Model 721

Programming Guide

12955 Enterprise Way
Bridgeton, Missouri 63044-1200
(314) 298-3500

7210010

Copyright © 11-99

This machine has been engineered to our own rigid safety and performance standards. It has been designed to comply with sanitation and health guidelines recommended by the Automatic Merchandising Health-Industry Council (AMHIC) and it conforms with all other NAMA safety recommendations.

This machine has been manufactured in accordance with the safety standards of both Underwriter's Laboratories and the Canadian Standards Association. To maintain this degree of safety and to continue to achieve the level of performance built into this machine, it is important that installation and maintenance be performed so as to not alter the original construction or wiring and that replacement parts are as specified in the Parts Manual. Your investment in this equipment will be protected by using this Programming Guide, the Operator's Guide, and the Parts Manual in your operation, service and maintenance work. By following prescribed procedures, machine performance and safety will be preserved.

Copyright © 11-99
National Vendors
A Division of **CRANE CO**

Table of Contents

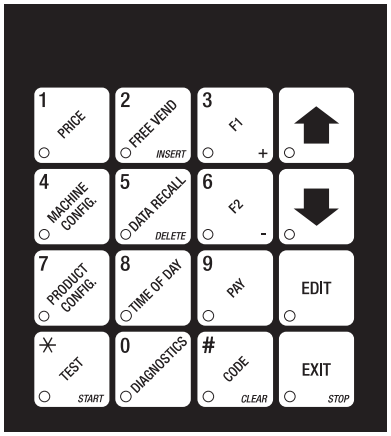
Subject	Page
Introduction	**1**
The Displays	**2**
The Function Keys	**2**
Other Keys	**2**
Control Panel Switch Functions Explained	**3**
Programming Flow Charts	**4**
Programming Functions	**8**
Gain Access to the Supervisor Mode	8
Enter a New Supervisor Code	8
Enter a Freevend Code	8
Assign a Code to View Data Without Opening the Door	9
Lock or Unlock Mode or Payout Keys	9
Set Printer or DEX Options	10
Lock or Unlock Data Clearing Access	10
Select Printer Baud Rate (Printer Mode Only)	11
Select Coin Mechanism and Options	12
Select Display Language	12
Select Bill Validator and Options	13
Select Card Reader and Options	14
Select Monetary Options	15
Set Up Winner Mode	16
View or Set Machine Configuration	17
Identify the Selections In the Merchandiser	18
Couple/Uncouple Tray Motors	18
Set Temperature (Supervisor Mode Only)	19
View and Control Defrost Mode	19
Set Time of Day Lamp Inhibit	20
View Software Version	21
Set the Time of Day	21
Set the Day of the Week	21
Set Month, Day, and Year	22
Set Time-of-Day Inhibited Vending	22
Set Time-of-Day Free Vending	22
Set Time-of-Day Discount Vending	22
Time Interval Editing	23
Select a Standby Message	25
Select An Out-of-Service Message	25
Select a Freevend Message	26
Edit Custom Messages	27
View Cabinet Temperature	29
View Evaporator Temperature	30
Payout Coins	30
Set Prices	31
View Nonresettable Sales and Vend Data	32

Subject	Page
View Data Three Different Ways	32
View Total Paid Sales	32
view card reader paid sales	33
View Total Paid Vends	33
Clear All Resettable Data	33
Clear Paid Sales Data Only	34
View Amount In Coin Box	34
View Amount In Validator	34
View Freevend Sales By Time Interval	35
View Discount Sales By Time Interval	35
View Free Vends	35
View Winners	36
View Time Data	36
View Total Unpaid Sales	37
View Total Unpaid Vends	38
View Number Of Test Vends	38
View Machine ID Number	38
Test Vend Selections and Verify Credit Added	39
Test the Display	39
Test the Motors	39
View Motor Status By Tray	40
Test Lamps On/Off Status	41
Test the Retractable Door	41
Download Data To a PDCD	42
Set Freevend Options	42
View Diagnostic Messages	43

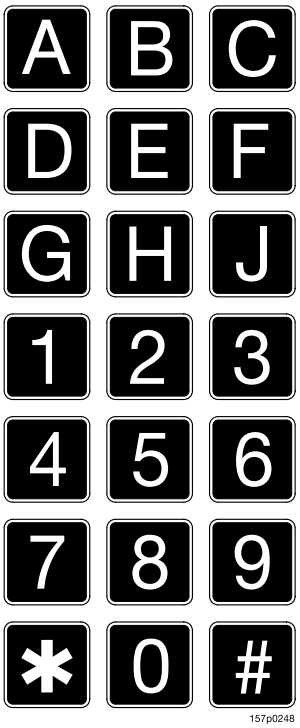
Introduction

How to program your Snack or Refreshment Center.

Some setup, test, and maintenance operations are computer controlled. The control panel switches and the selection panel switches regulate these operations.



Control Panel



Selection Panel

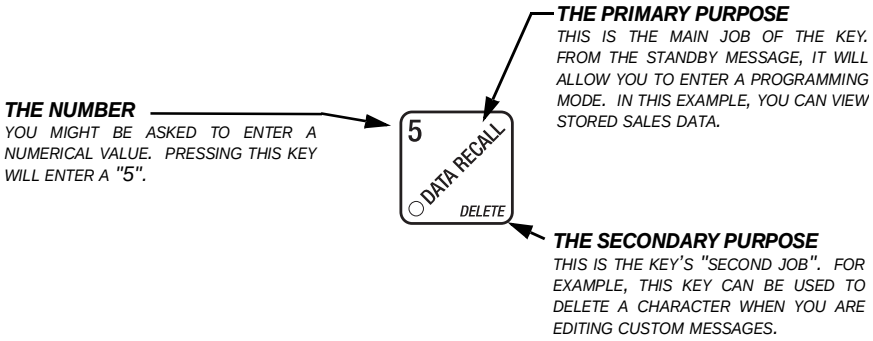
The Displays

The 10-character display performs two functions, and is referred to in this book as "the display":

1. It shows the customer's selection and how much credit is in the machine, as well as the ready, service, and time of day messages.
2. It provides information and feedback to the service person during maintenance.

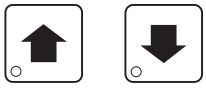
The Function Keys

The keys on the control panel can be used for up to three things:



Other Keys

The MOVEMENT keys on the control panel let you move inside a mode, and back and forth between modes. To see how these keys let you move around, study the flow diagram on the next page.



The up and down arrow keys are your "legs", which let you move up and down the list of tasks. These keys are what let you continue from one step to the next in programming procedures.

This is your "activate" or "choose" key. It "opens a door" to additional information and lets you begin a programming task once you are inside of a mode. Sometimes, it is used as a toggle switch to show you your choices during a programming task.

This is your "end" key. Pressing it one or more times will move you back to the start of the mode, or all the way back to the standby message.

Control Panel Switch Functions Explained

Each of the control panel switches has one or more jobs to do. This list will give you a short overview of those jobs.

Press this button to put your machine into the Price Setting mode. You can see maximum and minimum machine prices, and change prices for entire machine, entire tray, or individual selection.

Press this button to select the Free Vend modes.

Press this button to view the temperature of a cold unit, or software version number.

Press this button to:

- Select display language
- Select coin mechanism and options
- Select bill validator and options
- Select card reader and options
- Select monetary options
- Set winner feature

Press this button to view total sales and vends by whole machine, tray, or selection. Clear resettable data.

Press this button to:

- Download data into your portable data collection device (PDCD), **OR**
- Set printer baud rate, depending upon which device you are using

Press this button to:

- Set machine configuration
- Set which trays are active
- Couple and uncouple tray motors
- Set cold unit temperature

Press this button to:

- Set time of day
- Set day, month, year
- Set up time of day intervals for inhibit, freevend, and discount vending
- Select display messages
- Edit messages

Press this button to pay one or more coins from the coin mechanism.

