



Space Saver Series SS2000 and SS4000



Operator's Manual

INTRODUCTION

Congratulations on the purchase of your new SS Series Vendor. This SS Series Vendor 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 SS Series Vendor is designed to operate simply and reliably, but to take full advantage of your machine, 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 purchase, 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

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

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

The Space Saver Automatic Series Vendor

This is a User Manual for the SS2000 and SS4000 Space Saver Automatic Series Vendors. The SS2000 is a non-refrigerated Snack Vendor, whereas SS4000 is a Combo model that includes a refrigerated Beverage Can Vendor. This Operator's Manual is divided into four (4) main sections. There is a brief description of Space Saver Automatic series Vendor, Service Mode, Money Mechanisms and Beverage Can vending unit.

IMPORTANT NOTICES

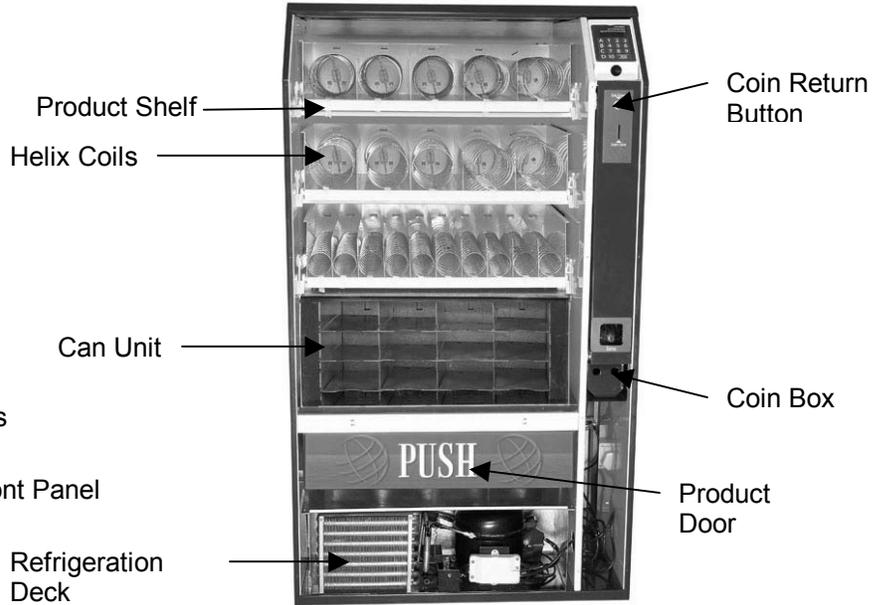
Your vendor is intended for indoor use only
Your vendor must be set on a level, well-supported location.
Always unload vendor before transporting it.
Do not load your vendor with disfigured or damaged product.

Section 1 Brief Description of your SS series Vendor

Fig.1 SS4000



Fig.2 SS4000



HOW TO LOCK AND UNLOCK THE DOOR OF SNACK VENDOR

Your Space Saver Vendor has 2 locks. To open the door, unlock the right side lock by turning the key clockwise; open the left side lock by turning the key counter-clockwise. The door can now be opened and removed by lifting it from both the sides until the top edge disengages from the cabinet. (Fig.3)

To lock the door hold both sides of door half way down the door. Engage the top of the door with the Vendor cabinet while keeping the bottom away from the machine. Lower the bottom of the door ensuring that the top of the door remains engaged with the cabinet. Lock the door by turning the left key clockwise and the right key counter clockwise.

Fig.3 Opening the Front Door



LEVELING YOUR VENDOR

Once you have installed your vendor in its proper location, you will need to level it to ensure trouble free operation. The vendor is provided with 4 threaded levelers. These can be adjusted up or down as needed to ensure a proper level by turning them clockwise and counter-clockwise respectively. (Fig.1)

ELECTRICAL CONNECTION

The SS2000/4000 Snack Vendor requires one 120 VAC 60 Hz grounded outlet or one 230 VAC 50 Hz grounded outlet.

PRICE LABELS ON PRODUCT TRAYS

The Price and Selection labels supplied with the vendor are to be displayed below the Helix Coil (Fig.4). The Product Trays must be marked as 'A','B','C','D' from the top tray down. In the case of the SS4000 the 'D' marking is used only for the beverage selections. The columns are numbered from the left starting with '1', '2', '3', '4', etc.

