



The Premium Collection

Ambient and Refrigerated models



EL900 Board, last revision 5.9.2007

Operator's Manual

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 trouble-shooting guide.

EQUIPMENT INSPECTION

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

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

MANUFACTURER'S WARRANTY

WHAT IS COVERED:

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

WHAT IS NOT COVERED:

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

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

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

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



For Service and Customer Care:
8:30 a.m. - 4:00 p.m. CST. Mon thru Fri
815.297.9500 ext 160
815.297.1758 Fax
email: customercare@seagamfg.com

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

For Service and Customer Care:
9:00 a.m. - 5:30 p.m. Mon thru Fri
+44(0)1492 874010
+44(0)1492 874644 Fax
email: info@seaga.co.uk

Seaga UK Ltd.
Unit 8, Caebach, Off Builders Street
Llandudno North Wales LL30 1DR
www.seaga.co.uk

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SECTION 4 – TROUBLE SHOOTING

PHYSICAL CHARACTERISTICS

- Height : 72" [183 cm]
- Width : 35" [85 m]
- Depth : 35.5" [91 cm]
- Weight : 520 lbs [236 Kg]
- Finish : Powder Coat paint
- Number of Trays : 6
- Maximum Selection : 32 standard, snack machine; 30 standard, refrigerated
- Maximum Capacity : 344 standard snack; 316 standard refrigerated