- Allows you to see any fault or condition that may place the machine out of service

Press this button to:

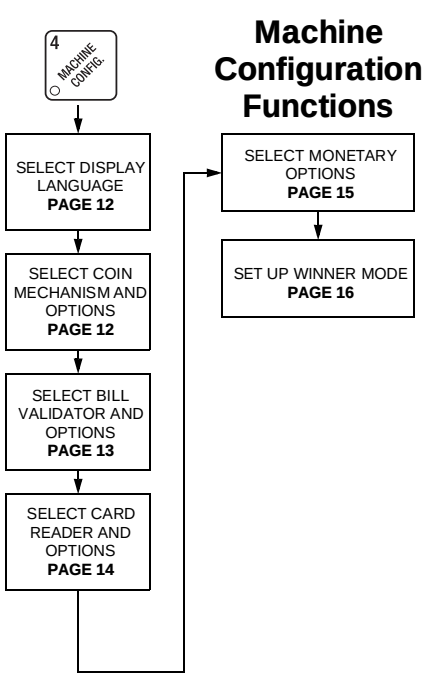
- Perform TEST VENDS
- Test displays
- Test machine functions

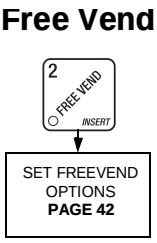
Press this button to:

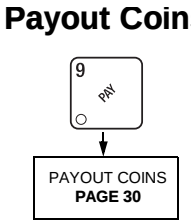
- Enter the SUPERVISOR mode
- Change the SUPERVISOR access code
- Lock and unlock access to functions

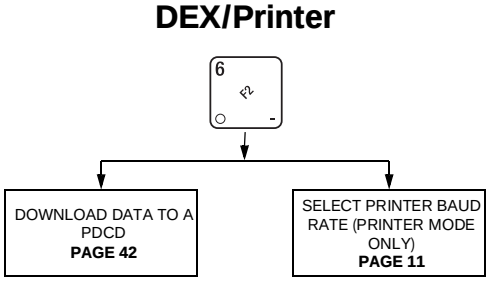
Programming Flow Charts

After you become familiar with the programming functions, you will be able to perform them without using the detailed, step-by-step tables. The following group of flow charts will give you a quick reference to the functions each key performs. If you need additional information, just refer to the page shown in the chart.









Time of Day

- SET THE TIME OF DAY **PAGE 21**
- SET THE DAY OF THE WEEK **PAGE 21**
- SET TIME-OF-DAY INHIBITED VENDING **PAGE 22**
- SET TIME-OF-DAY FREE VENDING **PAGE 22**
- SET TIME-OF-DAY DISCOUNT VENDING **PAGE 22**
- TIME INTERVAL EDITING **PAGE 23**
- EDIT CUSTOM MESSAGES **PAGE 27**

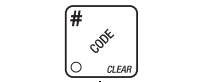
Tests

- TEST VEND SELECTIONS AND VERIFY CREDIT ADDED **PAGE 39**
- TEST THE MOTORS **PAGE 39**
- VIEW MOTOR STATUS BY TRAY **PAGE 40**
- TEST THE RETRACTABLE DOOR **PAGE 41**
- TEST LAMPS ON/ OFF STATUS **PAGE 41**
- TEST THE DISPLAY **PAGE 39**

Product Configuration Functions

- VIEW OR SET MACHINE CONFIGURATION **PAGE 17**
- IDENTIFY THE SELECTIONS IN THE MERCHANDISER **PAGE 18**
- COUPLE/UNCOUPLE TRAY MOTORS **PAGE 18**
- SET TEMPERATURE (SUPERVISOR MODE ONLY) **PAGE 19**
- VIEW AND CONTROL DEFROST MODE **PAGE 19**
- SET TIME OF DAY LAMP INHIBIT **PAGE 20**

Supervisor Functions



ENTER A NEW SUPERVISOR CODE
PAGE 8

ENTER A FREEVEND CODE
PAGE 8

ASSIGN A CODE TO VIEW DATA WITHOUT OPENING THE DOOR
PAGE 9

LOCK OR UNLOCK MODE OR PAYOUT KEYS
PAGE 9

SET PRINTER OR DEX OPTIONS
PAGE 10

Misc.

VIEW CABINET TEMPERATURE
PAGE 29

VIEW EVAPORATOR TEMPERATURE
PAGE 30

VIEW SOFTWARE VERSION
PAGE 21

View Diagnostics

VIEW DIAGNOSTIC MESSAGES
PAGE 43

Pricing

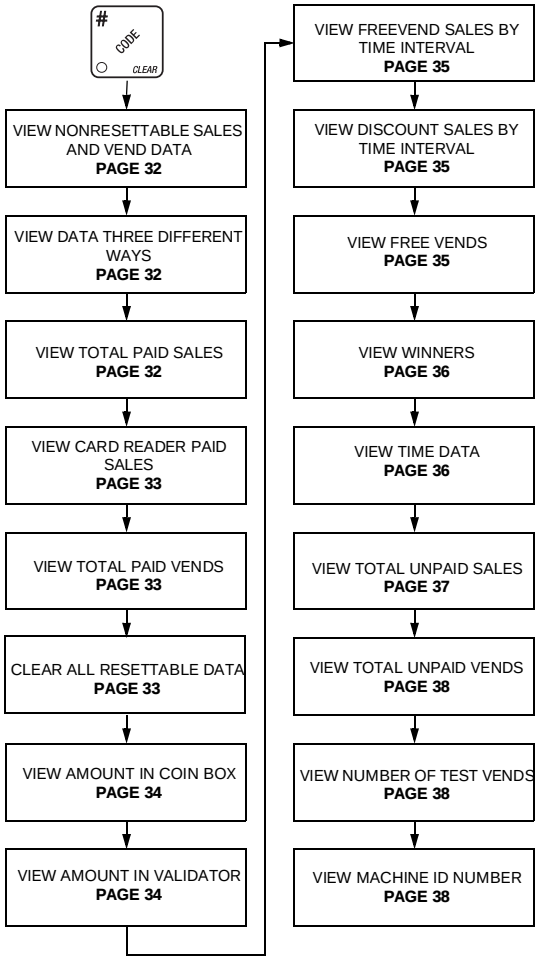
SET PRICES
PAGE 31

SET ENTIRE MACHINE TO ONE PRICE
PAGE 31

SET ALL SELECTIONS ON A TRAY TO ONE PRICE
PAGE 31

SET THE PRICE OF AN INDIVIDUAL SELECTION
PAGE 31

Data


CODE CLEAR
VIEW NONRESETTABLE SALES AND VEND DATA
PAGE 32
VIEW DATA THREE DIFFERENT WAYS
PAGE 32
VIEW TOTAL PAID SALES
PAGE 32
VIEW CARD READER PAID SALES
PAGE 33
VIEW TOTAL PAID VENDS
PAGE 33
CLEAR ALL RESETTABLE DATA
PAGE 33
VIEW AMOUNT IN COIN BOX
PAGE 34
VIEW AMOUNT IN VALIDATOR
PAGE 34
VIEW FREEVEND SALES BY TIME INTERVAL
PAGE 35
VIEW DISCOUNT SALES BY TIME INTERVAL
PAGE 35
VIEW FREE VENDS
PAGE 35
VIEW WINNERS
PAGE 36
VIEW TIME DATA
PAGE 36
VIEW TOTAL UNPAID SALES
PAGE 37
VIEW TOTAL UNPAID VENDS
PAGE 38
VIEW NUMBER OF TEST VENDS
PAGE 38
VIEW MACHINE ID NUMBER
PAGE 38

Programming Functions

GAIN ACCESS TO THE SUPERVISOR MODE

1. Press # CODE CLEAR. The display shows: ENTER CODE. You must enter the four-digit supervisor code within 6 seconds to gain access.

NOTE

A new machine has a factory-set supervisor code of 0000.

2. When you have entered the right code, you will hear two beeps and see UNLOCKED in the display. After a few moments, the standby message returns.
3. At the standby message, press # CODE CLEAR, then ↓. You are now ready to perform various supervisor functions.