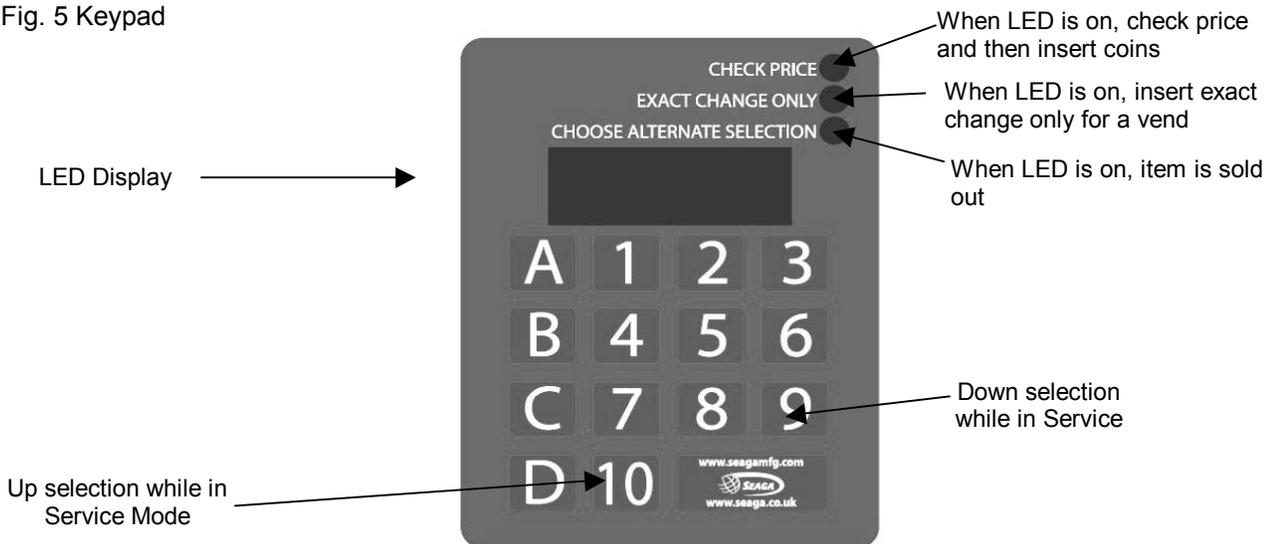
Fig.4 Price and Selection Labels



KEYPAD AND LED DISPLAY

The Keypad is touch sensitive. Light pressure will be necessary to activate each number or letter. The vendor's Keypad is used by the customer to make their selection, and by the operator to set and test many functions of the vendor. (Fig. 5)

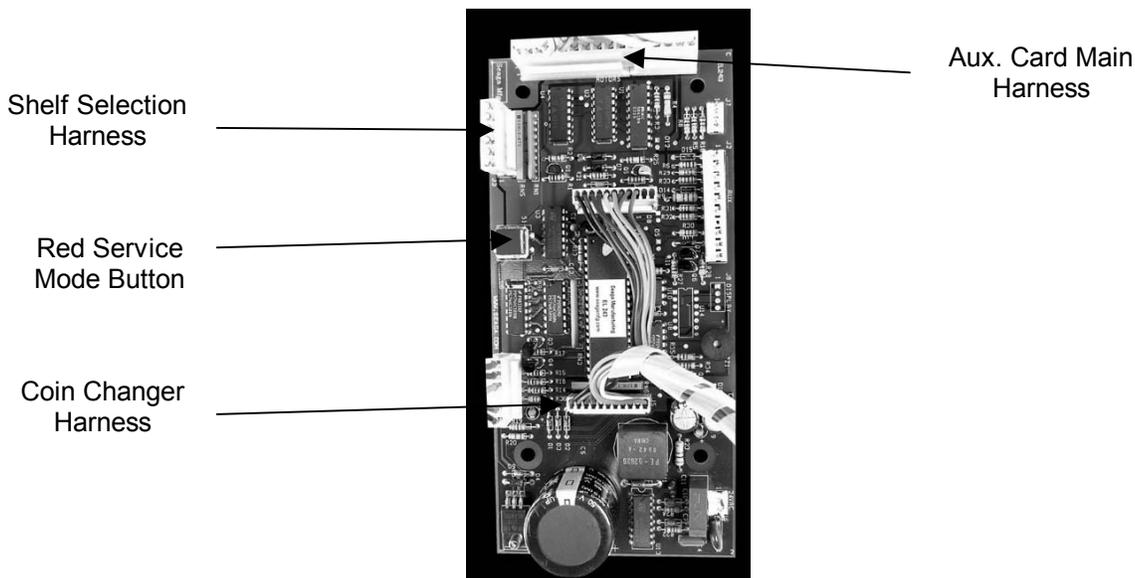
Fig. 5 Keypad



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

1. To Access Operator Functions:
 - A) Unlock and open the Front Door to access the Circuit Board, and enter Service Mode by pressing the Red Service Mode Button. (Fig. 6)

Fig. 6 Circuit Board



Section 2

SERVICE MODE

The Service Mode is entered and exited by pressing the Red Service Mode Button on the Circuit Board. All Service Mode functions are cycled and selected by pressing the DOWN (9) and UP (10) keys. If no action is taken within 20 seconds the display will return to Standard Operation Mode.