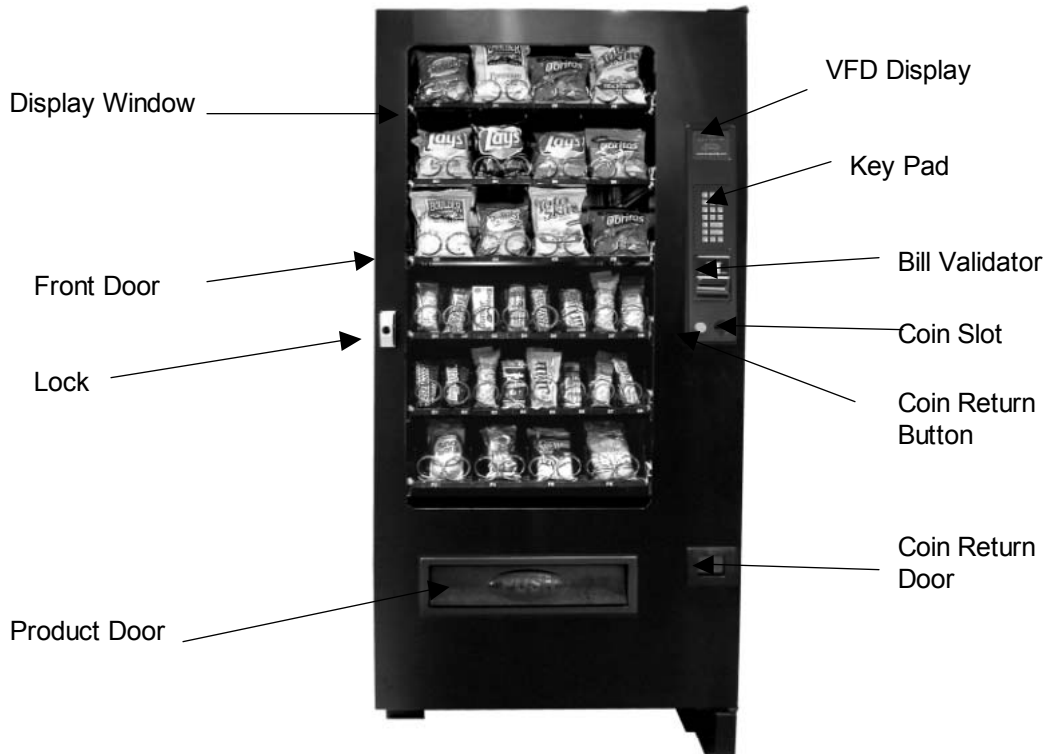
ENVIRONMENT

- Location Environment: Indoors only

Electrical Requirement

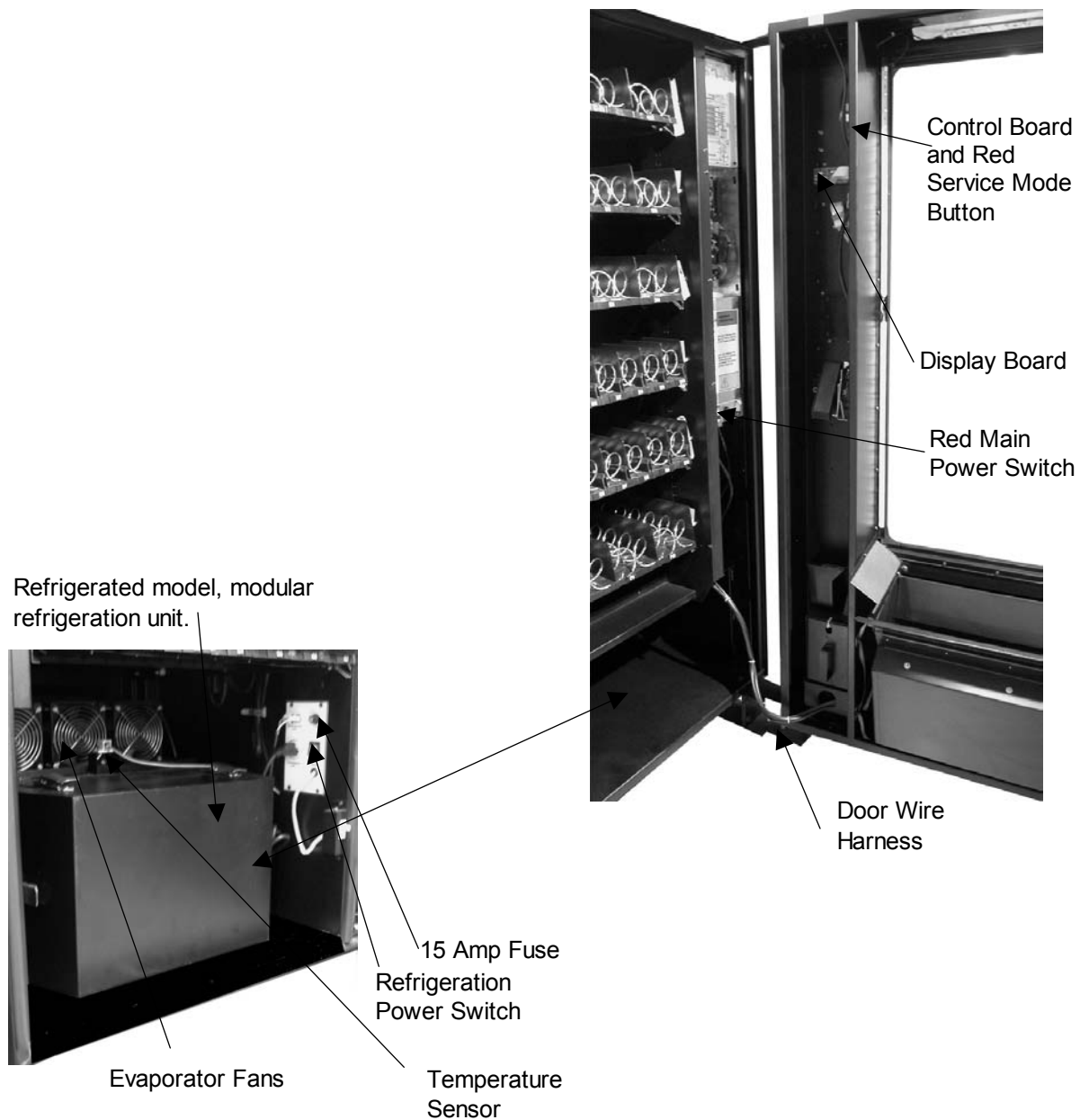
Requires one (1) 120 VAC 12 Amps grounded outlet.

Fig. 1
Exterior View
4-Wide Snack Machine Shown



Interior View

Fig. 2



SECTION 2

INSTALLATION

IMPORTANT NOTES

All models:

Your vendor is intended for indoor use only.

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

Always unload vendor before transporting it.

Do not load your vendor with disfigured or damaged product.

Remove all wire ties and protective sheeting prior to vending.

Refrigerated model:

Leave at least 6" between the back of the vendor and wall.

Condenser cooling air is taken in the bottom and exhausted out the back.
The condenser has to be cleaned once every two weeks. See “Refrigeration” on the next page.
Temperature is factory set. Allow your vendor(s) to operate for twenty-four (24) hours before attempting any adjustments.

LOCK

Your vendor has one Lock, more commonly known as T-handle lock. To unlock the Front Panel, insert key and turn clockwise ¼ turn. When unlocked the ‘T’ of the Lock will pop out from its base. Turn the ‘T’ 15 to 20 times counter clockwise to unlock the door. To Lock the door turn the ‘T’ handle clockwise 15 to 20 times and then push the ‘T’ inside the Lock to lock the door. Key can now be removed. Note: Do not over-tighten when locking – this could strip the threads and damage your machine.

REFRIGERATION

If you purchased a refrigerated model, please see special information throughout the manual regarding refrigeration, settings and other information. The refrigeration system consists of Compressor, Relay circuit, Accumulator, condenser, condenser fan, evaporator, evaporator fans and air duct. The entire refrigeration system is modular and has a separate internal power cord, which is plugged in on the plug point provided at the bottom area below the last tray. The power switch has to be turned ON in order to start up the refrigeration system. There is a door switch that controls the refrigeration system ON and OFF condition. When the door is opened, the door switch is not depressed and the refrigeration system shuts OFF. When the door is closed, the switch is activated and the evaporator fans starts turning. The compressor starts running within 90 seconds from the door closure.

There is a vent on the cabinet back to blow the air from condenser. The inlet vent is at the bottom of the cabinet in front of the condenser. The condenser has to be cleaned regularly. The recommended frequency is once every two weeks. There are 6 clips around the front of the refrigeration module that has to be un-hooked in order to remove the front door of the refrigeration module. This will provide the access to the condenser. Either using fin-comb or a brush, clean the lint in between the condenser fins. Note: Be careful not to bend the fins – this could restrict airflow and damage your machine.