ENTER A NEW SUPERVISOR CODE

1. Follow the steps in **GAIN ACCESS TO THE SUPERVISOR MODE.**
2. Press ↓ until the display shows SUPER XXXX. The X's represent the current supervisor code. Use the number keys to enter a new code.

IMPORTANT!

If you enter a new code, be sure to keep a written record of it. There is no other way to access the SUPERVISOR mode.

3. Press EXIT STOP until you have left the function.

ENTER A FREEVEND CODE

1. Follow the steps in **GAIN ACCESS TO THE SUPERVISOR MODE.**
2. Press ↓ until the display shows FREE XXXX. The X's represent the current freevend code. Use the number keys to enter a new code. This code is used with the **FREE WITH KEY** freevend mode. If the code is anything other than "0000", it must be entered after the key lock is turned in order to enable <u>one</u> free vend.
3. Press EXIT STOP until you have left the function.

ASSIGN A CODE TO VIEW DATA WITHOUT OPENING THE DOOR

If the proper non-zero code is entered, sales and non-resettable sales data can be viewed without opening the machine's door.

1. Follow the steps in **GAIN ACCESS TO THE SUPERVISOR MODE.**
2. Press until the display shows NR XXXX. The X's represent the currently entered code. Use the number keys to enter a new code, if desired.
3. Press until you have left the function.

LOCK OR UNLOCK MODE OR PAYOUT KEYS

1. Follow the steps in **GAIN ACCESS TO THE SUPERVISOR MODE.**
2. Press until the display shows either X. LOCKED or X. UNLOCKED. "X" refers to the number or character shown on the mode or payout key in question (1 through 9, # and *). To see if a key is locked or unlocked, press that key.
3. Press to change between locked and unlocked. When anyone other than the supervisor tries to enter a locked mode, the display shows LOCKED.

NOTE

The following mode keys cannot be locked out:

4. Press until you have left the function.

SET PRINTER OR DEX OPTIONS

1. Follow the steps in **GAIN ACCESS TO THE SUPERVISOR MODE.**
2. Press until the display shows one of the following:
3. PRINTER means that data will be sent directly to a printer,

- OR -

4. DEX ONLY means that data remains in memory after it is downloaded into a portable data collection device,

- OR -

5. DEX+CLR means that resettable data is cleared after it is downloaded into a portable data collection device.
6. Press to switch between the three choices.
7. Press until you have left the function.

LOCK OR UNLOCK DATA CLEARING ACCESS

1. Follow the steps in **GAIN ACCESS TO THE SUPERVISOR MODE.**
2. Press until the display shows either #.LOCKED or #.UNLOCKED. LOCKED means that non-supervisors cannot clear resettable machine sales and vend data from the key.
3. Press to switch between #.LOCKED and #.UNLOCKED.

NOTE

The supervisor can clear data regardless of this setting, provided the supervisor code was correctly entered first.

4. Press until you have left the function.

SELECT PRINTER BAUD RATE (PRINTER MODE ONLY)

BAUD RATE	The speed of data transfer, expressed in bytes per second. Your printer can receive data at a certain rate, and you must tell the printer what that rate is.

1. Press

. One of the following is displayed:

   BAUD 1200, BAUD 2400, BAUD 4800, BAUD 9600

2. Press

until the correct baud rate for your printer is displayed.

3. Press

until you have left the function.

SELECT COIN MECHANISM AND OPTIONS

1. Press [4 MACHINE CONFIG.], then press [↓] until the current **COIN MECHANISM** is shown in the display. Press [EDIT] to choose the desired coin mechanism. Your choices are:
   DUMB MECH, MDB MECH, EXEC MECH, or NO MECH
2. Press [↓] until the display shows CHANGE X.XX.
   Coins and bills which are less than or equal to this value will be returned without a purchase being made.
   Examples:
   CHANGE 0.00 - Forced vend; NO change returned without a purchase.
   CHANGE .25 - Nickels, dimes, and quarters returned without purchase.
   CHANGE 1.00 - $1 bills and SBAs will be returned as change without purchase. Nickels, dimes, and quarters are also returned.
3. Press [↓] until the display shows: LOW.MSG X.XX. The display will show USE EXACT CHANGE when the amount of available change in the coin mechanism falls below the value of "X.XX". Enter a value with the number keys. For example, if LOW.MSG 1.00 is displayed, the USE EXACT CHANGE message is displayed when less than a dollar's worth of change is in the coin mechanism.
4. Press [EXIT STOP] until you have left the function.

SELECT DISPLAY LANGUAGE

1. Press [4 MACHINE CONFIG.]. The current **LANGUAGE** is shown in the display. Press [EDIT] to choose the desired language. Your choices are: ENGLISH, DEUTSCH, FRANCAIS, ESPANOL, PORTUGUES, SWEDISH, NEDERLANDS, or FINNISH.

NOTE

The following message appears after every vend and is not translated by selecting a different language: PRESS ANY KEY TO REOPEN.
To delete or change it, see the Custom Message section.

2. Press [EXIT STOP] until you have left the function.

SELECT BILL VALIDATOR AND OPTIONS

1. Press 4 MACHINE CONFIG., then press ↓ until one of the following is displayed:

NO BBV - No bills will be accepted or there is no bill validator installed (you can exit the function).

SER.1.2.5.10.20 - The serial bill validator is selected and will accept $1, $2, $5, $10, and $20 bills. Use BILL SELECTION METHOD below to change the bills which will be accepted.

MDB.1.2.5.10.20 - A standard MDB bill validator is selected. It will accept $1, $2, $5, $10 and $20 bills. Use BILL SELECTION METHOD below to change the bills which will be accepted.

BILL SELECTION METHOD:
The standard $1, $2, $5, $10 and $20 bills are enabled by pressing the **1, 2, 5, 6,** or **7** key(s), respectively, to display which bill(s) will be accepted.

MDB. <*> - An MDB bill validator which accepts non-standard bills or tokens is connected and operating. Press * TEST START to enter list of bills.

See **INITIAL SETUP OF NON-STANDARD BILL VALIDATOR** (page 14).

BILL LIST OPERATION:

Use ↓ and ↑ to scroll through the list of bills.

1.1.00 ON -

Use EDIT to turn the bill acceptance ON or OFF.

Use EXIT STOP to move up to the top level screen.

1.1.00 ON - 1.= Bill validator channel 1, each bill has its own channel
1.00=Bill value
ON = $1.00 bill will be accepted

1.1.00 OFF - OFF = $1.00 bill will not be accepted

TKN - Token bills (same as coupon bills)

INITIAL SETUP OF NON-STANDARD BILL VALIDATOR:

Connect the bill validator, select MDB in the bill validator selection screens. The standard MDB.1.2.5.10.20 screen will appear first. Exit the bill validator setup by pressing . Bill information is now collected from the validator. Re-enter the bill validator selection screen and the non-standard screen "MDB. <*>" will appear.

PULSE 08V - The pulse bill validator will accept $1 bills.

2. Press EDIT to choose the desired option.
3. Press EXIT STOP until you have left the function.

SELECT CARD READER AND OPTIONS

1. Press 4 MACHINE CONFIG., then press ↓ until the current card reader is shown in the display. Press EDIT to choose the desired card reader.
2. Your choices are: NO CARD, DUMB CARD, or MDB CARD.

NOTE

If you selected NO CARD you can exit the function.

3. Press until one of the following is displayed:
4. REVALUE.ON - Allows credit to be transferred onto the card
5. REVALUE.OFF - Credit cannot be transferred to the card
6. Press EDIT to display the desired choice.
7. Press EXIT STOP until you have left the function.

SELECT MONETARY OPTIONS

This function lets you:
Set declining balance,
Set currency acceptance on low change,
Set overbuy options,
Set last bill stacking options

DECLINING BALANCE: Once credit is established, multiple vends may occur until the coin return is pressed.

1. Press 4 MACHINE CONFIG., then press ↓ until one of the following is displayed:
2. DECLINE.ON - More than one vend is allowed, with a declining balance.

- OR -

3. DECLINE.OFF - A declining balance is not allowed.
4. Press EDIT to display the desired choice.
5. Press ↓ until one of the following is displayed:
6. ACC <$$X.XX -Accept any bill of value $X.XX or less. Hold the last bill which meets or exceeds maximum price in escrow.

- OR -

7. ACC.STK X.XX -Accept any bill of value $X.XX or less. Immediately stack the last bill.
8. **Example: If setting is** ACC.STK1.00 and maximum price is $1.50. This setting will immediately stack the second $1.00 bill inserted.
9. Press EDIT to display the desired choice.
10. The value of "X.XX" has two purposes:
    a. The value of "X.XX" tells the machine how big a bill or coin to accept even though there is not enough change in the coin mech to cover all possible pay-backs.
    For example, enter 1.00. Therefore, the machine will take a dollar bill or coin even though there is less than $1.00's worth of change. Entering 5.00 tells the machine to take a five even though there is less than $5.00's worth of change, and so forth.

NOTE

This could cause a customer to be short-changed.

Entering **0.00** means that bills or coins will only be accepted if there is enough change to cover them.

b. The value of "X.XX" tells the machine how much the customer is allowed to overbuy a product. The customer will be short-changed when an overbuy occurs. **Example:**
For a value of $0.25: if there is no change in the machine and the customer insers a $1.00 bill. The customer can purchase a product for $0.75 even though the change cannot be paid back. The customer will be short-changed. Normally a purchase will not be approved unless all change can be paid.
Entering 0.00 means that the vend will only be approved when the correct change can be returned (overbuy disabled).

11. Press EXIT STOP until you have left the function.

SET UP WINNER MODE

WINNER At preselected intervals, a customer may receive a refund for a selection. You can select the intervals and qualifying selections.

1. Press 4 MACHINE CONFIG., then press ↓ until one of the following is displayed:
2. WINNER OFF Winner function is disabled.

- OR -

3. WIN XXX Winners are allowed at certain intervals, represented by "XXX".
4. Press EDIT to display the desired choice.
5. If you selected WINNER OFF, you can exit the function.
6. The display shows WIN XXX. XXX represents the number of vends which must occur per each winner vend. For example, an interval number of 50 means that a winner can happen any one time during the next 50 vends. Using the number keys, enter an interval number between 10 and 9999.
7. Press ↓. The display shows *----------. The dashes in the display represent which trays are allowed winners. Press the appropriate letter key to enable a tray, press the key again to disable it. For example, pressing A, C, and E will cause the display to look like this: A-C-E----_, meaning that all A, C, and E selections can have a winner.

ADVANCED OPTIONS:

Press **to enable all trays.**

Press **to deactivate all trays.**

AN EXAMPLE . . .

8. You want to enable winners on all trays except E and F. Do the following:
   a. Press . The letters A through F appear in the display instead of the dashes.

   b. Press "E" and "F". The letters E and F in the display are replaced by dashes.
9. Press until you have left the function.

VIEW OR SET MACHINE CONFIGURATION

(This function can be viewed at any time, but can only be set while in supervisor mode.)

1. Be sure you have correctly entered the supervisor code. Press . One of the following is displayed:

   CNF.0 SNACK (Machine with all trays)
   CNF.1 CHLLD (Chilled snack machine)
   CNF.2 CAN (Machine with can unit)
   CNF.3 CH.CAN (Chilled snack machine with can unit)
   CNF.4 FOOD (Any machine with refrigerated food module - includes chilled)
   CNF.5 FRZN (Any machine with frozen food module - includes chilled)
   CNF.6 NDL (Model 451 noodle machine only)
   7. OUTDOOR (Outdoor snack machine only)
2. Press until the following is displayed (if it is not already): 7. OUTDOOR.

   BE CAREFUL to select this configuration, because selecting the wrong one will affect other choices later on, and could cause problems.
3. Press until you have left the function.

IDENTIFY THE SELECTIONS IN THE MERCHANDISER

1. Press 7 PRODUCT CONFIG., then press ↓ until the display shows something like this: ABCDEF. This display means that all selections (A - F) are available for vending. An unavailable selection has its letter replaced by a blank space.
2. Press the appropriate letter to toggle the display on or off.

NOTE

Unconfigured selections will not appear in the diagnostics.

3. Press EXIT STOP until you have left the function.

COUPLE/UNCOUPLE TRAY MOTORS

Two motors may be electronically coupled to turn together to vend a wide product. In some cases, you may need to connect or disconnect the wire harness from a specific motor. See your Setup Guide for more information. **NOTE:** An even numbered motor (0, 2, 4, etc.) may only be coupled to an odd numbered motor (1, 3, 5, etc.)

1. Press 7 PRODUCT CONFIG., then press ↓ until the display shows CPLMTRS.
2. Press the letter of the tray you want to couple, or press EDIT to couple motors on tray A, then press ↓ to get to the desired tray.

COUPLE ADJACENT MOTORS:

a. The display shows +A.+A.+A.+A.+A.+A.. This display means that on the A tray, all adjacent motors (0 and 1, 2 and 3, etc.) are coupled. NOTE: The +s and As represent motor positions 0 through 9.
b. On the **CONTROL PANEL**, press the EVEN motor number of the pair you wish to couple or uncouple. In our example, to uncouple motors 0 and 1, press 0. The display will now show A.A.+A.+A.+A.+A..

COUPLE NON-ADJACENT MOTORS:

a. Disconnect the motor(s) between the two you want to couple. Consult your Setup Guide for information on how to do this. The display shows A.A.+A.+A.+A.+A.. This display means that on the A tray, adjacent motors 0 and 1 are NOT coupled, 2 is coupled to 5, 6 is coupled to 7, and 8 is coupled to 9. NOTE: The +s and As represent motor positions 0 through 9. If a motor is disconnected or not present (motors 3 and 4 in this example), its position is replaced by an empty space.

b. On the **CONTROL PANEL**, press the motor number of the even motor of the motor pair you wish to couple or uncouple. For example, to uncouple motors 2 and 5, press 2. The + representing motor number 2 changes to a C. Please note that the left motor of a coupled pair MUST be an even-numbered motor.

3. Press EXIT (STOP) until you have left the function.

SET TEMPERATURE (SUPERVISOR MODE ONLY)

1. If your machine is equipped (and properly configured) with a refrigerated module, press 7 (PRODUCT CONFIG.), then press ↓ until the display shows +/- +66°F. This means that 66°F is the current temperature setting.
2. Press 3 (F1 +) to raise the setting; press 6 (F2 -) to lower the setting.
3. Press EDIT to choose between display in °F or °C.
4. Press EXIT (STOP) until you have left the function.

VIEW AND CONTROL DEFROST MODE

1. Press 7 (PRODUCT CONFIG.), then press ↓ until the display shows:

   DEFRST-H.MM or DEFRST+H.MM

   If a minus (-) sign is displayed, H.MM shows the hours and minutes until the next defrost cycle. If a plus (+) sign is displayed, H.MM shows how long the unit has been defrosting.
2. Press * (TEST START) to start a manual defrost cycle.
3. Press # (CODE CLEAR) to end a defrost cycle in progress.
4. Press EDIT. The display shows DEFRSTX/DY. "X" indicates the number of defrost cycles per day (DY). Press again to change the value of X.
5. Press EXIT (STOP) until you have left the function.

SET TIME OF DAY LAMP INHIBIT

You can turn off the interior lamps during daylight hours, or when it is undesirable to have the machine lighted.

1. Press 7 PRODUCT CONFIG., then press ↓ until the display shows LMP.INH - - -.
2. Press the number of the time interval you want to edit, or EDIT to edit time interval 1 (we'll use interval 1 for this example).
3. The display shows 1.LMP.INH ON or 1.LMP.INH OFF This display tells you whether your time interval (represented by 1) is on or off. Press EDIT to change the condition of the time interval.

NOTE

When the lamp inhibit is ON, that means the lamps are off.

4. Press ↓. The display shows 1.STRT X.XX. "X.XX is the currently set start time. Enter a new start time (24-hour format) for this interval. To enter the time for 7:30 am, enter 0730. The lamps turn off at 7:30 in the morning.
5. Press ↓. The display shows 1.STOP X.XX. "X.XX is the currently set stop time. Enter a new stop time (24-hour format) for this interval. To enter the time for 6:00 pm, enter 1800. The lamps turn on at 6:00 in the evening.
6. Press ↓. The display shows 1.@- - - - - - - . The dashes represent the days that this time interval is active. Pressing number keys 1 through 7 switches the days on/off. For example, press "2", "3", "4", "5", and "6". The display now shows 1.@-MTWTF-. This interval is only active Monday through Friday.

NOTE

If the cabinet temperature falls below 40°, the machine is taken out of service and the lamps are OFF regardless of the time interval setting.

7. Press EXIT STOP to return to the READY mode and accept these settings.

VIEW SOFTWARE VERSION

1. Press [3 F\ +], and press [↓] until the display shows VER XXXXXX. "XXXXXX" represents the curent software version number.
2. Press [EXIT STOP] until you have left the function.

SET THE TIME OF DAY

1. Press [8 TIME OF DAY]. The display shows TIME HH.MM. "HH.MM" is the time of day in 24-hour format.
2. Enter the current time using the number keys.

NOTE

9:00 am is entered with a leading zero, like this: 0900; 9:00 pm is entered as 2100.

3. Press [EXIT STOP] until you have left the function.

SET THE DAY OF THE WEEK

1. Press [8 TIME OF DAY], and press [↓] until the display shows @SMTWTFS. The letter representing the currently set day of the week will be flashing.
2. Press [EDIT] until the correct day of the week is flashing.
3. Press [EXIT STOP] until you have left the function.

SET MONTH, DAY, AND YEAR

1. Press 8 TIME OF DAY, and press ↓ until the display shows MM/DD YY. "MM" is the month, "DD" is the date, YY is the year.
2. Enter the current month, date, and year using the number keys.
   For example, press the following keys to enter February 22, 1996: **0, 2, 2, 2, 9, 6**
3. Press EDIT to switch between MM/DD and DD/MM formats
4. Press EXIT STOP until you have left the function.

SET TIME-OF-DAY INHIBITED VENDING

1. Press 8 TIME OF DAY, then press ↓ until the display shows INHIB ----.
2. Go to the **TIME INTERVAL EDITING** procedure (page 23) for an example of how to set up time-of-day inhibited vending.

SET TIME-OF-DAY FREE VENDING

Vending can be free up to four times a day.

1. Press 8 TIME OF DAY, then press ↓ until the display shows FREEV ----.
2. Go to the **TIME INTERVAL EDITING** procedure (page 23) for an example of how to set up time-of-day free vending.

SET TIME-OF-DAY DISCOUNT VENDING

Vending can be discounted up to four times a day. For example, this can be used to favor early-arriving employees.

1. Press 8 TIME OF DAY, then press ↓ until the display shows DISCT ----.
2. Go to the **TIME INTERVAL EDITING** procedure (page 23) for an example of how to set up time-of-day discount vending

.

TIME INTERVAL EDITING

You can select up to four times of day for each special vending period.

NOTE

If two or more of these time periods overlap, the interval with the highest priority will overrule the other(s). This order of precedence is:

INHIBIT
FREEVEND
DISCOUNT

For example, if a DISCOUNT time period is scheduled for a certain area before the end of an INHIBIT time period, DISCOUNT does not begin until the INHIBIT interval has ended for that area.

The time interval editing procedure is almost the same for the INHIBIT, FREEVEND, and DISCOUNT intervals. There is one difference for the DISCOUNT time interval, so we will use it in our example. Assume you just finished the SET TIME-OF-DAY DISCOUNT VENDING procedure. Step 1 picks up where you left off . . .

1. The display shows DISCT ----. Press the number of the time interval you want to edit, or

to edit time interval 1 (we'll use interval 1 for this example).
2. The display shows 1.DISCT ON or 1.DISCT OFF This display tells you whether your time interval (represented by 1) is on or off. Press

to change the condition of the time interval.

NOTE

If you turn an interval ON, it must be edited. You can edit a time interval now, then turn it OFF until another time.

3. Press
. The display shows 1.DSCT X. "X" represents the discount percentage for this period. Enter a discount percentage of 25 with the number keys. (Discount percentages of from 0 to 99 are permitted.) The machine will apply a 25% discount to each price, rounding up to the nearest nickel (or whatever is the smallest coin accepted by the coin mechanism).
4. Press
. The display shows 1.STRT X.XX. "X.XX is the currently set start time. Enter a new start time (24-hour format) for this interval. To enter the time for 3:30 pm, enter 1530.

5. Press . The display shows 1.STOP X.XX. "X.XX is the currently set stop time. Enter a new stop time (24-hour format) for this interval. To enter the time for 6:00 pm, enter 1800. You have now established a 25% discount that starts at 3:30 pm and ends at 6:00 pm.

6. Press . The display shows 1.@-------. The dashes represent the days that this time interval is active. Pressing number keys 1 through 7 switches the days on/off. For example, press "2", "4", and "6". The display now shows 1.@-M-W-F-. This discount interval is only active on Monday, Wednesday, and Friday.

7. Press . The display shows *--------. The dashes represent the trays affected by this time interval. Press the appropriate letter key to enable a tray, press the key again to disable it. For example, pressing A, C, and E will cause the display to look like this: A-C-E----_, meaning that all A, C, and E selections are affected by this interval.

   Press to turn on all levels; press to turn all levels off.

8. Press . The display shows 1.MESG OFF or 1.MESG X. "OFF" means there is no custom message selected, and "X" represents the custom message number set for this interval. Press the number key of the message (1 through 8) you want displayed. To edit this message, press and follow the procedure given in **EDIT CUSTOM MESSAGES** (page 27). Press 0 to turn the message OFF for this time interval.

9. Press until you have left the function

.

STANDBY MESSAGES The message that is displayed during normal vending periods where there are no out-of-service faults on the machine.

SELECT A STANDBY MESSAGE

1. Press 8 TIME OF DAY, then press ↓ until the display shows STANDBY XX. "XX" represents the current message number selected for the standby message. Two dashes mean that the factory-set message is selected.
2. To select a message, just press the corresponding number (**1** through **8**). To display the factory-set message, press **0**.
3. The selected message (except the factory-set message) can be edited. To do this, press EDIT and follow the procedure given in **EDIT CUSTOM MESSAGES** (page 27).
4. Press EXIT STOP until you have left the function.

SELECT AN OUT-OF-SERVICE MESSAGE

1. Press 8 TIME OF DAY, then press ↓ until the display shows SERVICE XX. "XX" represents the current message number selected to display when the machine is out-of-service. Two dashes mean that the factory-set message is selected.
2. To select a message, just press the corresponding number (**1** through **8**). To display the factory-set message, press **0**.
3. The selected message (except the factory-set message) can be edited. To do this, press EDIT and follow the procedure given in **EDIT CUSTOM MESSAGES** (page 27)**.**
4. Press EXIT STOP until you have left the function.

SELECT A FREEVEND MESSAGE

1. Press 8 TIME OF DAY, then press ↓ until the display shows FREEVEND XX. "XX" represents the current message number selected for the message that displays when the machine is in the freevend mode. Two dashes mean that the factory-set message is selected.
2. To select a message, just press the corresponding number (**1** through **8**). To display the factory-set message, press **0**.
3. The selected message (except the factory-set message) can be edited. To do this, press EDIT and follow the procedure given in **EDIT CUSTOM MESSAGES** (page 27)**.**
4. Press EXIT STOP until you have left the function.

EDIT CUSTOM MESSAGES

1. Press [8 TIME OF DAY], and press [↓] until the display shows EDIT MSG'S. Press the number of the message you want to edit. MESSAGE X is displayed (X represents the message number you pressed).
2. Press [EDIT]. The message text is displayed with the first character flashing.
3. To view the message, press [✳ TEST START]. The message scrolls across the display. To stop the scrolling, press [EDIT].
4. When the character you want to change is flashing, either enter it directly, or use [3 F1 +] and [6 F2 -] to step through the character set until the desired character is displayed. Use the arrow keys to highlight different characters. See the section on the next page for an explanation of special keys and the character set.

SHORTCUT

Instead of stepping through the whole character set to enter a letter that is not on your keypad, enter one close to the one you want, then step to it. Example: If you want to enter an **L**, first press [1 PRICE], then press [6 F2 -] six times. Your **L** should now be displayed.

A special case...

PRESS ANY KEY TO REOPEN appears after every vend. It means that in case a product does not drop quickly enough, the customer can operate the sliding door one time only within 25 seconds of making a selection. This message is stored in M.8 at the factory, and is not translated when a language other than English is selected. If you want to translate it to your language, follow the directions shown in this section. To eliminate the message, replace the first character (P) with the end-of-message character. That way, all you have to do is reinsert a (P) to display the message again.

The End Of Message Character

This is the most important character in your message, because it tells the machine when the message is ended. If you don't use this character, your message will be followed by a bunch of zeros. This character can be selected either from the character set or by a direct key entry..

Entering Your Message

Most of the keys on the control panel have a special purpose to help you create and edit your messages:

Inserts an **R** at the flashing character.

Inserts a space at the flashing character.

Inserts an **S** at the flashing character.

Deletes the current character and closes up the space.

Inserts a **T** at the flashing character.

Deletes the current character and leaves the space.

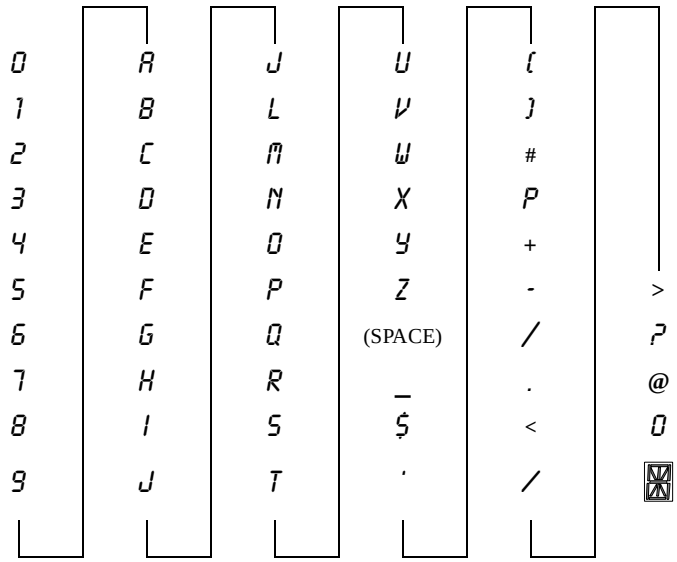
Repeats the letter to the left of the flashing character.

Enters the special "end of message" character, which denotes the end of the message.

"Pages" through the message, ten characters (one screen) at a time.

Steps forward and backward through the message, one character at a time.

Steps forward and backward through the character list, one character at a time. See the character list on the next page.



VIEW CABINET TEMPERATURE

1. Press [3 F1 +]. Depending on how your machine is configured, the display will show, for example, TEMP 66°F. This example shows that the temperature is 66 degrees Farenheit.

2. To change the display units, press [EDIT]. The display now shows TEMP 19°C.
   An **I** replacing the **F** or **C** means a sensor error exists and the displayed temperature is invalid. A decimal point in the display means the compressor is running; an apostrophe means the heater is on.

   NOTE

   When the machine door is closed, you can view the temperature by pressing [* TEST START] on the selection panel.

3. Press [EXIT STOP] until you have left the function.

VIEW EVAPORATOR TEMPERATURE

1. Press 3 F1, then ↓. The display will show, for example, TEMP2 34° F. This example shows that the temperature is 34 degrees Farenheit. An **I** replacing the **F** or **C** means a sensor error exists and the displayed temperature is invalid.
2. Press EXIT STOP until you have left the function.

PAYOUT COINS

1. Press 9 PAY. If a dumb mech was selected, the display shows MDQ =123; if an MDB mech was selcted the display shows PAY 123.
2. Press 1 PRICE. A dumb mech pays out one Nickel; an MDB mech pays a coin from tube 1. Press 2 FREE VEND INSERT. A dumb mech pays out one Dime; an MDB mech pays a coin from tube 2. Press 3 F1. A dumb mech pays out one Quarter; an MDB mech pays a coin from tube 3.
3. To continuously pay out coins, hold down the appropriate key.
4. Press EXIT STOP until you have left the function.

SET PRICES

1. Press

. The display shows ** 2.50 .25. This display shows the maximum and minimum prices set in the machine. In this example, the maximum price is $2.50 and the minimum is $0.25.
2. Enter prices as using one of the following methods:

SET ENTIRE MACHINE TO ONE PRICE

a. Press

. The display shows ** X.XX. Enter a price using the number keys. All selections in the machine are now set to this price.

SET ALL SELECTIONS ON A TRAY TO ONE PRICE

a. Press the letter key (A - J) corresponding to the tray you want to price. The display shows B* X.XX .YY. This display shows the maximum (X.XX) and minimum (.YY) prices set for the B tray.

b. Press

. The display shows B* X.XX. Enter a price using the number keys. All selections on this tray are now set to this price.

c. Press another letter key, or to price another tray.

SET THE PRICE OF AN INDIVIDUAL SELECTION

a. Press the number of the selection to be priced. (Example: B1.) The display shows B1 X.XX. Enter a price using the number keys. The selection is now priced.

a. Press another letter key, or to price another selection.

VIEW NONRESETTABLE SALES AND VEND DATA

1. Press [5 DATA RECALL DELETE]. The display shows NR $ XX.XX. "XX.XX" is a dollar and cents figure showing the total of all sales in the machine. This is a running total, and is not resettable.
2. Press [↓]. The display shows NR X. "X" is the total number of vends made by the machine. This is a running total, and is not resettable.
3. Press [EXIT STOP] until you have left the function.

VIEW DATA THREE DIFFERENT WAYS

Paid sales and vends can be viewed three different ways: By whole machine, by tray, and by individual selection. The first screen of the data item shows its machine total.

- To view the data by tray, press the letter of the tray you want to see. You can then press [↑] and [↓] to see data for all the active trays.
- To view the data by individual selection, press the letter and number of the selection you want to see. You can then press [↑] and [↓] to see data for all the active selections.
- If viewing data by individual selection, press [8 TIME OF DAY] to view the date and time of the last vend of that selection.

VIEW TOTAL PAID SALES

1. Press [5 DATA RECALL DELETE], then press [↓] until the display shows **$ XX.XX. "XX.XX" is a dollar and cents figure showing the total of all PAID sales in the machine (as opposed to unpaid sales like winner and free vends). This is the total since the last time it was cleared.
2. If desired, view this data by tray and individual selection.
3. Press [EXIT STOP] until you have left the function.

VIEW CARD READER PAID SALES

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows **$ XX.XX. (Not shown if total is zero.)
2. Press EDIT, then press ↓ until the display shows DBT XX.XX. "XX.XX" is the amount of money collected from card reader sales. Also, see **VIEW DISCOUNT SALES BY TIME INTERVAL,** page 35.
3. Press EXIT STOP until you have left the function.

VIEW TOTAL PAID VENDS

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows ** XX. "XX" is the total number of paid vends for the entire machine.
2. If desired, view this data by tray and individual selection.
3. Press EXIT STOP until you have left the function.

CLEAR ALL RESETTABLE DATA

1. Press 5 DATA RECALL DELETE. The display shows NR$ XX.XX. This is a running total, and is not resettable.
2. Press and hold # CODE CLEAR. Two beeps sound and the display shows CLEARING momentarily, and then changes to FINISHED. All data is cleared.
3. Press EXIT STOP until you have left the function.

CLEAR PAID SALES DATA ONLY

1. Press 5 DATA RECALL / DELETE, then press ↓ until the display shows **$ XX.XX. "XX.XX" is a dollar and cents figure showing the total of all PAID sales in the machine (as opposed to unpaid sales like winner and free vends). This is the total since the last time it was cleared.
2. Press and hold # CODE / CLEAR. Two beeps sound and the display shows CLEARING momentarily, and then changes to FINISHED. All paid sales data is cleared; other data is not cleared.
3. Press EXIT / STOP until you have left the function.

VIEW AMOUNT IN COIN BOX

1. Press 5 DATA RECALL / DELETE, then press ↓ until the display shows CBX XX.XX. (Will only display if the total is not zero.)
2. "XX.XX" is the dollar and cents amount in the coin box.
3. Press EXIT / STOP until you have left the function.

VIEW AMOUNT IN VALIDATOR

1. Press 5 DATA RECALL / DELETE, then press ↓ until the display shows DBV XX.XX. (Will only display if the total is not zero.)
   "XX.XX" is the dollar amount in the bill stacker.
2. Press EDIT to show the quantities of bills in the stacker. For example, the display shows $01 20, meaning that there are 20 dollar bills in the bill stacker. Press EDIT again to show the quantities of other bills, such as $5s, $10s, or $20s.
3. Press EXIT / STOP until you have left the function.

VIEW FREEVEND SALES BY TIME INTERVAL

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows -05 XX.XX. (This is the total value of unpaid vends and is only shown if not zero.)
2. Press EDIT, then press ↓ until the display shows 1.FRV .00. This is the total sales for freevend interval 1, shown even if zero.
3. Press ↓ to view intervals 2 through 4.
4. Press EXIT STOP until you have left the function.

VIEW DISCOUNT SALES BY TIME INTERVAL

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows **$ XX.XX.
2. Press EDIT, then press ↓ until the display shows 1.DSC .00. This is the total sales for discount interval 1 (not shown if zero). Also, see **VIEW CARD READER PAID SALES,** page 33.
3. Press ↓ to view intervals 2 through 4.
4. Press EXIT STOP until you have left the function.

VIEW FREE VENDS

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows -05 XX.XX (provided the total is not zero).
2. Press EDIT, then press ↓ until the display shows FRV XX.XX. "XX.XX" is the total machine-wide freevends, shown even if zero.
3. Press EXIT STOP until you have left the function.

VIEW WINNERS

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows -05 XX.XX (provided the total is not zero).
2. Press EDIT, then press ↓ until the display shows WIN XX.XX. "XX.XX" is the total machine-wide winners, shown even if zero.
3. Press EXIT STOP until you have left the function.

VIEW TIME DATA

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows TIME DATA.
2. Press EDIT. The following message scrolls across the display:

   MAIN.1 237M 01/30 10.13

   This example shows the latest time interval the main (machine) door was open (**1**). It was open for **237** minutes, and was opened on January 30 (**01/30**) at 10:13 am (**10.13**). Press ↓. If applicable, similar displays will appear for intervals 2, 3, and 4. Otherwise, go to the next step.
3. The following message scrolls across the display:

   AUX.5 33M 01/30 10.58

   This example shows the latest time interval the interior door was open (**5**). It was open for **33** minutes, and was opened on January 30 (**01/30**) at 10:58 am (**10.58**).

   Press ↓. If applicable, similar displays will appear for intervals 6, 7, and 8. Otherwise, go to the next step.
4. The following message scrolls across the display:
5. LAST POWER 01/30 13.51 FOR 00. 0.23

   This example shows that the last time the machine lost power was on January 30 (**01/30**) at 1:51pm (**13.51**) for zero days, zero hours, and 23 minutes (**00. 0.23**).
6. Press ↓. The following message scrolls across the display:

   LONGS.T POWER 01/30 10.58 FOR 00. 2.47

   This example shows that the longest time the machine was without power was on January 30 (**01/30**) at 10:58am (**10.58**) for zero days, 2 hours and 47 minutes (**00. 2.47**).

7. Press . The following message scrolls across the display:

   FULL CLEAR 01/30 8.58

   This example shows that the last time resettable sales was fully cleared was on January 30 (**01/30**) at 8:58am (**8.58**).

8. Press . The following message scrolls across the display:

   TIME SET 01/30 9.15

   This example shows that the last time the time or date was set was on January 30 (**01/30**) at 9:15 am (**9.15**).

9. Press . The following message scrolls across the display:

   PRICE SET 01/30 9.42

   This example shows that the last time prices were set was on January 30 (**01/30**) at 9:42 am (**9.42**).

10. Press . The following message scrolls across the display:

    LAST.VND C1 06/02 9.42

    This example shows that the last selection vended was C1 (**C1**) on June 2 (**06/02**) at 9:42 am (**9.42**).

11. Press

until you have left the function.

NOTE

Refer to **VIEW DATA THREE DIFFERENT WAYS** (page 32) to view the date and time of the lthe last vend of that selection.

VIEW TOTAL UNPAID SALES

1. Press

, then press until the display shows _0$ XX.XX (provided the total is not zero). "XX.XX" is the total unpaid sales (free vends, winner vends, 100% discounts, zero price vends) for the entire machine.
2. If desired, view this data by tray and individual selection.
3. Press

until you have left the function.

VIEW TOTAL UNPAID VENDS

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows _0 XX. "XX" is the total number of unpaid vends for the entire machine.
2. If desired, view this data by tray and individual selection.
3. Press EXIT STOP until you have left the function.

VIEW NUMBER OF TEST VENDS

1. Press 5 DATA RECALL DELETE, then press ↓ until the display shows TST X (provided the total is not zero). "X" is the number of test vends.
2. If desired, view this data by tray and individual selection.
3. Press EXIT STOP until you have left the function.

VIEW MACHINE ID NUMBER

1. Press 5 DATA RECALL DELETE, then press ↑ or ↓ until the display shows I.D. XXXXXX. The X's represent the 6-digit machine ID number.
2. You can edit the machine ID number if the SUPERVISOR access code has been previously entered.
3. Press EXIT STOP until you have left the function.

TEST VEND SELECTIONS AND VERIFY CREDIT ADDED

1. Press TEST START. The display shows TEST .00. You may now test vend selections.

   If you insert money into the machine, the zeros in the display will be replaced with the amount of the credit. After the item vends, your money will be returned.

   NOTE

   You may make one more test vend if you close the door while still in TEST VEND mode.

2. Press EXIT STOP until you have left the function.

TEST THE DISPLAY

1. Press TEST START, then press ↓ until the display shows DSPLY TEST.
2. Press TEST START to light all display segments; press # CODE CLEAR to turn them off.
3. Pressing a **NUMBER KEY** on the control panel causes all segments to display that character.
4. Press EXIT STOP until you have left the function.

TEST THE MOTORS

1. Press TEST START, then press ↓ until the display shows TEST MTRS.
2. Press TEST START to run all snack motors one time.

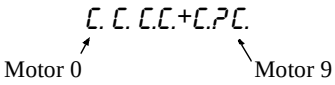
   - OR -

   Press # CODE CLEAR to run only those motors not home or jammed. After motor is run, an error message will show if any motors are still jammed or not home.

3. Press EXIT STOP until you have left the function.

VIEW MOTOR STATUS BY TRAY

1. Press [✳ TEST START], then press [▼] until the display shows TSTMTRS.
2. Press [EDIT] or the letter of the tray you want to view.
3. The display will show the status of all motors on the tray:
   (Tray letter)...(If motor is present)
   + ...(If motor is present and coupled to the next odd motor)
   (blank) .....(If motor is not present and not coupled)
   ? .....(If motor is coupled but not present)
   . .....(If the motor is home)
   ’.....(If there is a motor error such as jammed, tray not detected or missing)
   The following example is for tray C with 7 motors present and home with none jammed. Motors 1 and 3 are not present, 6 and 7 are coupled, and 8 is coupled to 9 but is not present nor home:



4. Press [✳ TEST START] to run all motors on this tray.

   - OR -

   Press [# CODE CLEAR] to run only those motors in error.