These instructions are also repeated on the inside of your vendor (see Fig. 13).

MOTOR COUNT (“Cnt”)- Displays the total count of motors available in this vendor. Enter Service Mode. Cycle through the Service Mode until the display reads “Cnt”. Press any keypad character other than the DOWN (9) or UP (10) key and the controller will display the motors it recognizes. The total number of motors should equal the total number of selections.

BILL ESCROW (“ES”)- Optional setting that when ON will return the bill to the customer on demand, when OFF the vendor will return coins to the customer. Enter Service Mode. Cycle through the Service Mode until the display reads “ES”. Press any keypad character other than the DOWN (9) or UP (10) key to turn this mode ON (“ES y”) or OFF (“ES n”).

MULTI-VEND MODE (“UL”)- Optional setting that when ON allows more than one vend to be performed, provided there is still credit remaining. Enter Service Mode. Cycle through the Service Mode until the display reads “UL”. Press any keypad character other than the DOWN (9) or UP (10) key to turn this mode ON (“UL y”) or OFF (“UL n”).

FORCE-VEND MODE (“FC”)- Optional setting that when ON requires a purchase once credit has been deposited. Enter Service Mode. Cycle through the Service Mode until the display reads “FC”. Press any keypad character other than the DOWN (9) or UP (10) key to turn this mode ON (“FC y”) or OFF (“FC n”).

BEVERAGE SOLD-OUT MODE (“Can”)- Optional setting that when ON operates sold-out function for this vendor, and will display “Sold Out” when selection is empty. Enter Service Mode. Cycle through the Service Mode until the display reads “Can”. Press any keypad character other than the DOWN (9) or UP (10) key to turn this mode ON (“Can y”) or OFF (“Can n”).

TEST ALL MOTORS (“Test”)- Allows user to test all motors in your vendor. Enter Service Mode. Cycle through the Service Mode until the display reads “Test”. Press any keypad character other than the DOWN (9) or UP (10) key to test all motors. No other function can be accessed during the test. The time this function requires will vary. Display will return to Standard Operating Mode.

INDIVIDUAL MOTOR TESTING (“Slct”)- Allows user to individually test each motor in this vendor. Enter Service Mode. Cycle through the Service Mode until the display reads “Slct”. Enter any selection to test it’s motor. (ex. A1)

PRICE SETTING (“Prc”)- Allows the user to set individual prices for each motor or item loaded in your vendor. Enter Service Mode. Cycle through the Service Mode until the display reads “Prc”. Enter any selection to display current price. (ex. A1) Press the DOWN (9) or UP (10) key to change the price for that selection. Price setting will change in increments of 5. Press “A” to save the new price.

CASH HISTORY (“Cash”)- Displays total cash count.
Enter Service Mode. Cycle through the Service Mode until the display reads “Cash”. Press any keypad character other than the DOWN (9) or UP (10) key to display the total cash count the vendor has accumulated. This function cannot be reset to zero.

SALES HISTORY (“Sale”)- Displays total vend count.
Enter Service Mode. Cycle through the Service Mode until the display reads “Sale”. Press any keypad character other than the DOWN (9) or UP (10) key to display the total vend count that your vendor has performed. This function cannot be reset to zero.

COIN DISPENSING (“Coin”)- Allows user to manually dispense coins from the Coin Mechanism by coin type.
Enter Service Mode. Cycle through the Service Mode until the display reads “Coin”. Pressing keys 1-7 will dispense the lowest through the highest denomination of coins. For American Coin Mechanisms key 1 will dispense nickels, key 2 will dispense dimes, and key 3 will dispense quarters.

Special Note: To avoid customer aggravation, Multi-Vend and Force-Vend should NOT be turned on at same time.