The compressor and the relay circuit, condenser fan motor and drain pan can be accessed in the same manner by removing the front door. The refrigeration system has to be unplugged and the module has to slide completely outside in order to gain access to these components.

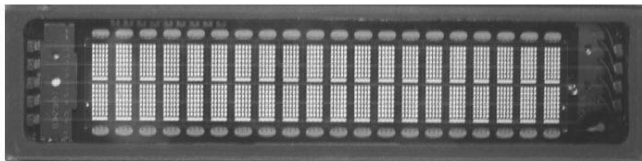
SECTION 3

OPERATION

DISPLAY

The VFD Display (Fig. 3) is a 2 x 20 Text Display. The display shows the customer the amount of money entered into the vendor and the cost of their selection. It shows the operator the Service Mode functions for setting the various functions of the vendor.

Fig. 3



SERVICE MODE

A	1	2
B	3	4
C	5	6
D	7	8
E	9	
F	10	
G	↑	↓

Sales mode keypad

F = ENTER
G = EXIT
↑ = Scroll UP
↓ = Scroll Down

ENTER		
EXIT	↑	↓

Four Service mode Button of keypad

1.0 Four service mode buttons navigate the service menu

Button	Definition
↑ Button	This key is used to increase a numeric value, or move forward through the various service mode functions.
↓ Button	This key is used to decrease a numeric value or move backwards through the various service mode functions.
F Button	This key is used to confirm, accept, or enter into a service mode function. In the Test Key pad Mode it displays a '0' Key on the VFD
G Button	This key is used to EXIT SERVICE or LEAVE a service mode function.

2.0 Entering service mode

To enter into service mode open the vendor door and Press the Brown Menu Service Mode Button (Fig. 4). After pressing the Service mode switch the controller will beep twice and the display will change to show **"Service Menu"** on the first line and **"Prices"** on the second line (Fig. 5). At this time you can use the keypad on the front of the machine to move through the various service mode MENUS.

Fig. 4

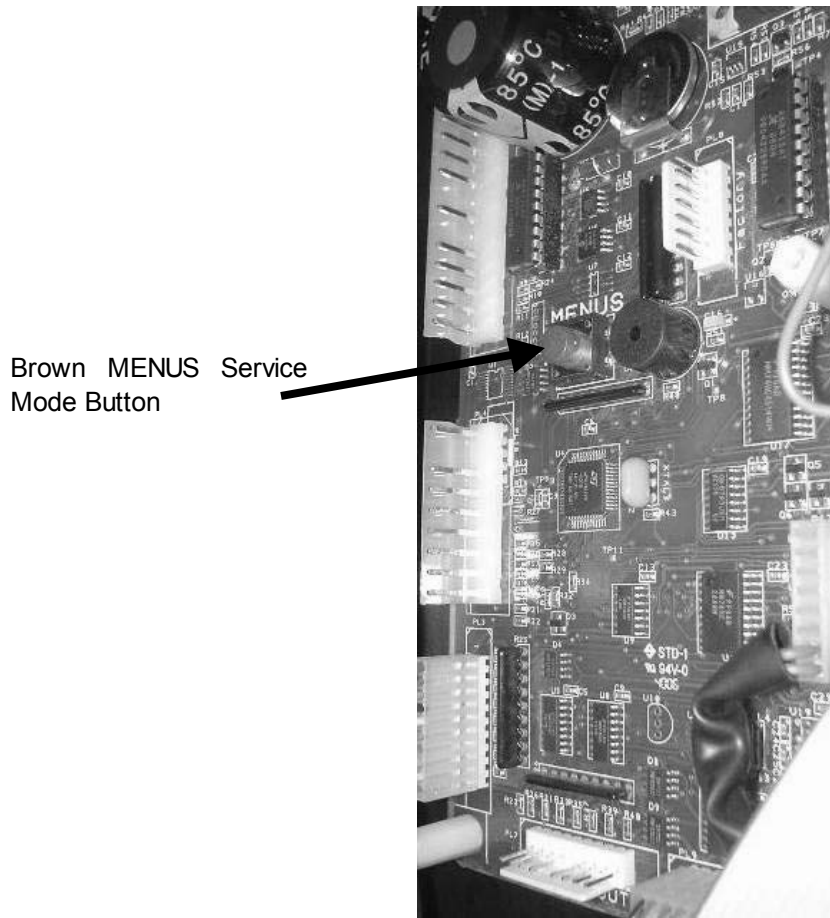


Fig. 5



2.1 Exiting service mode

The controller will remain in service mode as long as the user keeps using the keypad to move through the various service mode MENUS. The controller will automatically exit service mode and return to sales mode if any of the following occur:

- 1) The user is inactive for more than 3 minutes
- 2) The user presses the EXIT key (G).

When service mode is exited the beeper will sound twice and the installed firmware version will be shown on the display for three seconds, then the controller will revert to sales mode.

2.2 Service mode MENUS

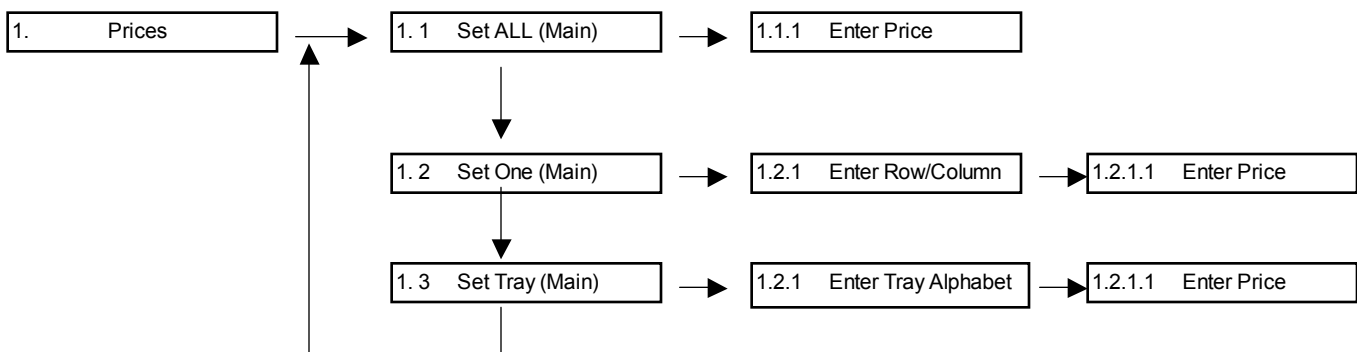
The table below is a summary list of the service mode MENUS. Each service mode MENU is described in detail in its respective section.

FUNCTION	DESCRIPTION	SECTION
PRICES	Allows to Set Prices for All Selections, Per Tray and Individual Selections	2.2.1
DIAGNOSTICS	Allows to test the functionality of the Machine	2.2.2
AUDIT	Allows the user to view cash sales and transaction data	2.2.3
SETTINGS	Allows the user to Setup the features of machine	2.2.4
ADVANCED	Allows the user to Setup the Advanced features of the machine. (Pass code Required)	2.2.5

2.2.1 Prices

- 2.2.1.1 Set All (Main) -** Allows user to Set Prices for All Selections.
2.2.1.2 Set One (Main) - Allows user to Set Prices for Individual Selections.
2.2.1.3 Set Tray (Main) - Allows user to Set Prices for Selections on each Tray.

PRICES SUB-MENU



In order to enter the price, Press the corresponding number. For example, if the Price of a Selection is \$0.75, then Press “10” for 0 followed by “7” and “5”. Press F to accept the value; G to exit to the main menu.

Note: Discount prices can only be set using a Seaga Smart Card.

2.2.2 Diagnostics - The Diagnostics menu is used to test various features of the machine. Certain critical features of the machine are protected by a pass code provided to the operator to prevent inadvertent modifications to the machine.

