 to Clear?
8.	Press 1 to clear links menu	XXX: Clear links? *-Exit, no change # to Clear?
9.	Press # to clear current links settings	XXX: Cleared *-Exit, no change # Add 1 – Clear
10.	Press # to add new selection	XXX:--- *-Exit, no change
11.	Enter next selection	XXX:YYY (in our example, 150) *-Exit, no change # Add
12.	Press # to add another selection (to enter more selections, repeat steps 10 and 11)	XXX:YYY, ZZZ (In our example, 151) The display shows the selections you have entered. After 3 selections, the screen will scroll all the links you have made.
13.	Press * two times to exit	0.00

ADVANCED*

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

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 0 for Advanced Config	Password: Use keypad to enter password
4.	Press 1 for Beep Enable menu	Beep Enable (Current Setting) *-Exit, no change 1-Edit
5.	Press 1 to toggle ON/OFF	Beep Enable (Choice Flashing) *-Exit, no change # to Save
6.	Press # to save the setting	Beep Enable (New Setting) *-Exit, no change 1-Edit
7.	Press * three times to exit	0.00

OPTICS DISABLES

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 0 for Advanced Config	Password: Use keypad to enter password
4.	Press 2 for Optics Disables menu	Optics Disables (Current Setting) *-Exit, no change 2-Edit
5.	Press 2 to toggle ON/OFF	Optics Disables (Choice Flashing) *-Exit, no change # to Save
6.	Press # to save the setting	Optics Disables (New Setting) *-Exit, no change 2-Edit
7.	Press * three times to exit	0.00

MOTOR TYPE

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 0 for Advanced Config	Password: Use keypad to enter password
4.	Press 3 for Motor Type menu	Motor Type (Current Setting) *-Exit, no change 3-Edit
5.	Press 3 to toggle 3-Wire or 2-Wire	Motor Type (Choice Flashing) *-Exit, no change # to Save
6.	Press # to save the setting	Motor Type (New Setting) *-Exit, no change 3-Edit
7.	Press * three times to exit	0.00

TEMP

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 0 for Advanced Config	Password: Use keypad to enter password
4.	Press 4 for Temp menu	Temp (Current Setting) *-Exit, no change 4-Edit
5.	Press 4 to toggle Snack, Cold, Cold Food, Slackened, Eng Test, Dual Zone, Dual Upper -6, Chilled, MZF, MZF -2, MZF -5, SZ Frozen, SZ Frozen -2, SZ Frozen -5, SZ Cold, SZ Cold -1	Temp (Choice Flashing) *-Exit, no change # to Save
6.	Press # to save the setting	Temp (New Setting) *-Exit, no change 4-Edit
7.	Press * three times to exit	0.00

SEL STYLE

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 4 for Configuration	Configuration
3.	Press 0 for Advanced Config	Password: Use keypad to enter password
4.	Press 5 for Sel Style	Sel Style (Current Setting) *-Exit, no change 5-Edit
5.	Press 5 to toggle 3 digit, 2 Dgt 40+, 2-Dgt ever, */# USD	Sel Style (Choice Flashing) *-Exit, no change # to Save
6.	Press # to save the setting	Sel Style (New Setting) *-Exit, no change 5-Edit
7.	Press * three times to exit	0.00

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
- Drop Sensor

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 1 for Forced Vend Menu	Forced Vend (Current Setting) *-Exit 1-Edit
4.	Press 1 to toggle between ON and OFF	Forced Vend (Choice Flashing) *-Exit #Save
5.	Press # to save the setting	Forced Vend (New Setting) *-Exit 1-Edit
6.	Press * two times to exit	0.00

BILL ESCROW

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

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 2 for Bill Escrow Menu	Bill Escrow (Current Setting) *-Exit 2-Edit
4.	Press 2 to toggle between ON and OFF	Bill Escrow (Choice Flashing) *-Exit #-Save
5.	Press # to save the setting	Bill Escrow (New Setting) *-Exit 2-Edit
6.	Press * three times to exit	0.00

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 over ride MultiVend and change will be made immediately after a selection.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 3 for Multi Vend Menu	Multi Vend (Current Setting) *-Exit 3-Edit
4.	Press 3 to toggle between ON and OFF	Multi Vend (Choice Flashing) *-Exit #-Save
5.	Press # to save the setting	Multi Vend (New Setting) *-Exit 3-Edit
6.	Press * three times to exit	0.00

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".

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 4 for FreeVend Menu	Free Vend (Current Setting) *-Exit 4-Edit
4.	Press 4 to toggle between ON and OFF	Free Vend (Choice Flashing) *-Exit #-Save
5.	Press # to save the setting	Free Vend (New Setting) *-Exit 4-Edit
6.	Press * three times to exit	0.00

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.

NOTE: If "Optical Vend" is ON, the vend price of the product displays until a product drops.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 5 for Fast Change Menu	Fast Change (Current Setting)

		*-Exit 5-Edit
4.	Press 5 to toggle between ON and OFF	Fast Change (Choice Flashing) *-Exit #Save
5.	Press # to save the setting	Fast Change (New Setting) *-Exit 5-Edit
6.	Press * three times to exit	0.00

OPTICAL VEND

This sub-menu provides the operator with options for designating product items or rows that are monitored for product delivery by an optical sensor. Default is ALL selections ON unless changed.

Selections that are designated as Optical have an associated vend operation that differs from the normal vend operation. For 5 milliseconds at the start of a vend, the Vigilant vend sensor is checked for blockage.

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

- The motor rotates to the home-switch position.
- If there is a home-switch signal, the vend is considered successful.
- If there is no home-switch signal after 10 seconds, the vend motor is shut down and MAKE ANOTHER SELECTION is shown on the display.
- The customer can then make another selection or press coin return.

NOTE: Forced Vend is overridden if Optical Vend is set.

If not blocked, the Vigilant vend sensor system is used. Both the vend motor and a 10-second timeout timer are started.

- The selection motor rotates to the home-switch position.
- If a product is detected, the vend is considered successful.
- If, after reaching the home-switch position, a product has not been detected, the vend motor will pause for 1 second while the VMC continues to monitor the optical sensor for product delivery.
- If a product is detected during this pause, the vend is considered successful.
- If a product is not detected, the controller initiates a second vend cycle and a 9-second timer while continuing to monitor the optical sensor.
 - If a product is detected during this second cycle, the motor is stopped immediately. The vend is considered successful. The 2nd Vend Count is increased by one.
 - If a product is not detected before the motor reaches the home-switch position, or if a 9-second timer runs out, the vend has failed or the selection is sold out. Such a state will show MAKE ANOTHER SELECTION on the display and the amount of credit. The customer can make a selection or press coin return.

OPTICS ALL

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 6 for Optical Vend Menu	Optical Vend
4.	Press 3 for All Items Menu	All Items (Current Setting) *-Exit 3-Edit
5.	Press 3 to toggle between ON and OFF	All Items (Choice Flashing) *-Exit #Save
6.	Press # to save the setting	All Items (New Setting) *-Exit 3-Edit
7.	Press * four times to exit	0.00

OPTICS BY ROW

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 6 for Optical Vend Menu	Optical Vend
4.	Press 2 for to enter a Row	Row: -- *-Exit
5.	Enter the Row	Row: X (Current Setting) *-Exit 1-Edit
6.	Press 1 to toggle between ON and OFF	Row: X (Choice Flashing) *-Exit #-Save
7.	Press # to save the setting	Row: X (New Setting) *-Exit 1-Edit
8.	Repeat Steps 4 through 7 until all desired rows are completed.	
7.	Press * to enter another Row or four times to exit	0.00

OPTICS BY SELECTION

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 6 for Optical Vend Menu	Optical Vend
4.	Press 1 for to enter the Selection	Item: -- *-Exit
5.	Enter the Item Number	Item: XXX (Current Setting) *-Exit 1-Edit
6.	Press 1 to toggle between ON and OFF	Item: XXX (Choice Flashing) *-Exit #-Save
7.	Press # to save the setting	Item: XXX (New Setting) *-Exit 1-Edit
8.	Repeat Steps 4 through 7 until all desired rows are completed.	
7.	Press * to enter another Selection or four times to exit	0.00

POINT OF SALE MESSAGE (POS)

Turns ON or OFF the default scrolling display message.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 7 for POS Menu	POS Message (Current Setting) *-Exit 7-Edit
4.	Press 7 to toggle between ON and OFF	POS Message (Choice Flashing) *-Exit #-Save
5.	Press # to save the setting	POS Message (New Setting) *-Exit 7-Edit
6.	Press * three times to exit	0.00

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 36F. These temperatures may be adjusted, **however it is not advised without direction by Seaga Customer Care or an authorized technician**. The optimal temperatures have been set according to NAMA specifications for optimal product safety. Before making any adjustment see Temp and Helath Safety section.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 8 for Set Point	Setpoint (Current Setting)F *-Exit 8-Edit
4.	Press 8 to edit the temperature Set Point	Setpoint (Choice Flashing)F *-Exit #Save
5.	Continue pressing 8 until the desired temperature is shown on the display	Setpoint (New Temp)F *-Exit 8-Edit
6.	Press # to save the setting	Setpoint (New Setting)F *-Exit 8-Edit
6.	Press * three times to exit	0.00

DROP SENSOR

Allows you to adjust the Drop Sensor Sensitivity; 1 is most sensitive and 9 is least sensitive. The default setting is 3 and should not need to be changed.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 5 for Options Menu	Options
3.	Press 9 for Drop Sensor	Drop Sensor (Current Setting) *-Exit 9-Edit
4.	Press 9 to edit the Drop Sensor sensitivity level	Drop Sensor (Choice Flashing) *-Exit #Save
5.	Continue pressing 9 until the desired setting is shown on the display	Drop Sensor (New Temp) *-Exit 9-Edit
6.	Press # to save the setting	Drop Sensor (New Setting) *-Exit 9-Edit
6.	Press * three times to exit	0.00

6. ADVANCED*

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

- Discount
- Exact Change
- Unconditional Acceptance
- Max Change
- Shutdown
- Energy Savings
- Pair
- Degrees

DISCOUNT

This menu uses various sub-menu settings to allow a different price for selections at different times or on different days.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 1 for Discount	Discount
5.	Press 1 for All Items	All Items (Current Setting) *-Exit 1-Edit
6.	Press 1 to toggle All Items ON/OFF	All Items (Choice Flashing) *-Exit #-Save
7.	Press # to save the setting	All Items (New Setting) *-Exit 1-Edit
8.	Press * to return to Discount menu	Discount
9.	Press 4 for Day menu	Day
10.	Press 1 for All Days	All Days (Current Setting) *-Exit 1-Edit
11.	Press 1 to toggle All Days ON/OFF	All Days (New Setting) *-Exit #-Save
12.	Press # to save the setting	All Days (New Setting) *-Exit 1-Edit
13.	Press 2 to toggle Monday ON/OFF	Mon (Choice Flashing) *-Exit 2-Edit
14.	Press # to save the setting	Mon (New Setting) *-Exit 2-Edit
Use numbers 3-8 to complete the other days of the week using steps 13 and 14.		
15.	Press * two times to return to Discount menu	Discount
16.	Press 5 two times for Start Time menu	(Current Time) *-Exit 5-Edit
17.	Press 5, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
18.	Press # to save the time	New Time *-Exit 5-Edit
19.	Press * two times to return to Discount menu	Discount
20.	Press 6 two times for Stop Time menu	Stop Time
21.	Press 6, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
22.	Press # to save the time	New Time *-Exit 6-Edit
23.	Press * two times to return to Discount menu	Discount
24.	Press 7 for Discount Value menu	Discount (Current Value) *-Exit 7-Edit
25.	Press 7, then enter new Discount Value (Enter the new price at which to sell the item)	Discount (New Value) *-Exit #-Save
26.	Press # to save the discount value	Discount (New Setting) *-Exit #-Save
27.	Press * two times to return to Discount menu	Discount
28.	Press 9 for Enable Discount menu	Enable (Choice Flashing)

		*-Exit 9-Edit
29.	Press 9 to toggle Enable ON/OFF	Enable (Choice Flashing) *-Exit #Save
30.	Press # to save the setting	Enable (New Setting) *-Exit 9-Edit
31.	Press * five times to exit to Sales Mode	0.00

DISCOUNT BY ROW

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

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 1 for Discount	Discount
5.	Press 2 for Row menu	Row: -- *-Exit
6.	Enter Row number	Row XX: (Current Setting) *-Exit 2-Edit
7.	Press 1 to toggle Row ON/OFF	Row XX: (Choice Flashing) *-Exit #Save
8.	Press # to save the setting	Row XX: (New Setting) *-Exit 2-Edit
9.	Press * once to enter another row or two times to return to Discount menu	Discount
10.	Press 4 for Day menu	Day
11.	Press 1 for All Days	All Days (Current Setting) *-Exit 1-Edit
12.	Press 1 to toggle All Days ON/OFF	All Days (New Setting) *-Exit #Save
13.	Press # to save the setting	All Days (New Setting) *-Exit 1-Edit
14.	Press 2 to toggle Monday ON/OFF	Mon (Choice Flashing) *-Exit 2-Edit
15.	Press # to save the setting	Mon (New Setting) *-Exit 2-Edit
Use numbers 3-8 to complete the other days of the week using steps 14 and 15.		
16.	Press * two times to return to Discount menu	Discount
17.	Press 5 two times for Start Time menu	(Current Time) *-Exit 5-Edit
18.	Press 5, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #Save
19.	Press # to save the time	New Time *-Exit 5-Edit
20.	Press * two times to return to Discount menu	Discount
21.	Press 6 two times for Stop Time menu	Stop Time
22.	Press 6, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #Save
23.	Press # to save the time	New Time *-Exit 6-Edit
24.	Press * two times to return to Discount menu	Discount