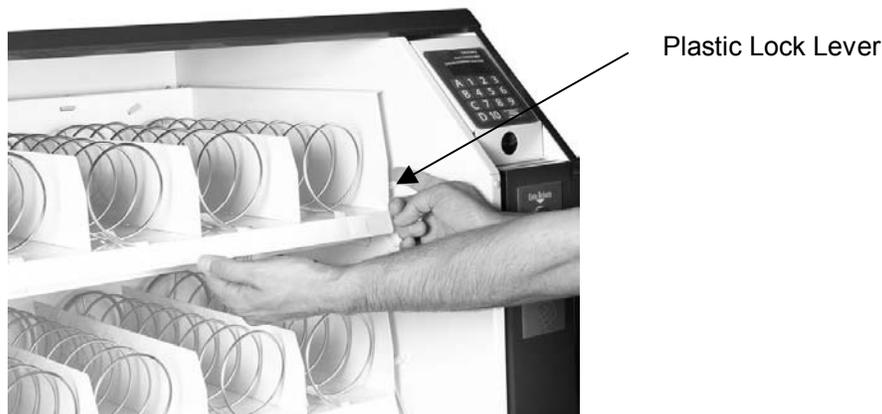
DELIVERY SYSTEM

The delivery system of your SS4000 Series Snack vendor consists of the Keypad, LED Display, Driver Motors, Product Trays Helix Coils and Beverage Can Unit. The customer inserts money and enters their selection on the Keypad. The selected Driver Motor turns the Helix Coil that vends the product.

LOADING PRODUCT SHELVES

Remove the front door of vendor, and push down the plastic lock lever on the right side of shelf (fig.7) to unlock the shelf. Holding the lever down, Grasp the Product shelf under both the front corners and lift the front of the shelf slightly and pull forward. The shelf will slide out and tilt down to make loading of products easier. Load only one product shelf at a time.

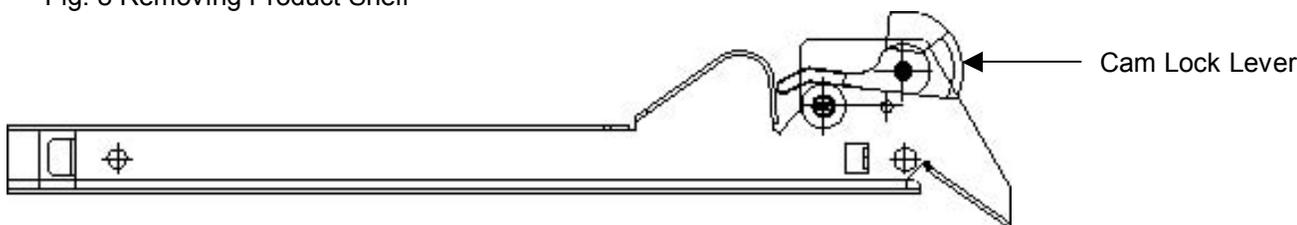
Fig. 7 Loading Shelves



Removing Product Shelves

Push up the plastic Cam lock lever on the right side of shelf (Fig. 8). Grasp the Product shelf under both the front corners, and lift the front of the shelf slightly and pull the Tray out completely. Remove the Wiring harness connector located on the inside right-hand side of the Shelf.

Fig. 8 Removing Product Shelf



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

Note: The Size of the item being vended must be larger than the Helix Coil, but smaller than the column, to vend correctly. Never force an oversized item into the helix Coil or Column, nor attempt to vend an item that is smaller than the Helix Coil as this will create problems and deter customers. The snack vendor ensures FIFO (First in first out) of product stock rotation. This is not so in the case of the Beverage Can Unit.

1. To Load Product:

a.) Pull the desired Product Tray all the way forward. Product tray will tilt down.

Note: Pull out only one (1) Product Tray at a time

b.) Place product in proper size helix coil. Note: Bottom of product must rest on the product Tray and not on the Helix Coil. Load each column from front to back.

Note: Fill all product trays; do not leave any spaces behind or between items.

Fig.9 Loading product



c.) Once Product Tray is fully loaded, lift and push it back in.
Repeat above steps until all product trays are fully loaded.

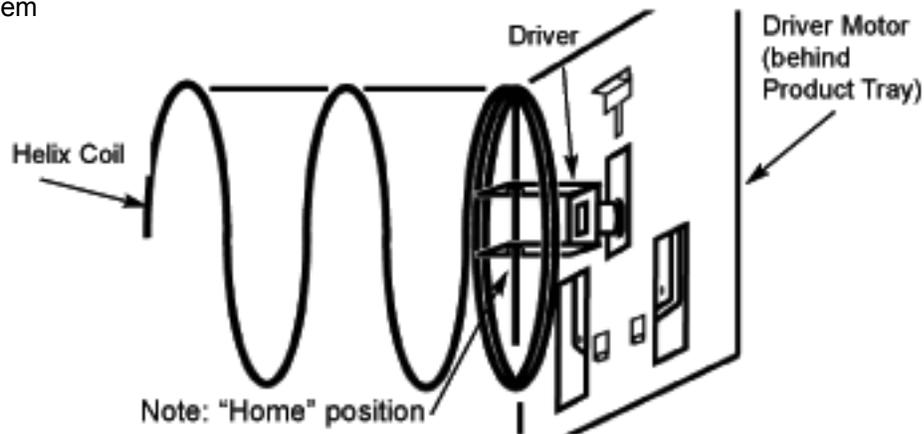
Special Note: We suggest that you always partially fill the vendor with product and perform at least five (5) test vends. Test vends can be performed easily by entering Service Mode and running "Individual motors testing".