DIAGNOSTICS SUB-MENU

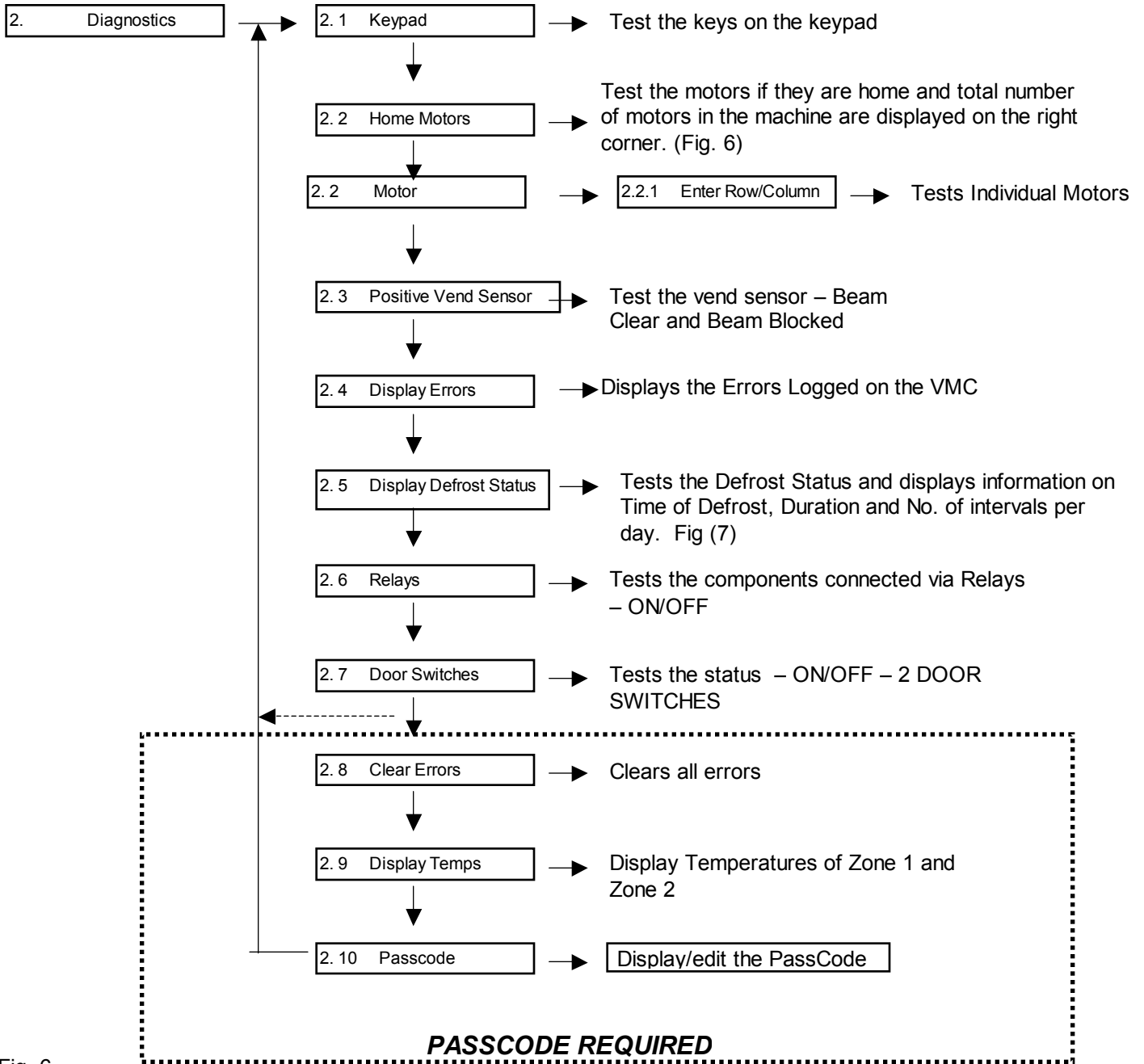


Fig. 6

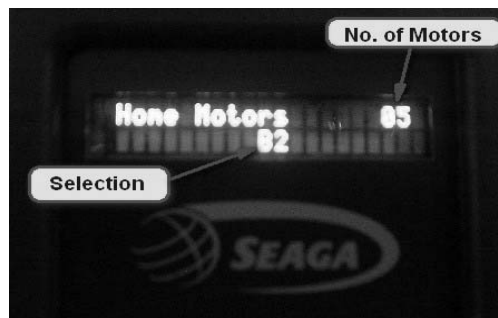
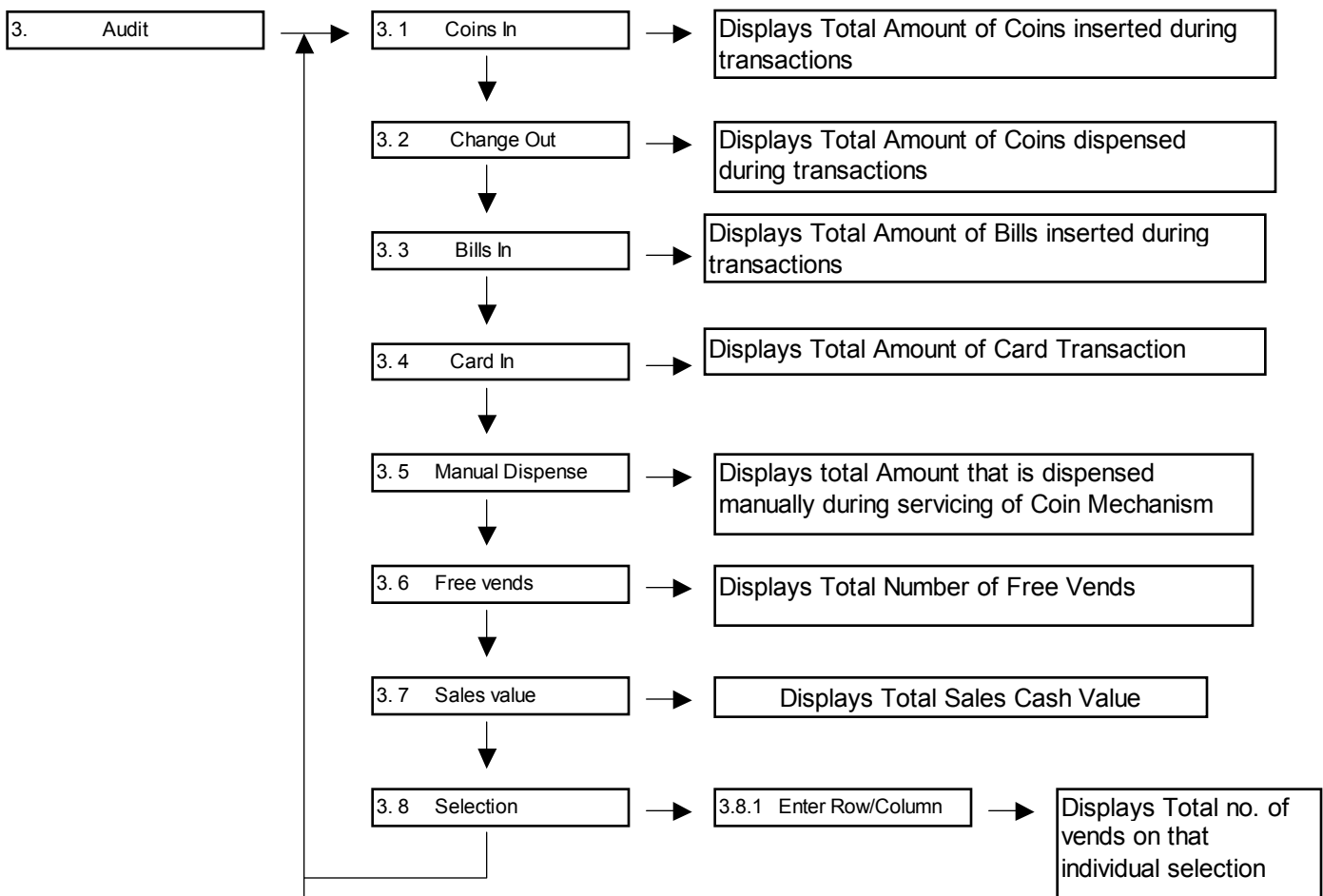


