

1670024

Snack/Refreshment Center

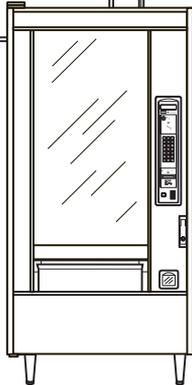
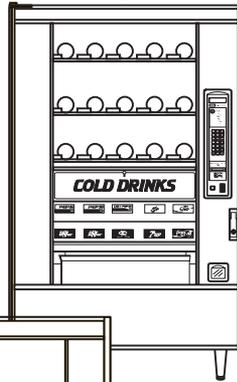
785, 786, 788, 789



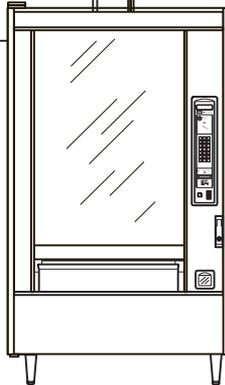
784, 787



797, 798



168, 268, 765



167, 267, 764

Programming Guide

CRANE MERCHANDISING SYSTEMS™ A Crane Co. Company
CMS PARTS & SUPPORT

12955 Enterprise Way
Bridgeton, Missouri 63044-1200
(314) 298-3500
www.nationalvendors.com

Copyright© 7-01

REFLECTING SOFTWARE VER 158.17R

1670024

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.

Table of Contents

Gain Access to The Supervisor Mode	4
Enter a New Supervisor Code	4
Enter a Freevend Code	4
Assign a Code to View Data Without Opening the Door	5
Lock Or Unlock Mode Or Payout Keys	5
Set Printer Or DEX Options	6
Select Printer Baud Rate (Printer Mode Only)	7
Select Display Language	7
Select Coin Mechanism	8
Select Bill Validator	9
Select Card Reader	10
Select Monetary Options	11
Set Up Winner Mode	13
View Or Set Machine Configuration	14
Identify the Selections In the Merchandiser	15
Set Temperature (Supervisor Mode Only)	15
Couple/Uncouple Tray Motors	16
Couple/Uncouple Can Selections	17
Select When the Can Unit Goes Out Of Service (8 Select Can Unit Only)	18
Select Fresh Brew Or Freeze Dry	18
Set Up Cup Sizes	19
Set Up a Hot Drink	21
Set Up Rinse Time	22
View and Control Defrost Mode (Frozen Food Module Only)	23
Set Up Basic SureVend™ Options	23
Set Up the SureVend™ Anti-Jackpot Feature	24
Set Refund Option	25
View Software Version	25
Set the Time Of Day	25
Set the Date	26
Set Time-Of-Day Inhibited Vending	26
Set Time-Of-Day Free Vending	26
Set Time-Of-Day Discount Vending	26
Time Interval Editing	27
Select a Standby Message	29
Select An Out-of-service Message	29
Select a Freevend Message	30
Edit Custom Messages	31
View Cold Unit Temperature	33
Payout Coins	34
Set Prices	35

Snack/Refreshment Center Programming Guide

View Nonresettable Sales and Vend Data.....	36
View Data Three Different Ways.....	36
View Total Paid Sales	36
View Card Reader Paid Sales.....	37
View Coupon Sales	37
View Total Paid Vends.....	37
Clear All Resettable Data	37
Clear Paid Sales Data Only	38
View Amount In Coin Box.....	38
View Amount In Validator.....	38
View Freevend Sales By Time Interval.....	39
View Discount Sales By Time Interval	39
View Free Vends	39
View Winners	40
View Time Data	40
View Total Unpaid Sales.....	42
View Total Unpaid Vends.....	42
View Number Of Test Vends	42
View Machine id Number	42
View SureVend™ Data.....	43
Test Vend Selections And Verify Credit Added	44
Test the Display.....	44
Test the Motors.....	45
View Motor Status By Tray	46
Test the Food Module Door (Food, Frozen, Or Outdoor Snack Only).....	47
Test the Coffee Air Compressor.....	47
Rinse the Mixing Bowls	47
Test Drop a Cup And Test Switches	48
Test the Brewer.....	48
Test the Whipper(S)	48
Test the SureVend™ System.....	49
Download Data To A PDCD.....	50
Set Freevend Options	50
View Diagnostic Messages.....	51