DRIVER MOTORS

Each Selection is vended by the action of the Driver Motor. The Driver Motors are clipped onto the rear of each Product Tray.

In the rare event of a jam a Driver Motor may need to be returned to its home position. The Home Position is when the shaft of the helix coil that is held by the Driver is Vertical with the end of the shaft pointing down.

Figure.10 Delivery System



1. To "Home" a Driver Motor.
 - a. Unlock and open the Front Door to access the Circuit Board, and enter Service Mode by pressing the Red Service Button
 - b. Cycle through the Service Mode until the Display Reads "SLCT"
 - c. Enter the letter and number of the motor you wish to home. The Motor will rotate to its home position.
2. To Remove a Driver Motor
 - a. Unlock and open the front door
 - b. Unlock Product Tray and pull it out fully whilst keeping it level
 - c. Lift Product tray to release from the Track and pull it out

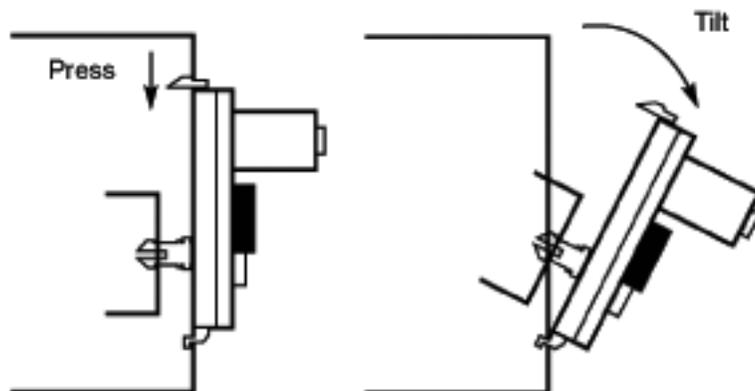
Caution: The Product Tray Wire Harness will need to be unplugged prior to complete removal of the product tray. The wiring harness is plugged into the inside right-hand side of the Product Tray.

- d. Remove Helix Coil from the driver by lifting the front end of the Helix Coil up with one hand while guiding the rear of the Helix Coil with the other

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

- e. Depress the top tab on the Driver Motor, tilt the Driver Motor backwards, and lift the driver motor free. (Fig.11)
- f. Disconnect Wires of The driver motor
- g. Replace Driver Motor by repeating above steps in reverse order.