   - OR -

   Press a number key to run that motor only.
5. Press [EXIT STOP] until you have left the function.

TEST LAMPS ON/OFF STATUS

1. Press [✳ TEST START], then press [↓], until the display shows either LAMPS ON or LAMPS OFF. This represents the present state of the fluorescent lamps.
2. Press [EDIT] to change the current status (will turn the lamps on if they are off, and vice-versa). The lamps stay in their current state until you have returned to READY mode.
3. Press [EXIT STOP] until you have left the function.

TEST THE RETRACTABLE DOOR

1. Press [✳ TEST START], then press [↓], until the display shows FOOD 23✳.

   The display represents the states of various switches and display under the following conditions:

   0 Vend door is closed
   1 Inner door is closed
   2 Retractable door is open
   3 Retractable door is closed
   ✳ Door motor is jammed or other error exists

2. Press [✳ TEST START] to manually open and close the retractable door while watching the display.
3. Press [EXIT STOP] until you have left the function.

DOWNLOAD DATA TO A PDCD

1. Connect your portable data collection device (PDCD) per its operating instructions.
2. If data does not download into your PDCD upon connection, press [6 ⇳ -]. Data is downloaded into your PDCD.

NOTE

Depending upon the setting selected in **SET PRINTER OR DEX OPTIONS** (page 10), data may be cleared after the download is complete.

3. Press [EXIT STOP] until you have left the function.

SET FREEVEND OPTIONS

1. Press [2 FREE VEND INSERT] until one of the following is displayed:

FREE OFF - Normal vending mode. No items are on freevend. A closure on the keyswitch input causes the machine to go out of service.

- OR -

FREE ALL - All items are on freevend. The credit display shows NO MONEY REQUIRED
A closure on the keyswitch causes the machine to go out of service.

- OR -

FREE W/KEY - All items are freevended while there is a closure on the keyswitch input. Normal cash sales are supported when the keyswitch input is open. If the free vend code (selected under **SUPERVISOR MODE** (page 7)) is not 0000, the code must be entered first.

- OR -

FREE ONCE - A closure on the keyswitch input causes only the next item to be freevended. Coin mechanism errors are ignored. Normal cash sales are also supported.

2. Press [EDIT] until the option you want is displayed.
3. Press [EXIT STOP] until you have left the function.

VIEW DIAGNOSTIC MESSAGES

1. Press

. the display shows any of the following diagnostic messages, depending upon any fault(s) present:

NO ERRORS	None of the following errors are detected:
KEYPAD XY	Key(s) x, y stuck.
ROM ERROR	Error in the programming EPROM. MACHINE WILL NOT OPERATE.
RAM ERROR	RAM is not initialized or is not compatible with the currently loaded software. If this message appears, initialize your RAM by performing the following procedure: NOTE: Initializing RAM will erase all your data. Be sure you have written this information down before continuing. Press **AND HOLD** until you hear two beeps and the display shows FINISHED.
TEMP REF	The temperature reference on the main PCB CANNOT BE READ.
TEMP SNSR	The primary temperature sensor cannot be read.
TEMP RANGE	The primary temperature sensor is out of range.
TEMP2 SNSR	The secondary temperature sensor cannot be read.
TEMP 2.RANGE	The secondary temperature sensor is out of range.
CHK PRICE	Price error detected and changed to maximum - check prices.
CHK CONFIG	A PRODUCT CONFIG value was out of bounds and set to nominal - check all PRODUCT CONFIGs.
ERR A B C (etc)	Error exists on tray A, B, C, etc. Motor may be jammed, not home, or a couple error exists.
NONE READY	No selection is ready to vend. Check that no time-of-day inihibits are active.
FOOD 23*	Some errors associated with the food door exists.
NO MECH	Coin mech not detected - machine will not operate if configured for coin mech.
MECH.COMM	Incomplete coin mech communications -- check harness.
MECH.SENSOR	Coin mech reporting a bad tube sensor - replace mech.
MECH.JAM	One or more coin tubes are jammed. Pay a coin from each tube until the jam is cleared. **- OR -** Coin is jammed in the acceptor section. Check the coin mechanism for a jam in this position. Insert coins and cycle machine power OFF and then ON.
MECH.ROM	Replace the coin mechanism.

MECH.ACCEPT	Coin mechanism acceptor section is unplugged from the main body of the coin mech. Connect the cable and cycle machine power OFF and then ON.
	- OR -
	The vending machine is telling the coin mech not to accept any coins
DBV.COMM	Incomplete bill validator communications -- check harness.
DBV.SENSOR	One of the sensors in the bill validator has failed. The unit will disable itself until the error is corrected. Check for bill stuck in the acceptance path. If no bill is present, replace the validator. Cycle machine power OFF and then ON.
DBV.ROM	ROM checksum failure. The unit will disable itself until the error is corrected. Replace the validator.
DBV.JAM	A bill is jammed in the acceptance path. The unit will disable itself until the error is corrected. Remove bill stuck in the acceptance path. Cycle machine power OFF and then ON.
DBV.MOTOR	One of the motors has failed. The unit will disable itself until the error is corrected. Check for bill stuck in the acceptance path. If no bill is present, replace the validator. Cycle machine power OFF and then ON.
DBV.STACKR	The stacker is open or removed. The unit will disable itself until the error is corrected. Install the stacker correctly.
	- OR -
	The stacker is full of bills. Remove bills from the stacker.
DBV.ACCEPT	The vending machine is telling the bill validator not to accept any bills. Check the enabled channels of the bill validator.
CARD.F.COMM	Incomplete card reader communications - check cables. The card reader is not operational.
CARD.COMM	Incomplete card reader communications. Check cables or replace unit.
CARD.ERR	Card reader is indicating it has a problem.
CARD.F.ERR	Card reader is indicating it has failed. Replace unit.
CARD.ERRXX	Card reader has an error and indicates code XX. The code is defined by the card reader manufacturer. To correct, contact card reader manufacturer. The unit is still operational.
CARD.F.ERRXX	Card reader has failed and indicates code XX. The code is defined by the card reader manufacturer. To correct, contact card reader manufacturer.
CARD.F.JAM	Card reader has failed because card is jammed in the unit. Remove the jammed card.
CARD.SERV	Card reader requires service. The unit is still operational.

This Merchandiser is warranted for one (1) year against defective parts and workmanship. Any part or parts which are proven to be defective within one (1) year of the date of shipment will be repaired or replaced free of charge when the defective part is returned, with transportation charges prepaid, to the destination designated by the National Vendors Warranty Department.

This warranty applies only to the original purchaser of the Merchandiser and is null and void if the Merchandiser is sold during the period of warranty.

This warranty does not apply to a) electrical components, wiring, or circuits and/or for all mechanical parts or assemblies damaged as a result of operating the Merchandiser at other than the design voltage and frequency specified on the Electrical Rating Tag, or b) in event of vandalism, fire or negligence, or c) incandescent lamps, neon lamps, fluorescent lamps, ballasts, starters or other expendable items or d) when other manufactured components are installed in National Vendors Merchandisers.

National Vendors is not responsible for any cost of service rendered or repairs made by customer or its agents on Merchandiser or parts unless authorization to incur such expense has been given in writing by National Vendors prior to incurring such expense.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NATIONAL VENDORS SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL OR PUNITIVE DAMAGES. National Vendors neither assumes nor authorizes any person to assume for it any obligation or liability in connection with the sale of said equipment or any part thereof.

National Vendors
A Division of CRANE CO
12955 Enterprise Way
Bridgeton, MO 63044