Alphabetical Index of Programming Procedures

B	
Bill Validator, Select	9
C	
Can Selections, Couple/Uncouple	17
Can Unit Out Of Service	18
Card Reader, Select	10
Coin Mechanism, Select	8
Cup Sizes	19
D	
Date, Set	26
Defrost Mode	23
DEX Options, Set	6
F	
Freevend Code	4
Freevend Message	30
Fresh Brew Or Freeze Dry	18
H	
Hot Drink Set Up	21
L	
Language, Select	7
M	
Machine Configuration, View Or Set	14
Merchandiser Trays, Identify	15
Message	
Freevend	30
Out-of-service	29
Standby	29
Mode Keys, Lock Or Unlock	5
Monetary Options, Select	11
O	
Out-of-service Message	29

Snack/Refreshment Center Programming Guide

P

Payout Keys, Lock Or Unlock	5
Printer Baud Rate, Select	7
Printer Options, Set	6

R

Rinse Time	22
------------------	----

S

Set SureVend™ Refund Option	25
Set Up Basic SureVend™ Options	23
Set Up the SureVend™ Anti-Jackpot Feature	24
Software Version, View	25
Standby Message	29
Supervisor Code	4
Supervisor Mode	4

T

Temperature	15
Time Of Day, Set	25
Time-Of-Day Vending	
Discount	26
Free	26
Inhibited	26
Tray Motors, Couple/Uncouple	16

V

View Data Without Opening the Door, Assign Code	5
View SureVend™ Data	43

W

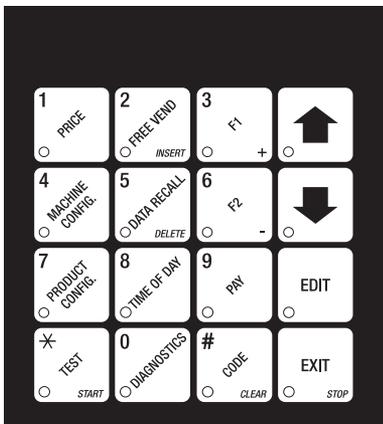
Winner Mode	13
-------------------	----

Snack/Refreshment Center Programming Guide

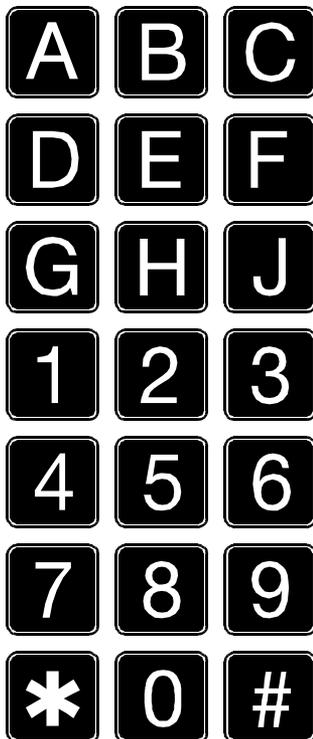
Introduction

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

159206

Snack/Refreshment Center Programming Guide

The Displays

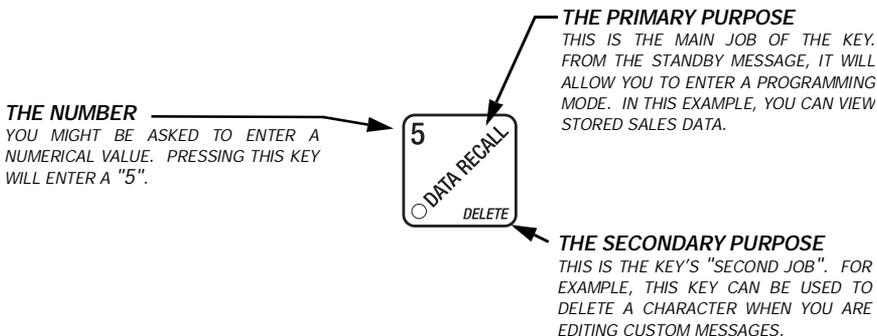
The 10-character display performs two functions, and is referred to in this book as "the display":

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.