Fig.10 Motor Removal



Section 3

MONEY MECHANISMS

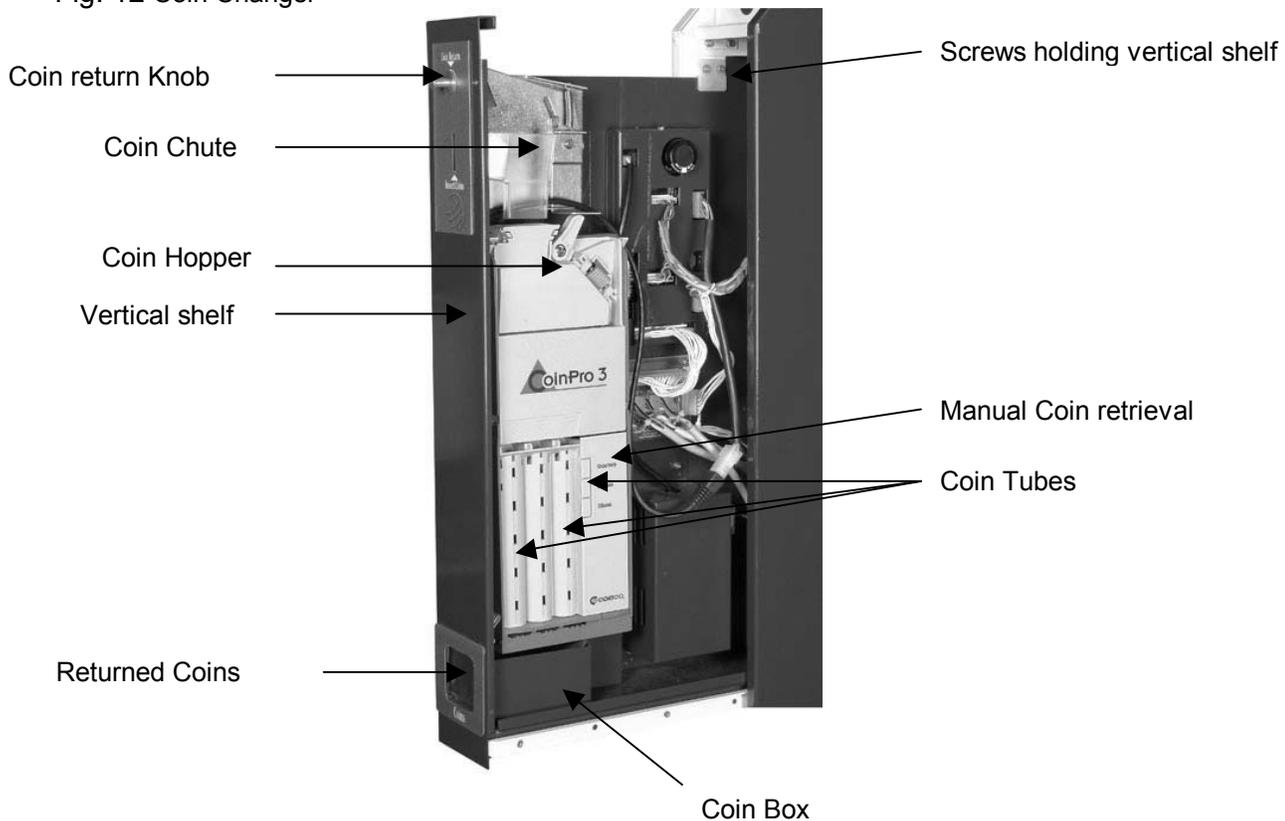
COIN CHANGER

The Coin Changer receives and returns change to customers. The Coin Changer is installed prior to delivery of the Vendor, and is preset to accept your country's coins. Coins that are not needed to maintain inventory in the coin tube are diverted to the Coin Tray. It is recommended that you initially load the tubes at least half full when setting up your vendor and that you do not allow your vendor's coin inventory to drop below that.

COIN RETRIEVAL

Coins can be retrieved from the vendor in three (3) ways, the Coin Box, Manual Coin Retrieval Button, and the Coin Return Button. The Coin Box Sits below the vertical shelf. The Coin Box holds all accepted coins, except for coins needed to maintain inventory in the Coin Tube. (Some overflow may occur) The Manual Coin Retrieval buttons are along side the dime tube, pressing a button will dispense one [1] of the selected coins.

Fig. 12 Coin Changer



The Coin Return Knob pushes the Coin Return Lever returning inserted coins to the customer.

CAPACITY

The Coin Changer will hold approximately 260 coins.

CLEARING JAMS

To clear a jam, remove the hopper assembly

1. To remove Hopper Assembly

- a. Unlock and open the front door of Vendor. Unplug the Vendor
- b. Remove the coin box, and pull the vertical shelf out.
- c. Loosen the mounting screws that hold the Coin Return arm and Coin Chute to the vertical shelf, and shift this assembly up.
- d. Push the thumb Tabs up, and tilt the Coin Hopper forward

- e. Lift and remove. Note: The coin hopper is still connected to the Coin Changer by the ribbon cable that can be pulled free.
- f. Clear Jam and reassemble.

CLEANING

Your Coin Changer needs to be cleaned only when the Coin Changer will no longer read coins.

1. Cleaning the Optics. You will need cotton swabs and a mild soap and water solution.
 - a. Unlock and open the front door
 - b. Remove the Coin Box, and Pull the Vertical shelf out.
 - c. Tilt The Coin Hopper open, there are two (2) Lenses on the flap and two (2) Lenses inside the coin hopper
 - d. Swab the lenses with the solution, and reassemble.

REMOVAL OF COIN CHANGER

1. To Remove the Coin Changer.
 - a. Remove the Coin Hopper as Above
 - b. Disconnect Wiring harness
 - c. Lift Coin Changer and remove.

VERTICAL SHELF REMOVAL

To Remove the Vertical Shelf

- a. Unlock and open the Front door, unplug the Vendor
- b. Slide out the Vertical Shelf completely
- c. Disconnect wiring harness
- d. Unscrew the two screws holding the vertical shelf using allen key at top right side of the shelf. (Fig. 11)
- e. Remove the vertical shelf. (Fig.13)

Fig. 13 Removing the Vertical Shelf



COMMON QUESTIONS AND ANSWERS

Q. How High Can I set my Prices?

A. Each selection can be priced individually up to 95.95

Q. Can Customers reach down and help themselves to product?

A. No, They Can't. The product door is a Triangle shaped flap designed to deter reach and theft. When pushed, the back of the triangle flap will come in contact with the bottom product tray and will become an anti-theft wall to act as a block.

Q. Motor cycles but no product is vended

A. Check to see if the product is jammed in the Helix Coil

Check to see if the Product is damaged, and make sure it is of the proper size.

Q. In the event of a power outage, will I have to reprogram my Vendor?

A. No, Your selection prices are safely stored.

Q. Coin Changer is not accepting Coins

A. Lenses may be dirty

Coins may be damaged or worn out

Wire harness may not be connected properly

Coin Changer may not have power

Section 4

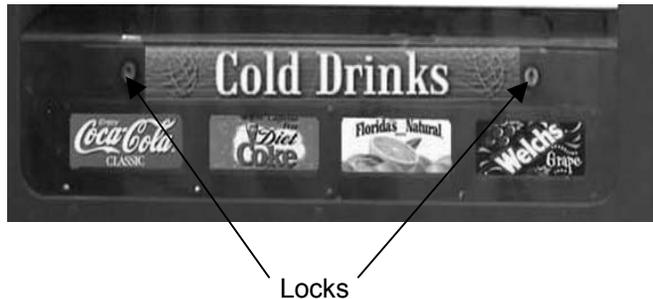
BEVERAGE VENDING UNIT

The Beverage Unit is a refrigerated unit that is located below the Product trays in the lower part of the Vendor. The Unit has 4 different selections holding 26 Cans each. Total capacity is 104. The unit incorporates a self-contained pull out type refrigeration deck.

ACCESSING BEVERAGE VENDING UNIT

The beverage unit can be easily accessed by opening the two locks at the top of the beverage unit door (Fig.14). (Below the lower snack tray of your vendor.) The door is then opened downwards. This is the area where the beverage cans are filled in to the vendor. The door and the vending flaps of the can unit can be dislodged from the can unit. This is done by removing two screws, which are located on either side of the machine right below the can unit door.

Fig.14 Beverage Vending Unit



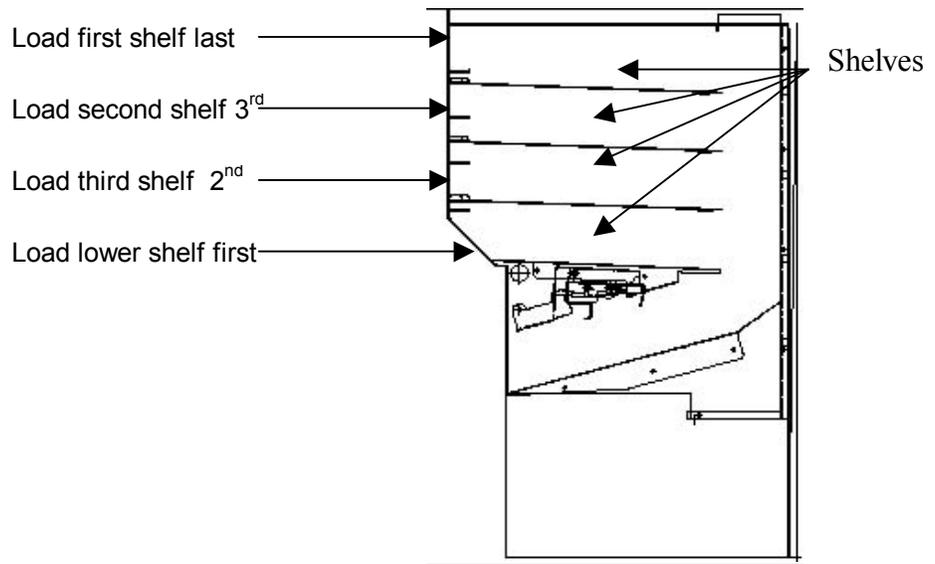
BEVERAGE SELECTION PRICING AND LABELS

The beverage selections are D1 to D4 on the keypad. The prices can be set by entering the Service Mode. The Selection Stickers can be put on the 4 slots available on the door of the Can Vending unit. (Fig. 14)

LOADING CANS

Unlock the can unit door. **Note: Cans must always be loaded from the bottom shelf first. Load the bottom shelf with cans and then load 3 cans in each shelf, proceeding upwards from the third shelf. Then load the remaining cans in the different shelves. See Schematic Diagram.** Cans can be directly loaded into the shelves using the can unit door as a ramp to roll down to the lower shelf.

Fig. 15 Loading

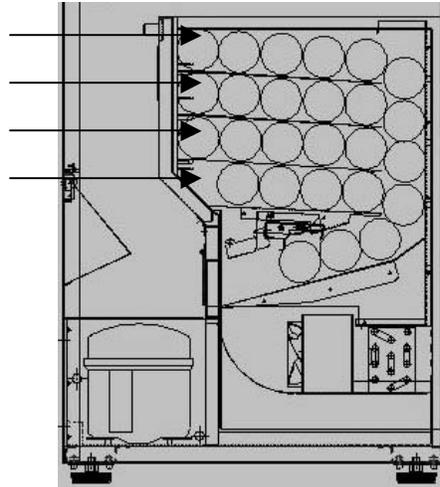


STOCK ROTATION

The Beverage unit does not ensure FIFO (first in first out), so when a fresh stock of cans are loaded, (usually from the upper shelves) it is likely that the lower shelves of the can unit may still be holding some older cans for an interval of time. Although beverages have reasonably good shelf life, we recommend that the beverage unit be emptied once every 30 days and reloaded, so that a forced product rotation takes place.

