



SNACK FOOD VENDOR SM5700



MODEL 3160

**SERVICE
MANUAL**

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Record the Model Number and Serial Number of your machine below.

The Model and Serial numbers will be needed for you to obtain quick service and parts information for your machine. The numbers are available on the identification plate located on the back side of the cabinet of the machine.

MODEL NUMBER: _____

SERIAL NUMBER: _____

SPECIFICATIONS

General Dimensions

	INCHES	CENTIMETERS
Height	72	183
Width	41	104
Depth	36	91
Open Door Depth	31	79
	Lbs	Kgs
Weight	615	277

Electrical

Power	115 VAC	230 VAC
Cycle	60 Hz	50 Hz
Current	1.2 Amps	0.6 Amps

Pricing

MDB Controller & Coin Mechanism

Recommended Maximum Product Size

	INCHES	MILLIMETERS
Large Snack Helix	5-27/32 x 1-1/2 x 9	148 x 38 x 228.6
Medium Snack Helix	4-3/8 x 1-1/2 x 7	111.1 x 38 x 178
Sandwich Cracker Helix	2-15/16 x 15/16 x 5-1/2	74.6 x 23.8 x 139.7
Gum/Mint Split Helix	1 x 13/16 x 5-1/2	25.4 x 20.6 x 139.7

INTRODUCTION

This manual contains service and installation guidelines and instructions for the Snack Food Vendor product line.

NOTE

Sections of the manual relating to refrigeration apply only to models with optional refrigeration units .
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All Snack Food Vendor models are equipped with an electronic control system. All programming of the vend functions, pricing and features is done at the controller. Changes can be made without any additional accessories or remote parts.

Selections can be priced individually from \$.05 to \$999.95 in five cent increments (U.S. currency).

Features include:

- Multi Drop Bus (MDB) coin handling mechanism
- Self-diagnostics and cash accountability
- Multi Vend, Free Vend, Bonus Vend and Promo Vend features
- Hermetically sealed refrigeration system with R-134a refrigerant
- Programmable electronic control of the refrigeration unit
- Motorized delivery, electronically controlled

CAUTION:

This vendor utilizes DC motors. Do not attempt to turn augers by hand. Motor damage could occur.

- Visual feedback when a product has been vended or when an error condition exists.
- No change or loss of program/memory because power failure
- Cash accountability records Total Cash transactions and Total Vend cycles performed by the vendor. Information for individual selections, complete range (rows) or total machine can be compiled and used for inventory and ordering records

The vending sequence is "first-in, first-out" for each selection, eliminating the need for stock rotation to maintain fresh products in the vend area.

This manual should be read thoroughly to become familiar with the functions of all components, along with the features that are available. The initial set-up of a vending machine is very important in insuring trouble-free operation of the equipment. Following the instructions at the initial installation of the machine will avoid service problems and minimize set-up time.

Should you have any questions pertaining to information in the manual, replacement parts or the operation of the vendor you should contact your local distributor or:

VendNet™

165 North 10th Street
Waukee, Iowa 50263 - USA

Service: 800-833-4411

Parts: 888-259-9965

All Others: 888-836-3638

Fax: 515-987-4447

E-Mail: Vendnet@vendnetusa.com

UNPACKING

his vendor was thoroughly inspected before leaving the factory and the delivering carrier has accepted responsibility for this vendor. Note any damage or irregularities at the time of delivery and report them to the carrier. Request a written inspection report from the claims inspector to file any claim for damage. File the claim with the carrier (not the manufacturer) within 15 days after receipt of the machine.

Carefully remove outside packing material to avoid damage to the finish or exterior of the machine. Remove adhesive residue with denatured alcohol or common household vinegar.

Inspect the machine for concealed shipping damage. Report any damage hidden by the shipping material directly to the delivering carrier on a hidden damage report.

Record the model number and serial number of the vendor for your records. These numbers can be found on the Serial Plate on the rear of the cabinet and/or inside the vendor. Refer to these numbers on all correspondence and inquiries pertaining to this vendor.

Remove the Knock-Away Support by placing a spacer under the vendor, inserting a screwdriver or prying tool into the groove and splitting it in two. Discard the washers located on each side of the wooden supports. Turn the leveling screws in as far as possible. See Figure 1.

WARNING

Use caution when tipping machine from skids. Machine is heavy and can fall causing serious injury. This may require a second person.

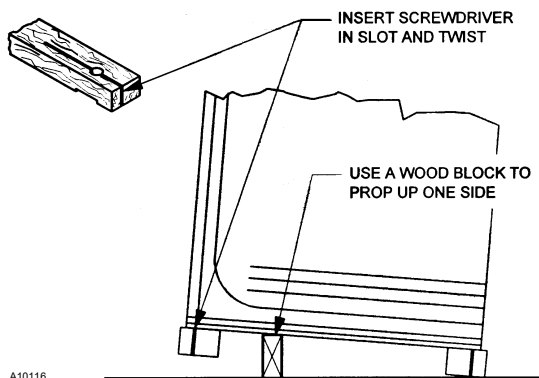


Figure 1. Removing Knock-Away Supports

INSTALLATION

Consult local, state and country codes and regulations before installation of the vendor.

CAUTION:

To insure reliability and maintain manufacturers equipment warranty, machine must **NOT** be placed in an environment where the temperature is greater than 90°F/32°C and the relative humidity is 65% or greater.

1. Position the vendor in its place of operation no further than six (6) feet (2 m) from the power outlet or receptacle.

WARNING:

DO NOT USE EXTENSION CORDS.
Extension cords can cause problems.

2. Leave at least six (6) inches (15 cm) of space between the back of the machine and any wall or obstruction for proper air circulation.
3. Retrieve the keys to the vendor from the coin return cup.
4. Open outer door and remove all internal packing material.
5. Check that the door will open fully without interference.
6. Level the vendor, making sure all levelers are touching the floor. The vendor must be level for proper operation and acceptance of coins through the coin mechanism. When the vendor is level, the door can be opened to any position and not move by itself. Try the door half closed, straight out and in the wide open position before deciding the vendor is level.

Grounding (Earthing) & Electrical

Before connecting the vendor, the integrity of the main electrical supply must be checked for correct polarity, presence of ground (earth) and correct voltage. ***These checks should be repeated at 6-month intervals with the routine safety electrical testing of the vendor itself.***

For proper operation of any equipment utilizing electronically controlled components, the equipment should be placed on an isolated or dedicated noise-free circuit.

A noise suppressor has been installed in this machine to compensate for any signal noise that could interfere with the normal operation of the controller.

For 115-Volt vendors the circuit should be a minimum 15 Amp, 60 cycle, properly polarized and grounded (earthed).

For 230-Volt vendors the circuit should be a minimum 7.5 Amp, 50 cycle, properly polarized and grounded (earthed).

Shown in Figure 2 and Figure 3 are two properly grounded (earthed) and polarized wall outlets. Figure 2 shows two 230-Volt wall outlets.

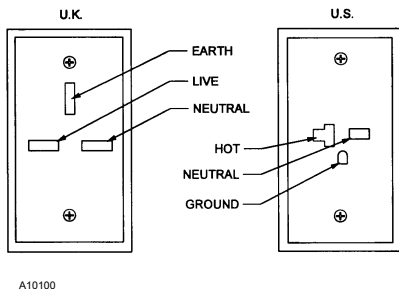


Figure 2. 230-Volt Outlets

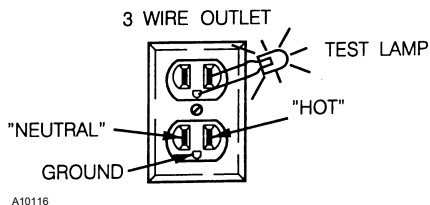


Figure 3. 115-Volt Outlet

Connect the vendor power cord to a grounded 115 Volt AC, 60 Cycle, noise free polarized power source of not less than 15 Amps. Checking the power source can be accomplished with an AC Voltmeter in the following manner:

1. Voltage Check

When the AC Voltmeter probes are connected to the **HOT** and **NEUTRAL** terminals, the voltmeter should indicate 110 to 130 volts AC. See Figure 4.

2. Polarity and Ground Check

When the AC Voltmeter probes are connected to the **HOT** and **GROUND** terminals, the voltmeter should indicate 110 to 130 Volts AC. See Figure 4.

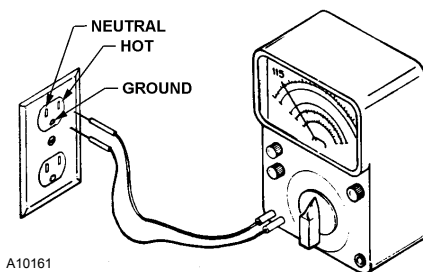


Figure 4. Electrical Check with Voltmeter

3. Noise Potential Check

When the AC Voltmeter probes are connected to the **NEUTRAL** and **GROUND** terminals, the voltmeter should indicate 0 Volts AC. See Figure 4. Any voltage reading could cause noise problems in the electronic controller.

4. Amperage Check

At the fuse box or circuit breaker panel, locate the proper circuit and ensure that the fuse or breaker protecting that circuit is rated at 15 Amps or greater.

NOTE

In a standard three (3) prong 115 Volt AC wall outlet the **GROUND** pin is round, the **NEUTRAL** pin is rectangular and located clock-wise from the ground pin and the **HOT** pin is rectangular and smaller than the neutral pin and located counterclockwise from the ground pin. See Figure 4.

To correct negative voltage, amperage, polarity, or ground checks, consult a licensed electrician. To correct a negative noise potential check, install a noise suppressor which can be obtained from any electrical or electronic supply store or in kit form.

Outlet Tester

An easy to read outlet tester can be obtained from any electrical or electronic supply store.

Plug the tester into any grounded (3-prong) 115V AC outlet to detect faulty wiring. See Figure 5.

Read the indicator lights as explained on the tester. See Table 1 for explanation of faults.

Refer all indicated problems to a qualified electrician.

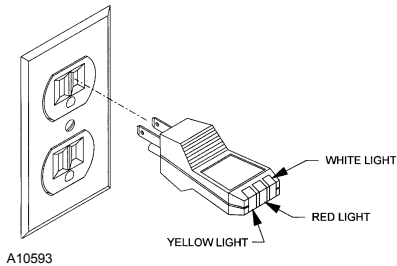


Figure 5. 3-Prong Outlet Tester

CAUTION

Unplug all equipment on branch circuit before testing.

NOTE

This is not a comprehensive diagnostic instrument. Please refer to the tester packaging for more information.

Table 1. Indicated Problems when using a tester

FAULT	REASON FOR FAULT
Open Ground	Ground contact not connected
Open Neutral	Neutral contact not connected
Open Hot	Hot contact not connected
Hot Ground Reverse	Hot and ground contacts interchanged
Hot Neutral Reverse	Hot and neutral contacts interchanged

Power Switch

Each **Super Vendor** is equipped with a “Power Switch” located on the transformer panel along with a 3-Amp breaker. The switch will shut-off the light and controller. See Figure 6.

The 3-Amp breaker is protection for the transformer.

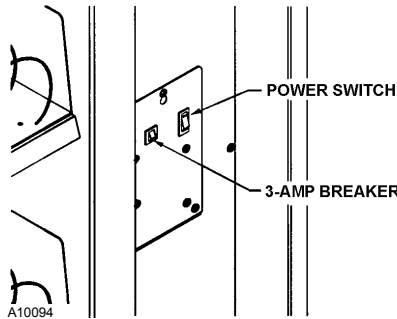


Figure 6. Power Switch

COIN MECHANISM & BILL VALIDATOR

CAUTION:

Do not plug in or unplug the coin changer with the power on!

The controller will monitor the condition of the coin changer at all times. Any activity (coins inserted) will be recorded and stored in the controller.

Removing Accepted Bills

Accepted bills may be removed by opening the “bill box” lid or by removing the bill box from the validator. (See manual from validator manufacturer).

NOTE

If the bill box is removed, make sure that it is fully latched in place when it is returned to the validator.

Clearing Jams & Cleaning

Trapped bills, debris or dirt can result in poor bill acceptance or bill rejection. Remove the bill box and lower housing to clear trapped bills or debris. Clean the bill path plastic parts or belts with a cloth moistened with a mild soap and water solution. Clean the magnetic head and optic sensors using a swab and isopropyl alcohol. (See manual from validator manufacturer)

CAUTION:

Do not use any petroleum based cleaning solvents, scouring pads or stiff brushes for cleaning.

LOADING PRODUCTS

To load products, lift tray slightly and pull forward until the tray stops. The upper-most trays will tilt for ease of loading.

Load products from front to back, making sure all items fit freely between the augers. Do not attempt to force oversize items or packages into the spaces. Do not skip a space. The bottom of the package should be placed on the bottom of the compartment above the product augers. The label should face the front of the machine for easy identification by the customer. See Figure 7.

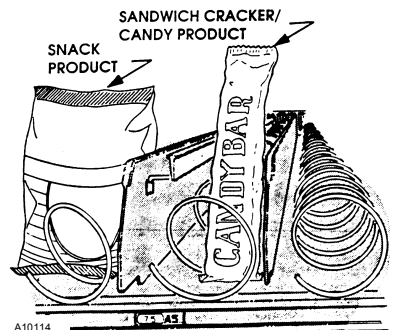


Figure 7. Loading Products

When finished loading each tray, make sure the tray is returned to its proper standby position. All trays must be pushed to the rear of the cabinet and properly seated in the "detent" position.

The size of the item being vended must be larger than the diameter of the auger being used to vend properly. Undersized items could cause vend problems. If the product does not fit the auger properly, it is recommended that a different auger be used. Optional augers are available; see the "Parts Ordering Procedure" (page 49) section for ordering information.

Product Ejectors

Product ejectors can be added to the end of the augers to help move the product out of the tray area (see Figure 8). Order P/N 4025748.

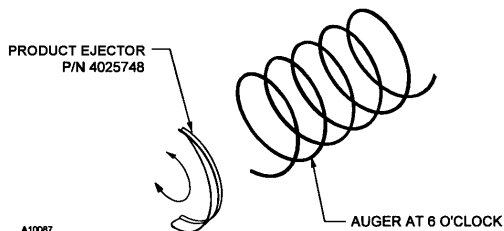


Figure 8. Product Ejectors

CHANGING TIMING AND TRAY SPACING

Retiming the augers can dispense difficult-to-vend items more dependably. Larger items can be vended by altering tray spacing.

Timing

Each auger can be rotated in 20-degree increments for a different drop-off point. Most items can be vended successfully when the auger end is positioned at 6 o'clock.

To change the auger end positions:

1. Make sure the auger coupling is seated over the vertical rail or retaining rib on the tray.
2. Remove the motor cover.
3. Raise the motor slightly and pull forward on the auger until it separates from the motor. See Figure 9.
4. Rotate the auger to the desired position and re-insert the auger coupling into the motor.
5. Replace the motor cover and securely tighten.

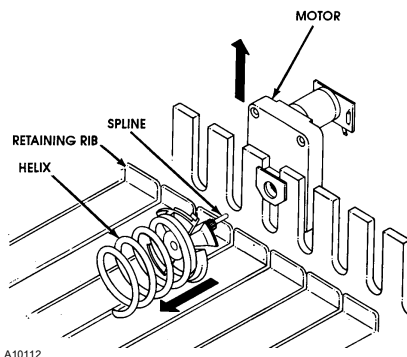


Figure 9. Auger Motor assembly

Tray Spacing

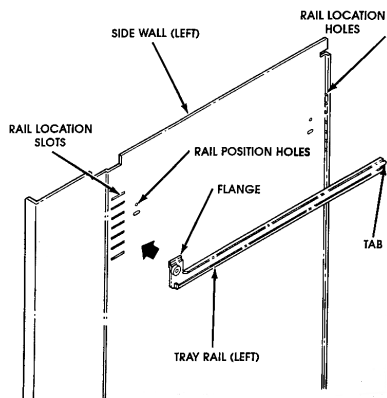
The trays can be raised or lowered in 1-inch (25.4 mm) increments to provide additional headroom for vending taller items.

NOTE

When increasing the space between two trays, a corresponding decrease in space of an adjoining tray will result.

To change tray spacing, follow the steps outlined below: (See Figure 10)

1. Pull out the tray to be adjusted until it stops.
2. Disengage the tray harness from its snap open harness clamp on the right hand side wall..
3. Disconnect the tray plug from its receptacle on the right side wall.
4. Lift up on the front of the tray and pull slightly forward (approximately 1/2-inch (15 mm) to clear the tray stop.
5. Lift up on the rear of the tray and remove it from the machine.
6. Disengage both left and right tray rails from their corresponding slots on the left and right side walls: pull inward on the bottom front of each rail and pull its flange out of the slot.



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Figure 10. Changing Tray Spacing

7. Pull each rail forward to disengage its rear tab from the hole in the rear wall. See Figure 10.
8. Relocate both left and right rails by reversing steps 6 and 7.

NOTE

Rails must be level front to back and right to left.

9. Replace the tray by placing its rear rollers on the left and right rails and lifting up on the front of the tray as you push it back.
10. Install the tray harness plug into its receptacle on the right side wall.
11. Clip the tray harness into its harness clamp and snap the clamp closed.
12. Test vend the tray in its new position to assure that the tray harness plug is properly connected.

CONTROLLER FUNCTIONS

There are two modes of operation.

Sales Mode: The vendor accepts deposits, pays out change, and dispenses product to the customer. The 10-character scrolling display is used to communicate with the customer.

Service Mode: Used by the operator to program and service the machine. The display is used to communicate with the operator.

Sales Mode

Display and Vend Cycle

When no credit has been established and a selection is made, the price for that selection displays for approximately one second.

When credit is deposited the amount displays. Five digits are available.

After a selection is made, the controller will determine if sufficient credit is available. If the accumulated credit is greater than or equal to the price of the selection a vend attempt will take place. If credit is less than the selection price, the price will display will scroll **PLEASE INSERT MORE MONEY.**

After a successful vend, the amount of change to be returned will be displayed until all coinage is paid back.

If a selection is made and a vend cannot take place, or selection is empty, (assuming that sufficient credit and change are available) the **MAKE ALTERNATE SELECTION** message scrolls.

If the payout tubes in the coin mechanism are below the low-level sensors, the **USE CORRECT CHANGE** message will scroll.

If no motors have been assigned or if the motor has been recorded as faulty, the **MAKE ALTERNATE SELECTION** message scrolls.

Jammed Motor Condition

The controller will not run motors that have been recorded as "jammed" or have not been assigned. A motor jam is detected when power is applied to a motor and the motor fails to return to the home position within about 9 seconds.

Motors recorded as inoperative can be reset by running a test vend of that particular selection. See the Test Vend Selections section of this manual (page 21).

Vend and Cash Counters

Following a successful vend, the vend counter will be incremented by one (1) and the cash counter will be incremented by the price of the vended selection. The counter rollovers occur at 79,999,920 and \$99,999.95 respectively.

NOTE

Test vends are not included in the counter totals.

Resettable Vend and Cash Counters

The resettable counters track Total Vends dispensed and Total Cash collected since last reset. The vend count and cash totals will be available by individual selections, range (rows) and entire machine utilizing all the rows (i.e. row A to row J for the combo vendor).

Following a successful vend, the resettable vend counter will be incremented by one (1) and the resettable cash counter will be incremented by the price of the selection vended. The counter rollovers occur at 79,999,920 and \$99,999.95 respectively if never reset.

NOTE

Test vends are not included in the counter totals.

Service Mode

Entering the Service Mode

To change any settings or programs in the vendor, the controller must be placed in the *Service Mode*. To enter the *Service Mode*, push the red service mode button once (located on the control board). If credit exists when entering the *Service Mode*, it will be restored when the machine is returned to the *Sales Mode*.

Key Functions while in Service Mode:

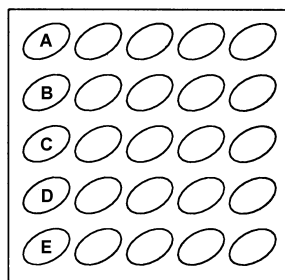
Key (A) = *Scrolls UP through a menu, sub-menu*

Key (B) = *ENTERS a menu, sub-menu or routine within a menu*

Key (C) = *Scrolls DOWN through a menu, sub-menu*

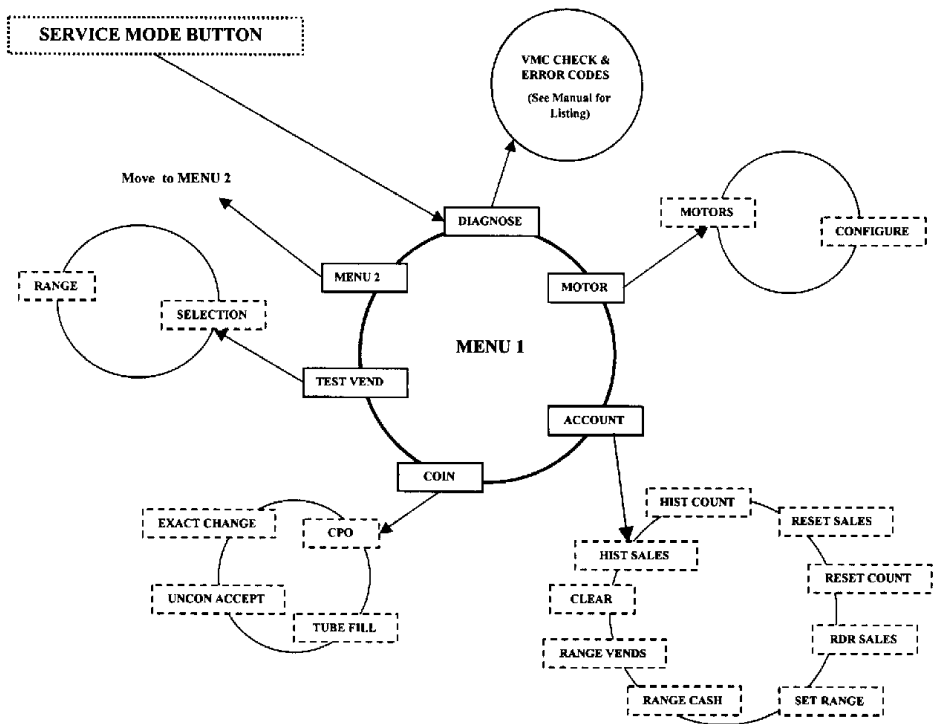
Key (D) = *SAVES a change within sub-menus or routines*

Key (E) = *EXITS down a level from a menu, sub-menu or routine without making a change.*

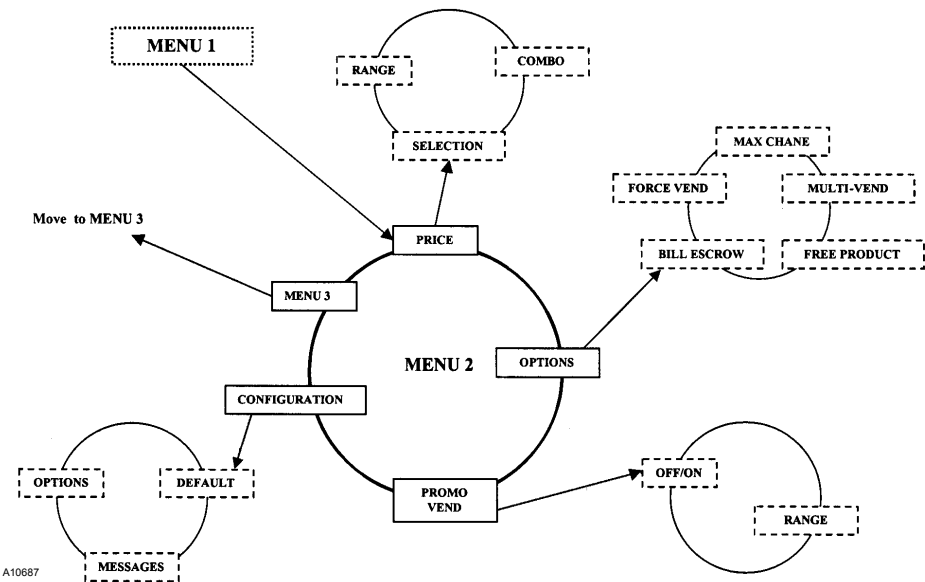


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The following three diagrams illustrate the three menu levels and the sub-menu levels of each main menu. Use the (A) and (C) keys to scroll through each menu or sub-menu. use the (A) key to move from menu to sub-menu levels.



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Upon entering Service Mode the display will show **DIAGNOSE**, which marks the beginning of **MENU 1** of the Service Menu.

NOTE

Pressing (E) will exit a menu or sub-menu item without saving any changes

Exiting the Service Mode

To exit the *Service Mode*, push the Service Mode Button.

The controller will automatically exit the *Service Mode* if no key is pressed for approximately 25 seconds.

MENU 1

NOTE

Press (A) or (C) to scroll through the Menu1 sub-Mode menu.

Diagnose Mode..... Displays Error codes

Motor Mode..... Counts and Configures motors

Account Mode..... Account Mode is used to display various types of cash and vend totals

Coin Mode Coin mode is used to load or unload the coin mech coin tubes and to set Unconditional Acceptance and Exact Change

Test Vend Mode..... Test Vend cycles each selection or range of selections to assure that they are working properly

With **DIAGNOSE** displayed

Press (B) to enter Errors Mode. **VMC** **OK** (Vendor Motor Configuration) will be displayed.

Press (B) again to display error codes. If there are no errors, the display will scroll through:

VMC	OK
CHANGER	OK
VALIDAT	OK
READER	OK

If the display reads for example: (**READER** **B**) the controller can not locate a card reader. See the following table for error codes.

Press (E) to return to **DIAGNOSE** display.

Press (C) to move to Motor Mode. **MOTOR** will be displayed.

Error Codes

CODE	ERROR DETAIL
CHANGER 3	Controller cannot locate the Coin Mechanism
VALIDAT 7	Controller cannot locate the Validator
READER 8	Controller cannot locate the Card Reader
SELS	55 1 - 55 12 (select switch closed)
CHAR	CC (changer communication) TS (Changer Tube Sensor) IC (Inlet Chute blocked) TJ (Changer Tube jammed) CRCH (Changer ROM Checksum)
ACCE	EE (excessive escrow) AJ (Coin Acceptor jammed) LA (low acceptance rate)
CHUT	CS (Chute Sensor always on)
STS	DAXX (column double assigned) UAXX (column unassigned)
BUAL	BS (Bill Validator Sensor) BILL (Bill Validator Motor) BJ (bill jammed) BOPN (open Bill Cash Box) BFUL (full Bill Cash Box) BC (Bill Validator communication)
FR16 (sensor)	SENS (Temperature Sensor) COLD (sensing temperature 3 degrees under Cut out) CNPR (not cooling—within 30 min. of Cut in) ACLD (less than 95 volts for more than 30 minutes)

MOTOR MODE

Motor mode is used to display the number of working motors or to configure the vendor to the currently working motors.

Press (EN) to enter motors mode. **MOTORS** will be displayed.

NOTE

Press (A) or (C) to scroll through the Motor Mode sub-menu.
Motors Motor Count of working motors
Configure Configure vendor to working motors

Press (B) again to display the number of working motors.

Press (E) to return to the **MOTORS** display.

Press (C) to enter configuration mode. **CONFIG** will be displayed.

Press (B) to automatically configure machine to the currently working motors. After a short pause **CONFIGURED** will be displayed.

Press (E) to exit back to **CONFIG**.

Press (E) again to return to **MOTOR**.

From there press (C) to move to Account mode. **ACCOUNT** will display.

ACCOUNT MODE

Account Mode is used to display various types of cash and vend totals.

Press (B) to enter Account Mode **HIST SALES** will be displayed.

NOTE

Press (A) or (C) to scroll through the Account Mode sub menu.
Historical Sales Total sales since initialization.
Historical Count Total vends since initialization.
Reset Sales Total sales since last reset.
Reset Count Total vends since last reset.
RDR Sales Card Reader Sales.
Set Range Defines a range for cash and vend counts.
Range Cash Total sales for defined range since last reset.
Range Vends Total vends for defined range since last reset.
Clear Clears all resettable counts above.

HISTORICAL SALES

Displays the total amount of sales (by dollar) since initialization of the control board.

Press (B) to display the amount of sales since initialization.

Press (E) to return to the **HIST SALES** display.

Press (C) to move to historical count. **HIST COUNT** will be displayed.

HISTORICAL COUNT

Displays the total number of vended products since initialization of the control board.

Press (B) to display vended products since initialization.

Press (E) to return to the **HIST COUNT** display.

Press (C) to move to Resettable Sales. **RES SALES** will be displayed.

RESETTABLE SALES

Displays the total sales (in dollars) since the last reset.

Press (B) to display the total sales.

Press (E) to return to the **RES SALES** display.

Press (C) to move to Resettable Count. **RES COUNT** will be displayed.

RESETTABLE VEND COUNT

Displays the total vends since the last reset.

Press (B) to display number of vended products.

Press (E) to return to the **RES COUNT** display.

Press (C) to move to Card Reader Sales. **RDR SALES** will be displayed.

RDR SALES

Displays the total card reader sales.

Press (B) to display the **Card Reader Sales**. (optional hardware required).

Press (E) to return to the **RDR SALES** display.

Press (C) to move to Set Range. **SET RANGE** will be displayed.

SET RANGE

The operator uses Set Range to define a specific range of selections to display total cash or vends since last reset. Use the Range Cash or Range Vends below to display totals. Ranges can only be defined by row and not by selections.

Press (B) to display **SR/ER** and the current range. To change the range press the letter of the first selection to be specified and then the letter of the last selection to be specified. (For example: A – A for the top tray or A – C for the top three trays).

Press (D) to save range and return to the **SET RANGE** display.

Press (C) to move to Range Cash. **RANGE CASH** will be displayed.

RANGE CASH

Displays the total sales (by dollar) for the defined range.

Press (B) to display total sales of the defined range.

Press (E) to return to the ***RANGE CASH*** display.

Press (C) to move on to ***RANGE VENDS***.

RANGE VENDS

Displays the number of vended products for the defined range.

Press (B) to display the number of vended products over the defined range.

Press (E) to return to the ***RANGE VENDS*** display.

Press (C) to move to Clear. ***CLEAR*** will display.

CLEAR

Clears all resettable values.

Press (B). ***CLEARED*** will display.

Press (E) to return to the ***CLEAR*** display.

Press (E) to exit Account sub-menu. ***ACCOUNT*** will display

Press (C) to move to Coin Mode. ***COIN*** will display.

COIN MODE

Coin mode is used to load or unload the coin mech coin tubes and to set Unconditional Acceptance and Exact Change values.

Press (B) to enter Coin mode. ***CPO*** (Coin Pay Out) will be displayed

NOTE

Press (A) or (C) to scroll through the Coin Mode sub-menu.

CPOCoin Tube Payout

Tube FillDisplays current amount in coin tubes

Unconditional Accept.Sets the value for Unconditional Acceptance

Exact Change.....Sets value for Exact Change

CPO (Coin Pay Out)

Pays out coins from the coin mech coin tubes.

Press (B) to display ***DISPENSE***. Press the number (1) key to dispense least significant coin, (2) key for next significant coin, or the (3) key for the most significant coin. On some coin mechs there is a fourth tube (the dollar coin for example). Use the number (4) key for this tube. Press and hold 1, 2, 3, or 4 to rapidly dispense coins.

Press (E) to exit dispense and return to the ***CPO*** display.

Press (C) to move to Tube Fill. ***TUBE FILL*** will display.

TUBE FILL

Display will show an increasing total as coins are entered through the coin mech.

Press (B) . ***FILL COINS*** will be displayed briefly, followed by ***00.00*** The display will change as coins are entered through the coin mech.

NOTE

Manually ejecting coins will not subtract from the total. and exiting the Fill Coins mode will reset the counter back to 00.00.

Press (E) to return to the ***TUBE FILL*** display.

Press (C) to move to Unconditional Acceptance. ***UNCON ACCP*** will display.

UNCONDITIONAL ACCEPTANCE

Used to set the highest amount of currency in bills or coins that can be accepted without regard if the equivalent value in coins can be returned.

Press (B) to display the amount currently set for unconditional acceptance.
Change amount using numerical keys.

Press (D) to save change and return to ***UNCON ACCP*** display.

Press (C) to move to Exact Change.

EXACT CHANGE

Sets the Exact Change value that controls the display of the INSERT EXACT CHANGE message.

Press (B) to display the amount currently set for exact change.
Change amount using numerical keys. Press (D) to save change and return to ***EXACT CHANGE***.

Press (E) to exit Coin Mode sub-menu. ***COIN*** will display.

Press (C) to move to Test Vend Mode. ***TEST VEND*** will display.

TEST VEND MODE

Test Vend cycles each selection or range of selections to assure that they are working properly - product will be vended in the process.

Press (B) to enter Test Vend Mode. ***SELECTION*** will be displayed.

NOTE

Press (A) or (C) to scroll through the Test Vend Mode sub-menu.
Selection.....Test Vends one selection
Range.....Test Vends a set range of selections

SELECTION

Use this option to test vend one selection at a time.

Press (B) to display **SELECT** and -- --. Enter the desired selection ("B3" for example). The current price of the chosen selection will be displayed and the selection will vend. A triple beep indicates that the selection did not properly vend. After the test vend, the display will return to **SELECTION**.

Press (B) to repeat process or press (C) to move to Range.

RANGE

Use this option to test vend a range of selections by rows at a time. The range is settable by the operator.

Press (B) to display **SR/ER** (Start Range/End Range) and the current range of rows set to be automatically test vend. Change the range by entering the first row to be tested followed by the last row to be tested. (For example: "A - A" or "B - D")

Press (D) to begin test vend. At the end of the test, the display will return to **TEST VEND**.

Press (C) to move to MENU 2. **MENU 2** will be displayed.

MENU 2

Press (B) to enter MENU 2. **PRICE** will be displayed.

NOTE

Press (A) or (C) to scroll through the Menu 2 sub-menu modes.

Price Mode	Sets prices by selection, range or by combo
Options Mode	Sets vending options
Promo Vend Mode.....	Turn promo vend on or off and set range
Configuration Mode	Configures vendor to original defaults
Menu 3	Enters Menu 3 Modes

PRICE MODE

Price Mode is used to set the selection prices by selection, range of selections or combo prices.

Press (B) to display **SELECTION**.

NOTE

Press (A) or (C) to scroll through the Price Mode sub-menu.

Selection.....	Sets prices by Selection
Range.....	Sets prices by Range
Combo.....	Sets Combo prices

SELECTION

Set prices by single selection.

Press (B) . **SELECT** will be displayed followed by **— —**. Enter desired selection (B4 for example). The selection number and its current price will be displayed.
Enter the desired price.

Press (D) to save change and return to **SELECTION** display.

Press (B) to repeat process for other selection changes.

Press (C) to move to Range. **RANGE** will be displayed.

RANGE

Sets the same price for a range (by row only) of selections.

Press (B) to **SR/ER** (Start Range/End Range) will be displayed followed by the current range of selections to be priced. Change the range by entering the first row to be priced followed by the last row to be priced. (**Range pricing must be by row rather than selection — Row D-Row E, not D3-E5**) Each row will be displayed along with its current price.

After the pricing is complete, press (D) to save changes or press (E) to return to the **RANGE** display without changes.

Press (C) to move to Combo, **COMBO** will be displayed.

COMBO VEND

Combo Vend is used to set up a combination of products to be purchased at a single combined price. A maximum of five products can be combined in a combo vend. Five Combo selections can be programmed into the vendor. (Example: a “combo” meal of a bag of chips plus a drink and a candy bar for one price).

NOTE

A sign of some kind will have to be posted on the front of the vendor to indicate Combo packaged “meals” and the price of the combined selection.

CAUTION:

Be sure the vendor is configured to the currently working motors. See page 18. For combo vend use a selection number that is not in the vendor configuration, this is typically the even-numbered selections on a snack tray.

Press (B) to display **SELECT** **— —**. Enter the selection number chosen for the combo vend (A4, for instance). Current price for the combined items will be displayed. Change the price as desired using the numerical keys.

NOTE

You must use a selection number that is not included in the current motor configuration.

Press (D) to save changes and to display **COMBO1**. At this point use the (A) and (C) keys to choose which combo of 1 to 5 to assign selection A4.

Press (B). The display will show **R61**. Up to 5 ranges of selections can be entered under each combo. (C1 to C6, for example.)

Press (B) again to display **R61** plus a *. Enter the 1st range to be included in the Combo selection of A4.

Press (D) to save range 1. The display will show **R62**.

Press (B) again to display **R62** plus a *. Enter the 2nd range to be included in the Combo selection of A4. (J4 to J6, for example. canned drinks only).

Press (D) to save range 2. The display will show **R63**.

Press (B) again to display **R63** plus a *. to enter the 3rd range. Repeat above to continue with ranges 4 & 5 or press (EX) to move back out to **COMBO**.

Press (E) to move back to the **PRICE** display.

From there press (C) to move to Options. **OPTIONS** will be displayed.

OPTIONS MODE

Options Mode is used to set various options on the coin mech and the validator.

Press (B) **BILL ESCROW** will be displayed.

NOTE

Press (A) or (C) to scroll through the Options Mode sub-menu.

Bill Escrow..... Turn Bill Escrow ON or OFF

Force Vend..... Turn Force Vend ON or OFF

Max Change Turn Max Change ON or OFF and set a value

Multi Vend Turn Multi Vend ON or OFF

Free Product..... Turn Free Product ON or OFF and set a interval

BILL ESCROW

This Option can be turned ON or OFF. With Bill Escrow ON and bill is accepted that matches or exceeds maximum credit value, the bill will be held in "escrow", and not stacked, so that it will be available for return.

Press (B). **ESCROW OFF** or **ON** will be displayed. Use the (B) key to toggle between OFF and ON.

Press (D) to save change and return to **BILL ESCROW** or

Press (E) to return to **BILL ESCROW** without changes.

Press (C) to go to Force Vend. **FORCE VEND** will be displayed.

FORCE VEND

This Option can be turned ON or OFF. With Force Vend ON, once credit is deposited a vend must take place, and change is only given after a vend. With Force Vend OFF the vendor can be used as change machine.

Press (B) to set Force Vend option. **F VND OFF** or **ON** will be displayed. Use the (B) key to toggle between OFF and ON.

Press (D) to save the change or press (E) to return to **FORCE VEND** display without making a change.

Press (C) to go to Max Change. **MAX CHANGE** will be displayed.

MAX CHANGE

This Option can be turned ON or OFF. With Max Change ON this feature allows the vendor operator to control the maximum amount of credit to be returned as change at the end of a vend.

Press (B) to display **OFF** or **ON**. Use the (B) key to toggle between OFF and ON or to change the value press (C) to display value.

Press (D) to save the change. **VALUE** will display.

Press (B). Use the numerical keys to change the value.

Press (D) to save the change and return to **VALUE** display.

Press (E) to return to **MAX CHANGE** display without making a change.

Press (C) to go to Multi Vend. **MULTI VEND** will be displayed.

MULTI VEND

This Option can be turned ON or OFF. With Multi Vend ON instead of immediately returning the change after a vend, the credit will remain on the display for up to 25 seconds. This allows for a second vend on one line of credit. To receive change on an over-deposit, the coin return button must be pressed. If a coin return is not requested within 25 seconds the change will then be returned automatically.

Press (B) to display **OFF** or **ON**. Use the (B) key to toggle between OFF and ON.

Press (D) to save changes and return to **MULTI VEND** display. Or press (E) to return to **MULTI VEND** without changes.

Press (C) to go to Free Product. **FREE PROD** will be displayed.

FREE PRODUCT

At a set interval of vends a single free vend will be dispensed upon making a selection, and payment will be returned. Set to 0 to turn off.

Press (B) **FREE** will be displayed along with the current interval at which a Free Vend occurs. Enter new interval (*Must be between 2 and 255*).

Press (D) to save interval. **FREE PRODUCT** will be displayed.

Press (E) to move out to **OPTIONS**.

Press (C) to move to Promo Vend

PROMO VEND MODE

This option allows the customer to receive an additional product “free” when purchasing another. A maximum of two (2) promotional items can be programmed into each vendor with a choice of which two rows to assign to the promo vend . The promotional or free item will always be dispensed from the #2 selection of a row. The primary product will be dispensed from the #1 selection of a row. When enabled, purchasing selection ‘1’ from one of the two possible promotional rows will result in both selection ‘1’ and ‘2’ of that row to vend sequentially. Individual vends from selection “2” can be obtained while in promo vend if these selections are depressed with adequate credit inserted.

Press (B) **OFF** or **ON** will be displayed. Use the (B) key to toggle between OFF and ON.

Press (D) to save change and return to **OFF** or **ON**.

Press (C) to move to Range. **RANGE** will be displayed.

RANGE

Range is used to set which rows to operate as Promo Vends. Maximum of two rows can be set at a time.

Press (B) to select rows. **SR/ER** (Start Range/End Range) will be displayed followed by the current set rows. Change the rows by entering the first row letter followed by the second row letter.

Press (D) to save changes or press (E) to return to the **RANGE** display without changes.

Press (E) to move out to **PROMO VEND**.

Press (C) to move to Configuration. **CONFIG** will display or press (A) to move to Options Mode.

CONFIGURATION MODE

Configuration Mode is used to return the vendor to original factory settings under each of the following areas.

Press (B), ***DEFAULT*** will be displayed.

NOTE

Press (A) or (C) to scroll through the Configuration Mode sub-menu.

Default Configures factory default settings

Messages Configures POS messages to default settings

Options Configures options settings to default ON or OFF

DEFAULT

This action configures the factory default settings.

Press (B), ***CONFIGURED*** will be displayed.

Press (E) to return to the ***DEFAULT*** display.

Press (C) to go to Messages. ***MESSAGES*** will be displayed.

MESSAGES

This action configures POS Messages to the default settings. (messages only)

Press (B), ***CONFIGURED*** will be displayed.

Press (E) to return to the ***MESSAGES*** display.

Press (C) to go to Options. ***OPTIONS*** will be displayed.

OPTIONS

This action configures the Options to the ON or OFF default settings.

Press (B), ***CONFIGURED*** will be displayed.

Press (E) to return to the ***OPTIONS*** display.

Press (C) to go to Default. ***DEFAULT*** will be displayed the beginning of this sub menu listing.

Press (E) to move out this sub menu to Configuration Mode.

Press (C) to move to MENU 3, ***MENU 3*** will be displayed or (A) to move to Promo Vend Mode the beginning of Menu 2.

MENU 3

Press (B) to enter the Menu 3 listing of procedures **POS/AUX** will be displayed.

NOTE

Press (A) or (C) to scroll through the MENU 3 menu.

POS/AUX Mode Set the Point of Sale and Auxiliary scrolling messages.
Set language of display.

Time/Date Mode Sets the time and date.

Shutdown Mode Sets periods of vending shutdown.

Temperature Mode.... Adjust temperature settings and Temp Sensors.

Discount Mode..... Turns Discount Mode OFF and ON and sets a range of
selections for discount.

Autoreinstate Mode... Auto.

Coupon/Token Mode. Enables the vendor to accept coupons or tokens.

Can/Bottle Mode Sets the can/bottle columns for single or double.

POS/AUX MODE

Press (B) to set POS (Point-of-Sale Message). **POS** will be displayed.

NOTE

Press (A) or (C) to scroll through the POS/AUX Mode sub-menu.

POSEnter a new Point-of-Sale message

LanguageSet Display Language for

AUX.....Enter a Auxiliary Message

POS (Point-of-Sale message)

The scrolling Point of Sales message can be changed using this mode. Messages can include up to 105 characters including spaces. When entering a new message, all inputs will overwrite the previous message.

NOTE

If the max limit of 105 characters is entered, the new message is automatically saved and any subsequent characters entered will overwrite the 105th character.

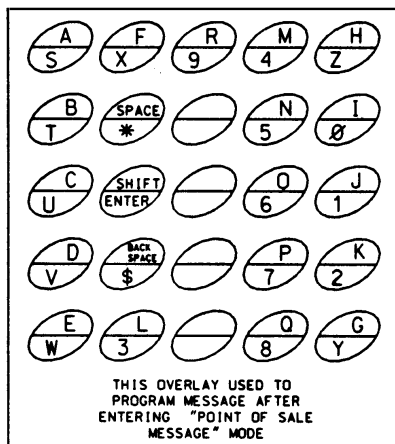
Press (B) again and **MESSAGE** will be displayed. **AT THIS POINT THE MESSAGE KEYPAD LAYOUT IS IN EFFECT** and a new message can be entered. See Figure 11. Enter each letter of the message according to the Keypad Format and the keypad overlay furnished with the vendor.

Press the service mode button to save the new message.

NOTE

To enter the lower letters or numbers on the keypad layout shown in figure 8, the SHIFT key or key (H) must be depressed first each time.

The keypad overlay can be found in the Service Packet that came with the vendor.



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Figure 11 Keypad Overlay

LANGUAGE

*Use **Language** to set the default display messages to read in one of seven languages (ITALIAN, DUTCH, SPANISH, DANISH, ENGLISH, FRENCH, and GERMAN. and AUXILIARY).*

Press (B) to display the default Point-Of-Sale language (English).

Press (C) to toggle through the available languages.

Press (D) to set desired language and return to **LANGUAGE** display.

Press (C) to move to Auxiliary Message. **AUX** will be displayed.

AUXILIARY MESSAGES

During the normal operation of the vendor, default messages will be displayed, depending on the condition or function being performed. Use Auxiliary Messages sub-menu to set the eight auxiliary messages in any desired language.

NOTE

Press (A) or (C) to scroll through the Auxiliary Messages sub-menu.

Message 1PLEASE INSERT EXACT MONEY (Max 30 characters)

Message 2PLEASE INSERT MORE MONEY (Max 30 characters)

Message 3MAKE ALTERNATE SELECTION (Max 25 characters)

Message 4PLEASE CALL SERVICE (Max 25 characters)

Message 5VENDING OPERATION TO RESUME AT (Max 25 characters)

Message 6MAKE SNACK SELECTION ONLY (Max 30 characters)

Message 7THANK YOU (Max 10 characters)

Message 8FREE ON US (Max 10 characters)

Press (B) , **MESSAGE 1** will be displayed.

Press (B) again to enter message mode and to begin setting Auxiliary Message 1.

NOTE

AT THIS POINT THE MESSAGE KEY PAD LAYOUT IS IN EFFECT. See Figure 11. Enter each letter of the message according to the Keypad Format and the keypad overlay furnished with the vendor.

Press the enter key twice to save message 1. **MESSAGE 2** will display.

Repeat above steps to set all eight messages.

At any message number. Press (E) to return the **AUX** display.

Press (E) to return to **AUX/POS** display.

Press (C) to move to Time/Date Mode.

TIME/DATE MODE

The Time/Date Mode is used to set the controller to the current time and date.

NOTE

Press (A) or (C) to scroll through the Time/Date sub-menu.

Time Sets time of day in military time (24-hour format)

Date..... Sets day of the month

Month Sets month of the year

Day..... Sets day of the week

Year..... Sets the year

Daylight Savings..... Sets daylight savings time and geographical location

Press (B) . **TIME** will be displayed.

TIME

Press (B) again to display **TIME** and the current setting in military time (24-hour format). Change setting using the numeric keys.

NOTE

The controller operates on a 24-hour format. Time displays as **TIME HH.MM** (i.e. **17.14** is 5:14 pm).

Press (D) to accept the new setting and return to **TIME** display.

Press (C) to move to Date. **DATE** will be displayed.

DATE

Press (B) again to display **DATE** and the current day of the month. (1-31) Change setting using the numeric keys.

Press (D) to save the new setting and return to **DATE** display.

Press (C) to move to Month. **MONTH** will be displayed.

MONTH

Press (B) and **MONTH** plus the current month setting will display. Change to current month (1-12) using the numeric keys.

Press (D) to save the new setting and return to **MONTH** display.

Press (C) to move to Day. **DAY** will be displayed.

DAY

Press (B) , **DAY** and the current **numerical** day of the week (1-7, Sunday being 1) will be displayed by number. Change day of week using the numeric keys.

Press (D) to save change and return to **DAY** display.

Press (C) to move to Year. **YEAR** will be displayed.

YEAR

Press (B) , **YEAR** and the current year setting will display (2 digit year).

Enter correct year using last two (2) digits, (00 for the year 2000).

Press (D) to save change and return to **YEAR** display.

Press (C) to move to Daylight. **DAYLIGHT** will be displayed.

DAYLIGHT-SAVINGS TIME

Turns Daylight-Savings time ON or OFF. And sets geographical location.

NOTE

Press (A) or (C) to scroll through the Time/Date sub-menu.

North America.....North-American Daylight-Savings time

OFFTurns Daylight-Savings time OFF

AustraliaAustralia Daylight-Savings time

EuropeanEuropean Daylight-Savings time

Choosing a geographical location indicates that Daylight-Savings is ON.

Press (B) to set the geographical location or set to off.

Press (D) to save change and return to **DAYLIGHT** display.

Press (E) to move out to **TIME/DATE** display.

Press (C) to move to Shutdown Mode. **SHUTDOWN** will be displayed.

SHUTDOWN MODE

This option shuts down the machine during specified intervals of the day. All vending functions of the machine will be disabled. Four programmable intervals per day are available. If set to on, during these time intervals the message **VENDING OPERATION TO RESUME AT HH:MM** displays. (i.e. 9.05 = 9:05 am, 15.34 = 3:34 pm).The controller must be set to the current time and date before specifying the intervals.

NOTE

Press (A) or (C) to scroll through the Shutdown mode sub-menu.

Time Sets shutdown interval times

Day..... Sets days of the week shutdown intervals are in effect

Range..... Sets the range of selections affected by shutdown intervals

If the ON state is selected, four intervals with a start and a stop time for each, must be programmed. If an interval is not used, program the start and stop times to zeros (00.00)

Press (B) to display **ON** or **OFF**.

Press (B) again to display **ON** or **OFF** with asterisk to right side of display.

Use the (B) button to toggle from one to the other.

Press (D) to save change and return to **ON** or **OFF**.

Press (C) to move to Time. **TIME** will be displayed.

TIME

Time is used to set Shutdown interval times. There are four (4) shutdown time periods that must be set (using military time, 24 hour clock) .

Press (B) **1STRT** will be displayed followed by the current shutdown start time.

Set first interval start time using numerical keys.

Press (D) to save and move to **1STOP**. Set first interval stop time using numerical keys.

Press (D) to save and move to **2START** and so on. All four time periods must be set. Time periods not used should be set to 00.00.

Saving the 4th stop period will move back to **TIME** display.

Press (C) to move to Day of the week. **DAY** will be displayed.

DAY

Sets the day of the week the shutdown period is active within a four week period.

Press (B) to begin setting days for shut down procedure to be active. **1SUN**

followed by **OFF** or **ON** will be displayed. Use (A) or (C) to toggle through the four weeks available for setting starting with Sun of each week.

Press (B) at a desired Sunday (1,2,3, or 4). (**4SUN**, for example). Now the entire 4th week is available for adjustment. At this point (A) or (C) cycles through the days of the week.

Press (B) at a desired day of the week. Then (A) or (C) will toggle ON or OFF for that day.

Press (D) to save changes. Use the (A) or (C) keys to move to other days of the week and repeat the change process.

Press (D) to save changes.

Press (E) two (2) times to move back to **DAY** display.

From there press (C) to move to RANGE.

RANGE

Sets the range of selections to be affected by the shutdown.

Press (B). **SR/ER** will be displayed followed by the row range.

Enter the row changes. Press (D) to confirm changes and move back to **RANGE**.

Press (E) again to move back to SHUTDOWN.

Press (C) to move on to Temperature.

TEMPERATURE MODE

Temperature Mode is used to set the operating parameters of the sensors and the refrigeration unit.

NOTE

Press (A) or (C) to scroll through the Temperature Mode sub-menu.

Degree Sets the display to read in Fahrenheit or Celsius.

Temp Sensor 1 Located in the drink compartment and can be turned OFF or ON.

Temp Sensor 2 Located one the snack compartment and can be turned OFF or ON.

Defrost Set defrost perimeters for refer unit.

Press (B) to begin temperature control routines.

Press (B) again to display **DEGREE** will be displayed followed by **F** for Fahrenheit or **C** for Celsius plus an asterisk at the right side of the display. Toggle between the two using (B).

Press (D) to confirm choice.

Press (C) to move to Sensor 1. **SENSOR 1** will be displayed

SENSOR 1

Turns Temperature Sensor 1 ON or OFF. Sensor 1 is located in the canned drink compartment.

NOTE

Press (A) or (C) to scroll through the Sensor 1 sub-menu.

Set Point..... Sets the set point of sensor 1.

Delta Sets the Delta of sensor 1.

Health Safety Sets H/S parameters for sensor 1.

Press (C) **ON** or **OFF** will be displayed.

Press (B) again to display an asterisk to the right side of the display. Use (B) to toggle between the two.

Press (D) to confirm choice.

Press (C) to move on to Set Point. **SET POINT** will be displayed.

SET POINT

Used to set the Temperature Set Point of Sensor 1.

Press (B) The current temperature setting will be displayed. Enter the desired temperature using the (A) and (C) keys.

Press (D) to save changes and return to **SET POINT**.

Press (C) to move on to Delta. **DELTA** will be displayed.

DELTA

Delta determines the temperature swing around the temperature set point. The cut-off value is equal to the set point minus half of this value. The cut-in temperature is equal to the set point plus half of this value.

Press (B) The current delta setting will be displayed.

Enter the desired delta using the (A) and (C) keys.

Press (D) to confirm changes and return to **DELTA** display.

Press (C) to move to Health Safety. **H/S** will be displayed.

HEALTH SAFETY

This is a "Health Safety" feature that prevents the sale of perishable food items if the temperature inside the cabinet area exceeds 45°F (7.2°C). Due to the operating temperature range of this vendor this feature should be turned off at all times.

NOTE

Press (A) or (C) to scroll through the Sensor 1 Health/Safety sub-menu.

Level.....Set H/S to none, frozen, slack or cold

Range.....Sets a range of rows for H/S

Press (B), **LEVEL** will be displayed.

Press (B) again to display **NONE** plus an asterisk to the right side of the display.

Use (A) or (C) to toggle through the choices of Frozen, None, Slack or Cold.

Press (D) to confirm choice and return to **LEVEL** display.

Press (C) to move on to range. **RANGE** will be displayed.

Press (B), **SR/ER** (start of range/end of range) will be displayed. Enter range of rows (A-B for example).

Press (D) to save choice and return to **RANGE**.

Press (E) to move to Sensor 2. **SENSOR2** will be displayed.

SENSOR 2

Turns Temperature Sensor 2 ON or OFF. Sensor 2 is located in the snack side of the cabinet.

NOTE

Press (A) or (C) to scroll through the Sensor 2 sub-menu.
Set Point.....Sets the set point of sensor 2.
Delta.....Sets the Delta of sensor 2.
Health SafetySets H/S parameters for sensor 2.

Press (C) ***ON*** or ***OFF*** will be displayed.

Press (B) again to display an asterisk to the right side of the display. Use (B) to toggle between the two.

Press (D) to confirm choice.

Press (C) to move on to Set Point. ***SET POINT*** will be displayed.

SET POINT

Used to set the Temperature Set Point of Sensor 2.

Press (B) The current temperature setting will be displayed. Enter the desired temperature using the (A) and (C) keys.

Press (D) to save changes and return to ***SET POINT***.

Press (C) to move on to Delta. ***DELTA*** will be displayed.

DELTA

Delta determines the temperature swing around the temperature set point for sensor 2. The cut-off value is equal to the set point minus half of this value. The cut in temperature is equal to the set point plus half of this value.

Press (B) The current delta setting will be displayed.

Enter the desired delta using the (A) and (C) keys.

Press (D) to confirm changes and return to ***DELTA*** display.

Press (C) to move to Health Safety. ***H/S*** will be displayed.

HEALTH SAFETY

This is a "Health Safety" feature that prevents the sale of perishable food items if the temperature inside the cabinet area exceeds 45°F (7.2°C). Due to the operating temperature range of this vendor this feature should be turned off at all times.

NOTE

Press (A) or (C) to scroll through the Sensor 2 Health/Safety sub-menu.
Level.....Set H/S to none, frozen, slack or cold.
Range.....Set a range of rows for H/S.

Press (B), **LEVEL** will be displayed.

Press (B) again to display **NONE** plus an asterisk to the right side of the display.

Use (A) or (C) to toggle through the choices of Frozen, None, Slack or Cold.

Press (D) to confirm choice and return to **LEVEL** display.

Press (C) to move to range. **RANGE** will be displayed.

Press (B), **SR/ER** (start of range/end of range) will be displayed. Enter range of rows (A-B for example).

Press (D) to save choice and return to **RANGE**.

Press (E) to move to Defrost. **DEFROST** will be displayed.

DEFROST

This feature controls the amount of time the system remains in a defrost cycle. The factory setting (default) is 15 minutes for duration. The maximum defrost time is 60 minutes and the minimum is 10 minutes. The factory setting (default) for the period.

Press (B) **DURATION** will be displayed.

Press (B) again and the current duration of defrost in minutes (10 to 60) will be displayed. Use the (A) or (C) key to adjust the duration.

Press (D) to save changes and return to **DURATION** display.

Press (C) to move on to Period. **PERIOD** will displayed.

Press (B). The display will show the current setting for the period. Use (A) or (C) keys to adjust this time period in half hour increments from 1/2 hr to 24 hrs.

Press (D) to confirm changes and return to **PERIOD** display.

Press (E) to return to **DEFROST** display.

Press (E) again to move out to **TEMPERATURE** display.

Then press (C) to move to Discount Mode. **DISCOUNT** will be displayed.

DISCOUNT MODE

This procedure enables the machine to charge a different price for selections at different times or on different days—Sundays, for example.

NOTE

Press (A) or (C) to scroll through the Discount Mode sub-menu.

ON or OFF.....Turns discount mode ON or OFF

TimeSets time period of the day discount will be in effect

Day.....Sets the day of the week discount will be in effect

Range.....Sets the range of selection for the discount

ValueSets the value to be discounted from the regular set price

Press (B) **ON** or **OFF** will be displayed.

Press (B) again to display an asterisk to the right side of the display. Toggle ON or OFF using the (B) key.

Press (D) to confirm any changes and return to **ON** or **OFF**.

Press (C) to move on to Time. **TIME** will be displayed.

TIME

Sets the time of day that the discount mode is in effect.

Press (B) . **STRT** will be displayed followed by the starting time for discount. Set the new time using number keys (military time—24 hour clock).

Press (D) to confirm change and move to 1STOP. Repeat changing process.

Press (D) to confirm changes and return to **TIME**. Press (C) to move on to **DAY**.

DAY

Sets the day of the week that the discount mode will be in effect.

Press (B) . **SUN** will be displayed followed by **ON** or **OFF**. Use the (A) or (C) key to change day.

Press (B) to enter a day to turn ON or OFF.

Press (A) or (C) to toggle from OFF to ON.

Press (D) to save change. Use the (A) or (C) key to move to another day.

Repeat process as needed. When finished with all changes, press (E) to move back out to **DAY**.

Press (C) to move to Range. **RANGE** will be displayed.

RANGE

Sets the range of selections to be discounted.

Press (B) . The current range of selections for discount pricing will be displayed.

Use alpha and numeric keys to change range.

Press (D) to confirm changes and return to **RANGE**.

Press (E) to exit without making changes.

Press (C) to move on to Value. **VALUE** will be displayed.

VALUE

Sets the amount to be discounted from the regular price – .25 for example.

Press (B) . The current discount value will be displayed. Set value using numeric keys.

Press (D) to save change and return to **VALUE** display.

Press (E) to move out to **DISCOUNT** display.

Press (C) to move to Auto-reinstatement Mode. **AUTOREINST** will be displayed.

AUTO-REINSTATEMENT MODE

Use this feature for a satellite soft drink or similar vendor utilizing a sold out or empty switch. Normally, when an empty selection is detected during an attempted vend, that selection is recorded inoperative and requires resetting before it can be vended again. Satellite units utilize a range of selections within the controller. Programming this range of selections into the auto reinstatement will eliminate the necessity of manually resetting the controller after re-loading a selection that went into a soldout condition.

NOTE

Press (A) or (C) to scroll through the Auto-reinstatement Mode sub-menu.
ON or OFF Turns Auto-reinstatement mode ON or OFF.
Range Sets the range of selections (by row) to be effected by Auto-reinstatement

Press (B) to set the auto-reinstatement of empty/jammed selections. **OFF** or **ON** will be displayed.

Press (B) again to display an asterisk to the right of the display. Use the (B) key to toggle between ON and OFF.

Press (D) to save change.

Press (C) to move on to Range. **RANGE** will be displayed.

NOTE

With Auto-reinstatement ON — Selections affected by this function will not be recorded as "SOLD OUT" even when empty. The customer will see a display of **MAKE ANOTHER SELECTION** instead. The advantage to Auto-reinstatement is in the fact that when refilling the item, the supplier will not have to "reset" the selection.

RANGE

Press (B). **SR/VR** will be displayed followed by the range of rows covered by auto-reinstatement. Enter the rows desired.

Press (D) to save change and return to **RANGE** display.

Press (E) to back out to **AUTOREINST.**

Press (C) to move to Coupon/Token Mode. **COUPN/TOKN** will be displayed.

COUPON/TOKEN MODE

Enables the use of coupons or tokens—this option requires a Validator capable of accepting coupons or tokens.

NOTE

Press (A) or (C) to scroll through the Coupon/Token Mode sub-menu.
Coupon Value.....Sets the value of coupons to be used with vendor
Coupon RangeSets the range of coupons to be used with vendor
Token ValueSets the value of tokens to be used with vendor
Token Range.....Sets the range of tokens to be used with vendor

Press (B). **COUP VALUE** will be displayed.

COUPON VALUE

Sets the value of a coupon to be used with this vendor. Up to five different coupons can be used.

Press (B) . ***CV1*** will be displayed followed by the current coupon value. At this point (A) or (C) to display each of 5 coupons (CV1-CV5).

Press (B) at any coupon display. Change value using numeric keys.

Press (D) to save changes. ***COUP VALUE*** will again be displayed. Repeat above process to set other coupons.

Press (E) to move back out to ***COUP VALUE*** display.

Press (C) to move to Coupon Range ***COUP RANGE***. will be displayed.

COUPON RANGE

Sets a range of selections where the coupon is redeemable.

Press (B) to display ***C1R1*** (Coupon1-Range1--representing the range of selections that will honor Coupon 1) and the current range.

Press (B) again. Enter or change range (C4-D6, for example).

Press (D) to save changes and move out to ***COUP RANGE*** display.

Press (C) to move to Token Value. ***TOKEN VALUE*** will be displayed.

TOKEN VALUE

Sets the values of tokens to be used with this vendor. Up to 5 different tokens can be used.

Press (B) . ***TV1*** (Token Value 1) will be displayed followed by the current value of Token 1. At this point (A) or (C) will toggle through all 5 tokens (TV1-TV5)

Press (B) at any token display. Change value using numeric keys.

Press (D) to save changes, ***TOKEN VALUE*** will be displayed. Repeat the process to change value of other tokens.

Press (C) to move to Token Range. ***TOKEN RANGE*** will be displayed.

TOKEN RANGE

Sets the ranges of selections a Token can be used with.

Press (B) to display ***T1R1*** (Token1-Range1) and the current range.

Press (B) again. Enter or change range (C4-D6, for example).

Press (D) to save changes and move out to ***TOKEN RANGE***. Repeat the process to change range of other tokens.

Press (E) to move out to ***COUPN/TOKEN***.

Press (C) to move on to Can/Bottle Mode ***CAN/BOTTLE*** will be displayed.

CAN/BOTTLE MODE

When Can/Bottle Mode is ON either bottles or cans may be vended for the range selected. With Can/Bottle Mode OFF the controller is configured for single depth and only bottles can be dispensed from the vendor.

NOTE

Press (A) or (C) to scroll through the Can/Bottle Mode sub-menu.

OFF or ONTurns Can/Bottle mode ON or OFF.

RangeSets the range of selections on the can/bottle rack that are turned ON or OFF.

DepthSets the depth of each selection on the can/bottle rack to single or double.

Press (B). **ON** or **OFF** will be displayed. Use the (B) key to toggle between ON and OFF.

Press (D) to save choice and return to **ON** or **OFF**.

Press (C) to move on to Range. **RANGE** will be displayed.

RANGE

Sets the range of the can/bottle rack that is turned ON or OFF.

Press (B). **SR/ER** (Start Range/End Range) will be displayed, followed by the current range of rows included. Enter desired row designations using the alpha keys.

Press (D) to save changes and return to **RANGE** display.

Press (C) to move to Depth. **DEPTH** will be displayed.

DEPTH

Sets the depth of each selection for single or double operation. Single is used for dispensing bottles and double is used for dispensing cans.

Press (B). **SELECT** will be displayed followed by the current selection.

Press (B) again, **DOUBLE** or **SINGLE** will be displayed. Use (B) to toggle between the two choices.

Press (D) to save choice and move back to **SELECT** followed by current selection.

Use the (A) or (C) key to move to another selection. Repeat process as needed. When finished with all changes, press (E) to move back out to **DEPTH**.

Press (E) to move out to **CAN/BOTTLE**.

CAUTION

*When the selection is set at single depth — upon vending the motor continues to turn for a couple of seconds, positioning the next vend for faster delivery. **However**, if a product is double loaded in single-depth mode, double vending will result!*

NOTE

Press the Service Mode Button at any time during *Service Mode* to exit the *Service Mode*. Press (D) first to avoid losing any changes .

DEX/UCS

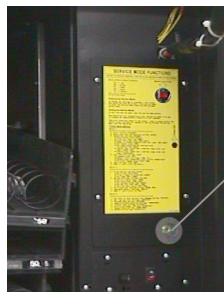
DEX/UCS Information (requires hand-held computer)

If the vendor operation will be tracked using a DEX/UCS capable hand-held computer (HHC), please note the following:

The picture to the right shows the control panel cover. Just below the instructional decal is the plug-in point for the connecting wire from the hand-held computer.

Plug in HHC and the vendor will enter DEX/UCS mode (machine does not have to be in Service Mode).

Plug the HHC into the vendor and the exchange of information will begin automatically.



HHC plugs in here

The following is a list of DEX/UCS codes and their meanings.

DEX field	DEX field description
ID101	Machine Serial Number
ID102	Machine Model Number
VA101	Value of all paid sales since initialization
VA103	Value of all paid sales since last reset
CA302	Value of cash to coin box since last reset
CA303	Value of cash to tubes since last reset
CA304	Value of bills in since last reset
CA401	Value of cash dispensed since last reset
CA801	Value of cash overpay since last reset
CA1401	Bill value (\$1, 2, 5, 10, & 20)
CA1403	Number of bills to stacker since last reset
TA203	Value of vend token sales since last reset
TA204	Number of vend token vends since last reset
PA101	Product Number
PA102	Product Price

DEX field	DEX field description
PA201	Number of products vended since initialization
PA203	Number of products vended since last reset
PA204	Value of paid product since last reset
EA201	Event Identification
EA202	Number of events since last reset
EA204	User defined field
EA301	Number of reads since initialization
EA302	Date of this readout
EA303	Time of this readout
EA304	This terminal/interrogator identification
EA305	Date of last readout
EA306	Time of last readout
EA501	Date of price setting
EA502	Time of price setting

REFRIGERATION FUNCTIONS & OPERATION (Not applicable in all machines)

Refrigeration Control

NOTE

To prevent damage to the refrigeration unit when it is turned off or the power interrupted, the refrigeration unit will not restart for at least three minutes regardless of the temperature.

When the temperature is above the cut-in temperature programmed, the unit is turned on. When the refrigeration unit reaches the cut-out temperature, it is turned off.

If the refrigeration unit runs for more than two hours without reaching the cut-out temperature, the unit is turned off for the programmed ten (10) minute defrost time. It will then be turned on again automatically.

Refrigeration Troubleshooting

If the refrigeration unit is turned off or the power is interrupted, the refrigeration unit will not start for at least three minutes regardless of the temperature. This is done to prevent damage to the refrigeration unit.

CAUTION:

Breaking the refrigerant joints or seals on the system voids the unit warranty. Failure to keep the condenser coil clean and free of dirt and dust and other similar debris voids the unit warranty.

Know and understand how the unit operates. Units may vary, but the operation is basically the same. Never guess at the problem; find the symptom before attempting any repair.

NOTE

Most refrigeration problems are electrical.

The sealed hermetic system should not be worked on outside the Factory Service Center. There are three things that can go wrong with a sealed system and should be repaired only at the Factory Service Center. These are:

- Low Charge - usually caused by leaks; look for oil around seals and welds. Unit will not cool properly. The capillary tube is frosted before it enters the evaporator inlet tube.
- Restriction in Systems (unit frosts, then melts) - not cooling properly
- Bad valves - unit does not cool properly-- noisy compressor

Compressor will not start

Compressor has no power

- Machine not plugged in
- Tripped breaker or blown fuse
- Faulty wall outlet
- Short or open in power cord
- Temperature sensor circuit is open (check with a Multi-Meter)
- Improper wiring
- Low voltage: 5% below (check the power source with a Multi-Meter)
- Overload defective: Trips too fast (check overload with the Multi-Meter)
- Start relay defective (check start relay with the Multi-Meter)
- Compressor has open windings (check compressor windings with a Multi-Meter)
- Defective refrigeration relay
- Unplug power to the machine; remove the relay plate. Use an insulated jumper wire to short the wires on relay terminals 2 and 4 or 6 and 8-- then restore power to the machine. The compressor should start, indicating a problem in the control circuit.

Check relay terminals 1 to 0 with a Multi-Meter. Should have 24VDC applied to them.

- No DC voltage (check control board output terminal for a loose connection)

Compressor trips on Overload

- Improper voltage: 5-10% above, 5% below (check power source with Multi-Meter)
- Overload defective: Trips too fast (check overload with Multi-Meter)
- Relay defective: Won't open after starting (check relay with Multi-Meter)
- Compressor has shorted windings (check compressor windings with Multi-Meter)
- Short in other component: Isolate and eliminate each electrical component until short is found
- Compressor is too hot
 - ◆ Dirty condenser
 - ◆ Faulty condenser motor or blade
 - ◆ Restricted airflow

CAUTION:

Condenser must be kept clean of dirt and debris to allow for proper air circulation.

Noisy or vibrating unit

- Components rubbing or touching each other
 - ◆ Check fan blades and motor
 - ◆ Loose shrouds and harness
 - ◆ Copper tubing
 - ◆ Loose or unsecured parts
 - ◆ Dirty condenser fan blades
- Worn or aged compressor grommets
- Compressor
 - ◆ Bad valves
 - ◆ Slugging
 - ◆ Bad windings (See Schematic)
 - ◆ Low voltage

Unit short cycles

- Temperature sensor defective or not mounted in the return air duct
- Defective control board
- Temperature setting set too warm (see "Refrigeration Settings" section of this manual)

Unit operates long or continuously

- Temperature sensor defective or not mounted in the return air duct
- Refrigeration relay shorted

- Air flow restricted
 - ◆ Faulty evaporator motor or blades causing coils to ice
 - ◆ Loose connections on evaporator motor (1 motor not running.)
 - ◆ Airflow blocked by product in front of evaporator or air duct openings
 - ◆ Exhaust area blocked (machine too close to wall)
- Gasket leak around door
- Excessive load: After loading, unit runs longer to pull out excessive heat from product
- Shortage of refrigerant or restriction
- Bad controller
- Ambient air temperature and relative humidity exceed manufacturer's operational standards

Refrigerated space too cold

- Temperature sensor defective (check with Multi-Meter)
- Refrigeration control setting too cold (see "Refrigeration Settings" section of this manual)
- Refrigeration relay bad (check with Multi-Meter)
- Faulty control board

Refrigerated space too warm

- Temperature sensor defective (check with Multi-Meter)
- Refrigeration control setting too warm (see "Refrigeration Settings" section of this manual)
- Refrigeration relay bad
- Faulty control board
- Restricted evaporator space
 - ◆ Evaporator motor or blades faulty, causing the coils to ice over the evaporator
 - ◆ Condenser air flow restricted
 - ◆ Plugged or dirty condenser
 - ◆ Condenser motor or blades bad
 - ◆ Blade stuck
 - ◆ Condensing space restricted
 - ◆ Unit placed too close to a wall
 - ◆ Compressor - bad valves
 - ◆ Capillary tube will start frosting 8 to 10 inches (20-25 cm) past evaporator connection tube
 - ◆ Check for oil around brazed connections

Troubleshooting circuits with Multi-Meter

- To check the power source, use the voltage section of the Multi-Meter (should measure within 5-10% above, 5% below)
- Check overload.

CAUTION

Power must be off and fan circuit open.

Using the resistance section of the Multi-Meter, check terminals 1 and 3 for continuity. If no continuity is measured (infinity), overload may be tripped. Wait 10 minutes and try again. If still no continuity, overload is defective.

1. Check relay (See Figure 12.) Unscrew lead terminals and remove relay from compressor. (NOTE: keep relay upright)
2. Check terminals 1 and S, or L and S with the Multi-Meter. Replace relay if continuity exists.
3. Check Temperature sensor with a Multi-Meter.
4. Check compressor windings as shown in Figure 12.
5. Check winding resistance with a Multi-Meter. If readings are not within 2 Ohms, the compressor is faulty. Use RX1 scale.

WARNING:

Wiring diagrams must be followed as shown. Any mis-wiring can cause serious electrical hazard and potential damage or rupture component electrical parts.

Winding Resistance

APPROX. RESISTANCE ACROSS TERMINALS	
COMMON to START:	12 Ohms
COMMON to RUN:	2 Ohms
RUN to START:	14 Ohms
COMMON to SHELL:	No Continuity

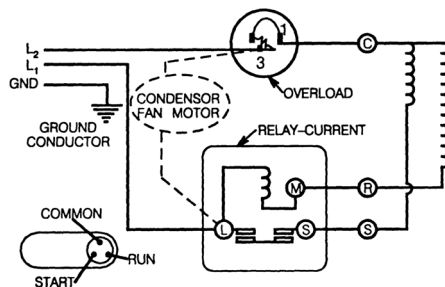


Figure 12. Compressor Schematic

CARE & CLEANING

CAUTION:

Always disconnect power source before cleaning.

Cabinet Exterior

Wash with warm water and a mild detergent, rinse thoroughly and dry with a non-abrasive, lint free cloth. Wax occasionally with a quality grade liquid or paste auto wax. Minor scratches can be smoothed with rubbing compound, but deep scratches should be touched up with paint to prevent rust. Plastic parts should be cleaned with non-abrasive plastic cleaner. Jewelers <rouge> can sometimes be used to polish out scratches in plastic.

Cabinet Interior

Remove power from machine. Wash with warm water and a mild detergent, rinse thoroughly and dry with a non-abrasive, lint free cloth. Offensive odors may be eliminated by adding baking soda or ammonia to the cleaning solution. Paint brushes may be used to clean hard to reach areas such as cabinet and delivery box corners. A damp sponge will pick up loose particles from the delivery box. The delivery box drain tube is equipped with a screen, which can be removed for cleaning.

The vend motors and augers in the Snack Food Vendor require no lubrication. Spray cleaners, lubricants or silicone may damage these moving parts. The nylon tray-rollers need no lubrication but do require occasional cleaning for smooth operation. The vend door and anti-cheat moving parts also require cleaning without lubrication. The main door hinges should require no lubrication, provided the cabinet is installed level. Occasional lubrication of the main door lock screw and lock nut with a quality lubricant, such as lithium grease, will allow the locking mechanism to function more smoothly.

The electronic coin changer is designed to operate without lubrication and minimal cleaning. Occasionally open the coin acceptor portion and wipe the exposed surfaces with a damp cloth.

CAUTION:

Electronic or electrical components should be kept free of water or other conductive liquids. Should any of these components be exposed to liquids, rinse and dry thoroughly with forced air, heat or time before restoring power to the machine.

PARTS ORDERING

Augers

Auger Sizes Available

PRODUCT				PART NUMBER
TYPE	WIDTH	THICK	QTY	
CANDY	2-3/4	1-3/16	15	4200272-000
		15/16	18	4200272-001
		21/32	24	4200272-002
		1/2	30	4200272-003
		1-1/2	12	4200272-004
		2-1/32	9	4200272-005
		3-3/32	6	4200272-006
SNACK	5-1/2	1-13/16	10	4200272-007
		1-1/2	12	4200272-008
		1-3/16	15	4200272-009
		2-11/16	7	4200272-010
		2-5/8	8	4200272-011

Procedure

When ordering parts, include the following:

1. **The model and serial numbers of the machine for which the parts are needed.**
2. Shipping address
3. Address where the invoice should be sent.
4. The number of parts required.
5. Always refer to the pertinent parts and/or part manual for the correct part number and description of a specific part

NOTE

When RIGHT or LEFT is used with the name of a part, it means the person is facing the machine with the door closed.

6. Any special shipping instructions.
7. Carrier desired: air or air special, truck, parcel post or rail.
8. Signature and date.
9. Purchase order number, if used.

Mail your order to:

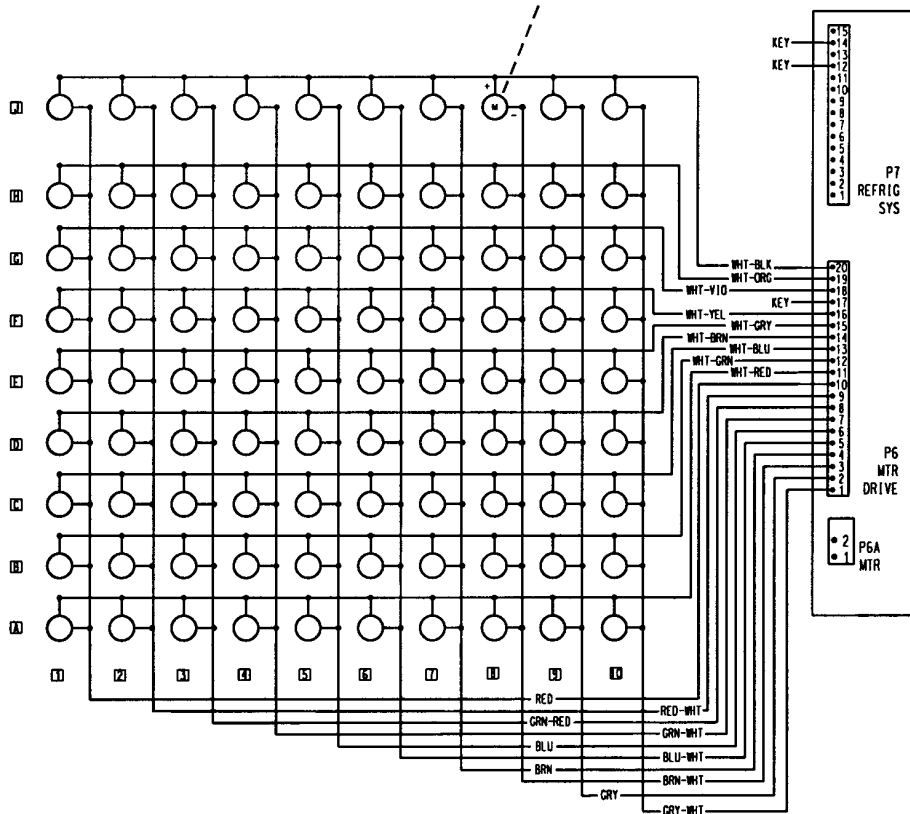
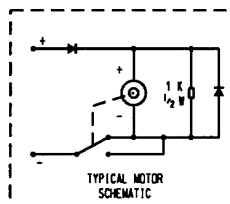
VendNet™
P. O. Box 488
165 North 10th Street
Waukee, IA 50263-0488 USA

All orders are carefully packed and inspected prior to shipment. Damage incurred during shipment should be reported at once and a claim filed with the terminating carrier.

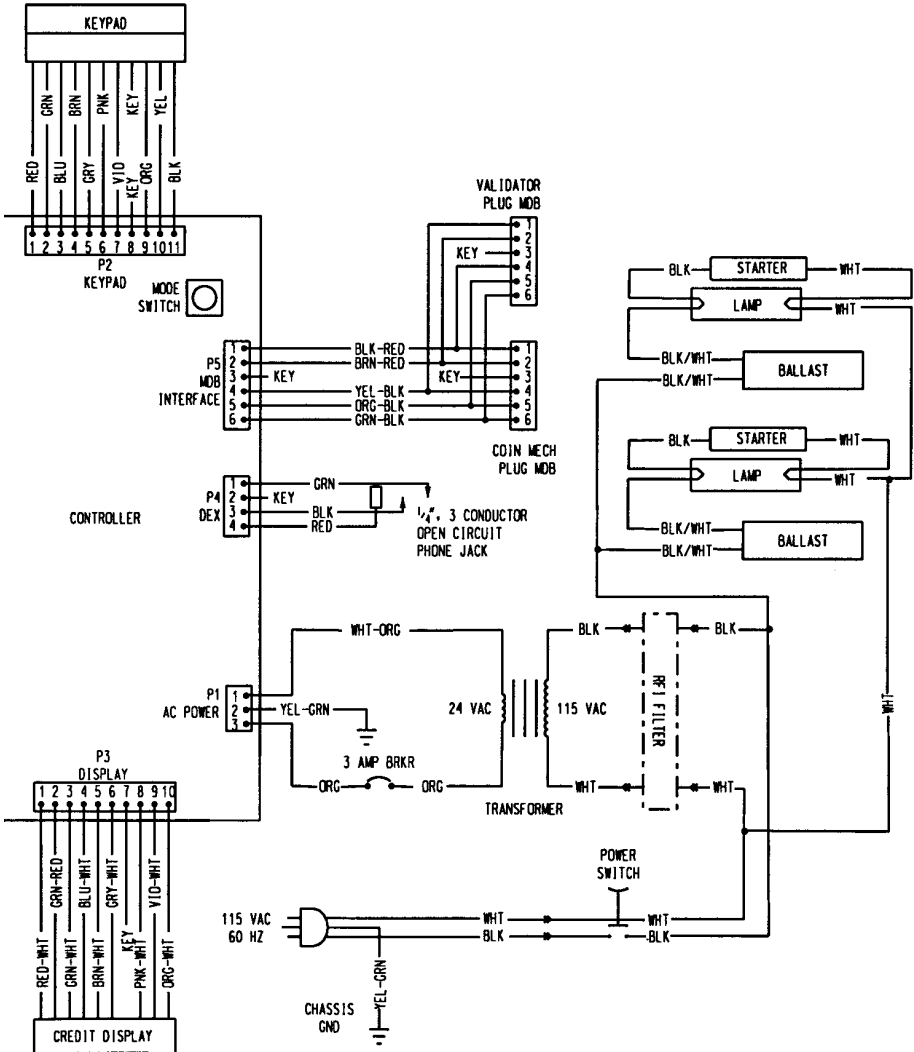
If you do not have the right parts manual: contact VendNet™.

If you have any questions, check out our Website www.vendnetusa.com or call VendNet™. Ask for the Parts Department. We will be happy to assist you. Email: Vendnet@vendnetusa.com

SCHEMATIC



SM5700 SCHEMATIC
P/N 4211321
REV. B



NOTES

NOTES

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