Fig. 7



2.2.3 AUDIT MENUS - The Audit Menu is used to track the machine operation in all aspects but not limited to the transactions.

AUDIT SUB-MENU



2.2.4 SETTINGS - This menu is used to Setup the features of the machine.

SETTINGS SUB-MENU

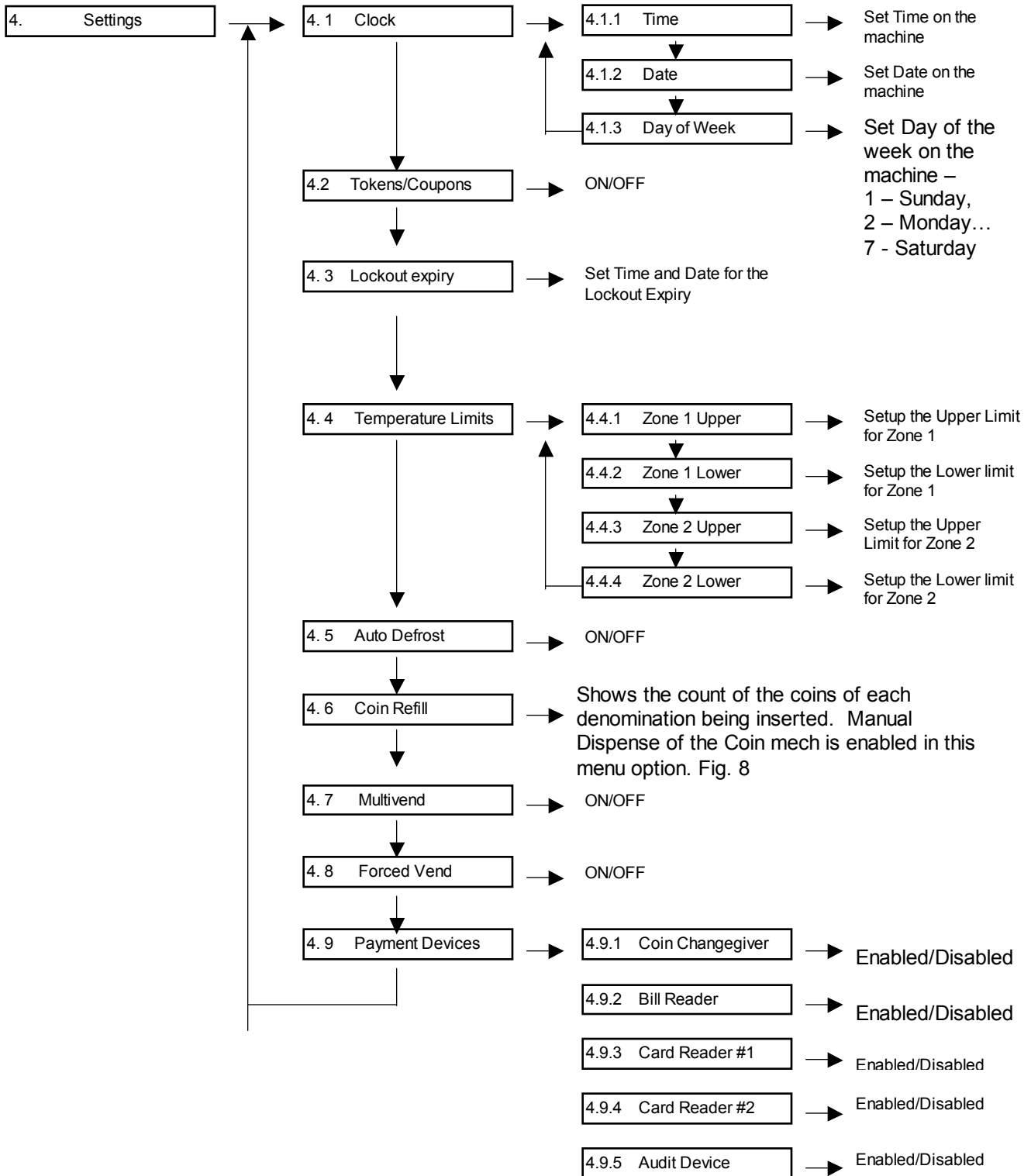


Fig. 8



In normal operational mode the buttons on the side of the coin changer are disabled. This is a simple safety feature to disallow vandals or unauthorized persons from just pressing the buttons and emptying the coin changer. In order to activate those buttons;