Fig. 16 Beverage Rotation

Shelf No.1 vends first
Shelf No.2 vends second
Shelf No.3 vends third
Shelf No.4 vends last



Note: The cans in the lower shelf will be the last to be vended by the machine. The new product stock must be loaded in the lower shelves. The old cans retrieved from the lower shelf of the vendor should be loaded on the top shelf. These cans will now be vended first by the can unit, thus ensuring that no old stock is vended from the machine.

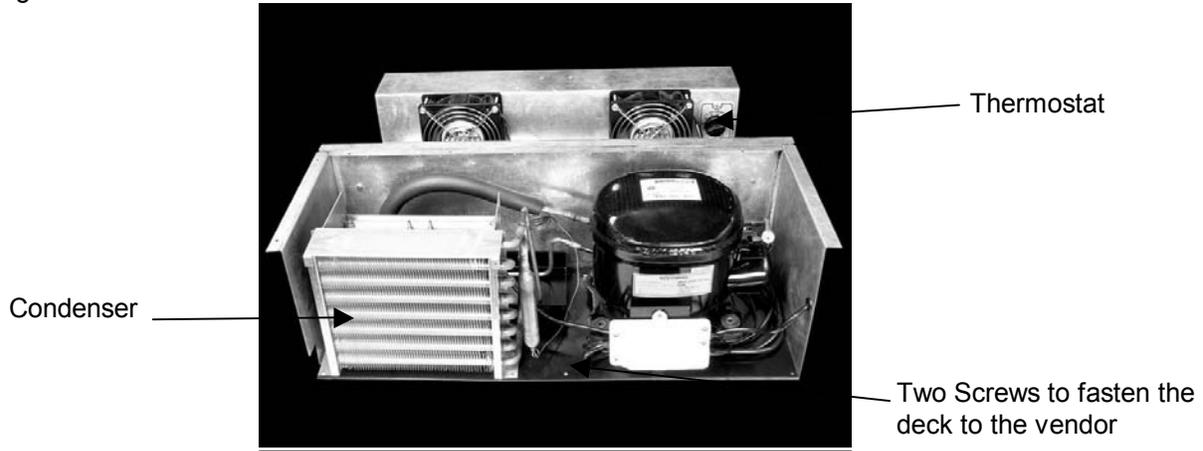
SHELF ADJUSTMENT WHEN CANS DO NOT ROLL OUT

The can unit has adjustable flexible shelves. The concept is that the shelf is pushed downwards by the weight of the cans, which in turn stops the cans on the lower flexible shelf from being rolled out. Once the upper flexible shelf is empty the shelf springs up by itself, thereby releasing the cans of the lower shelves to roll out. For adjustment of shelf, empty the cans from that shelf and bend the shelf up or down by hand so that there is a gap of 2 to 4 mm between the shelf and the cans on the lower shelf.

REFRIGERATION DECK

The beverage vending unit incorporates a high efficiency refrigeration system with two air circulation fans to chill the product. The refrigeration unit can be easily accessed by opening two screws located on the front bottom panel of the vendor. Remove the two screws at the mid point of the Panel (see Fig. 17) The refrigeration Deck can now be pulled out from the vendor.

Fig.17 Refrigeration Deck



ACCESS POINT FOR THERMOSTAT

The Thermostat Knob can be adjusted without pulling out the refrigeration deck (Fig. 18). The Thermostat is accessible through a port located on the extreme right hand side of the vend area below the fourth driver motor. Turning the Knob clockwise will lower the temperature in the dispensing unit and vice versa.

Fig.18 Thermostat Access



TEMPERATURE CHECK

Once your vendor is unboxed you will need to plug in your vendor and allow it to reach operating temperature. It will take about 18 hours for the vendor to reach an operating temperature of 38° F - 45° F. Temperature fluctuation is normal, and will depend upon your local climate.

CLEANING THE CONDENSER

Dust and dirt restrict good airflow and cooling of the condenser, an accumulation of which will cause the condenser unit to not chill the cans properly. Remove the front bottom panel of the refrigeration unit. Brush the dirt and dust from the condenser. You can also blow air on the condenser or vacuum clean it. Do not damage the fins of the condenser while cleaning. Reassemble the front bottom panel after cleaning.

NOTES