One Last Thing:

When you see the word CONTINUE at the end of a function, it means to press until you return to the standby message.



Snack/Refreshment Center Programming Guide

Control Panel Switches 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 bill validator, 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
- Set up can unit options
- Set up hot drinks
- Couple/uncouple tray motors
- Set cold unit temperature
- Set up bowl rinse times
- Set up SureVend™ options



Press this button to:

- Set time of day and date
- 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 various machine functions
- Test displays



Press this button to:

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

Snack/Refreshment Center Programming Guide



GAIN ACCESS TO THE SUPERVISOR MODE

1. Press . 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.

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.

2. At the standby message, press , 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. CONTINUE.



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 one free vend.
3. CONTINUE.

Snack/Refreshment Center Programming Guide



ASSIGN A CODE TO VIEW DATA WITHOUT OPENING THE DOOR

If the proper non-zero code is entered, sales data can be viewed by machine, tray, or selection 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. CONTINUE.
-



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 *#. LOCKED* or *#. UNLOCKED*. The pound sign (#) is the first mode key that can be locked or unlocked. To see if another 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. CONTINUE.

Snack/Refreshment Center Programming Guide



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:

PRINTER means that data will be sent directly to a printer,

- OR -

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

- OR -

DEX+CLR means that resettable data is cleared after it is downloaded into a portable data collection device.

- OR -

NR DEX (this is a future DEX option),

3. Press  to switch between the choices.

4. CONTINUE.

Snack/Refreshment Center Programming Guide



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. CONTINUE.



SELECT DISPLAY LANGUAGE

1. Press . The current **LANGUAGE** is shown in the display. Press  to choose the desired language. Your choices are: *ENGLISH, DEUTSCH, FRANCAIS, ESPANOL, PORTUGUES, SWEDISH, NEDERLANDS, or FINNISH.*
2. CONTINUE.

Snack/Refreshment Center Programming Guide



SELECT COIN MECHANISM

1. Press , then press  until the current **COIN MECHANISM** is shown in the display. Press  to choose the desired coin mechanism. Your choices are:
DUMB MECH, MDB MECH, EXEC MECH, or NO MECH
2. Proceed to **SELECT MONETARY OPTIONS**, page 11, to customize your coin mechanism choice.

NOTE

Depending upon your choice of coin mechanisms, some displays may not appear.

3. CONTINUE.

Snack/Refreshment Center Programming Guide



SELECT BILL VALIDATOR

1. Press , then press  until one of the following is displayed:

NO DBV

- 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.

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.

MDB.1.2.5.10.20

- **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 (bills of denominations of 100, 200, 500, 1000, or 2000) or tokens is con-

- nected and operating. Press  to enter list of bills. See

BILL LIST OPERATION. See INITIAL SETUP OF NON-STANDARD BILL VALIDATOR.

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.

Snack/Refreshment Center Programming Guide

BILL LIST OPERATION:

Use  and  to scroll through the list of bills.

1.1.00 ON

Use  to turn the bill acceptance ON or OFF.

Use  to move up to the top level screen.

1.1.00 ON - 1. =Bill validator channel 1, each bill has its own channel

1.1.00 ON - 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)

PULSEDBV - The pulse bill validator will accept \$1 bills.

2. Press  to choose the desired option.

3. Proceed to **SELECT MONETARY OPTIONS**, page 11, to customize your bill validator choice.

NOTE

4. Depending upon your choice of bill validator, some displays may not appear.

5. CONTINUE.



SELECT CARD READER

1. Press , then press  until the current card reader is shown in the display.

Play. Press  to choose the desired card reader.

2. Your choices are: *NOCARD*, *DUMBCARD*, or *MOBCARD*.

3. Proceed to **SELECT MONETARY OPTIONS**, page 11, to customize your card reader choice.

NOTE

Depending upon your choice of card reader, some displays may not appear.

4. CONTINUE.

Snack/Refreshment Center Programming Guide



SELECT MONETARY OPTIONS

Certain options can be selected, depending upon which monetary devices you have selected.

This function lets you:

- Set change returning criteria
- