Dixie-Narco, ® INC.

FLEXPAK™ 3000

COCA-COLA

SET-UP / CONFIGURATION / TROUBLESHOOTING / OPERATION / PARTS MANUAL

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INTRODUCTION

Dixie-Narco's FlexPak™ 3000 Vender is the next "generation" of equipment that will revolutionize the industry by providing a piece of equipment, in three models, that will serve your entire business. The FlexPak™ 3000 will provide full package flexibility with increased product capacity and exceptional space-to-sales. Each of the three models utilize standardized parts, delivery platform, and a refrigeration system that is 100% CFC-free.

The FlexPak™ 3000 also incorporates electronics to meet the growing need for accountability, multi-pricing, programmability, and system diagnostics. Along with these functions, DEX/UCS - communications to a hand-held computer provides the ability to measure each vending location for product performance, vender performance, and accessing accounting data. The data obtained can be used to maximize the efficiency of the truck routes for servicing venders. DEX communications provides the bottler security for the integrity of the "cash in" versus the "product sold".

MODELS AND SPECIFICATIONS

DMV 72N

Dimensions: 72"H x 28"W x 32"D
Approximate Weight: 680 lbs. (Empty)
Number of Modules per Vender (12 oz. Can):   16
Number of Modules per Vender (16 oz. Bottle):   6, four 12 oz. can modules may be added.
Number of Modules per Vender (20 oz. Bottle):   6, four 12 oz. can modules may be added.

DMV 72W

Dimensions: 72"H x 37"W x 32"D
Approximate Weight: 750 lbs. (Empty)
Number of Modules per Vender (12 oz. Can):   20
Number of Modules per Vender (16 oz. Bottle):   10
Number of Modules per Vender (20 oz. Bottle):   10

DMV 79W

Dimensions: 79 1/2"H x 37"W x 32"D
Approximate Weight: 880 lbs. (Empty)
Number of Modules per Vender (12 oz. Can):   20
Number of Modules per Vender (16 oz. Bottle):   10
Number of Modules per Vender (20 oz. Bottle):   10

All weights, dimensions, and specifications listed are subject to change without notice.

INTRODUCTION AND SET-UP

Please read this manual in its entirety. Repair and maintenance of this vending machine must only be performed by authorized and competent technical personnel. If you have any questions, please call your local bottler, distributor, or Dixie-Narco for assistance.

Receiving Inspection

Upon receipt, inspect the FlexPak™ 3000 for shipping damage. If there is any damage, have the driver note the damage on the Bill of Lading and notify Dixie-Narco. Although I.C.C. regulations require that the consignee originate shipping damage claims, Dixie-Narco will gladly help if you must file a claim.

Unpacking The Vender

Remove the stretch wrap and top covers from the vender. If flavor cards were shipped with the vender, they will be in an envelope affixed to the back of a vender in the shipment or in the cash box.

NOTE: **DO NOT STORE THE VENDER OUTDOORS WITH STRETCH WRAP ON. THIS COULD CAUSE THE STRETCH WRAP TO BOND TO THE VENDER'S SURFACE, WHICH COULD DAMAGE THE FINISH.**

Remove the shipping boards from the bottom of the vender. The shipping boards are attached by the leveling legs. Remove the shipping boards by **unscrewing** the leveling legs. This will avoid unnecessary damage to the leveling legs or the base. A 1-1/2" "socket-type" wrench should be used on the bottom of the leveling legs. Be sure to replace the legs after removing the shipping boards.

To open the vender, locate the door lock keys which are secured inside the coin return cup. After unlocking the door, rotate the "T"-handle counter-clockwise until the door can be opened. Once inside, check the coin box on the door for any additional parts, pricing labels, or information concerning factory equipped accessories. Check the "T"-handle for proper alignment and locking functions. Check the lamps for proper installation.

WARNING: **INSURE THAT POWER IS DISCONNECTED FROM THE VENDER OR THAT THE POWER INTERRUPT SWITCH (IF PROVIDED) IS NOT DEFEATED BEFORE INSPECTING OR REPLACING THE LAMPS. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY SUBJECT THE USER TO THE RISK OF INJURY OR ELECTRICAL SHOCK WHICH CAN BE SERIOUS OR FATAL.**

Electric Power Needed

Refer to the FlexPak™ 3000 serial number plate to determine the proper voltage and frequency required by the machine (domestically this requirement is 115 volts, 60 hertz). The vender will operate at +/- 10% of the specified voltage for domestic models - this is between 103 volts and 127 volts. Single phase, alternating current is required. The vender must be plugged in its own properly rated circuit with its own circuit protection (fuse/circuit breaker). **DO NOT USE AN EXTENSION CORD.**

Ground The Vender

The FlexPak™ 3000 is equipped with a three wire power supply cord and **MUST** be plugged into a properly grounded outlet.
DO NOT REMOVE THE GROUND PIN OR IN ANY WAY BYPASS THE GROUNDING OF THE FLEXPAK™ 3000. If the outlet will not accept the power cord plug, contact an electrician to install a proper AC outlet.

WARNING: **Failure to comply with these instructions may subject the user to the risk of injury or electrical shock which can be serious or fatal.**

Placing The Vender On Location

CAUTION: **DO NOT TRANSPORT THE VENDER TO OR FROM THE LOCATION WHEN IT IS LOADED WITH PRODUCT; DAMAGE TO THE VENDER MAY RESULT.**

The vender must be located on a solid, flat, and level surface.

The vender must be positioned close enough to an electrical outlet that an extension cord is not required. If securing the vender to the floor or wall is required, call the Dixie-Narco Factory Service Department for suggestions.

Level The Vender

Level the vender. When the vender is level, the door can be opened to any position and it will not move by itself. Open the door to several different positions before deciding that the vender is level. Make sure that all of the leveling legs are in contact with the floor. If you cannot level the vender, select another location. Do not place any objects under the machine.

DANGER: **THE VENDER MUST BE PROPERLY LOCATED AND LEVELED TO MINIMIZE THE RISK OF INJURY OR DEATH FROM TIPPING IN THE EVENT OF MISUSE OR VANDALISM.**

Space The Vender

Do not block the rear of the vender. Maintain a minimum of 10 cm (4 in) from the wall to insure adequate air flow to the condenser and compressor. At the front of the vender, make sure that nothing obstructs the air intake at the bottom of the main door. At the rear of the vender, make sure that nothing obstructs the air exhaust at the bottom of the cabinet.

Installing Flavor Cards

The flavor cards are inserted in the flavor card carrier. Swing the coin changer mounting plate away from the outer door exposing the back of the select panel. Remove the flavor card carrier. Ensure the flavor cards are placed in the select button flavor card carrier position that corresponds to the module in which the product is loaded. Install the flavor card carrier back in position.

Temperature Control Adjustments

Adjustment #1 - Temperature Adjustment

Turn the adjustment clockwise for colder product and counter-clockwise for warmer product. This will change the cut-out temperature only, the cut-in temperature remains constant.
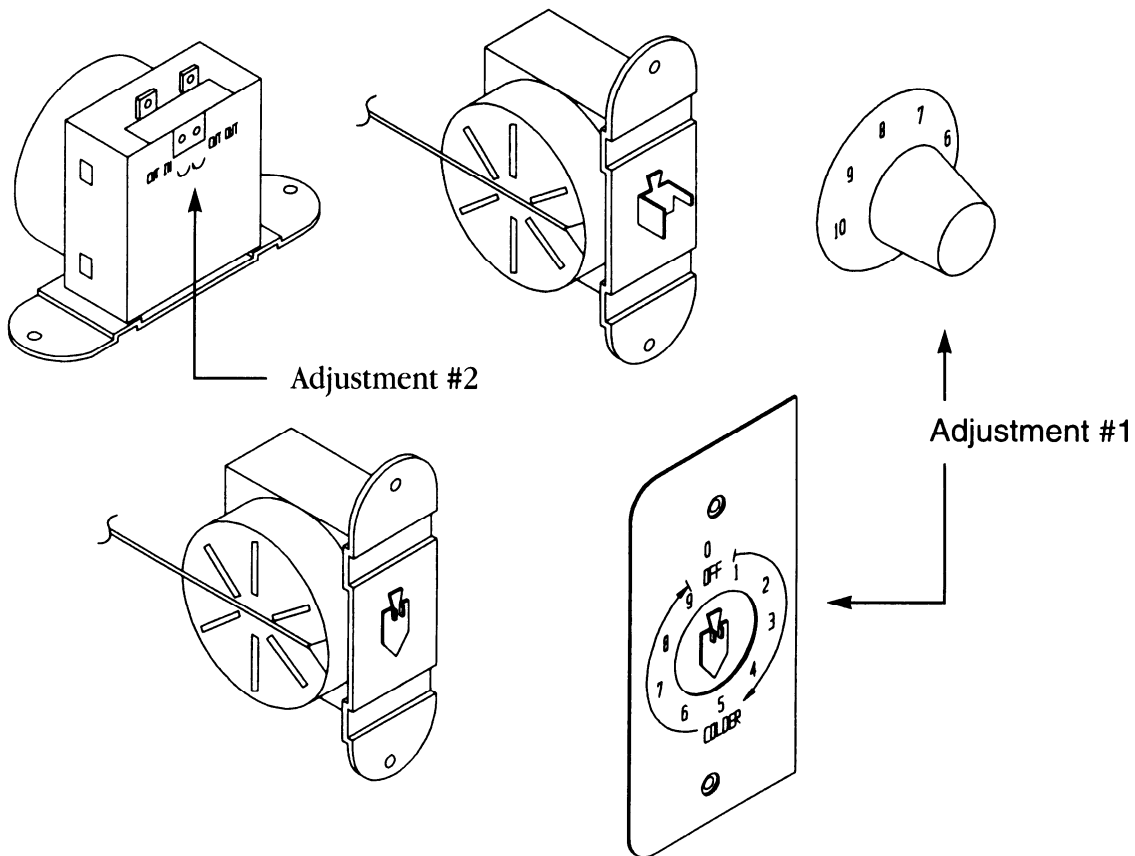
Adjustment #2 - Altitude Adjustment

Warning: **Disconnect power to the vending machine before proceeding with this adjustment.**

The control is factory set for an altitude of 152 M (500 ft.). For higher altitudes, adjust the inside range screws to prevent freeze-up of the product. Adjust the inside range screws as follows.

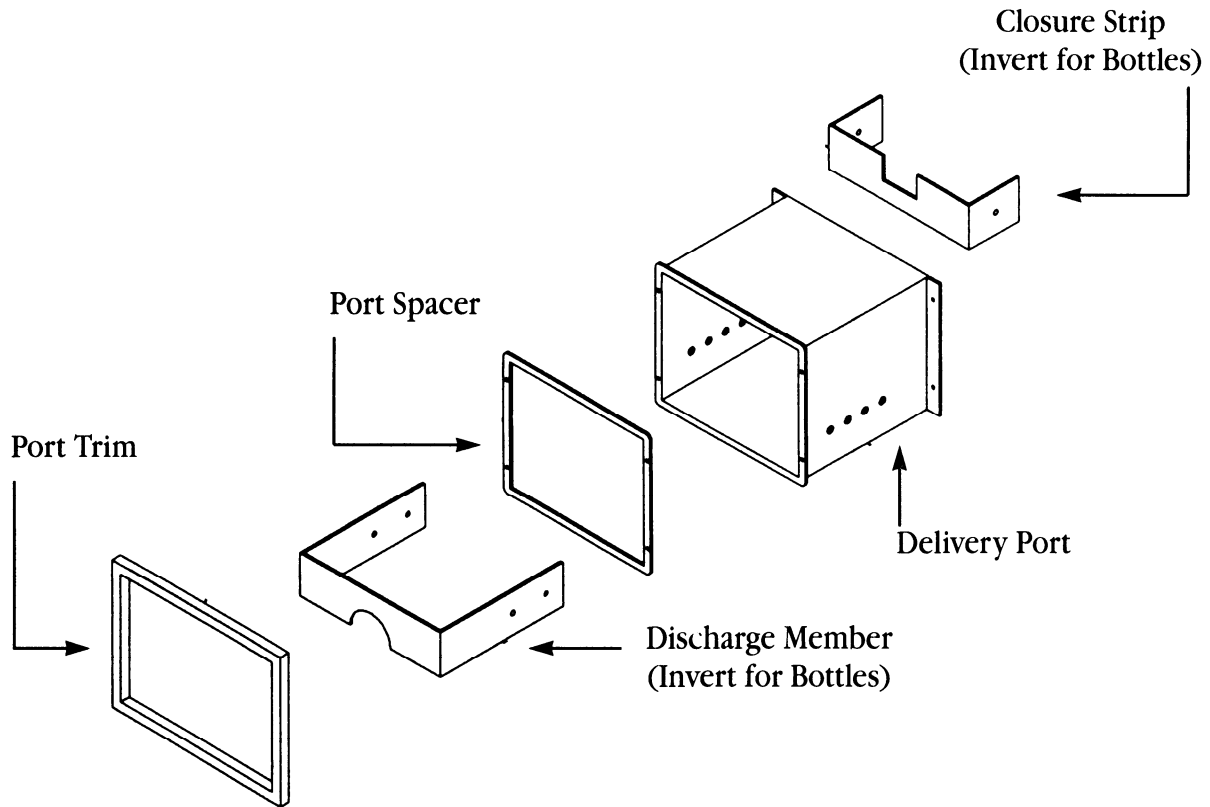| ALTITUDE		CUTLER-HAMMER 9531N272
Meters	**(Feet)**	**Turn both screws counter-clockwise**
610	(2,000)	1/8 Turn
1219	(4,000)	1/4 Turn
1829	(6,000)	1/2 Turn
2438	(8,000)	5/8 Turn

Adjustment #2

Adjustment #1

Loading Instructions

Product Vending

Dixie-Narco venders are shipped ready to vend 12 oz. cans unless another package was specified at the time the vender was ordered. If packages other than 12 oz. cans are to be vended, contact the Dixie-Narco Factory Service Department for the proper instructions.

The closure strip and the discharge member are set for the maximum security when vending cans. To vend bottles, refer to the illustration below.

Closure Strip
(Invert for Bottles)

Port Spacer

Port Trim

Delivery Port

Discharge Member
(Invert for Bottles)

Cleaning The Vender

⚠ **DO NOT USE A WATER JET OR NOZZLE TO CLEAN THE VENDER**

Sign Face

The polycarbonate sign face requires proper cleaning to prolong the service life of this item. It is recommended that you periodically clean the sign as follows:

1. Rinse the sign with a soft cloth or sponge soaked in warm water.
2. If necessary, use a mild soap to loosen any dirt or grime. To prevent damage, DO NOT SCRUB or use a brush or squeegee, as some signs have a clear ultraviolet resistant coating to prevent yellowing.
3. Repeat the above steps as necessary, then dry using a soft cloth to prevent spotting.

Cabinet

*   Wash the cabinet with a good detergent or soap mixed in warm water.
*   Wax the vender often with a good grade of automobile wax.
*   Any corrosion inside of the vender should be removed with fine steel wool and the area should be painted with aluminum paint.
*   Repair any scratches on painted surfaces to prevent corrosion.

WARNING: THE COMPRESSOR ELECTRICAL CIRCUIT IS ALWAYS LIVE WHEN THE PLUG IS CONNECTED TO AN ELECTRICAL OUTLET.

Refrigeration Condenser

*   Check the condenser periodically for dirt or lint build-up.
*   Remove the build-up with a brush or vacuum, or blow the dirt out of the condenser with compressed air and approved safety nozzle.
*   Ensure nothing obstructs the air intake at the bottom of the main door.
*   Ensure nothing obstructs the air exhaust at the rear of the cabinet.

Coin Acceptor

*   Follow the coin acceptor manufacturer's instructions on cleaning.

Lubricating The Vender

The FlexPak™ 3000 Refrigeration System does not require any field lubrication. The hermetic refrigeration system and fan motors are manufactured with lifetime lubrication.

Parts Needing Lubrication

Time	Component	Lubricant Example
Every six months	Main door	
(or as needed)	1. Lock Bolt & Nut Retainer	Mechanics Friend
	2. Hinge Pivot Points	Mechanics Friend
	Inner Door	
	1. Hinge Pivot Points	Mechanics Friend
	Slides	
	1. Top Only	White Lithium Grease
Every Year	Inner Door	
(or as needed)	1. Door Gasket	Petroleum Jelly

FEATURES

DEX COMPATIBLE HAND-HELD INTERFACE
The vending industry (NAMA) has established an audit data protocol which is defined by DEX (Direct Exchange of Data) and UCS (Uniform Communications Standards). This interface is a direct connection as defined by the specification. The FlexPak™ 3000 has provisions for an internal and external connection. The external connection provides a limited amount of information.

20 MODULE COMPATIBLE
The FlexPak™ 3000 cabinet controller is capable of driving up to twenty vend mechanisms independently. The vend mechanism is 24V DC.

LOW VOLTAGE SELECT PANEL
The select panel consists of gold cross-point switches. The interface circuitry is located on the door control board. The control board supports up to nine selections.

PROGRAMMABLE SPACE-TO-SALES
The programmable space-to-sales is a feature which allows modules to be assigned to select buttons. Modules are dispensed evenly when more than one module is assigned to given select button(s).

SELECT PANEL OR HAND-HELD CONTROLLER PROGRAMMING
The FlexPak™ 3000 has the capability to be programmed through the select panel or through the DEX port on the door control board with the same hand-held used to access the accounting data.

LED DISPLAY (LIGHT EMITTING DIODES)
Early displays consist of four characters, utilizing seven segment LED's for each character, to provide a true alpha-numeric display. Current displays consist of four characters, utilizing fourteen segment LED's for each character, to provide a clearer alpha-numeric display.

PRICE DISPLAY
If all selections are set at the same vend price in primary pricing and secondary pricing, the vend price is shown on the display. If multi-pricing is used, pressing any select button shows the vend price of that particular selection on the display.

SINGLE PRICE OR MULTI-PRICE VIA THE SELECT PANEL OR HAND-HELD
Prices for each selection can be programmed either through the front select panel or through the DEX hand-held device. For single price, configuration code 1 has to be programmed to "C1 0"; set the vend price for select 1 and all other select prices are the same. For multi-price, configuration code 1 has to be programmed to "C1 1"; set the vend price for each selection.

ACCOUNTING DATA PROVIDED

Accounting features can be accessed through the front select panel. The vender can also be configured to automatically cycle the viewing of historical total sales, total cash, and current errors when the door is opened. This is done by setting configuration switch #4 to "C4 1" (see programming section of manual for details). The accounting features include - "CASh", which shows the user the vender historical total cash counted and the resettable cash counted for each selection for the vender; and "SALE", which shows the user the vender historical number of vends and the resettable vends counted for each selection for the vender.

The types of data that can be retrieved via the DEX interface to a hand-held device is addressed in the Audit Features section on pages 13 and 14.

LIMITED ACCESS ON SELECTION (TIME, DAYS, PRICE)

The limited access feature allows each selection to be inhibited with respect to time and selected days of the week. Also, prices of selections can be altered (Happy Hour) with respect to time and selected days of the week.

COIN CHANGER INTERFACES

1.   The FlexPak controller supports the listed multidrop bus coin mechanisms.
        Coinco 9302GX
        Mars TRC 6510

CAUTION: DO NOT USE 24V CHANGERS. USE OF 24V CHANGERS WILL CAUSE DAMAGE TO ELECTRONICS PACKAGE AND CHANGER AND VOID ALL WARRANTY'S.

BILL VALIDATOR INTERFACES TO ARDAC DOOR CONTROLLER

Mars VN2512-mdb   (need harness 250071009 from Mars)
BA30-multidrop bus   (need 407420 interface harness from Coinco)
Conlux mdb-multidrop bus

BILL VALIDATOR INTERFACES TO DEAMERTEK DOOR/DISPLAY CONTROLLER

Mars VN2512-mdb   (need 250071009 harness from Mars)
BA30-multidrop bus   (need 407420 interface harness from Coinco)
Conlux mdb-multidrop bus

MULTIDROP BUS CAPABLE DEBIT CARD AND DATA RECORDING SYSTEMS

The FlexPak™ 3000 is capable of interfacing to debit card and data recording systems which are multidrop bus acceptable. At this time, only a few such accessories have been tested by Dixie-Narco. If such accessories are to be used, check with either Dixie-Narco or the accessory manufacturer about physical and electrical compatibility before attempting to interface such accessories to the FlexPak™ 3000 vender.

HARDWARE CONFIGURATION

The hardware configuration for the FlexPak™ 3000 consists of a cabinet control board, a door control board, and a display board or a door/display board combination. The select panel consists of low voltage switches and interfaces directly to the door control board.

The vend mechanism is 24V DC. The vend mechanism interfaces directly to the cabinet controller.

The main (primary) fuse is located on the transformer mounting plate.

The cabinet control board is the main controller. It supports up to twenty vend mechanisms. It senses product in the delivery chute and controls the dispensing from modules. It also controls the door control board and the collection of money and change payout.

The door control board reports the status of the door to the cabinet control board. It reports the status of the door switch, select panel, service switch, DEX port, changer, and note acceptor. The door control board enables and disables the changer and note acceptor. It also tests the display as commanded by the cabinet control board.

The vend sensor recognizes the product being delivered and reports directly to the cabinet control board.

The door switch is included to determine door accesses. A service switch, located on the door control board, is used to access accounting data and programming features through the front select panel.

The DEX interface supports both an internal connection as well as an external connection. The interconnect is a 1/4" phono jack as specified and approved by NAMA. The initial hand-held devices supported are Norand, Mars MEQ, Fujitsu, and lap top PC's. All electrical specifications, protocols, and baud rates are identified in the specification.

A real time clock (RTC) with battery backed memory is provided so memory can be maintained during power failures. The life expectancy of the battery is five years shelf and ten years operational. The real time clock is displayed in military time (24 hour clock). It is used for time stamping door closures, power outages, limited access, and selection discount pricing.

Early display boards consist of four, seven segment LED's to provide alpha-numeric characters. Current displays consist of four, fourteen segment LED's to provide clearer alpha-numeric characters. Also, the exact change indicator consists of an LED.

The intelligence of the cabinet (main) controller is a Motorola 68HC11 microprocessor. A minimum of 64K of Eprom and 8K of ram (battery backed) is provided.

FLEXPAK™ 3000 AUDIT FEATURES

The FlexPak™ 3000 provides two methods of accessing audit data. A limited amount of audit information is available in the service menu. More extensive audit information is accessible electronically.

SERVICE MENU

Four types of audit data are available in the service menu: "Cash", which shows the user the historical total cash counted and the resettable cash counted for each selection for the vender; and "SALE", which shows the user the historical number of vends and the resettable vends counted for each selection for the vender.

The audit data can be accessed in two ways: first, by pressing the service switch with the door opened and scrolling through the menu to "CASh" or "SALE" and pressing select button 4 to enter the chosen menu prompt; and second, by setting configuration switch 4 to the "C4 1" will configure the vender to automatically scroll historical total sales, total cash, and current error codes when the main door is opened. (See programming section of manual for details.)

EXTERNAL ELECTRONIC COUNTER

External electronic counters are used to show historical total vends, interval product counts that have occurred for prices being used, and interval product count for each selection from outside the vender. To show the current data, with the main door closed, press select button 4, then 2, then 3, then 1. This code or password is factory-set and can only be changed via DEX or hand-held computer. Once the password is pressed, the display will show historical total vends. To view other data:

Press and hold select button 1:   Show historical vends.
Press and hold select button 2:   Show list of prices and interval product counts that have occurred for those prices.
Press and hold select button 3:   Show interval product count for each selection.
Press and hold select button 4 for five (5) seconds: Resets interval data. "COUntErS rESEt" will scroll across display.
Press any select button greater than 4 or two (2) minutes of inactivity will return vender to normal operation.

ELECTRONIC ACCESS

A more extensive amount of audit information is accessible electronically. It is retrieved with a portable data collection device and typically loaded into a computer at a central location. The data can then be tracked with a database for preparing route stocking lists, tracking cash flow, doing inventory control, and other tasks. Data collection devices are available from several sources, including Norand, Fujitsu, Panasonic, Telxon, Verifone, and Mars. Dixie-Narco currently collects data with a PC program on a portable notebook computer.

The FlexPak™ 3000 uses the DEX/UCS protocol as the method of exchanging data with the portable data collection device. DEX/UCS was formally adopted as the standard method of collecting audit data for the vending industry by the National Automatic Merchandising Association (NAMA) in April of 1991. DEX/UCS has been used in related industries since 1989. It was developed by the Arthur D. Little Company and is administered and maintained by the Uniform Code Council (UCC). The NAMA Vending Electronics Standardization Committee developed and published a comprehensive set of data records relevant to the vending industry. The FlexPak™ 3000 reports the portion of these related to this specific machine design. The current list of records and their usage by the FlexPak™ 3000 follows.

DEX stands for Direct Exchange of data, which means there is a hard-wired connection between the two systems exchanging data. This is done by inserting a 1/4 inch phone plug on the portable data collection device into a jack mounted on the FlexPak™ 3000 door controller. Inserting the plug automatically initiates the exchange of data, which takes several seconds. No other machine functions are available while the exchange is taking place. Most of the data records are reported in both an interval and historical format. The historical values represent a total of the values since the machine shipped from the factory. The interval values are the data collected since the last time it was collected electronically.

The following types of audit data are accessible electronically:

> Machine Identity Information
> Date and Time of Interrogation
> Cash Sales Summary
> Cash Input and Output Summary
> Product Sales Information
> Machine Configuration
> Events: Door Openings   Interrogations
>   Time of Day Discounts   Programmable Access Limits
>   Sold-Out Selection Information

In addition to retrieving audit data, every machine configuration parameter that can be programmed in the service menu can be programmed electronically via the DEX port.

The following types of data can be configured electronically:

> Machine Identity   Limited Access Control Parameters
> Price & Product Information   Space-to-Sales
> Date and Time   Time of Day Discounts Control Parameters
> Escrow Mode*

> *Escrow mode cannot be transferred with the Norand Device.

COCA-COLA FOUR BUTTON PROGRAMMING
(FlexPak Controllers)
Licensed under United States Patents 4,216,461 and 4,369,442

The controller has two modes of operation: NORMAL and SERVICE.

NORMAL MODE: In normal mode, the display will show a decimal point. If two decimal points are displayed, the far right decimal point indicates a column(s) is (are) sold-out. When money is inserted, the display indicates the total amount of the deposit. The select buttons are used to select the product.

IMPORTANT: Any time "STS INIT" (Space-to-Sales Initialization) scrolls across the display, the Flex-Pak controller has recognized a change from the programmed space-to-sales set-up. Press select button 2 to confirm the controller to <u>not</u> make any changes. Press select button 1 to allow the controller to change the Flex-Pak space-to-sales set-up (re-initialize).

SERVICE MODE: If configuration switch 4 is set to "C4 0", when the door is opened, "NONE" or a list of ERROR codes will show on the display. If configuration switch 4 is set to "C4 1", when the door is opened, "CASH-####-####", "SALE-####-####", "ERROR" will show on the display. The service mode is entered when the door is open and the service switch is pressed. The operator can now use the first four select switches to move through the main routine menu. The main routine menu is as follows:

EROR - errors, CPO - coin payout mode, TUFL - tube fill mode, TEST - test mode, PASS - Password; the following will only be accessed after the password is entered: CASH - cash counters, SALE -vend counters, PRIC - price setting, STOS - space-to-sales setting routine, CON - machine configuration, and RTN - return to normal mode, door open state. The first four select button functions are as follows:

IN-LINE

Select Button 1:   Home (Will return you to normal mode, door open)
Select Button 2:   Scroll Forward
Select Button 3:   Scroll Backward
Select Button 4:   Enter/Save/Clear (Allows you to enter a specific routine, save command programmed, and to clear the error prompts)

Important: Machine configuration functions and the routines they affect are shown in italics. See the machine configuration "CON" programming portion of the label for detailed information.

Note: Routines with ***** are the only programs accessible coming from the factory. If other programs are desired, they need to be turned on in the machine configuration code routine.

PROGRAMMING MENU

* "EROR" - ERROR ROUTINE
This function allows you to enter the error readout routine. If there have been no errors since the last reset, the display will read "NONE". If one or more errors have occurred, the display will show the first error code that occurred.

The following are error codes that may be displayed and detailed information accessed: VEND, DOOR, SELS, CHAR, ACCE, STS, and BUAL. An EROR code will stay in the controller's memory until cleared. To clear, hold select button 4 for two seconds with the error code showing on the display to clear the EROR from the board's memory.

Press select button 2 or 3 to scroll through any error codes that are present.
Important: If there is only one problem, that will be the only error code shown when you enter the error code sub-menus.
Press select button 1 to return to normal mode, door open.
With an error code showing on the display, press select button 4 to access detailed information.
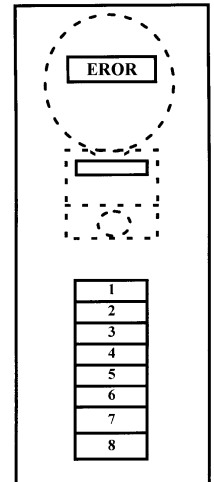
* "VEND" - VEND MECHANISM
Press select button 4 and the display will show one of the following:
- "VS-", indicating a vend sensor problem
- "PN-", indicating a PNP transistor failed (board failure)
- "NP-", indicating a NPN transistor failed (board failure) or stack harness problem
- "S-", indicating a solenoid failed
- "RE-", indicating a row is not plugged in

Press select button 2 or 3 to scroll through the error messages if more than one error message exists.
With any error code showing, press and hold select button 4 for two seconds, after making repairs, will clear the error.
Press select button 1 will return to "VEND" if all home sense errors have not been cleared. If all are cleared, the next error code will be displayed or "NONE" if there are no errors.

* "DOOR" - DOOR SWITCH

Press select button 4 and the display will show "DS", indicating a door switch error (door opened or switch not recognized for more than one hour), or "NONE", indicating no problems.

With "DS" showing, press and hold select button 4 for 2 seconds, after making repairs, will clear the error.

Press select button 1 will return to "DOOR" if door errors have not been cleared. If all are cleared, the next error code will be displayed or "NONE" if there are no errors.

* "SELS" - SELECT SWITCH

Press select button 4 and the display will show "SSXX", where "XX" indicates the first select switch that caused the error code, or "NONE", indicating all selection switches are O.K.

With "SSXX" showing, press and hold select button 4 for 2 seconds, after making repairs, will clear the error.

Press select button 1 will return to "SELS" if all select switch errors have not been cleared. If all select switch errors are cleared, the next error code will be displayed or "NONE" if there are no errors.

* "CHAR" - CHANGER ERRORS (Pay-out part of coin mechanism)

Press select button 4 and the display will show one of the following:

- "CC", indicating a changer communication error
- "TS", indicating a tube sensor error
- "IC", indicating an inlet chute blocked error (no coins sensed in the acceptor)
- "TJ", indicating a tube jam error
- "CRCH", indicating a changer ROM check sum error
- "NONE", indicating there are no errors

Press select button 2 or 3 to scroll through the error messages if more than one error exists.

With any error code showing, press and hold select button 4 for 2 seconds, after making repairs, will clear the error.

Press select button 1 will return to "CHAR" if all changer errors have not been cleared. If all changer errors have been cleared, the next error code will be displayed, or "NONE" if there are no errors.

* "ACCE" - ACCEPTOR ERRORS (Separator or top of coin mechanism)

Press select button 4 and the display will show one of the following:

- "EE", indicating excessive escrow attempts
- "NJ", indicating a coin jam (sensed and reported by the coin mechanism)
- "LA", indicating a low acceptance rate (ratio of read to accepted)
- "NONE", indicating there are no errors

Press select button 2 or 3 to scroll through the error messages if more than one error exists.

With any error code showing, press and hold select button 4 for 2 seconds, will clear the error.

Press select button 1 will return to "ACCE" if all acceptor errors have not been cleared. If all acceptor errors have been cleared, the next error code will be displayed, or "NONE" if there are no errors.

* "STS" - SPACE-TO-SALES ERRORS
Press select button 4 and the display will show one of the following:

- "DAXX", where "XX" indicates a module with a double select button assignment
- "UAXX", where "XX" indicates a module that is not assigned a select button
- "NONE", indicating there are no errors.

Press select button 2 or 3 to scroll through the error messages if more than one error messages exists.

With any error code showing, press and hold select button 4 for 2 seconds, after making repairs, will clear the error.

Press select button 1 will return to "STS" if all space-to-sales errors have not been cleared. If all space-to-sales errors have been cleared, the next error code will be displayed, or "NONE", if there are no errors.

* "BUAL" - BILL VALIDATOR ERRORS
Press select button 4 and the display will show one of the following:

- "BC", indicating a bill validator communication error
- "BFUL", indicating the bill stacker is full
- "BILL", indicating a defective vend mechanism in the validator
- "BJ", indicating a bill jam in the validator
- "BRCH", indicating a check sum error
- "BOPN", indicating an open stacker
- "BS", indicating a bill validator sensor error
- "LA", indicating a low acceptance rate (ratio of read to accepted)
- "NONE", indicating there are no errors

Press select button 2 or 3 to scroll through the error messages if more than one error exists.

With any error code showing, press and hold select button 4 for 2 seconds, after making repairs, will clear the error.

Press select button 1 will return to "BUAL" if all bill validator errors have not been cleared. If all bill validator errors have been cleared, the next error code will be displayed, or "NONE" if there are no errors.

Press select button 1 will return to "EROR".

Press select button 2 to scroll to the next routine.

* "CPO" - COIN PAYOUT MODE
This function allows you to dump coins from the coin mechanism.

Press select button 4 to enter mode and the lowest coin value dispensable will show on the display.

Press select button 2 or 3 to scroll through the different coin values available.

Press and hold select button 4 to dump the coins whose value is shown on the display.

Press select button 1 will return to "CPO".

Press select button 2 to scroll to the next routine.

* "TUFL" - TUBE FILL MODE
This function allows you to count the coins loaded in the top (separator) of the coin mech. The total value of the coins will be displayed and counted in the vender controller. The controller will inhibit the acceptance of any coin which does not go to a tube during this procedure. If a tube full status is detected, that coin type will be inhibited. When you finish loading all coins:

Press select button 1 to return to "TUFL".
Press select button 2 to scroll to the next routine.

* "TEST" - TEST ROUTINE
>>This function allows you to diagnose different functions of the vender, depending on the setting of configuration code number 3.
>>Note: The modes listed in italic in this routine are only accessible if configuration number 3 is set to C3 1.
>>"TEST" mode features include:

>>>*SE -*   *SELECT SWITCH TEST*
>>>*Press select button 4 and the display will show SE-0.*
>>>*Press any select button and the display will indicate the number of the select button pressed.*

>>>*Press and hold select button 1 will return to "SE".*

>>>*Press select button 2 to scroll to the next test mode.*

>>* CO - VEND MECHANISM TEST
>>>Press select button 4 and the display will show "CO-1".

>>>Press select buttons 2 and 3 to scroll up and down the vend mechanisms available to cycle in vend mechanism test.

>>>Press select button 4 to cycle the vend mechanism of the module displayed.

>>>Press select button 1 will return to "TEST", or "CO" if configuration Code 3 is turned on.

>>>Press select button 2 to scroll to next test mode.

>>>*VS -*   *VEND SENSOR*
>>>*This function allows you to check the alignment and proper functioning of the vend sensor. The display will change from "VS-0" to "VS-1" as the sensor becomes blocked and unblocked.*

>>*CN - COIN MECH TEST (mdb only)*
>>>*Press select button 4 and the display will show "00".*

>>>*Insert coins. The value of the coins will be reflected on the display.*

>>>*Press select button 4 to return coins that have been inserted and return to "00".*

>>>*Press select button 1 will return to "CN".*

>>>*Press select button 2 to scroll to the next test mode.*

>>*NA - NOTE ACCEPTOR TEST (mdb only)*
>>>*Press select button 4 and the display will show "00".*

>>>*Insert note. The value of the note will be reflected on the display.*

>>>*Press select button 4 to stack the note or press select button 1 to return the note and the display will return to "NA".*

>>>*Press select button 2 to scroll to the next test mode.*

>>*DSP - DISPLAY TEST*
>>>*Press select button 4 and the display segments will illuminate in a scrolling manner, while blinking the exact change LED, and when finished will return to "DSP".*

>>>*Press select button 2 to scroll to the next test mode.*

VERS - VERSION NUMBER TEST
> *Press select button 4 and the display will scroll the software revision level in the control box and return to "VERS". (Example: ###.## represents the installed software revision.)*
> *Press select button 1 to return to "TEST".*
> *Press select button 2 to scroll to the next routine.*

* "PASS" - PASSWORD

This function allows you to enter the following routines which are not accessible until the operator enters a password, which is set as 4-2-3-1. To enter password, press select button 4 until the display goes blank. Then press select button 2, then 3, then 1, and then 4, and "CASH" should appear on the display. If not entered properly, the display will return to "PASS". If entered correctly, the display will go to the next function "CASH". Also, you may enter "AUTO" (Auto Test) from the "PASS" prompt by entering the password, which is set as 1-2-3-4. To enter password, press select button 4 until the display goes blank. Then press select button 1, then 2, then 3, and then 4, and "AUTO" should appear on the display.

* "CASH" - CASH COUNTER ROUTINE

This function will show the user the vender historical total cash counted and the resettable cash counted for each selection for the vender.

Press select button 4 and "CASH"/"XXXX"/"XXXX" will show on the display where the 8"X" characters are the historical total cash counters that have been recorded.

Press select button 2 or 3 to display "CLN"/"XXXX"/"XXXX" where the character "N" is a selection number and the 8"X" characters are the resettable cash counters for that selection. Pressing select button 2 or 3 at this time will scroll through the available selection cash counters. Press select button 1 to return to "CASH"/"XXXX"/"XXXX". Press select button 1 to return to "CASH".
Press select button 2 to scroll to the next routine.

* "SALE" - SALES COUNTER ROUTINE

This function will show the user the vender historical total number of vends and the resettable vends counted for each selection for the vender.

Press select button 4 and "SALE"/"XXXX"/"XXXX" will show on the display where the 8"X" characters are the historical total vend counters that have been recorded. Press select button 2 or 3 to display "SLN"/"XXXX"/"XXXX", where the "N" character is a selection number and the 8"X" characters are the resettable vend counters for that selection. Pressing select button 2 or 3 at this time will scroll through the available selection vend counters. Pressing select button 1 will return to "SALE"/"XXXX"/"XXXX". Press select button 1 to return to "SALE".

Press select button 2 to scroll to the next routine.

* "PRIC" - PRICE SETTING ROUTINE

This function allows the user to set pricing for each selection when Configuration Code 1 is programmed to C1 1", multi-pricing. Press select button 4 and "PR1" will show on the display.

Press select button 4 to view the price on select button 1.

Press select button 2 or 3 to change the price setting for 1 selection.

Press select button 4 to enter the price selected and the display will return to "PR1".

Press select button 2 to scroll to the next selection and "PR2" will show on the display. Enter Set Price, set the price and enter the price. Repeat these steps for each select button until all prices are set.

If Configuration Code 1 is programmed to "C1 O", single price, set the vend price for select 1 as described above. The price entered for selection 1 will be set for all selections.

Press select button 1 to return to "PRIC".
Press select button 2 to scroll to the next routine.

* "STOS" - SPACE-TO-SALES ROUTINE

This function allows you to change the space-to-sales settings.

Press select button 4 and "OPTX" will show on the display, where the "X" indicates the current space-to-sales options. For 7 options available, see the list below.

Press select button 2 or 3 to scroll through the options.

Press select button 4, with the desired option showing on the display, to save that option and return to "STOS".

Space-to-Sales Options
> Important: To set the Flex-Pak to any option 2 through 6, the Flex-Pak must first be set to Option 1 for proper module settings.

* 1 - Modules are assigned to select buttons according to Factory default.
* 2 - Selections 1 & 2 are tied together with all associated modules.
* 3 - Selections 2 & 3 are tied together with all associated modules.
* 4 - Selections 1 & 2 and selections 3 & 4 are tied together with all associated modules.
* 5 - Selections 1, 2, & 3 are tied together with all associated modules.
* 6 - Selections 1, 2, & 3 and selections 4 & 5 are tied together with all associated modules.

Option 7 is only available if configuration code 2 is set at "C2 1".
7 - Custom: Allows you to assign modules to select buttons.

With "OPT7" showing, press select button 4 and "BT1" will show on the display. "1" stands for the select button number. Press select button 2 or 3 to scroll through the select numbers. When the desired select button number is reached, press select button 4 and "DISP" will show on the display. Press select button 2 or 3 to scroll through "DISP", "ADD", and "DEL". Press select button 4 with any one of these on the display, and it will allow you to do the following with the selection:

> *"DISP":   Allows you to view the modules assigned to the select button in the form of "X-A.B.C." where "X" is the select button and A.B.C. are the modules assigned to it.*

> *"ADD":   Allows you to add modules to the select button.*
> > *To add: With "ADD" on the display, press select button 4 and "ADDX", where "X" is the next module number that can be added to the select button. Press select button 4 and this will be saved and the display will show "ADDX" again with the next module number. If you do not want to save press, select button 1 and return to "ADD"; from here you can scroll to "DEL" or "DISP", or press select button 1 to return to "BT 1". Press select button 2 to scroll to the next select button to program or press select button 1 to return to "STOS".*

> *"DEL":   Allows you to delete modules from the select button.*
> > *To delete: With "DEL" on the display, press select button 4 and "DELX", where "X" is the next module number that can be deleted from the select button. Press select button 4 and this will be saved and the display will show "DELX" again with the next module number. If you do not want to save, press select button 1 and return to "DEL"; from here you can scroll to "ADD" or "DISP", or press select button 1 to return to "BT1". Press select button 2 to scroll to the next select button to program or press select button 1 to return to "STOS".*
> > *Press select button 2 to scroll to the next routine.*

* "CON" - MACHINE CONFIGURATION

This function allows the user to access and change the programming of the following machine configuration settings or to lock the user out of this portion of the programming to prevent accidental changes. If you press select button 4 and the display shows "LOC", this means configuration setting changes will not be allowed. If "C1" is displayed, then configuration setting changes will be allowed. "LOC" can only be enabled or disabled through DEX interrogation. If "C1" is displayed, the following settings are available:

C1 -   Configuration Code 1 - Single Price / Multi-Price Setting Mode
           This code is used to enable the single price mode "C1 O" or multi-price mode "C1 1".
           Press select buttons 2 and 3 to scroll between "C1 O" and "C1 1".
           Press select button 4 with the display showing the setting you wish to use.
           Press select button 1 to return to "C1".
           Press select button 2 to scroll to "C2".

C2 -   Configuration Code 2 - Dixie-Narco Menu Options Enable
           This code is used to enable Dixie-Narco programming options: space to sale option 7, "LAOS", "LAOD", "PER1", "PER2", "S-P2", "PR2P", "PR2D", "TIME", "DATE", "PROM", and "LANG". To enable this programming option enter "C2 1", to disable or skip these programming options enter "C2 0".
           Press select buttons 2 and 3 to scroll between C2 0 and C2 1.
           Press select button 4 with the display showing the setting you wish to use.
           Press select button 1 to return to "C2".
           Press select button 2 to scroll to "C3".

C3 -   Configuration Code 3 - Full Test Enable
           This code is used to enable the full test menu options:
           SE, VS, CN, NA, DSP, and VERS. To enable these programming options enter "C3 1", to disable or skip these programming options enter "C3 0".
           Press select buttons 2 and 3 to scroll between C3 0 and C3 1.
           Press select button 4 with the display showing the setting you wish to use.
           Press select button 1 to return to "C3".
           Press select button 2 to scroll to "C4".

C4 -   Configuration Code 4 - Automatic Viewing of Historical Sales & Cash Data and Error Codes
           This code is used to enable viewing of historical total sales, total cash, and current errors automatically when the door is opened. To enable automatic viewing option enter "C4 1"; to disable enter "C4 0".
           Press select button 2 and 3 to scroll between "C4 0" and "C4 1".
           Press select button 4 with the display showing the setting you wish to use.
           Press select button 1 to return to "C4".
           Press select button 2 to scroll to "C5".

C5 -   Configuration Code 5 - Door Switch Reset Status
           This code is used to reset all resettable data when the door switch is cycled and at least one data register is read via the credit display when set at "C5 1" or to reset all resettable data only when the "RESET" command is received when set at "C5 0".
           Press select buttons 2 and 3 to scroll between C5 0 and C5 1.
           Press select button 4 with the display showing the setting you wish to use.
           Press select button 1 to return to "C5".
           Press select button 2 to scroll to "C6".

Important: "C6" and "C7" are correct change rule settings and work in conjunction - that is if "C6" is on, C7 is off or vice versa. "C6" is the default code for correct change rule setting.

* C6 - Configuration Code 6 - Correct Change Rule No. 1

This code is used in regards to turning off the exact change light as follows: there must be nickels and dimes covering the low level sensors of the coin mech, or there must be nickels and quarters covering the low level sensors of the coin mech. Press select button 4; if the display shows "C6 1", Code 6 is on and "C6 0" means Code 6 is off.

Press select buttons 2 and 3 to scroll between C6 0 and C6 1.

Press select button 4 with the display showing the setting you wish to use.

Press select button 1 to return to "C6".

Press select button 2 to scroll to "C7".

C7 - Configuration Code 7 - Correct Change Rule No. 2

This code is used in regards to bill and coin acceptance as follows: user will be allowed to insert bills and coins, and receive product regardless of the tube level status of the coin mech. Press select button 4; if the display shows "C7 1", Code 7 is on and "C7 0" means Code 7 is off.

Note: If code 7 is turned on, Code 6 is automatically turned off.

Press select buttons 2 and 3 to scroll between C7 0 and C7 1.

Press select button 4 with the display showing the setting you wish to use.

Press select button 1 to return to "C7".

Press select button 2 to scroll to "C8".

Important: "C8", "C9", "C10", and "C11" are Escrow Rule settings and work in conjunction, that is if one of the four is on, the other three are automatically turned off. "C8" is the default code for Escrow Rule setting.

* C8 - Configuration Code 8 - Escrow Rule No. 1 Enable

This code is used for "escrow to price" condition. All dollar bills will be stacked. No cancel sale is allowed once the minimum vend price is met or exceeded. Press select button 4; if the display shows "C8 1", Code 8 is turned on, and "C8 0" means Code 8 is turned off.

Press select buttons 2 and 3 to scroll between C8 0 and C8 1.

Press select button 4 with the display showing the setting you wish to use.

Press select button 1 to return to "C8".

Press select button 2 to scroll to "C9".

C9 - Configuration Code 9 - Escrow Rule No. 2 Enable

This code is used for "escrow to select" condition with dollar bills being stacked. Dollar bills are always stacked and a cancel sale will return deposit from the coin mech (i.e. 4 quarters).

Press select button 4; if the display shows "C9 1", Code 9 is turned on, and "C9 0" means Code 9 is turned off.

Press select buttons 2 and 3 to scroll between C9 0 and C9 1.

Press select button 4 with the display showing the setting you wish to use.

Press select button 1 to return to "C9".

Press select button 2 to scroll to "C10".

C10 - Configuration Code 10 - Escrow Rule No. 3 Enable

This code is used for "escrow to select" condition with the last dollar bill that meets or exceeds maximum vend price being held in escrow in the validator. Cancel sale will return the held bill and any amount over $1 will be returned from the coin changer.

Press select button 4; if the display shows "C10 1", Code 10 is turned on, and "C10 0" means Code 10 is turned off.

Press select buttons 2 and 3 to scroll between C10 0 and C10 1.

Press select button 4 with the display showing the setting you wish to use.

Press select button 1 to return to "C10".

Press select button 2 to scroll the "C11".

C11 - <u>Configuration Code 11 - Escrow Rule No. 4</u>
This code is used for "escrow no cancel" condition with all bills stacked and no cancel sale allowed unless the vender is in exact change and the maximum vend price is exceeded.
Note: Any money entered below vend price cannot be returned.
Press select button 4; if the display shows "C11 1", Code 11 is turned on, and "C11 0" means Code 11 is turned off. Press select buttons 2 and 3 to scroll between C11 0 and C11 1.
Press select button 4 with the display showing the setting you wish to use.
Press select button 1 to return to "C11".
Press select button 1 to return to "CON".
Press select button 2 to scroll to "LAOS".

If Configuration Code 2 is programmed to "C2 1", the following routines will be enabled:
LAOS - LIMITED ACCESS ON SELECTION
This function is used to set selection(s) which will be limited during certain periods of the day.
Press select button 4 and the display will show "L1", where "1" represents a select button number.
Press select button 2 or 3 to scroll through select button numbers.
Press select button 4 with "L1" showing to view "LAOS" settings for that selection. "L#0" or "L#1" will show on display. Press select button 2 or 3 to scroll to desired setting. "L#1" means the selection is set for limited access and "L#0" means it is not set for limited access.
Press select button 4 when the desired setting is showing on the display and then the display will return to "L#".
Press select button 1 to return to "LAOS".
Press select button 2 to scroll to "LAOD".

LAOD - LIMITED ACCESS ON DAYS
This function is used to set the days of the week for limited access.

Sunday = D1	Wednesday = D4	Saturday = D7
Monday = D2	Thursday = D5	
Tuesday = D3	Friday = D6	

Press select button 4 and the display will show "D1", where "1" represents a day.

Press select button 2 or 3 to scroll through days.
Press select button 4 with "D#" showing to view "LAOD" settings for that day.
"D#0" or "D#1" will show on the display.
Press select button 2 or 3 to scroll to the desired setting. "D#1" means the day is set for limited access and "D#0" means the day is not set for limited access.
Press select button 4 when the desired setting is showing on the display and then the display will return to "D#".
Press select button 1 to return to "LAOD".
Press select button 2 to scroll to "PER1".

PER1 - PERIOD 1 FOR ENGAGING AND DISENGAGING LIMITED ACCESS
This function is used to set the times to start and end limited access.
Press select button 4 and "STRT" will show on the display.
Press select button 4 to enter "STRT" (start) and the display will show a time (24 hour clock).
Press select button 2 or 3 to increment or decrement the time. With the time you wish to activate showing on the display, press select button 4. The display will return to "STRT". Press select button 2 to scroll to "END".
Set the time the same as start.
Note: Start time has to be less than end time. You must set an on and off time.
Press select button 4 to save the end time and the display will return to "END".
Press select button 1 to return to "PER1".
Press select button 2 to scroll to "PER2".

PER2 -   PERIOD 2 FOR ENGAGING AND DISENGAGING LIMITED ACCESS
This function is used to set a second time to start and end limited access. Set the start time and end time the same way as in "PER1". Period 2 must be greater than period 1.
Press select button 1 to return to "PER2".
Press select button 2 to scroll to "S-P2".

S-P2 -   SECONDARY SET PRICE
This function is used to set a second price for each selection. Set this using the instructions for "PRIC". (See "PRIC" instructions.
Press select button 1 to return to "S-P2".
Press select button 2 to scroll to "PR2P".

PR2P -   PERIOD FOR ENGAGING AND DISENGAGING SECONDARY PRICES
This function is used to set the time to start and end secondary prices. Set this using the instructions for "PER1".
Press select button 1 to return to "PR2P".
Press select button 2 to scroll to "PR2D".

PR2D -   SECONDARY PRICING ON DAYS
This function is used to set the days of the week for secondary pricing. Set this using the instructions for "LAOD". (See page 9).
Press select button 1 to return to "PR2D".
Press select button 2 to scroll to "TIME".

"TIME" - TIME

This function is used to set the time. The time will be displayed in military time (24 hour clock).
Press select button 4 and the time will be displayed.
Press select button 2 or 3 to increment or decrement the time.
With the time you wish to set showing on the display, press select button 4 and the display will show "TIME".
Press select button 2 to scroll to "DATE".

"DATE" - Date

This function is used to set the day of the month, the month, the day of week, and the year.
Press select button 4 and the display will show "D -M" (day of month).
Press select button 4 and the display will show "XX.YY" where "YY" characters indicate the day of the month.
Press select buttons 2 and 3 to increment or decrement the days of the month. With the day of month you wish to save showing on the display, press select button 4.
The display will return to "D - M".
Press select button 2 to scroll to "MNTH" (Month).
Press select button 4 and the display will show "XX.YY", where "XX" characters indicate the month of the year.
Press select button 2 and 3 to increment or decrement the months of the year. With the month of year you wish to save showing on the display, press select button 4.
The display will return to "MNTH".
Press select button 2 and scroll to "D -W" (day of week).
Press select button 4 and display will show "XX", where "XX" characters indicate the day of week:

01 = Sunday	04 = Wednesday	07 = Saturday
02 = Monday	05 = Thursday	
03 = Tuesday	06 = Friday	

Press select button 2 or 3 to increment or decrement the days of the week. With the day of the week you wish to save showing on the display, press select button 4.
The display will return to "D - W".
Press select button 2 and scroll to "YEAR" (year).
Press select button 4 and the display will show "XXXX", where the X characters indicate the year.
Press select buttons 2 and 3 to increment or decrement the year. With the year you wish to save showing on the display, press select button 4.
The display will return to "YEAR".
Press select button 1 to return to "DATE".
Press select button 2 to scroll to "PROM".

"PROM" - PROMOTIONAL SALES

This function is used to initiate a promotional sale.

Press select button 4 and the display will show "VN" (the number of vends required to initiate the promotional sale), "FR" (the number of free beverages delivered), or "SELXXX" ("XXX" are the characters representing the selection numbers enabled for the promotion).

Press select button 2 or 3 to scroll through "VN" "FR", and "SELXXX". With the prompt you wish to enter showing on the display, press select button 4.

Enter "VN" and "VN-#" will show on the display, where # will be zero to 25.

Press select button 2 or 3 to increment or decrement the number of vends required to initiate promotional sales. With the number you wish to save showing, press select button 4 to save.

Note: If "VN-0" is displayed, the promotion is disabled.

Enter "FR" and "FR-#" will show on the display, where # will be zero to 25.

Press select button 2 or 3 to increment or decrement the number of free beverages to be delivered. With the number you wish to save showing, press select button 4 to save.

Note: If "FR-0" is displayed, the promotion is disabled.

Enter "SEL#" and "ADD" or "DEL" will show on the display. With the function you wish to enter showing on the display, press select button 4.

Enter "ADD" and "ADD#" will show on the display, where # is the character that represents the selection to be enabled for the promotional sale to occur. Press select button 2 to scroll to next button to "ADD". Press select button 4 to save the selection.

Enter "DEL" and "DEL#" will show on the display, where # is the character that represents the selection to be disabled for the promotional sale to occur. Press select button 2 to scroll to next button to "DEL". Press select button 4 to save the selection.

Important: Promotional sales, when enabled, will be set at all times of the day.

Press select button 1 to return to "PROM".

Press select button 2 to scroll to "LANG".

"LANG" - LANGUAGE

This function is used to set the language that will be used for display messages.

Press select button 4 and the display will show the language currently set in the controller. Press select button 2 or 3 to scroll through the languages available:

ENGL - English	SPN - Spanish	ITA - Italian
GERM - German	FRN- French	

With the language you wish to enter showing on the display, press select button 4. The display will return to "LANG".

Press select button 1. Vender will return to normal mode, door open.

RTN - Return

This function is used to return to normal mode, door open. Press select button 4 with "RTN" on the display and the vender will return to normal mode, door open.

"AUTO" - Auto Test

This function is used in Dixie-Narco's manufacturing process and is not intended for use in the field. Its purpose is a self-test routine to check the vender's system. This function is not accessible until the operator enters a password, which is pressed when the display is at the "PASS" prompt. To enter password, press select button 4 until the display goes blank. Then press select button 1, then 2, then 3, and then 4, and "AUTO" should appear on the display. If not entered correctly, the display will return to "PASS". For further details on "AUTO" test, contact Dixie-Narco Factory Service.

External Electronic Counters

This function is used to show historical total vends, interval product counts that have occurred for prices being used, and interval product count for each selection from outside the vender. To access this information you must press the password, which is set at 4231. To enter password, press select button 4, then 2, then 3, then 1 and the display will show a # which is the number of historical total vends. To access data available:

Press and hold select button 1: To show historical total vends.

Press and hold select button 2: To show list of prices & interval product counts that have occurred for those prices.

Press and hold select button 3: To show interval product count for each selection.

Press and hold select button 4 for 5 seconds: Resets interval data. "COUntErS rESEt" will scroll across the display.

Press any select button greater than 4 will return the vender to normal operation.

Note: There is a two (2) minute time-out that will return the vender to normal vending mode.

Select Button 1: Home (will return to previous menu prompt or to normal door open mode)
Select Button 2: Scroll Up (forward in menu)
Select Button 3: Scroll Down (backward in menu)
Select Button 4: Enter/Save/Clear (allows you to enter a specific prompt, save what you have programmed, or clear the error prompts)

EROR - Error Readout Routine
    VEND - Vend Mechanism
        VS - Vend Sensor Error
        PN - PNP Transistor Error
        NP - NPN Transistor Error
        S - Solenoid Error
        RE - Row Unplugged Error
    *DOOR** - Door Switch
        DS - Door Switch Error
    *SELS** - Select Switch
        SS# - Select Switch Error
    CHAR - Changer Errors
        CC - Changer Communication Error
        TS - Tube Sensor Errors
        IC - Inlet Chute Blocked Error
        TJ - Tube Jam Error
        CRCH - Changer ROM Check Sum Error
    ACCE - Acceptor Error
        EE - Excessive Escrow Attempts
        NJ - Coin Jam
        LA - Low Acceptance Rate
    STS - Space-To-Sales Errors
        DA# - Module Assigned to 2 Buttons
        UA# - Module not Assigned to a Button
    BUAL - Bill Validator Errors
        BC - Bill Validator Communication Error
        BFUL - Full Bill Stacker
        BILL - Defective Validator Motor
        BJ - Bill Jam
        BRCH - Check Sum Error
        BOPN - Open Stacker
        BS - Bill Validator Sensor Error
        LA - Low Acceptance Rate
    CPO - Coin Payout Mode
    TUFL - Tube Fill Mode
    TEST - Test Routine
        SE - Select Switch Test
        CO - Vend Mechanism Test
        VS - Vend Sensor Test
        CN - Coin Mech Test
        NA - Note Acceptor Test
        DSP - Display Test
        VERS - Version Number Test
    PASS - Password
        CASH - Cash Counter Routine
            CASH/####/#### - historical cash counter/vender
            CL#/####/#### - resettable cash counter/select

PASS (Continued)
    SALE - Sales Counter Routine
        SALE/####/#### - Historical Vend Counter/Vender
        SL#/####/#### - Resettable Vend Counter/Select
    PRIC - Price Setting Routine
        PR# - Price for Each Selection
    STOS - Space-To-Sales Routine
        OPT# (# = 1 thru 7)
            BT# (OPT 7 ONLY)
                DISP (OPT 7 ONLY)
                ADD (OPT 7 ONLY)
                DEL (OPT 7 ONLY)
    CON - Machine Configuration
        C# (# = 1 thru 11)   **C#0** (off)
        (See below)   **C#1** (on)
    LAOS - Limited Access on Selection
        L# (# = select button #)   **L#0** (off)
                        L#1 (on)
    LAOD - Limited Access on Days
        D# (# = 1 thru 7)   **D#0** (off)
                        D#1 (on)
PER1 - Period 1 for Engaging & Disengaging Limited Access
    STRT - Start
    END
PER2 - Period 2 for Engaging & Disengaging Limited Access
    STRT - Start
    END
S-P2 - Secondary Set Price
    PR# - Price for each Selection Involved
PR2P - Period for Engaging and Disengaging Secondary Prices
    STRT - Start
    END
PR2D - Secondary Pricing on Days
    D# (# = 1 thru 7)
                        D#0 (off)
                        D#1 (on)
TIME - Time
    #### - 24 Hour Clock
DATE - Date
    D-M - Day of Month
    MNTH - Month
    D-W - Day of Week
    YEAR
PROM - Promotional Sales
    VN - Number of Vends to Initiate PROM
    FR - Number of Free Beverages to be Delivered
    SEL# - Selection Enabled for the Promotion
    LANG - Language
    RTN - Return
    AUTO - Auto Test

** Prompts listed with asterisks are the only programs accessible coming from the factory. If other programs are desired, they need to be turned on in the machine configuration code programs. Note: To enter "AUTO", at the 'PASS' prompt enter the correct password to enter Auto Test.

CON: Machine Configuration	
C1 - single price/multi-price	**C6** - quarter/nickel or dime/nickel cover low sensor turn off cc light
C2 - D-N menu options	**C7** - cc light stays off regardless of tube status
C3 - full test (diagnostics)	**C8** - escrow to price
C4 - auto viewing of historical sales, cash & error codes	**C9** - escrow to select (ES-4) all bills stacked
C5 - door switch reset of data	**C10** - escrow to select (ES-1) last bill escrowed
	C11 - escrow no cancel

TROUBLESHOOTING INDEX

Symptom: **PRODUCT HOT**

Possible Cause: **Compressor will not run.**

WHAT TO CHECK	SOLUTION
1. Is the vender plugged in?	**1. YES**, see step 2. 　**NO,** plug it in.
2. Is the compressor power cord plugged in?	**2. YES,** see step 3. 　**NO,** plug it in.
3. Is the temperature control on?	**3. YES,** see step 4. 　**NO,** turn it on.
4. Is the circuit breaker or fuse correct?	**4. YES,** see step 5. 　**NO,** replace or reset.
5. Is there power at the wall outlet?	**5. YES,** see step 6. 　**NO,** consult an electrician.
6. Is the vender power cord good?	**6. YES,** see step 7. 　**NO,** replace.
7. Is the compressor power cord good?	**7. YES,** see step 8. 　**NO,** replace.
8. Is the temperature control bulb located properly?	**8. YES,** see step 9. 　**NO,** correct.
9. Is the temperature control operational?	**9. YES,** see step 10. 　**NO,** replace.
10. Is the thermal overload operational?	**10. YES,** see step 11. 　**NO,** replace.
11. Is the start relay operational?	**11. YES,** see step 12. 　**NO,** replace.
12. Is the compressor operational?	**12. YES,** see step 13. 　**NO,** replace.
13. If all of the above steps fail....	13. Consult the Dixie-Narco Factory 　Service. 1-800-688-9090. 　Note: Have the vender model 　and serial number available.

Possible Cause: **Compressor starts but will not keep running.**

WHAT TO CHECK	SOLUTION
1. Is the temperature control set on its highest setting?	**1. YES**, see step 2. **NO,** adjust the knob to a higher setting.
2. Domestically, is the voltage supply within +/- 10% of rating on serial plate?	**2. YES**, see step 3. **NO,** consult the power company.
3. Is the condenser clear of obstruction?	**3. YES,** see step 4. **NO,** clear or clean.
4. Is the condenser fan blade turning?	**4. YES,** see step 5. **NO,** free the obstruction or replace the blade if needed.
5. Is the condenser fan motor operational?	**5. YES,** see step 6. **NO,** replace.
6. Is the temperature control operational?	**6. YES,** see step 7. **NO,** replace.
7. Is the tube from the compressor to condenser free of kinks?	**7. YES,** see step 8. **NO,** repair or replace.
8. Is the capillary tube free of kinks?	**8. YES,** see step 9. **NO,** replace.
9. Is the thermal overload operational?	**9. YES,** see step 10 **NO,** replace.
10. Is the start relay operational?	**10. YES,** see step 11. **NO,** replace.
11. If all of the above steps fail.....	11. Consult the Dixie-Narco Factory Service 1-800-688-9090. Note: Have the vender Model & Serial number available.

Possible Cause: **MISCELLANEOUS**

WHAT TO CHECK	SOLUTION
1. Is the evaporator fan motor working?	1. **YES**, see step 2. **NO**, replace motor.
2. Has the refrigeration system lost its charge?	2. **YES**, replace the refrigeration system **NO**, see step 3.

3. If all of the above steps fail...	3. Consult the Dixie-Narco Factory Service
	   1-800-688-9090.
	   Note: Have the vender model and serial
	   number available.

WHAT TO CHECK	SOLUTION
1. Is the temperature control set properly?	**1. YES,** see step 2. **NO,** set properly.
2. Domestically, is the voltage supply between 103V and 127V?	**2. YES,** see step 3. **NO,** call power company.
3. Is the temperature control probe located properly?	**3. YES,** see step 4. **NO,** correct.
4. Is the condenser clear of obstruction?	**4. YES,** see step 5. **NO,** clear, clean, or space the vender.
5. Is the evaporator fan free of obstruction?	**5. YES,** see step 6. **NO,** free any obstruction or replace.
6. Is the condenser fan free of obstruction?	**6. YES,** see step 7. **NO,** free any obstruction or replace.
7. Is the evaporator free of ice?	**7. YES,** see step 8. **NO,** defrost & check the following: gasket seal, port door seal, refrigerant charge.
8. Is the temperature control operational?	**8. YES,** see step 9. **NO,** replace.
9. Is the evaporator fan operational?	**9. YES,** see step 10. **NO,** replace.
10. Is the condenser fan motor operational?	**10. YES,** see step 11. **NO,** replace.
11. Is the refrigerant tubing free of kinks?	**11. YES,** see step 12. **NO,** repair or replace.
12. Is the overload operational?	**12. YES,** see step 13. **NO,** replace.
13. Is the start relay operational?	**13. YES,** see step 14. **NO,** replace.
14. Is there refrigerant in the system?	**14. YES,** see step 15. **NO,** charge system and check for leaks.

15. If all of the above steps fail....	15. Consult the Dixie-Narco Factory Service.
	  1-800-688-9090.
	  Note: Have the vender model and serial
	  number available.

Symptom: **PRODUCT TOO COLD OR FROZEN**

Possible Cause: **Compressor runs too long or continuously.**

WHAT TO CHECK	SOLUTION
1. Is the temperature control set properly?	**1. YES,** see step 2. **NO,** set properly.
2. Is the temperature control bulb located properly?	**2. YES,** see step 3. **NO,** correct.
3. Is the temperature control operational?	**3. YES,** see step 4. **NO,** replace.
4. Does the evaporator frost over completely while the system is running?	**4. YES,** see step 5. **NO,** check for leaks or a low charge.

5. If all of the above steps fail......	5. Consult the Dixie-Narco Factory
	    Service. 1-800-688-9090.
	     Note: Have the vender model and
	     serial number available.

POSSIBLE CAUSES	SOLUTION
1. Are refrigerant lines free of contact with surfaces?	**1. YES,** see step 2. **NO,** correct.
2. Is the condenser fan blade obstructed or damaged?	**2. NO,** see step 3. **YES,** free any obstructions or replace the blade if needed.
3. Is the evaporator fan blade obstructed or damaged?	**3. NO,** see step 4. **YES,** free any obstructions or replace the blade if needed.
4. Is compressor noisy?	**4. NO,** see step 5. **YES,** replace.
5. If all of the above steps fail....	5. Consult the Dixie-Narco Factory Service 1-800-688-9090. Note: Have the vender Model & Serial number available..

Symptom: **EXCESSIVE CONDENSATE**

WHAT TO CHECK	SOLUTION
1. Is the door sealed properly? (This can be checked by inserting a piece of paper, thin plastic or paper currency between the cabinet and the door seal when the main door is open. When the door is closed properly, the paper should exert some resistance as it is pulled out.	1. **YES,** see step 4. **NO,** Rotate "T"-Handle clockwise until it can no longer be turned by hand. If door still does not seal properly, see step 2.
2. Is the motor cover interfering with the inner door?	2. **YES,** reinstall motor cover properly. **NO,** see step 3.
3. Has the machine been vandalized?	3. **YES,** replace necessary components. **NO,** see step 4.
4. Are soakers positioned properly?	4. **YES,** see step 5. **NO,** place soakers upright in pan so that air will flow over & through the soakers.
5. Are there 14 fiberglass soakers in the pan?	5. **YES,** see step 6. **NO,** place 14 fiberglass soakers in the condensate pan.
6. Are the condenser & evaporator free from obstruction?	6. **YES,** see step 7. **NO,** remove all debris and/or cans from the area around the evaporator and condenser. Clean the evaporator & condenser coils with a stiff brush or compressed air.

7. Is the delivery door misaligned?	7. **YES,**
	  A. Level the vender properly.
	  B. Align the inner & outer doors so that the delivery door does not stick open.
	  NO, see step 8.

8. If all of the above steps fail...	8. Consult the Dixie-Narco Factory Service 1-800-6888-9090. Note: Have the vender model and serial number available.