25.	Press 7 for Discount Value menu	Discount (Current Value) *-Exit 7-Edit
26.	Press 7, then enter new Discount Value (Enter the new price at which to sell the item)	Discount (New Value) *-Exit #-Save
27.	Press # to save the discount value	Discount (New Setting) *-Exit #-Save
28.	Press * two times to return to Discount menu	Discount
29.	Press 9 for Enable Discount menu	Enable (Choice Flashing) *-Exit 9-Edit
30.	Press 9 to toggle Enable ON/OFF	Enable (Choice Flashing) *-Exit #-Save
31.	Press # to save the setting	Enable (New Setting) *-Exit 9-Edit
32.	Press * five times to exit to Sales Mode	0.00

DISCOUNT BY SELECTION

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

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 1 for Discount	Discount
5.	Press 3 for Selection menu	Selection: -- *-Exit
6.	Enter Selection number	Selection XX: (Current Setting) *-Exit 3-Edit
7.	Press 1 to toggle Selection ON/OFF	Selection XX: (Choice Flashing) *-Exit #-Save
8.	Press # to save the setting	Selection XX: (New Setting) *-Exit 3-Edit
9.	Press * once to enter another row or two times to return to Discount menu	Discount
10.	Press 4 for Day menu	Day
11.	Press 1 for All Days	All Days (Current Setting) *-Exit 1-Edit
12.	Press 1 to toggle All Days ON/OFF	All Days (New Setting) *-Exit #-Save
13.	Press # to save the setting	All Days (New Setting) *-Exit 1-Edit
14.	Press 2 to toggle Monday ON/OFF	Mon (Choice Flashing) *-Exit 2-Edit
15.	Press # to save the setting	Mon (New Setting) *-Exit 2-Edit
Use numbers 3-8 to complete the other days of the week using steps 14 and 15.		
16.	Press * two times to return to Discount menu	Discount
17.	Press 5 two times for Start Time menu	(Current Time) *-Exit 5-Edit
18.	Press 5, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
19.	Press # to save the time	New Time *-Exit 5-Edit
20.	Press * two times to return to Discount menu	Discount
21.	Press 6 two times for Stop Time menu	Stop Time
22.	Press 6, then enter Start Time in 24-hr time (HH:MM)	New Time

		*-Exit #Save
23.	Press # to save the time	New Time *-Exit 6-Edit
24.	Press * two times to return to Discount menu	Discount
25.	Press 7 for Discount Value menu	Discount (Current Value) *-Exit 7-Edit
26.	Press 7, then enter new Discount Value (Enter the new price at which to sell the item)	Discount (New Value) *-Exit #Save
27.	Press # to save the discount value	Discount (New Setting) *-Exit #Save
28.	Press * two times to return to Discount menu	Discount
29.	Press 9 for Enable Discount menu	Enable (Choice Flashing) *-Exit 9-Edit
30.	Press 9 to toggle Enable ON/OFF	Enable (Choice Flashing) *-Exit #Save
31.	Press # to save the setting	Enable (New Setting) *-Exit 9-Edit
32.	Press * five times to exit to Sales Mode	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 2 for Exact Change	Exact Change \$--.00 *-Exit 1-Edit
5.	Press 1 to edit Exact Change	Exact Change (Flashing) *-Exit 1-Edit
6.	Use number keys to enter an amount	Exact Change (New Setting) *-Exit 1-Edit
7.	Press # to save the setting	Exact Change (New Setting) *-Exit #Save
8.	Press * two times to exit	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 2 for Exact Change	Exact Change \$--.00 *-Exit 1-Edit
5.	Press 2 to set Alt Rules	Alt Rules (Current Setting) *-Exit 2-Edit
6.	Press 2 to toggle ON/OFF (default ON)	Alt Rules (Choice Flashing) *-Exit #Save
7.	Press # to save the setting	Alt Rules (New Setting) *-Exit 3-Edit
8.	Press * two times to exit	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 3 for Unconditional Acceptance menu	Uncond Accept: (Current Setting) *-Exit #-Edit
5.	Press 3 then enter value	Uncond Accept: (New Setting) *-Exit #-Save
6.	Press # to save the setting	Uncond Accept: (New Setting) *-Exit #-Save
7.	Press * two times to exit	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 4 for Max Change menu	Max Change
5.	Press 1 for current Max Change setting	Max Change (Current Setting) *-Exit 1-Edit
6.	Press 1 to toggle ON/OFF	Max Change (Choice Flashing) *-Exit #-Save
7.	Press # to save the setting	Max Change (New Setting) *-Exit 1-Edit
8.	Press 2 and enter dollar amount	Max Change: \$--.— *-Exit #-Save
9.	Press # to save the setting	Max Change (New Setting) *-Exit 2-Edit
7.	Press * three times to exit	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 5 for Shutdown	Shutdown
5.	Press 1 for Interval1 (2 for Interval2, and so on)	Interval1
6.	Press 1 to for All Items	All Items (Current Setting) *-Exit 1-Edit
7.	Press 1 to toggle ON/OFF	All Items (Choice Flashing) *-Exit #-Save

8.	Press # to save the setting	All Items (New Setting) *-Exit 1-Edit
9.	Press * to return to Interval1	Interval1
10.	Press 4 for Day menu	Day
11.	Press 1 for All Days	All Days (Current Setting) *-Exit 1-Edit
12.	Press 1 to toggle All Days ON/OFF	All Days (New Setting) *-Exit #-Save
13.	Press # to save the setting	All Days (New Setting) *-Exit 1-Edit
14.	Press 2 to toggle Monday ON/OFF	Mon (Choice Flashing) *-Exit 2-Edit
15.	Press # to save the setting	Mon (New Setting) *-Exit 2-Edit
Use numbers 3-8 to complete the other days of the week using steps 13 and 14.		
16.	Press * two times to return to Interval1 menu	Interval1
17.	Press 5 two times for Start Time menu	(Current Time) *-Exit 5-Edit
18.	Enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
19.	Press # to save the time	New Time *-Exit 5-Edit
20.	Press * once to return to Interval1 menu	Shutdown
21.	Press 6 two times for Stop Time menu	Stop Time
22.	Press 6, then enter Stop Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
23.	Press # to save the time	New Time *-Exit 6-Edit
24.	Press * two times to return to Shutdown	Shutdown
25.	Press 2, 3 or 4 to edit Intervals 2, 3 or 4	IntervalX
26.	Press 9 for enable menu	Enable (Current Setting) *-Exit 9-Edit
27.	Press # to save the setting	Lighting (New Setting) *-Exit 8-Edit
28.	Press * five times to exit to Sales Mode	0.00

SHUTDOWN BY ROW

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 5 for Shutdown	Shutdown
5.	Press 1 for Interval1 (2 for Interval2, and so on)	Interval1
6.	Press 2 for Row menu	Row: -- *-Exit
7.	Enter Row number (First 2 character of any selections in the row)	Row XX: (Current Setting) *-Exit 2-Edit
8.	Press 1 to toggle Row ON/OFF	Row XX: (Choice Flashing) *-Exit #-Save
9.	Press # to save the setting	Row XX: (New Setting) *-Exit 2-Edit
10.	Press * once to enter another row or two times to return to Shutdown menu	Shutdown

11.	Press 4 for Day menu	Day
12.	Press 1 for All Days	All Days (Current Setting) *-Exit 1-Edit
13.	Press 1 to toggle All Days ON/OFF	All Days (New Setting) *-Exit #-Save
14.	Press # to save the setting	All Days (New Setting) *-Exit 1-Edit
15.	Press 2 to toggle Monday ON/OFF	Mon (Choice Flashing) *-Exit 2-Edit
16.	Press # to save the setting	Mon (New Setting) *-Exit 2-Edit
Use numbers 3-8 to complete the other days of the week using steps 15 and 16.		
16.	Press * two times to return to Shutdown menu	Shutdown
17.	Press 5 two times for Start Time menu	(Current Time) *-Exit 5-Edit
18.	Press 5, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
19.	Press # to save the time	New Time *-Exit 5-Edit
20.	Press * two times to return to Shutdown menu	Shutdown
21.	Press 6 two times for Stop Time menu	Stop Time
22.	Press 6, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
23.	Press # to save the time	New Time *-Exit 6-Edit
24.	Press * Back to interval	
25.	Press 9 to Enable menu (must be on)	Enable (current setting) *-Exit 9-Edit
26.	Press # to save the setting	
27.	Press * five times to exit to Sales Mode	

SHUTDOWN BY SELECTION

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 5 for Shutdown	Shutdown
5.	Press 1 for Interval1 (2 for Interval2, and so on)	Interval1
6.	Press 3 for Selection menu	Selection: -- *-Exit
7.	Enter Selection number	Selection XX: (Current Setting) *-Exit 3-Edit
8.	Press 1 to toggle Selection ON/OFF	Selection XX: (Choice Flashing) *-Exit #-Save
9.	Press # to save the setting	Selection XX: (New Setting) *-Exit 3-Edit
10.	Press * once to enter another row or two times to return to Discount menu	Discount
11.	Press 4 for Day menu	Day
12.	Press 1 for All Days	All Days (Current Setting) *-Exit 1-Edit
13.	Press 1 to toggle All Days ON/OFF	All Days (New Setting)

		*-Exit # -Save
14.	Press # to save the setting	All Days (New Setting) *-Exit 1-Edit
15.	Press 2 to toggle Monday ON/OFF	Mon (Choice Flashing) *-Exit 2-Edit
15.	Press # to save the setting	Mon (New Setting) *-Exit 2-Edit
Use numbers 3-8 to complete the other days of the week using steps 15 and 16.		
16.	Press * two times to return to Shutdown menu	Shutdown
17.	Press 5 two times for Start Time menu	(Current Time) *-Exit 5-Edit
18.	Press 5, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit # -Save
19.	Press # to save the time	New Time *-Exit 5-Edit
20.	Press * two times to return to Shutdown menu	Shutdown
21.	Press 6 two times for Stop Time menu	Stop Time
22.	Press 6, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit # -Save
23.	Press # to save the time	New Time *-Exit 6-Edit
24.	Press * two times to return to Shutdown menu	Shutdown
25.	Press 2, 3 or 4 to edit Intervals 2, 3 or 4	IntervalX
26.	Press 9 for Enable menu (Enable must be on to start shut down)	Enable (Current Setting) *-Exit 9-Edit
27.	Press # to save the setting	Lighting (New Setting) *-Exit 8-Edit
28.	Press * five times to exit to Sales Mode	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 6 for Energy Savings	Energy Savings
5.	Press 1 for Interval1 (2 for Interval2, and so on)	Interval1
6.	Press 4 for Day menu	Day
7.	Press 1 for All Days	All Days (Current Setting) *-Exit 1-Edit
8.	Press 1 to toggle All Days ON/OFF	All Days (New Setting) *-Exit # -Save
9.	Press # to save the setting	All Days (New Setting) *-Exit 1-Edit
10.	Press 2 to toggle Monday ON/OFF	Mon (Choice Flashing) *-Exit 2-Edit
11.	Press # to save the setting	Mon (New Setting) *-Exit 2-Edit
Use numbers 3-8 to complete the other days of the week using steps 10 and 11.		
12.	Press * two times to return to Interval1 menu	Interval1
13.	Press 5 two times for Start Time menu	(Current Time)

		*-Exit 5-Edit
14.	Press 5, then enter Start Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
15.	Press # to save the time	New Time *-Exit 5-Edit
16.	Press * two times to return to Energy Savings menu	Energy Savings
17.	Press 6 two times for Stop Time menu	Stop Time
18.	Press 6, then enter Stop Time in 24-hr time (HH:MM)	New Time *-Exit #-Save
19.	Press # to save the time	New Time *-Exit 6-Edit
20.	Press * to return to Interval1 menu	Interval1
21.	Press 7 to enter Storage Temp (default is 62° F)	Storage (Current Temp) F *-Exit 7-Edit
22.	Press 7 to set Storage Temp (36° F to 62° F)	Storage (Choice Flashing) F *-Exit #-Save
23.	Press # to save the setting	Storage (New Temp) F *-Exit 7-Edit
24.	Press * once to return to Interval1 Menu	Interval1
25.	Press 8 for Lighting menu	Lighting (Current Setting) *-Exit 8-Edit
26.	Press 8 to toggle Lighting ON/OFF <i>Lighting ON turns off lights during Energy Saving interval</i> <i>Lighting OFF leaves lights on during Energy Saving interval</i>	Lighting (Choice Flashing) *-Exit 8-Edit
27.	Press # to save the setting	Lighting (New Setting) *-Exit 8-Edit
28.	Press * five times to exit to Sales Mode	0.00

PAIR

This function allows two adjacent motors to run at the same time so that large, wide items can be accommodated. A coil and rail change is also required. See Combining Selections section of this manual for more information.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 7 for Pair menu	Pair - - - *-Exit
5.	Enter the first motor number	Pair 013 to --- *-Exit #-Add
6.	Press # and enter the 2 nd motor number	Pair 013 to 015 *-Exit #-Save
7.	Press * two times to add another pair of motors or	Pair - - - *-Exit #-Save
8.	Press * five times to exit to Sales Mode	0.00

DEGREES

This function allows you to change from Fahrenheit to Celsius.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 6 for Password (Advanced Features) Menu	Password
3.	Enter Password (default 2314)	Advanced Features
4.	Press 8 for Degrees menu	Degrees - - - *-Exit 8-Edit
5.	Press 8 to Edit	Toggle between F and C
6.	Press # to save or * to Exit	Degrees - - - *-Exit #-Save
7.	Press * five times to exit to Sales Mode	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 7 for Motor count display menu	Motors (Count Flashes)
3.	Press * to exit to Sales Mode	0.00

8. SELECTION

This function tests the motor on one specified selection.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 8 for Selection motor test menu	Selection: --
3.	Enter selection to test and wait	Selection: (Current Selection) *-Delete
4.	Repeat for any other selections or	Selection: (New Selection) *-Delete
8.	Press * to exit to Sales Mode	0.00

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.

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **
2.	Press 9 for Selection motor test menu	Selection: (First Selection) *-Stop
3.	Press * to exit to Sales Mode	0.00

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

STEP		DISPLAY
1.	Press Service Mode Button	Motor Count or Error Code **

2.	Press 0 for Test Modes	Test Modes
3.	Press 1 to test relays; then press 1-6 to test each relay. Press 2 for vend sensor alignment test. Press 3 then password 2314 for log. NOTE: Do not use unless requested by trained personnel. Press 4 and toggle ON/OFF to show errors when door opens. Press 5 for Manual Defrost, which will enable you to set a manual defrost period for the machine. NOTE: Do not use unless requested by trained personnel.	Test Modes 1 through 5
4.	Press * to exit to Sales Mode	0.00

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 (Refrigerated Models Only)

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	The vend sensor is blocked, out of alignment or not detected.	Check sensor and sensor harness for open connections. Check for sensor readings. Replace sensor if necessary.

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 Acpt 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.

NOTE: Errors are cleared after the problem detected has been resolved.

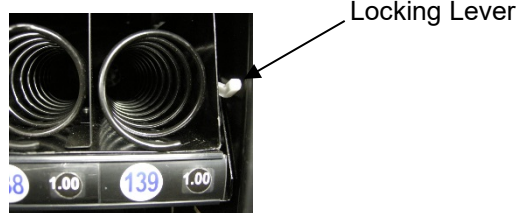
DELIVERY SYSTEM

Your vendor consists of the Keypad, 2 Line VF Display, Driver Motors, Product Trays, Helix Coils and Delivery Bin. The customer inserts money and enters their selection on the Keypad. The selection's Driver Motor turns the Helix Coil that vends the product into the Delivery Bin.

PRODUCT TRAYS

Your vendor features lock and release product trays. On the right side of each product tray you will find a Locking Lever (Fig. 14). To pull out the Product Tray, push down on the Locking Lever and roll toward you to load position.

Fig. 14



PRICE SCROLLS AND SELECTION LABELS

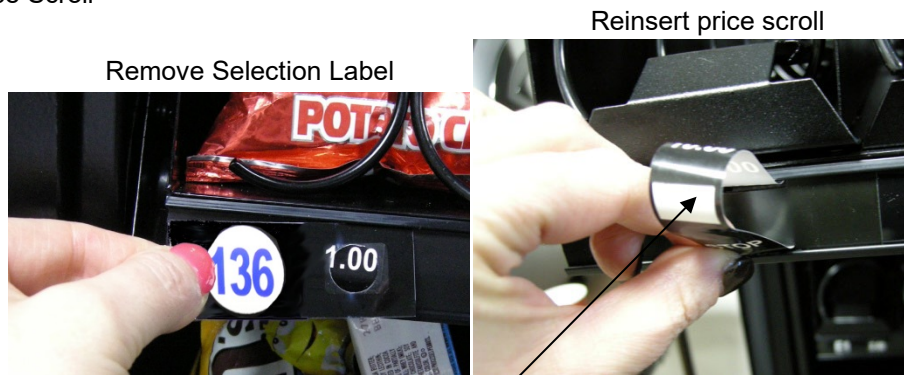
Price scrolls are fitted to each tray position. To adjust the pricing display, use your thumb or finger to rotate the scroll to show the desired price (Fig. 15). Note: this does not change the price of the item but only the display. The actual price must be changed via the service mode menus detailed in this manual. Note that there is a blank, white square at the end of the scroll case you need to write in a price not printed on the scroll.

Fig. 15 – Adjustment of Price Display



Note that the word “STOP” showing in the price display is an indication that you should stop rotating the scroll as the end has been reached. Should the scroll end become disengaged from the tray, simply remove the Selection Label and reinsert the scroll end. Rotate the scroll to the proper position and replace the Selection Label.

Fig. 16 – Replace Price Scroll



Blank white squares are available on the price scrolls just before the STOP indicator for custom pricing.

VIGILANT VEND SENSOR SYSTEM

The Vigilant system is a series of infrared sensors that send a beam of light across the delivery bin. If this beam is broken by a product, the machine knows that an item was delivered to the customer. If this beam is not broken, the machine assumes that nothing was vended and turns the selection spirals by $\frac{1}{4}$ turns until a product delivery is sensed. If, after the coils have turned a full revolution back to home without delivering a product, the customer will be asked to make another selection or to press the Coin Return button to receive their money back.

Certain products can be problematic for any vend sensing system. Products that are very thin or very small in size may, on occasion, miss the beams. With proper loading of the machine, sensing systems are irrelevant. A comfort level is provided to customers who walk up to the machine and know, through technology, they will not experience a “rip-off”. For this reason, a vend sensor system is desirable – however, if you vend very small or very thin items, you may want to consider turning off your sensing system in case of malfunction via product size. See the Service Mode section of this manual, Advanced menu, Rows and Columns sub-menu, for instructions.

The Vigilant sensors are located inside the delivery bin as shown in Figure 17. There is a red indicator light located on the left side when viewing the bin from the inside with the door open. This light should be lit when the system is on, indicating that there is power to the system. Blocking any of the beams turns off the red indicator light, which means the system is working correctly.

Fig. 17 Vend Sensor System



Note: When performing Motor Tests without product loaded, it is a good idea to shut off the Vigilant system.

TROUBLESHOOTING

1.

NO DISPLAY ON THE FRONT PANEL

- a. Harness may be unplugged
- b. Transformer fuse tripped
- c. Restart machine
- d. Faulty display harness
- e. Display board defective

2.

SELECTION WILL NOT VEND

- a. Disconnected tray wire harness
- b. Detection system may be blocked, if enabled
- c. Vend mechanism binding on tray
- d. Product jammed
- e. Tray or Motor connection unplugged or faulty connection
- f. Defective motor

3.

MULTIPLE VENDS FROM ONE SELECTION

- a. Detection system malfunction, if enabled
- b. Defective motor switch
- c. Detection system may be blocked, if enabled

4.

MULTIPLE VENDS MORE THAN ONE SELECTION SIMULTANEOUSLY

- a. Defective motor

- b. Motor harness not plugged into the vend motor correctly
- c. Defective or damaged motor interface board [KS11]
- d. Tray cable faulty

5. **UNIT WILL NOT ACCEPT MONEY**

- a. All Prices are set to zero or machine is set to Free Vend
- b. Will not accept bill if coins in coin changer below the minimum level
- c. 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.

7. **MACHINE WILL NOT COOL**

- a. Press the "0" 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.

Q: I rearranged my trays and now some selections don't work. Display says Make Alternate Selection.

A: Enter the service mode, press "7" to home & count motors. The motors will now be automatically updated.

Q: My machine will not take in bills but accepts change ok.

A: Several options here but the most common especially when first setting up the machine is that there is not enough change in the changer. By looking at the display it will give you a clue as to what may be wrong. If the display reads "Please Insert Exact Money...." that indicates there is not enough change in the changer. Fill the coin tubes completely full. Completely full means you can't get any more change into the coin tube. Press the coin return button and the display should show Canceling. The display should now show "Please Insert Money....." without the word Exact.

Q: My machine still will not accept bills and the display does not indicate exact change.

A: If the validator takes in the bill partially but ejects it back out, that indicates that the bill may be unacceptable or the validator needs cleaning. Check for a jammed bill behind the bill box. Follow the validator manufacturer's recommendation for cleaning.

Q: My machine will accept \$1 bills but not \$5 bills.

A: This situation can depend on several factors. Make sure the bill validator is set to accept \$5 bills. The amount of change being reported in the changer must accommodate the highest vending price in the machine, so make sure the changer is full of change. If you are vending high priced items you may need to replace the changer with a larger capacity model.

Q: My machine will not accept the new \$5 bills.

A: Contact the bill validator manufacturer for upgrade instructions. Not accepting currency that has been changed due to a Federal Government mandate is not covered under our manufacturer's warranty.

Q: My machine will vend a product, display Vend Error then give my money back or allow me take make an alternate selection.

A: My machine will vend a product, display Vend Error then give my money back or allow me take make an alternate selection.

A: This indicates there is a problem detected with the vend motor. Each vend motor has a small micro switch inside that indicates when the motor has made one full revolution and returns back to what is referred to as the "home position". If this signal is not received back to the controller in a specified amount of time the controller will indicate an error and refund the money. The problem could be in an individual motor itself, the tray wire harness or any connection in between the tray to the control board. If the whole tray acts this way that usually indicates that the tray harness or any connection in between to the controller may be bad. If it is an individual motor, the motor count you see when entering service mode will not have the correct count. The easiest way to troubleshoot this situation would be to swap tray connections where the tray harness plug plugs into the machine. For example if the problem appears on tray 1, unplug tray 1 and tray 2 (assuming they both have the same number of selections), swap the connections and plug tray 1 into tray 2 receptacle and vice versa. Now do your test vending by selecting the tray 2 selections on the keypad and the tray 1 should operate. If the problem follows the tray then suspect either the motor or the tray cable harness. If the problem stays with the A receptacle and now the B tray exhibits the problem then the problem is in a connection somewhere between the A receptacle and the controller board. Make sure to examine any and all connections for any loose wires, etc.

Q: My display is dead or intermittent but the rest of the machine appears to be working.

A: Check the gray flat ribbon cable connection between the display and the controller board to insure the plugs are plugged in securely.

Q: My machine will not cool.

A:

1. Make sure the machine programming is set up properly. Factory setting is 39°F. Setting the machine any lower could cause the machine to freeze up.
2. Inspect the evaporator coil to see if it may be frozen over. Using a flashlight shine it into the evaporator fan located under the bottom tray. You are looking for aluminum fins behind the fan motor. If they are completely white or solid with ice this will keep the air from flowing properly and cause the machine to not cool. To thaw out remove the 4 prong condensing unit plug, not the evaporator fan plug and just close the door and let set for overnight to insure it completely defrosts. Be prepared in case the defrost water pan overflows on the floor. You may need to set some towels around and under the machine to catch any overflow. After the machine is thawed completely out you will want to check the temperature settings to insure they are not set too cold.
3. Check the door switch. The easiest test is to close the door, then while opening the door watch the display to see if you see the message No Errors and hear an audible beep. If you do not then suspect the door switch may need adjustment. You can reach over the door and press it manually while watching the display to see if it works.
4. As a manual test of the cooling system you can enter the Test Mode section of the menu and select the Test Relays function. Relay 1 controls the condensing unit, and Relay 2 controls the evaporator fan. If either one does not turn on while testing, then suspect a relay has quit working or connection has become loose.

CAUTIONS:

1. High voltage is located in the area of the unit and could cause injury or death.
2. Replacement of the bill acceptor, coin changer, front panel display, system control board or vend motors should only be performed by trained personnel with power disconnected from the vending machine.

DELIVERY SYSTEM

Your vendor consists of the VMC, Keypad, Display, Driver Motors, Product Trays, Coils and Delivery Bin. The customer enters their selection on the Keypad. The VMC signals the selection's Driver Motor to turn the Coil that vends the product into the Delivery Bin.

PRODUCT TRAYS

Your machine features lock and release product trays. On the right side of each product tray you will find a Locking Lever (Fig. 14). To pull out the Product Tray push down on the Locking Lever and roll toward you to tilt position. Or completely push the locking lever to the back.

Fig. 14



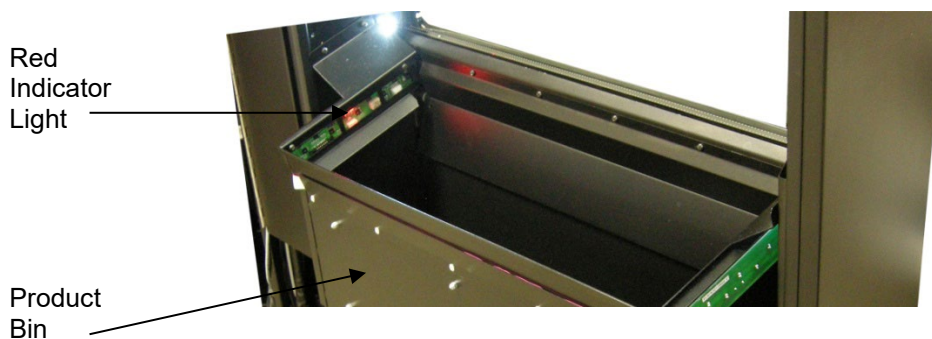
PRODUCT SENSOR

The product sensor system is a series of infrared sensors that send a beam of light across the delivery bin. If this beam is broken by a product, the machine knows that a product was delivered. If this beam is not broken, the machine assumes that nothing was vended and turns the selection spirals once.

Certain products can be problematic for any vend sensing system. Products that are very thin or very small in size or in clear packaging may, on occasion, miss the beams.

The product sensors, made up of the emitter (right) and detector (left) are located inside the delivery bin as shown in Figure 15. There is a red indicator light located on the left side when viewing the bin from the inside with the door open. This light should be lit when the system is on, indicating that there is power to the system. Blocking any of the beams turns off the red indicator light, which means the system is working correctly.

Fig. 15 Vend Sensor System



PRODUCT SENSOR INTERFERENCE

The light emitted by this system is infrared. The sensors have hoods that discourage outside light from getting into the detector, however there are times where external light may interfere. The red LED indicator light will continually blink on and off if the sensors are picking up interference. This usually results in the product not being sensed. If outside light interference is suspected, test the system by turning off the exterior lights or shielding the sensors with a cover (paper, cardboard, etc). Should you be unable to eliminate outside light interference sufficiently, it may be necessary to move the machine to another area in the room or turn the vend sensors off.

PRODUCT SENSOR ELECTRICAL SPECIFICATION

There are four (4) wires from the sensor to the VMC as described below:

Green	+24V DC	Vend Sensor Supply Voltage
Brown	Common	Common (Supply and signal return)
Grey	+5V DC	Signal Supply Voltage
Yellow	+5V DC	Signal output

CUSTOM CONFIGURATIONS AND OPTIONAL KITS

There are many thousands of products that can be placed in your IQ system for control purposes. Packaging, even between same or similar items, varies widely. The IQ system can be adapted for most items using special kits for different types of items. Additionally, the trays on the IQ system can be adjusted vertically to accommodate taller items.

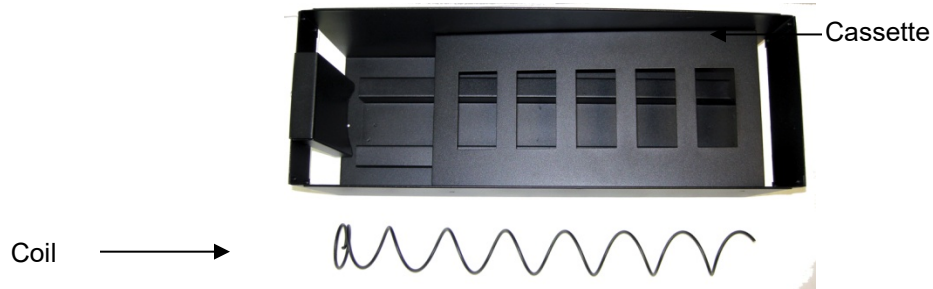
The chart below shows the most common conversions IQ system users experience in the field and the kits available to adapt the system. If your particular requirement does not fall into these categories, please contact Seaga Customer Care to discuss your options.

Description	Kit Required	Notes
3 columns to 1	Qty. 2 SAI330	
4 columns to 1	Qty. 2 SAI330	
5 columns to 1	Qty. 3 SAI330	
6 columns to 1	Qty. 3 SAI330	
Spray Can Kit	SA605	Requires tray height adjustment
9 Volt Battery Kit	SA600	
C-Cell Battery Kit	SA601	
D-Cell Battery Kit	SA602	
Small Blade Kit	SA603	For 5" or smaller blades or wheels.
Large Blade Kit	SA604	For 7.55" or smaller blades or wheels
Adhesive/Marking Kit	SA606	

The following information pertains to installing the various optional kits available for your IQ640. If you would like to order these kits or have any questions, please contact your equipment supplier or Seaga Customer Care.

OPTIONAL SPRAY CAN KIT INSTALLATION

In The Box



Tools Required

Needle Nosed Pliers
Phillips Screw Driver

Installation

1. The tray above where you will install your Spray Can Kit must be adjusted upward to accommodate the height of the cassette.
2. Remove the tray above by pushing the white tray release lever toward the back of the machine, unlocking the tray.



3. Slide the tray toward you slowly, lifting slightly when the wheel hits the first tray stop on the rail. At this point, reach back on the right side of the cabinet and unplug the tray harness.



4. Lay the tray harness plug on top of the tray you're removing and continue sliding the tray forward until it can be removed completely by lifting up slightly on the last tray wheel to free it from the side rails.
5. Use caution! The tray is heavy. Make sure you have room to set the tray down and/or a helper to assist you with the weight.
6. Unscrew the left side rail at the front and lift up and out. Relocate rail two notches up from the original position, insuring the rail is level from back to front.



7. Repeat for the right side rail.



8. Continue working with the tray removed for better visibility.
9. The Spray Can Kit is installed by converting 3 single selections into one using the cassette and coil in the kit.
10. Begin by unlatching the tray you want to install the Spray Can Kit on and sliding it forward until you feel the wheel reach the first tray stop.
11. With the needle nosed pliers, squeeze the ends of the Coil Drivers and pull the Coil Retaining Hubs and Coils toward you to remove. Remove on three adjacent selections.



12. Remove the two tray dividers by unscrewing the fastener located at the front of each divider and lifting up and off.

Remove Screws
and
Center Dividers



13. Install Spray Can Kit Cassette, using the divider hole to line up. Insert and re-use fastener from the center dividers to secure the cassette to the tray.

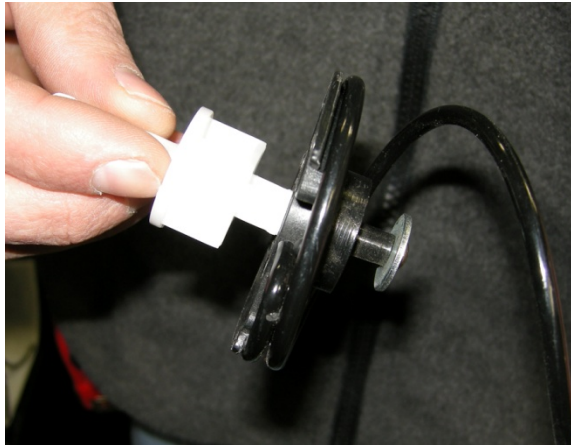
Line up and
Install Fastener



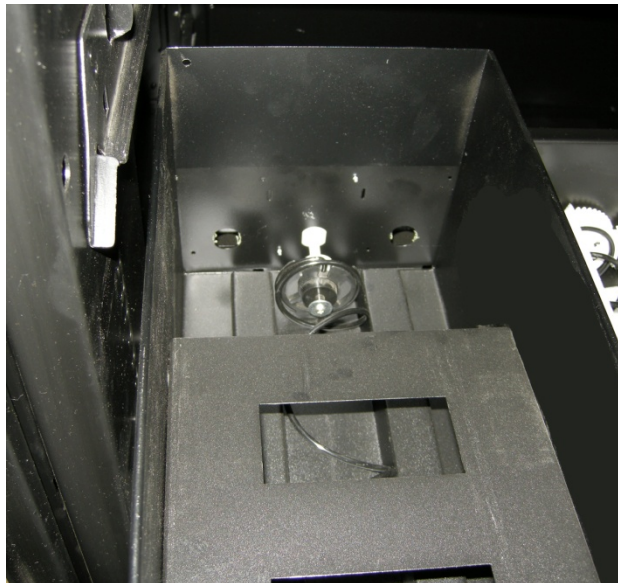
14. Snap Coil Retaining Hubs onto Coil.



15. Install Coil Driver into Coil Retaining Hub.



16. Install Coil, Retainer and Driver assembly into center motor of the three selections you just converted, insuring that end of coil is in the 9:00 position.



17. Slide newly converted tray back into place.

18. Reinstall tray above, keeping wire harness away from tray wheels and rails to avoid damage. Plug in tray harness.

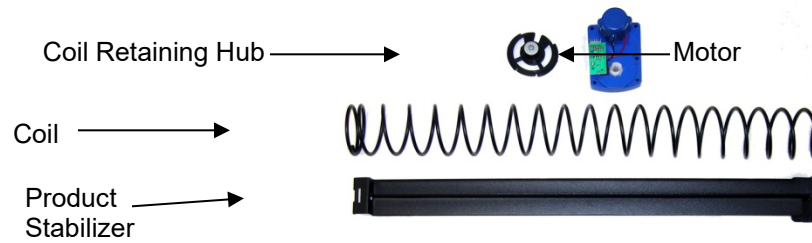
19. Load spray cans laying down in each section of the coil while lifting up the cassette loading platform. When all 6 spaces in the coils are loaded, close the cassette loading platform and load an additional 7 cans laying down to gravity feed as the coil stock is depleted.



Remove the two outer selection labels from the tray front. The new cassette will be identified as the selection number that was formerly the center of the three converted selections.

OPTIONAL BATTERY KIT INSTALLATION

In The Box



Tools Required

Needle Nosed Pliers
Phillips Screw Driver

Installation

1. Push down and hold the release latch located on the right side of the tray and slide the Product Tray toward you until it is in the Load Position.

Tray in Load Position



2. With the needle nosed pliers, squeeze the ends of the Coil Driver and pull the Coil Retaining Hub and coil toward you to remove.



3. Push down and hold the release latch located on the right side of the tray and lift the Product Tray slightly to clear the first tray stop only.
4. Slowly slide the Product Tray toward you and down until it is in the Maintenance Position.

Tray in Maintenance Position

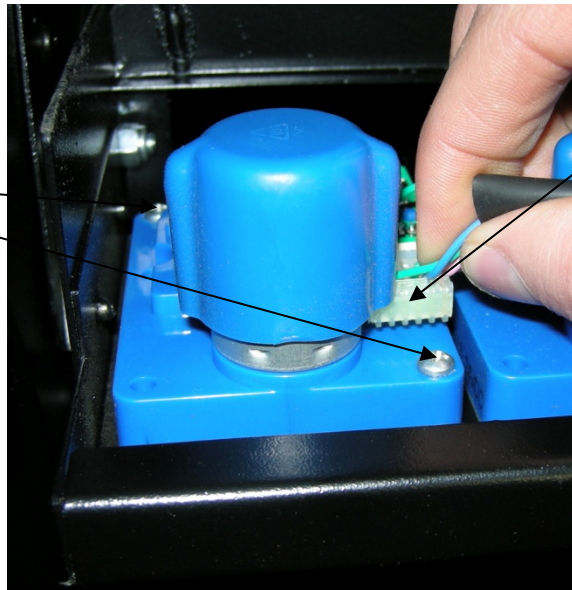


5. Using the needle nosed pliers, gently press on the back of the Coil Driver to remove it from the Motor.



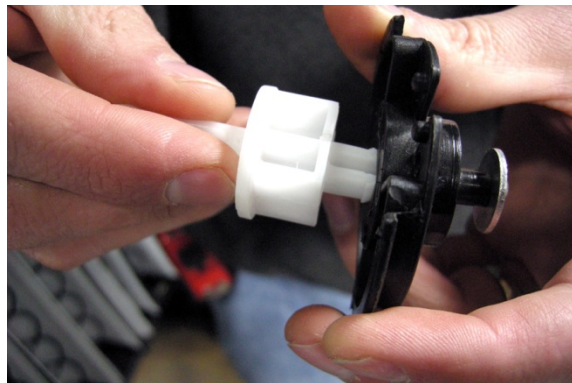
6. Remove two (2) screws fastening motor to tray back and unplug wire harness.

Remove two
(2) screws

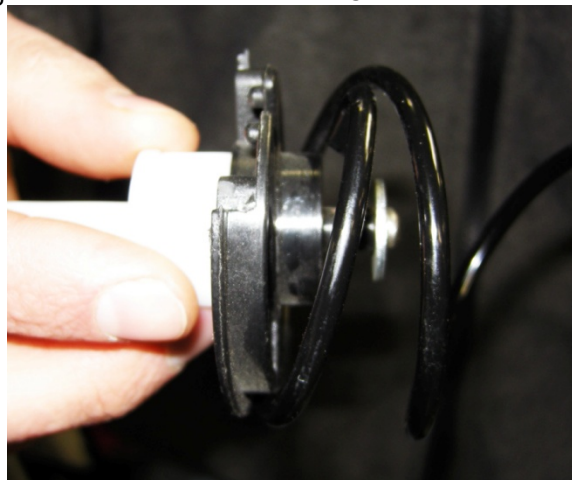


Unplug Wire Harness

7. Install kit motor using the two screws removed previously and plugging in the wire harness. This motor may look the same as the current motor, but it has been modified to turn only 180 degrees for use with smaller product sizes such as batteries.
8. Insert the Coil Driver into the new Coil Retaining Hub.

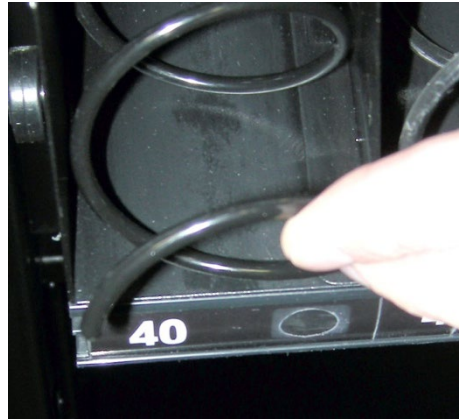


9. Snap the new Coil Retaining Hub into the end of the new Coil.



10. Lift tray and slide back into Load Position, insuring that the Tray Wheels are engaged in the Rails.

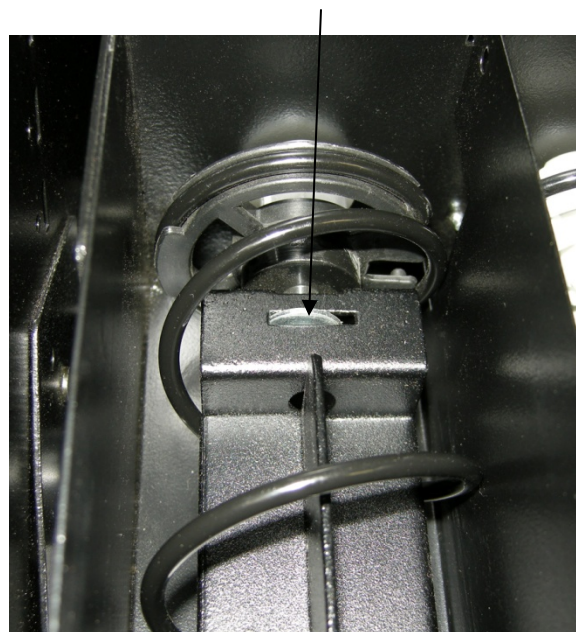
11. Install the newly assembled coil, hub and driver into the motor through the back of the tray, insuring the end of the coil is in the Home Position (approximately 9:00).



12. Slide stabilizer into coil, hooking slot over the washer on the Coil Retaining Hub.



Slot in Stabilizer Hooks Over Washer in Coil Retaining Hub



13. Install a fastener screw at the front of the stabilizer to secure.



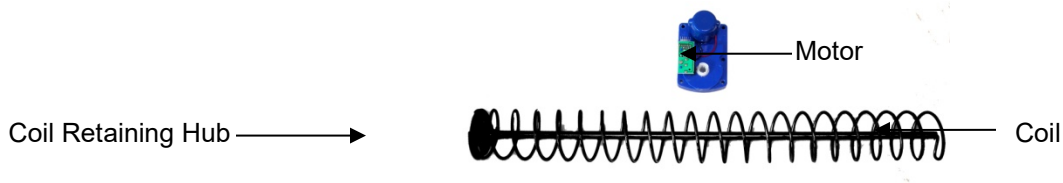
Install fastener screw

14. Load batteries on each side of the Stabilizer as shown, insuring they are facing forward and undamaged to avoid product jams.



OPTIONAL ADHESIVE/MARKING KIT INSTALLATION

In The Box



Tools Required

Needle Nosed Pliers
Phillips Screw Driver

Installation

1. Push down and hold the release latch located on the right side of the tray and slide the Product Tray toward you until it is in the Load Position.

Tray in Load Position



2. With the needle nosed pliers, squeeze the ends of the Coil Driver and pull the Coil Retaining Hub and coil toward you to remove.



3. Push down and hold the release latch located on the right side of the tray and lift the Product Tray slightly to clear the first tray stop only.
4. Slowly slide the Product Tray toward you and down until it is in the Maintenance Position.

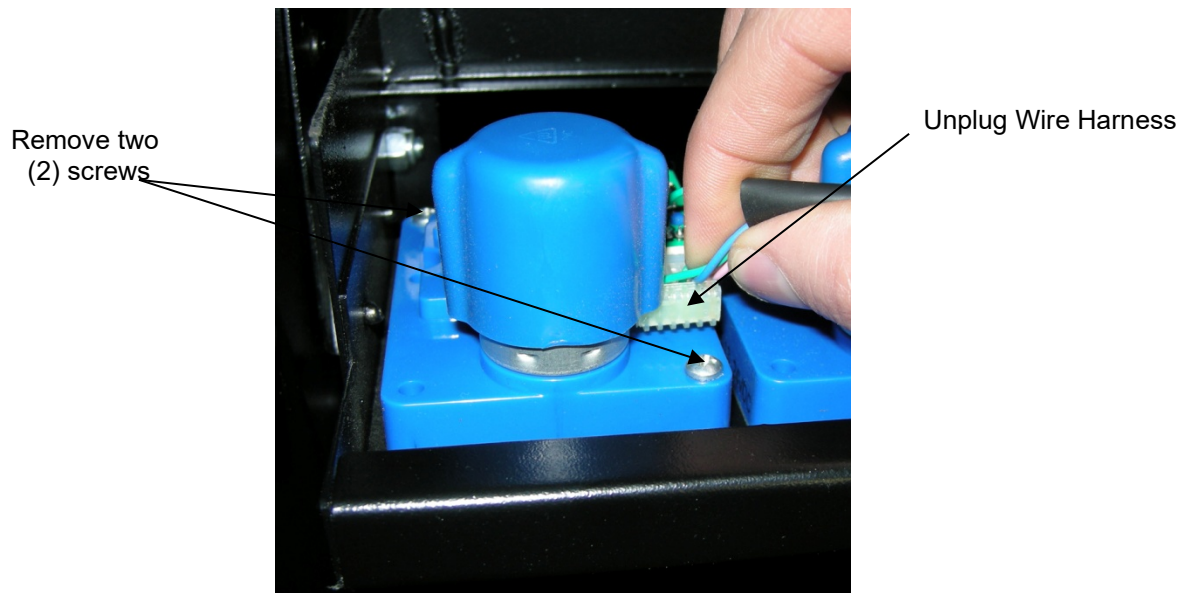
Tray in Maintenance Position



5. Using the needle nosed pliers, gently press on the back of the Coil Driver to remove it from the Motor.



6. Remove two (2) screws fastening motor to tray back and unplug wire harness.

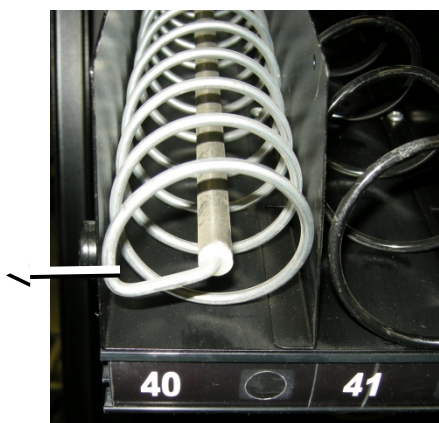
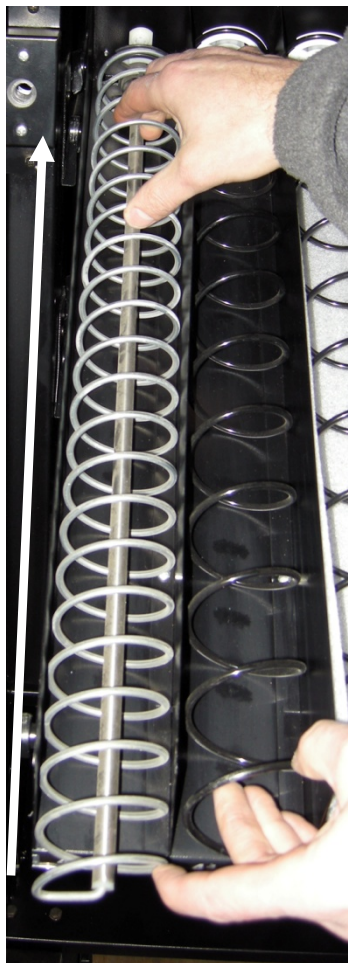


7. Install kit motor using the two screws removed previously and plugging in the wire harness. This motor may look the same as the current motor, but it is a custom design to turn only 180 degrees for use with smaller product sizes such as batteries.
8. Insert the Coil Driver into the new Coil Retaining Hub and Coil.



9. Lift tray and slide back into Load Position, insuring that the Tray Wheels are engaged in the Rails.

10. Install the newly assembled coil, hub and driver into the motor through the back of the tray, insuring the end of the coil is in the Home Position (approximately 9:00).

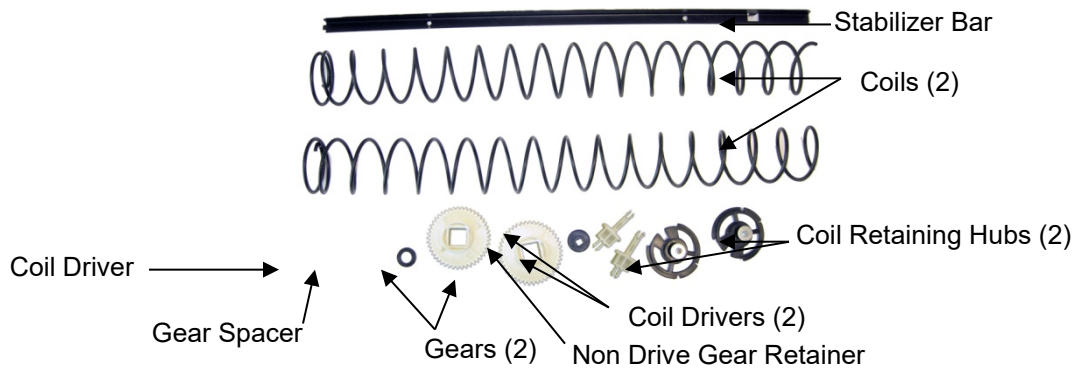


11. Load adhesives or marking/paint pens on each side of the Coil Divider as shown, insuring they are facing forward and undamaged to avoid product jams.



OPTIONAL LARGE BLADE KIT INSTALLATION

In The Box



Tools Required

Needle Nosed Pliers
Phillips Screw Driver

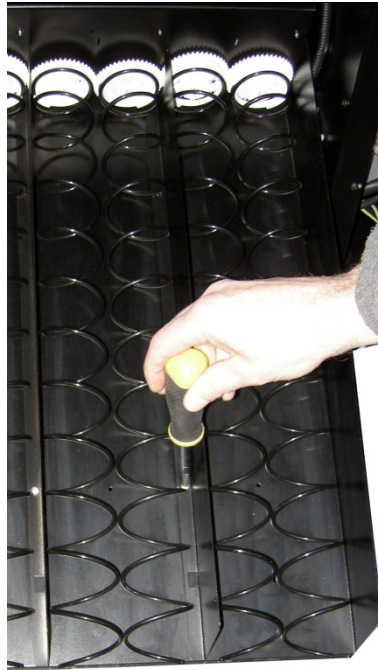
Installation

1. Push down and hold the release latch located on the right side of the selected tray and slide the Product Tray toward you until it is in the Load Position.

Tray in Load Position



2. If converting a dual selection, one of the coils in the next selection must also be removed. Start by removing the divider.



3. Remove the third (right) coil and coil driver by using the needle nosed pliers to squeeze the ends of the coil driver. Pull the coil and coil driver toward you to remove.

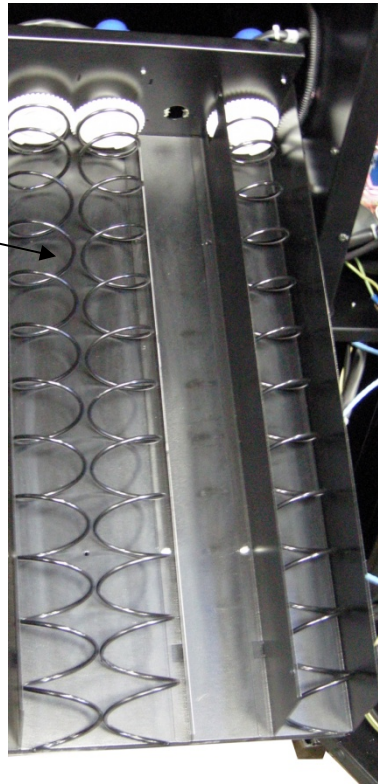


4. Reinstall the divider, creating a single selection to the right of your large blade selection.



5. Install the stabilizer bar and screw from the kit in the area where the divider was previously.

Stabilizer Bar



Note: To convert three single selections, remove both dividers and the right most coil as shown in steps 1 through 3.

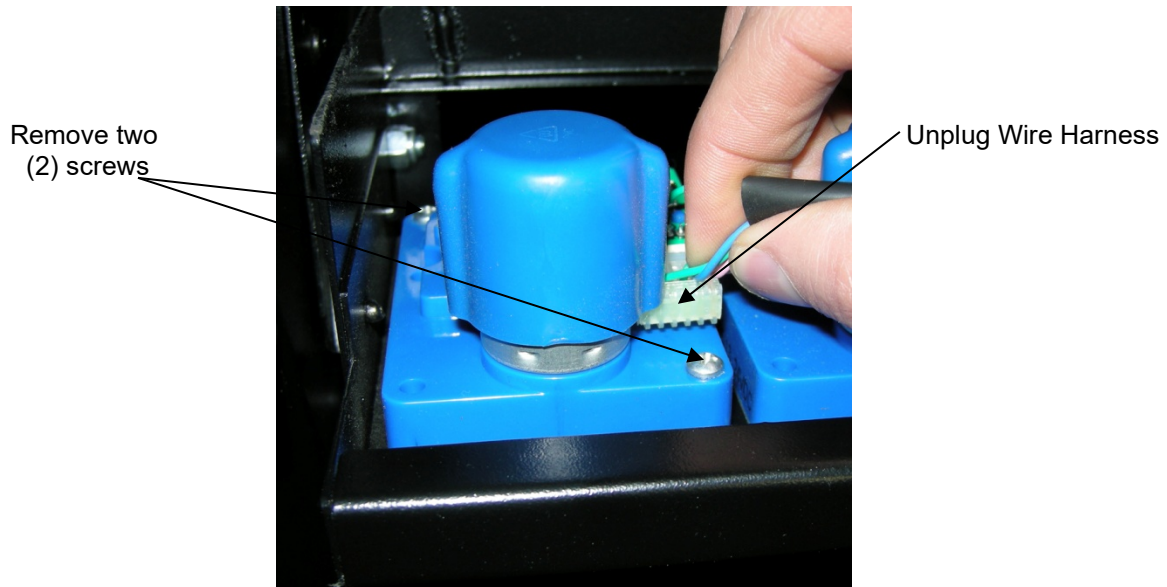
6. Next, push down and hold the release latch located on the right side of the tray and lift the Product Tray slightly to clear the first tray stop only.
7. Slowly slide the Product Tray toward you and down until it is in the Maintenance Position.
8. Tray in Maintenance Position



9. Using the needle nosed pliers, gently press on the back of both Coil Drivers to remove them from the Motors.



10. On the left motor of the two selections you are converting to a dual selection, remove two (2) screws fastening motor to tray back and unplug wire harness. Remove motor.



11. Continue by installing the Coil Drivers into the Gears.



12. On one of the Gears, which will be installed on the left side of the dual selection, install the Spacer onto the post of the coil driver. Note: This will be installed inside the tray as shown in #13 below.



Note: It is very important to install the spacer in the tray with the flat sides of the spacer aligned into the grooves **INSIDE** the tray to prevent rotation of the spacer.

Align flat sides with grooves **INSIDE** the tray



13. Install Gears and Drivers on back of Tray, using the Non Drive Gear Retainer to install the Gear with Spacer on the left side:



14. Then install the gear into the motor on the right side, making sure teeth on the two gears mesh properly.



15. Continue with step 5 to complete.

16. Note: as one motor has been taken out of service, you must go into Service Mode on the VMC and run the Motor Home and Count (or Hardware, Motor Count on some VMCs) for proper operation of your new dual coil selection.

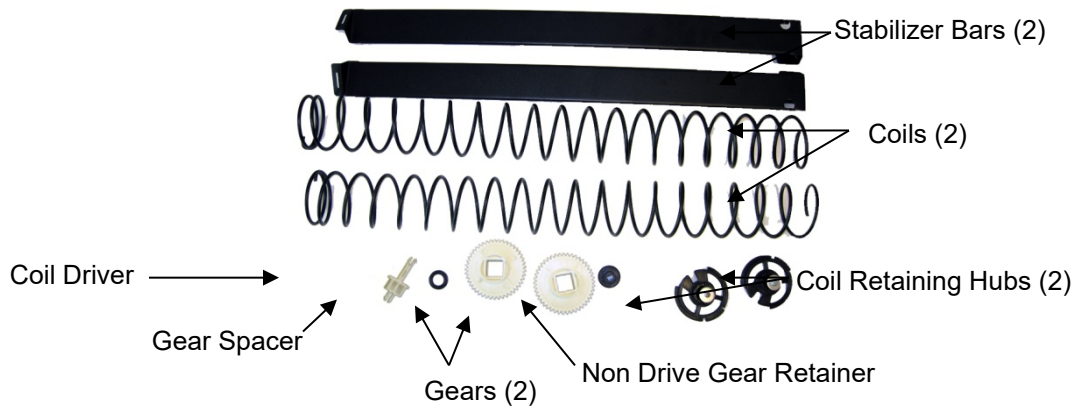
17. The selection identification label on the left should be removed, as the new dual selection will be identified on the VMC as the selection on the right side of the new dual space.

Note: Load blades as shown below, with the bottoms resting on the product tray and the right sides riding along the stabilizer bar.



OPTIONAL SMALL BLADE KIT INSTALLATION

In The Box



Tools Required

Needle Nosed Pliers
Phillips Screw Driver

Installation

1. Push down and hold the release latch located on the right side of the selected tray and slide the Product Tray toward you until it is in the Load Position.

Tray in Load Position



2. If converting a dual selection to this kit, start by removing the Coils and Coil Retaining Hubs with needle nosed pliers, squeeze the ends of the Coil Driver and pull the Coil Retaining Hub and coil toward you to remove.



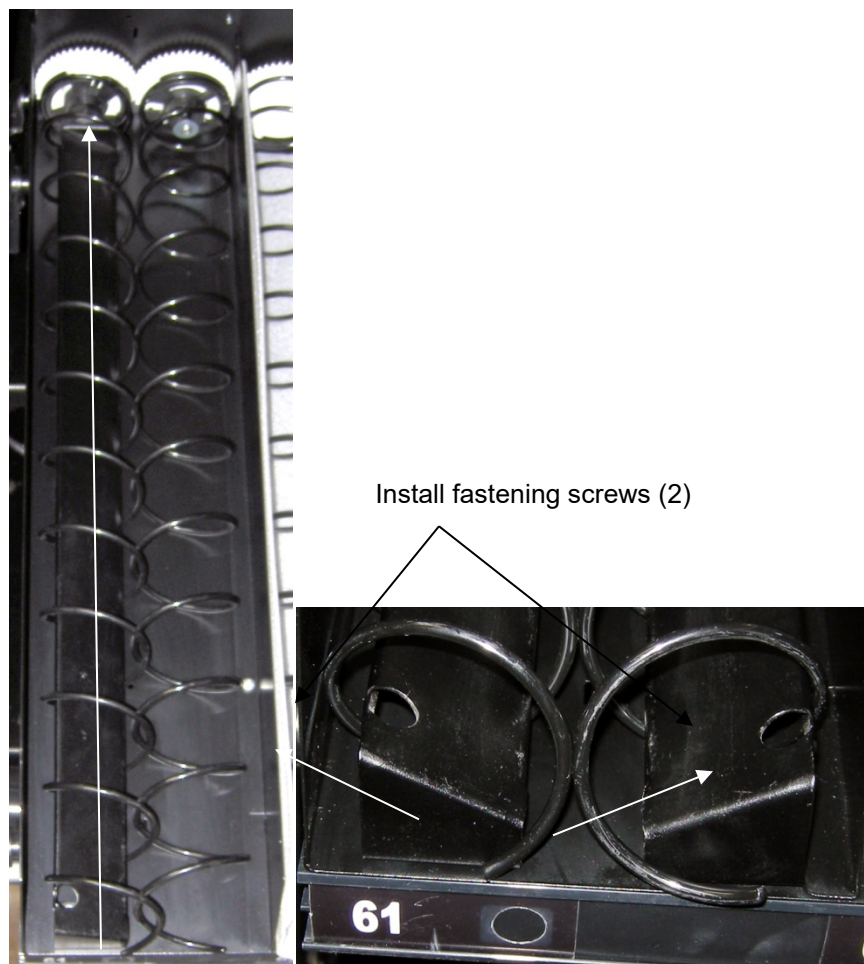
3. Snap new Coil Retaining Hubs into the ends of the new coils.



4. Install new coils with the ends at approximately the 6:00 position.



5. Install Left and Right Product Stabilizer Bars to create a “vee” shape as shown, hooking the slot in the back of the Product Stabilizer Bars into the washer on the Coil Retaining Hub.
6. Install fastening screws down through holes in the end of the Product Stabilizer Bars.



7. Load small blades resting between the coils and on the stabilizer bars, insuring they are facing forward and undamaged to avoid product jams.



Note: to convert two single selections into a dual selection for this kit, follow steps 1, 2 and 3 for each selection to be converted, removing Coils and Coil Retaining Hubs. Additionally, you must remove the Center Divider from between the two selections:

Remove Screw
and Center
Divider



8. Next, push down and hold the release latch located on the right side of the tray and lift the Product Tray slightly to clear the first tray stop only.
9. Slowly slide the Product Tray toward you and down until it is in the Maintenance Position.
10. Tray in Maintenance Position

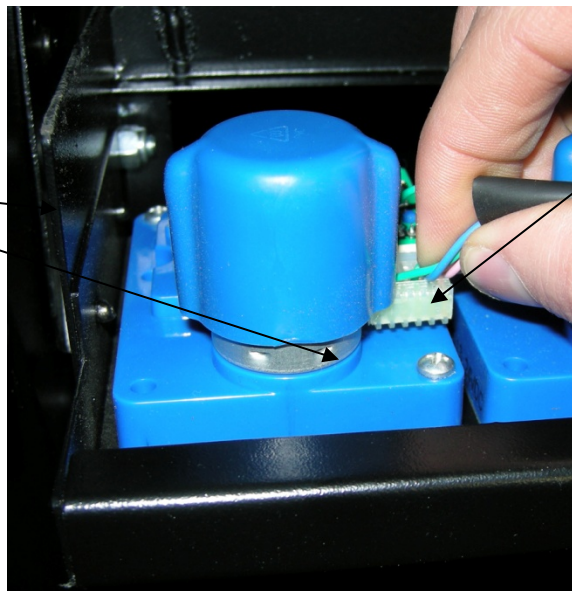


11. Using the needle nosed pliers, gently press on the back of both Coil Drivers to remove them from the Motors.



12. On the left motor of the two selections you are converting to a dual selection, remove two (2) screws fastening motor to tray back and unplug wire harness. Remove motor.

Remove two
(2) screws



Unplug Wire Harness

13. Continue by installing the Coil Drivers into the Gears.



14. On one of the Gears, which will be installed on the left side of the dual selection, install the Spacer onto the post of the coil driver.

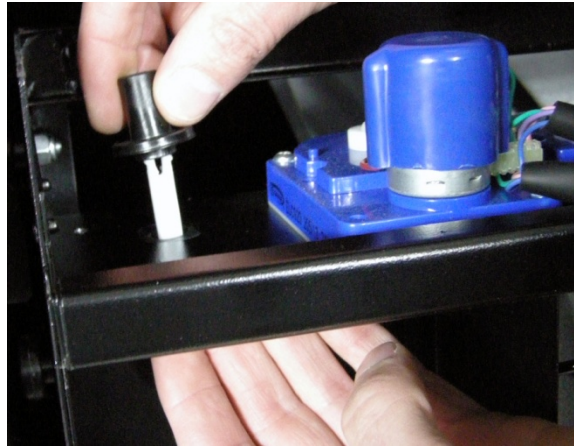


Note: It is very important to install the spacer in the tray with the flat sides of the spacer aligned into the grooves in the tray to prevent rotation of the spacer.

Align flat sides with grooves in tray



15. Install Gears and Drivers on back of Tray, using the Non Drive Gear Retainer to install the Gear with Spacer on the left side:



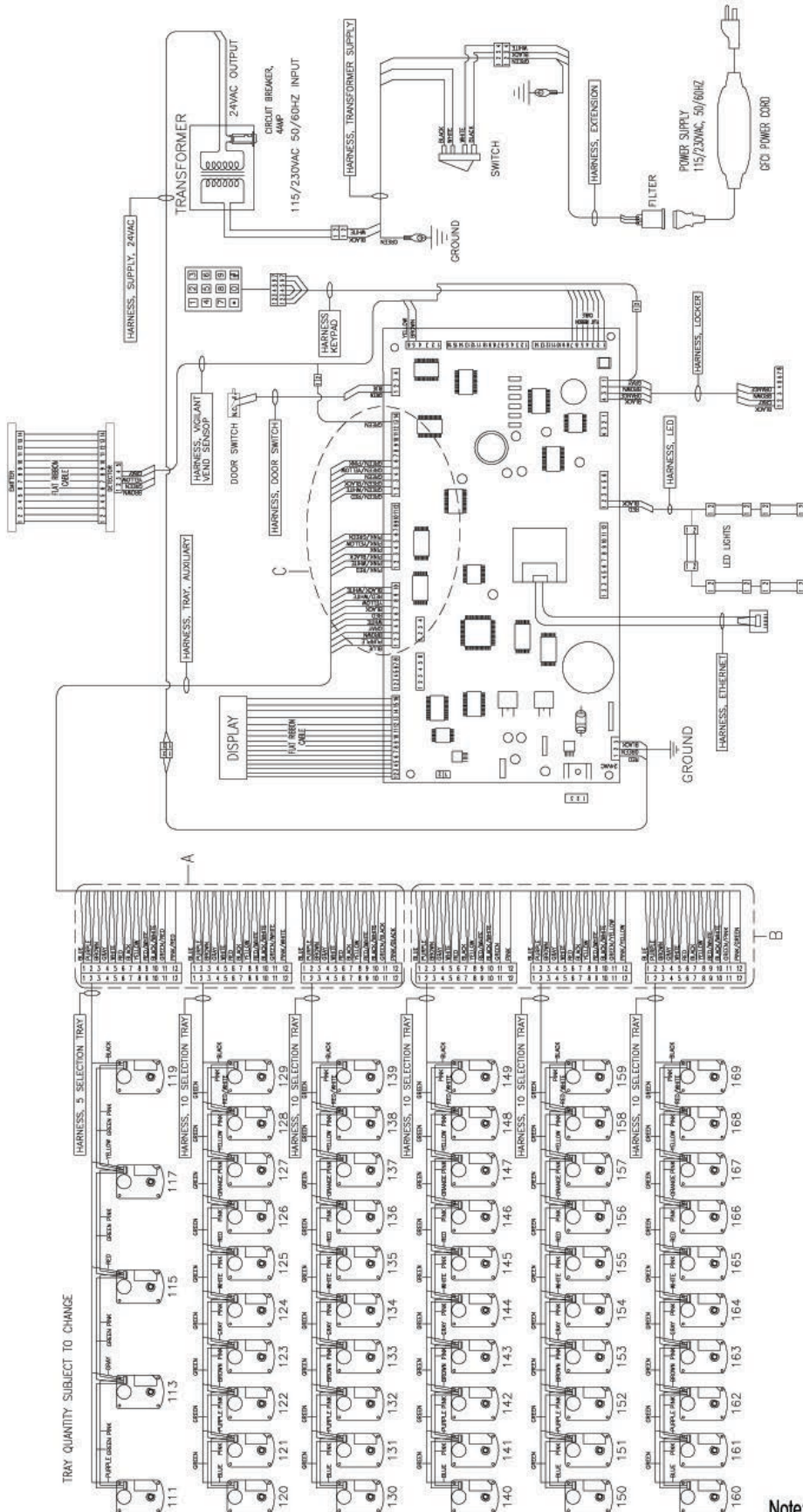
16. Then install the gear into the motor on the right side, making sure teeth on the two gears mesh properly.



17. Continue with steps 4 through 7 to complete.
18. Note: as one motor has been taken out of service, you must go into Service Mode on the VMC and run the Motor Home and Count (or Hardware, Motor Count on some VMCs) for proper operation of your new dual coil selection.

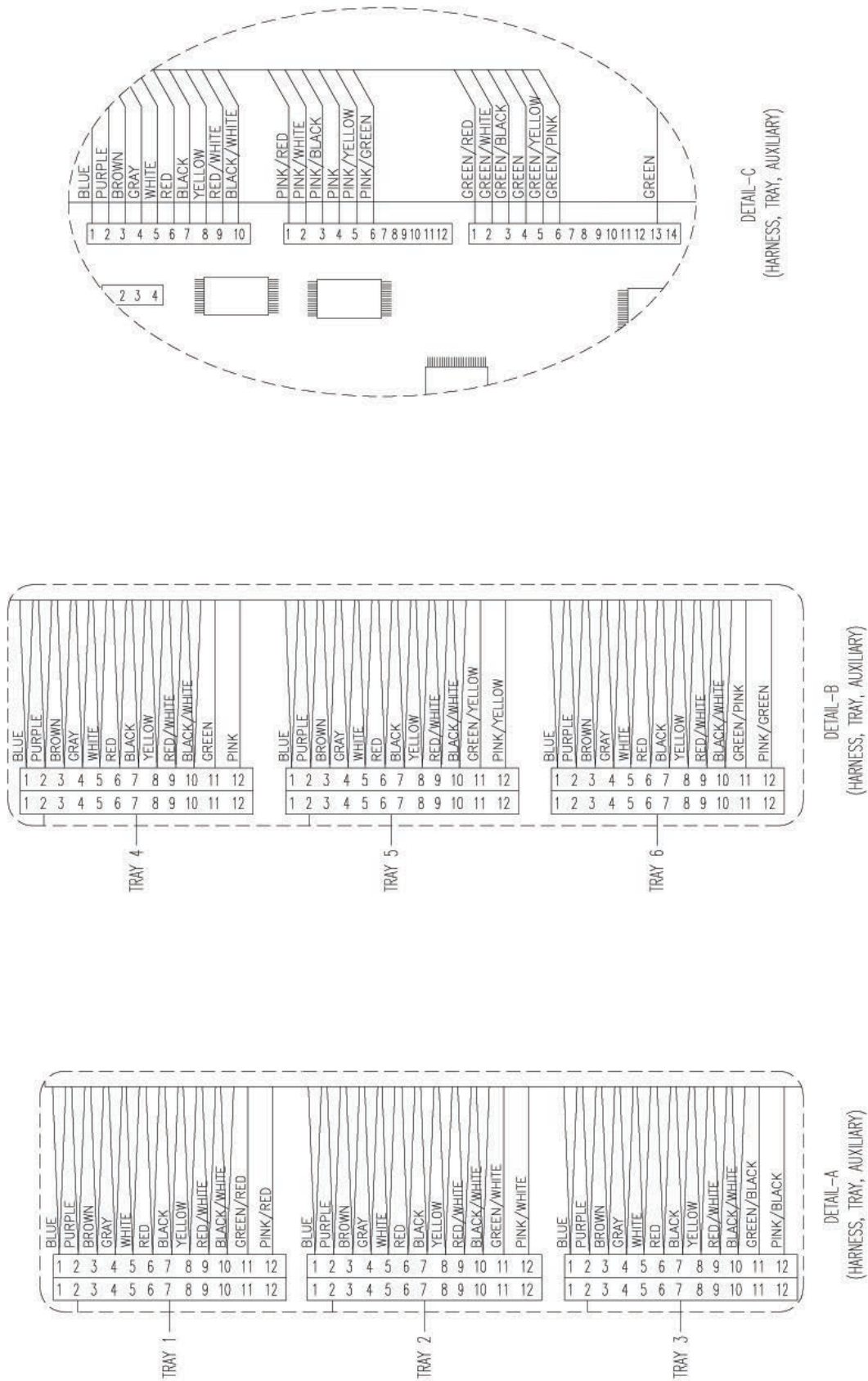
The selection identification label on the left should be removed, as the new dual selection will be identified on the VMC as the selection on the right side of the new dual space

WIRING DIAGRAM IQ640 MODEL

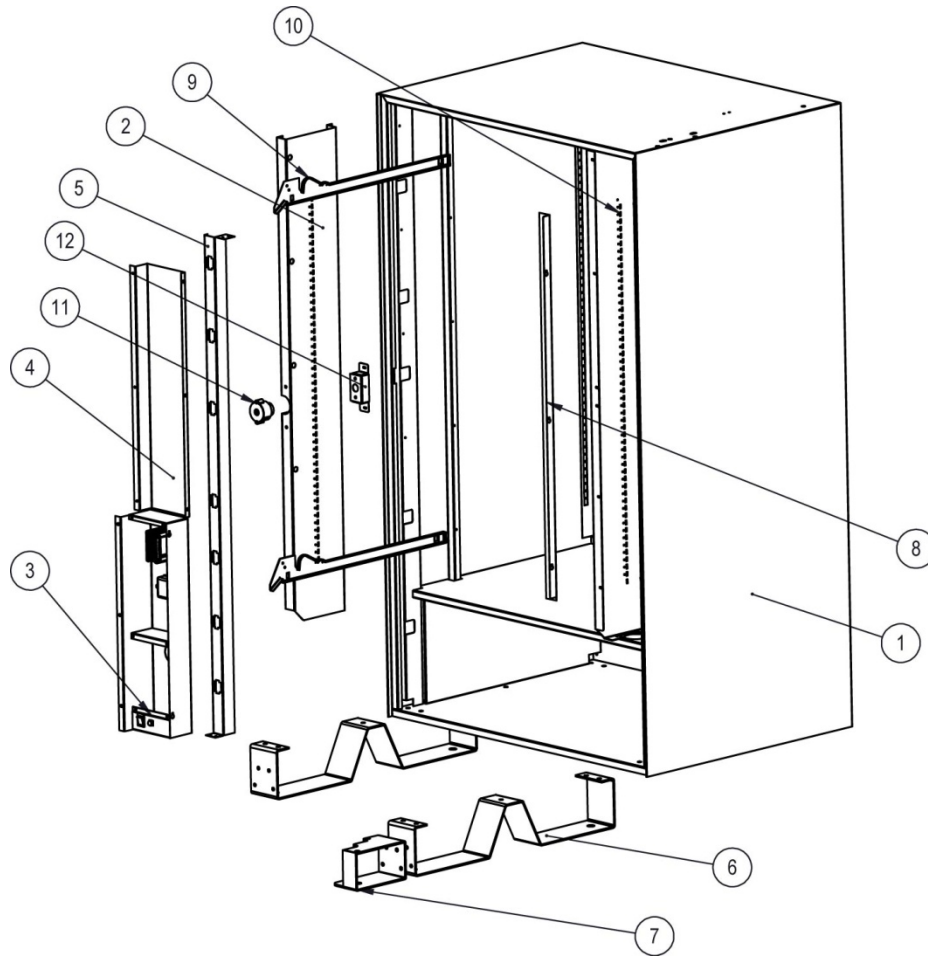


Note: For detailed views at A, B, and C,
please refer page 2

WIRING DIAGRAM IQ640 MODEL

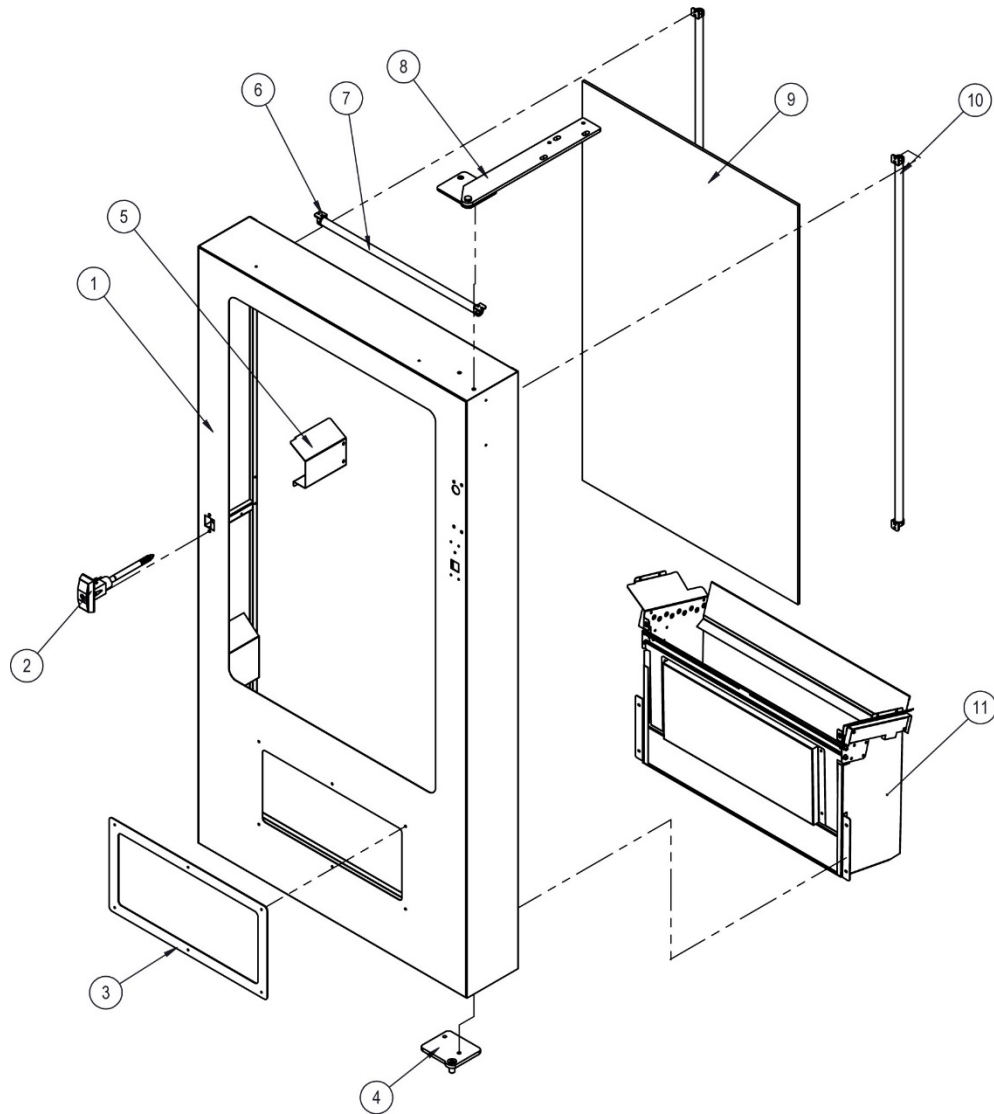


CABINET ASSEMBLY



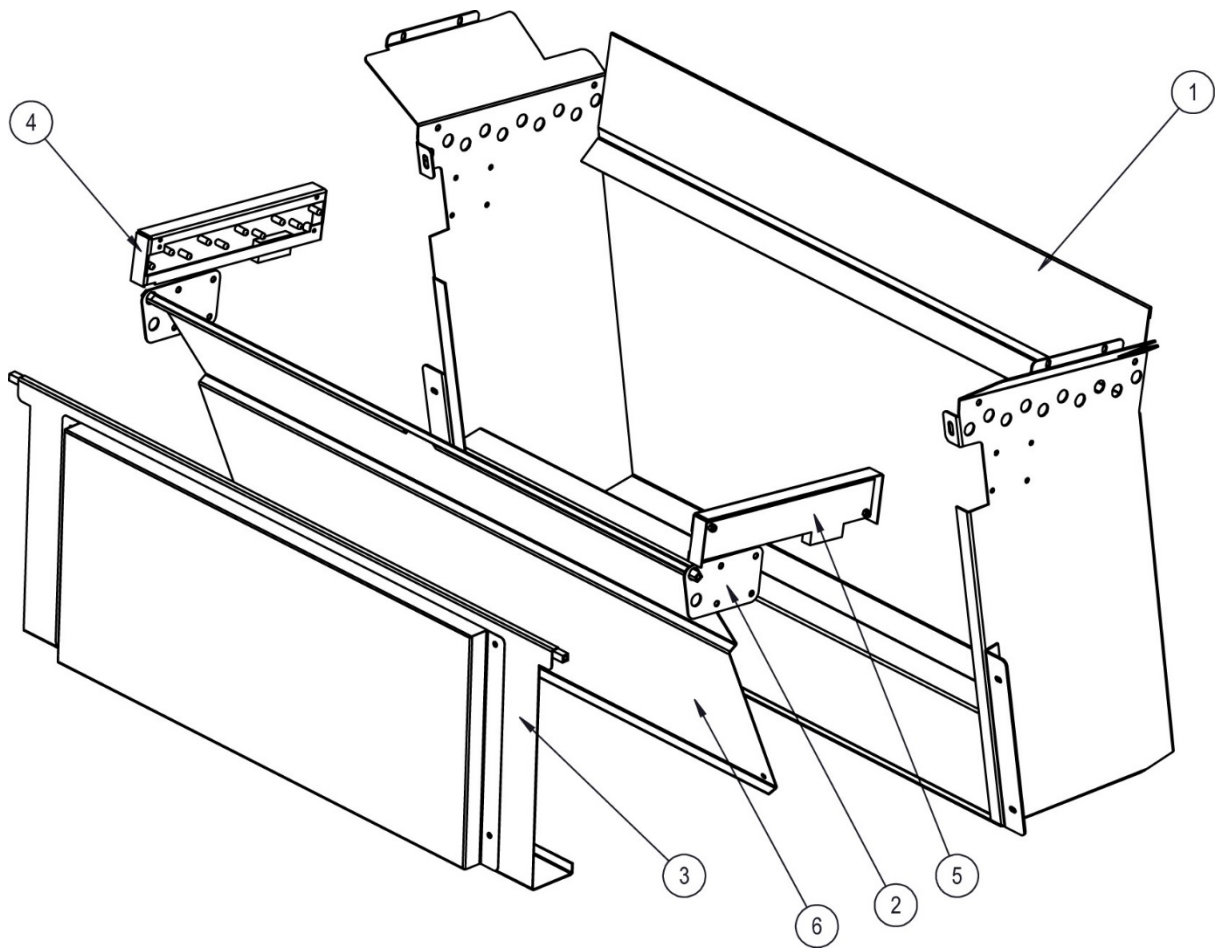
ITEM	PART NO.	DESCRIPTION
1	SAI88002A	CABINET
2	STI70035	BRACKET, LEFT FRONT
3	SAI88004	ASSEMBLY, ELECTRICAL BOX
4	STI70039	PANEL, WIRING DIAGRAM
5	STI70091	BRACKET, TRAY CONNECTOR
6	STI573A	LEGS
7	SAI778	SUPPORT, DOOR
8	STI87062	STOPPER, TRAY
9	STI900	RAIL, TRAY LEFT
10	STI901	RAIL, TRAY RIGHT
11	HAC910	SPLIT NUT, T-HANDLE LOCK
12	STI57038	BRACKET, SPLIT NUT MOUTNING