Menu mode-->

 Scroll to Settings-->

 Press F-->

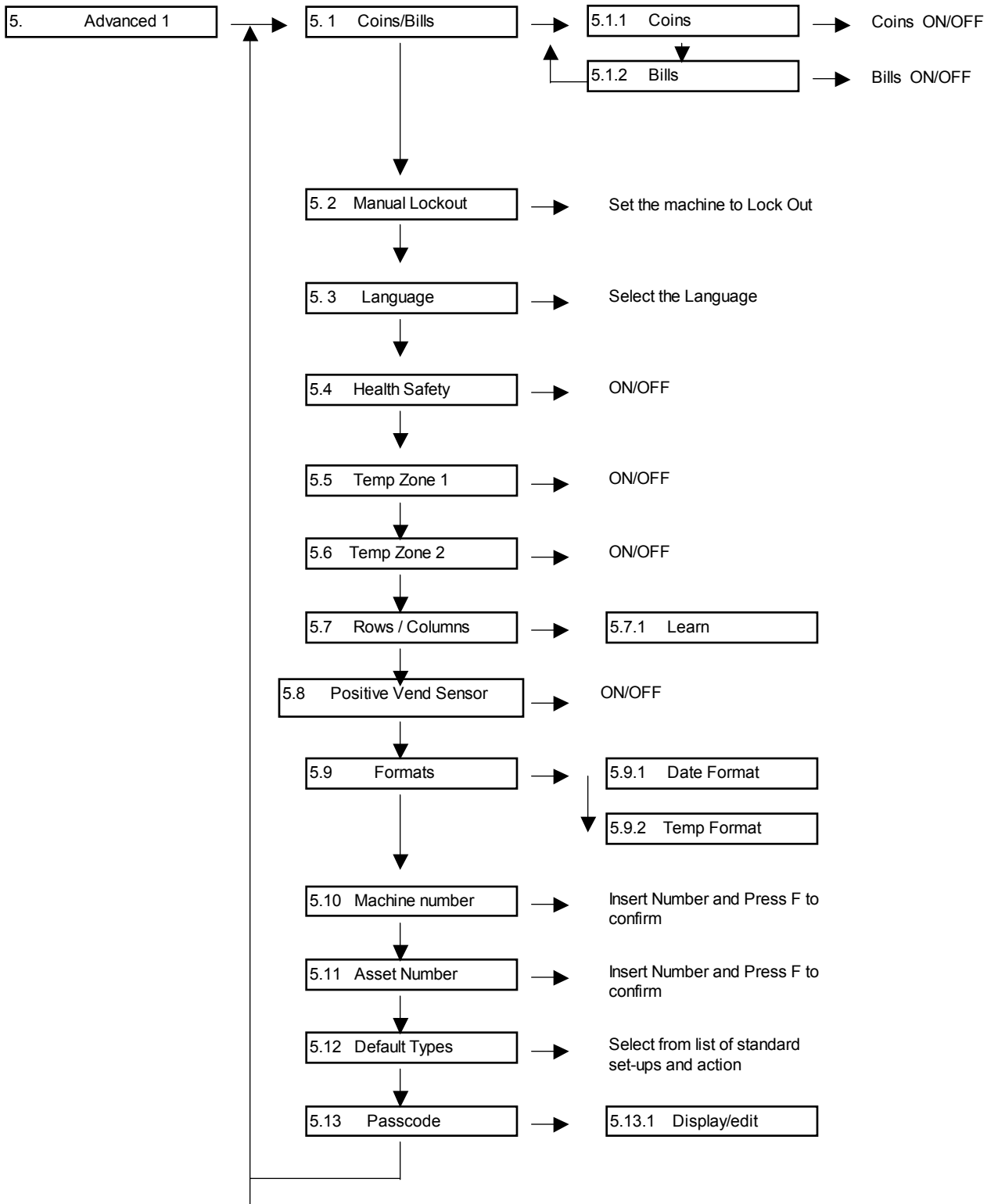
 Scroll to Coin Refill-->

 Press F

Now the buttons will be activated. While in this mode press F to scroll from coin 1 to coin 2, etc and the entire tube selected will be emptied.

2.2.5 ADVANCED - This menu is used to setup the Advanced Settings. Please enter the Pass Code in order to access this menu.