DOOR ASSEMBLY



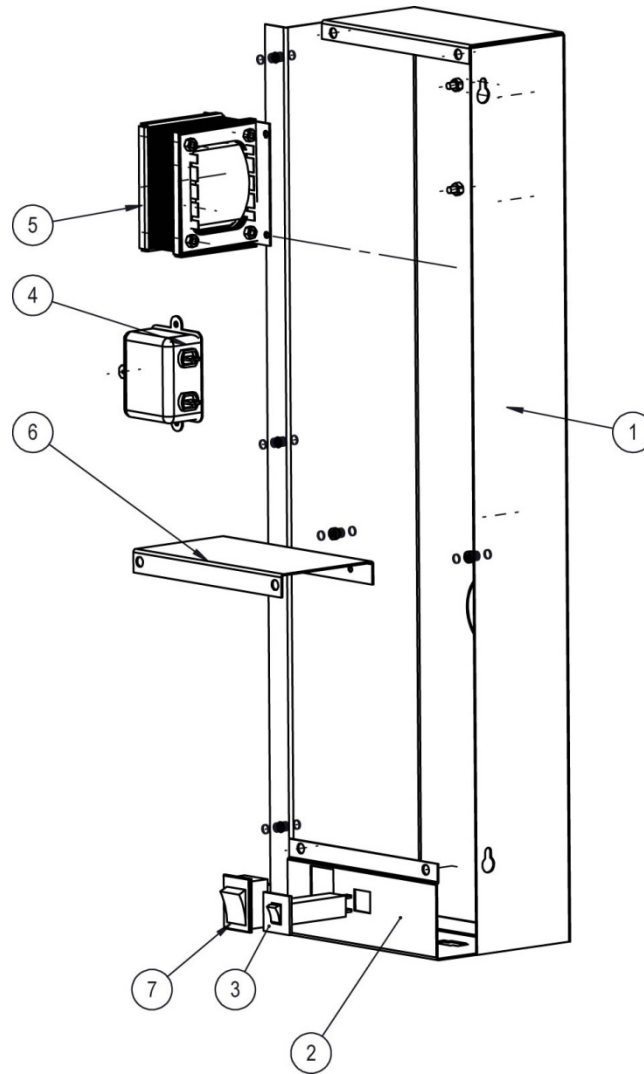
ITEM	PART NO.	DESCRIPTION
1	SAI89030	ASSEMBLY, DOOR
2	HAC909	T-HANDLE
3	STI89050	FRAME, DELIVERY DOOR
4	SAI780	ASSEMBLY, HINGE, BOTTOM
5	STI70058	COVER, DOOR LOCK
6	PLI2082	CAP, TUBE, LED
7	HAI990A	TUBE, LED
8	SAI777	ASSEMBLY, HINGE, TOP
9	GLI953	GLASS
10	HAI990	TUBE, LED
11	SAI89013	ASSEMBLY, DELIVERY BIN
12	ELI962D	LED

DELIVERY BIN ASSEMBLY



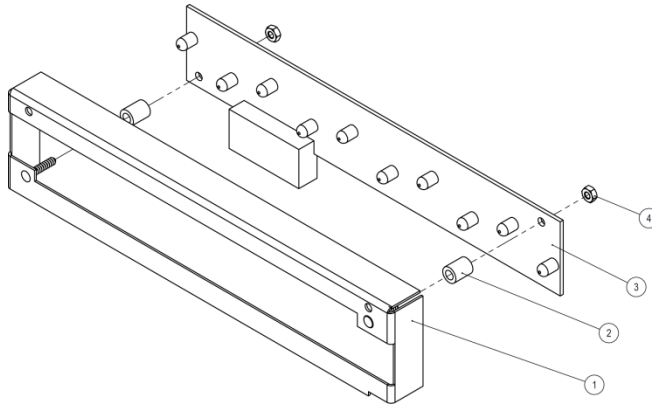
ITEM	PART NO.	DESCRIPTION
1	SAI89012	DELIVERY BIN ASSEMBLY
2	STI86007	CAM PLATE
3	SAI89014	PUSH DOOR ASSEMBLY
4	SAI779	ASSEMBLY, VEND SENSOR, LEFT
5	SAI775	ASSEMBLY, VEND SENSOR, RIGHT
6	STI89048	PANEL, DELIVERY BIN

ELECTRICAL PANEL ASSEMBLY



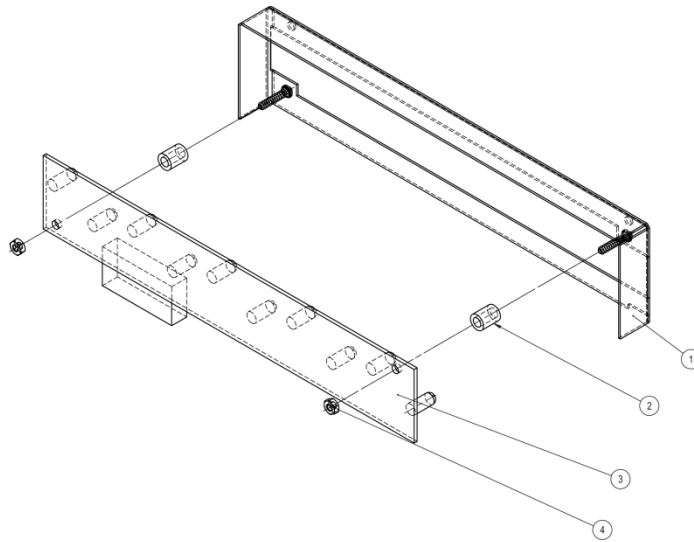
ITEM	PART NO.	DESCRIPTION
1	STI70060	BOX, ELECTRICAL
2	STI70010	BRACKET, SWITCH, MOUNTING
3	ELI972	CIRCUIT BREAKER
4	ELI946	FILTER
5	ELC478	TRANSFORMER
6	STI70059	BRACKET, TRANSFORMER
7	ELI916	ON/OFF SWITCH

PRODUCT SENSOR, RIGHT SIDE ASSEMBLY



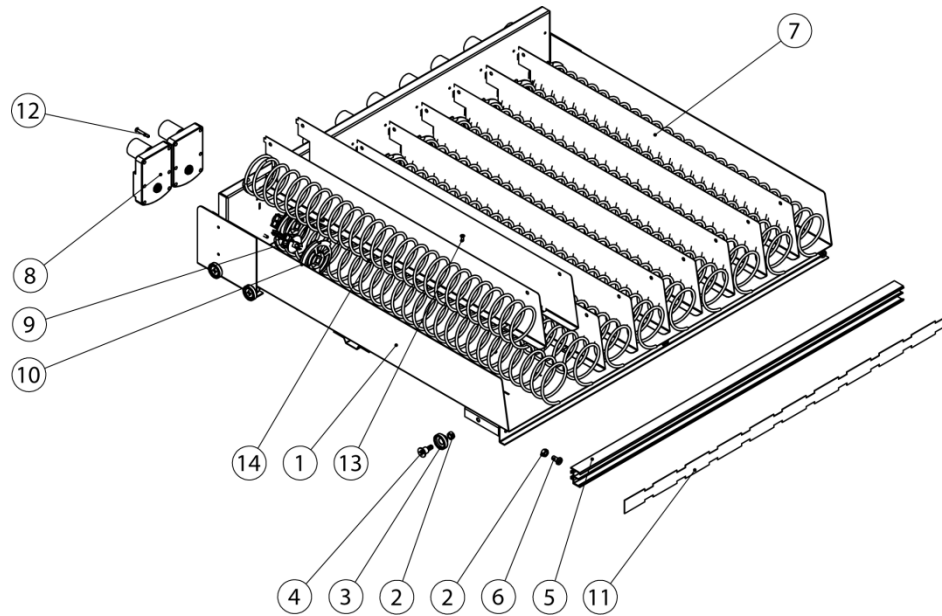
ITEM	PART NO.	DESCRIPTION
1	STI70086	SENSOR BRACKET
2	PLI609A	SPACER
3	ELI974	EMITTER
4	FAI922	NUT

PRODUCT SENSOR, LEFT SIDE ASSEMBLY



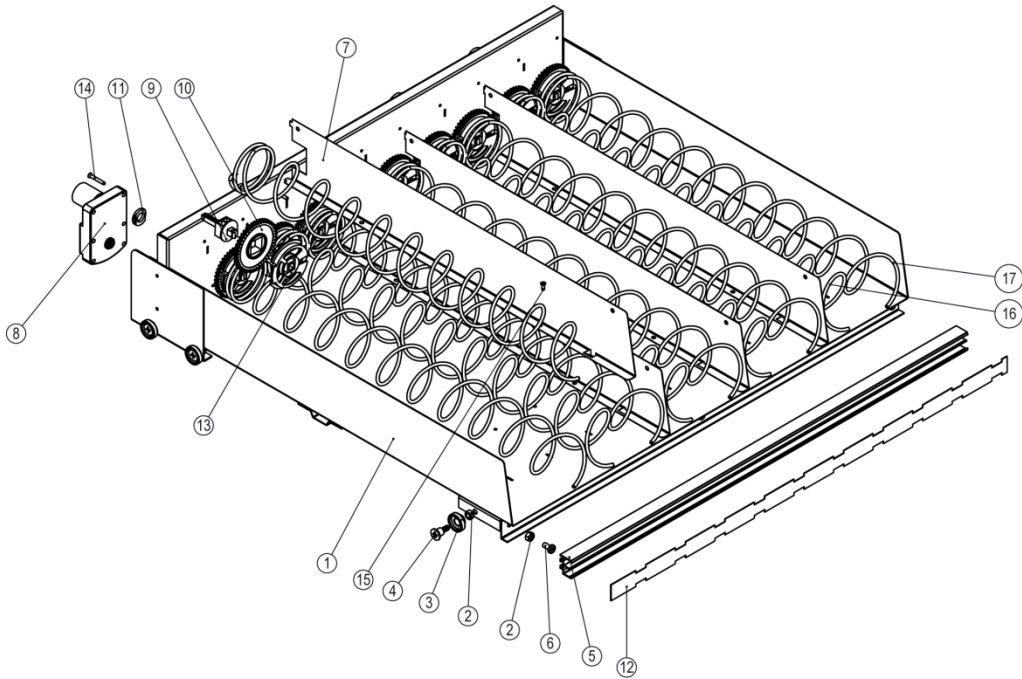
ITEM	PART NO.	DESCRIPTION
1	STI70086	SENSOR BRACKET
2	PLI609A	SPACER
3	ELI2169	DETECTOR
4	FAI922	NUT

10 SPACE TRAY ASSEMBLY



ITEM	PART NO.	DESCRIPTION
1	SAI87041	ASSEMBLY, WELDED TRAY
2	FAI923	NUT, NYLOCK, M6
3	PLI802A	WHEEL, TRAY
4	HAI602	PIN, WHEEL, TRAY
5	PLC958	PROFILE, PRICE SELECTION
6	HAI976	PIN, PROFILE LABEL HOLDING
7	STI70010A	PARTITION, TRAY
8	ELC920	MOTOR
9	PLI721C	SHAFT, GEAR MOTOR
10	PLI331	HUB, COIL, RETAINER
11	PLI87001	STRIP, PRICE SCROLL, HOLDING
12	FAI882	SCREW
13	FAI892	SCREW
14	WFI602	COIL, 18 SPACE, RIGHT
-	WFI552	COIL, 15 SPACE, RIGHT
-	WFI524	COIL, 24 SPACE, RIGHT

5 SPACE TRAY ASSEMBLY



ITEM	PART NO.	DESCRIPTION
1	SAI87041	ASSEMBLY, WELDED TRAY
2	FAI923	NUT, NYLOCK
3	PLI802A	WHEEL, TRAY
4	HAI602	PIN, WHEEL, TRAY
5	PLC958	PROFILE, PRICE SELECTION
6	HAI976	PIN, PROFILE LABEL HOLDING
7	STI70010A	PARTITION, TRAY
8	ELC920	MOTOR
9	PLI721C	SHAFT, GEAR MOTOR
10	PLI536	GEAR
11	PLI332	BUSH, RETAINER
12	PLI87001	STRIP, PRICE SCROLL, HOLDING
13	PLI331	HUB, COIL, RETAINER
14	FAI882	SCREW
15	FAI892	SCREW
16	WFI548	COIL, 10 SPACE, LEFT
-	WFI549	COIL, 10 SPACE, RIGHT
-	WFI568	COIL, 12 SPACE, LEFT
-	WFI59	COIL, 12 SPACE, RIGHT

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 seaga.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