ADVANCED SUB-MENU



2.2.6 EXIT SERVICE MODE: Press “G” to Completely Exit from the Service Menus.

SEAGA SMARTCARD AND SEAGA SMARTWARE

There are several operator friendly and field required options that can be setup using the Seaga SmartCard and Seaga Smartware Software. Please contact our Sales Department for further details on the addition of these features to your Premium equipment. There is Seaga Smartware guide available regarding the features that are offered via Seaga Smart Card.

DELIVERY SYSTEM

Your vendor consists of the Keypad, 2 Line VF Display, Driver Motors, Product Trays, Helix Coils and Delivery Bin. In the case of the refrigerated models vending beverages, product stabilizers are also included. 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

The SP Series features lock and release product trays. On the right side of each product tray you will find a Locking Lever (Fig. 9). 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. 9



To install the product stabilizers for beverage vending, first pull out one of the beverage trays. Note the silver tab at the back of the tray, inside the coil (Fig. 10).

Fig. 10



The product stabilizers (one for each selection) should be slid inside the coil and the silver tab at the back of the tray should be inserted into the slot on the end of the platform. Note that there are two slots at the end of the platform; the rear-most slot should be used for this application. (Fig. 11)

Fig. 11

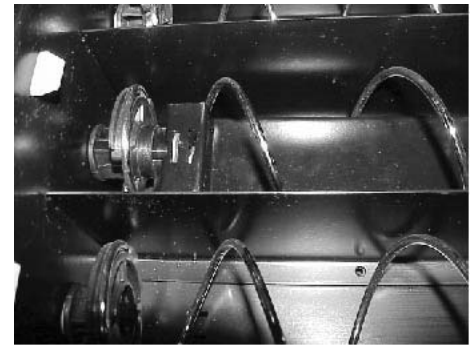
Installed, side view.



Installed



Installed, Top View



Installed, Front View



LOADING PRODUCTS

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

Note: The size of the item being vended must be larger than the Helix Coil, but smaller than the Product Chute, to vend correctly. Never force an oversized item into the Helix Coil or Product Chute, nor attempt to vend an item that is smaller than the Helix Coil as this will create problems and deter customers. (Fig.12)

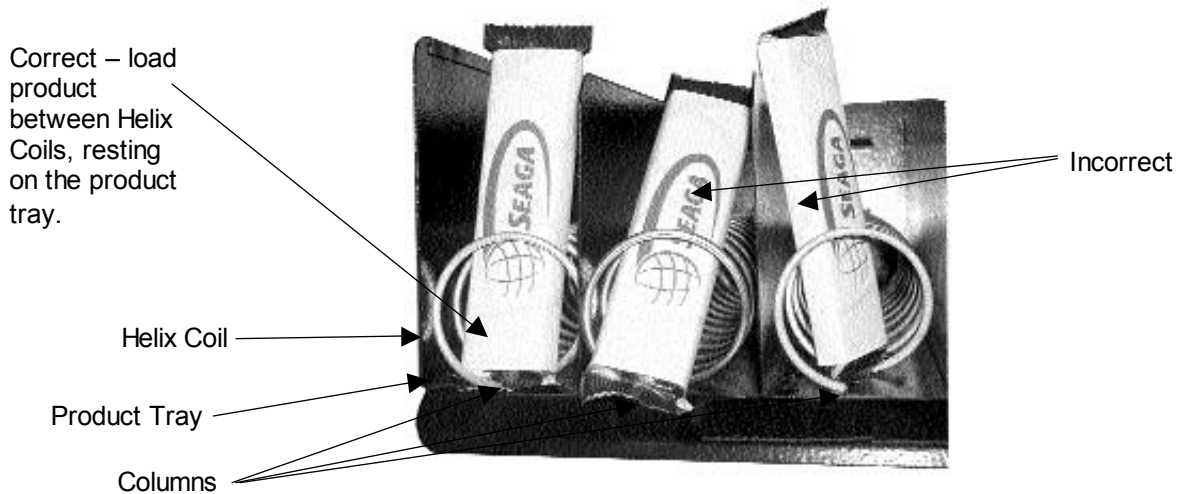
1. To Load Product:

- A.) Use the release latches and pull the desired Product Tray all of the way forward. Product Tray will tilt down or can be removed and placed on the floor or a table.
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. 12) 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.
- D.) After loading the product, if you have removed the tray to do so, place the Tray in the cabinet by aligning the wheels in the guide rails. Clear the wire harness to the side so that it is not interfering with the tray below.

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

Special Note: We suggest that you always partially fill the vendor with product and perform at least five (5) test vends. Test vends can be performed easily by entering Service Mode and running "Individual Motor Testing". (See: Keypad and LED Display, Individual Motor Testing.)

Fig. 12



SECTION 4

TROUBLE SHOOTING

1. NO DISPLAY ON THE FRONT PANEL

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

2. SELECTION WILL NOT VEND

- a. Vend mechanism binding on tray
- b. Product jammed
- c. Tray or Motor connection unplugged or faulty connection
- d. Bad motor or defective motor
- e. System control board defective
- f. Detection system may be blocked, if enabled

3. MULTIPLE VENDS FROM ONE SELECTION

- a. System control board defective
- b. Defective motor switch
- c. Detection system malfunction, 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
- e. System control board defective

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.

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.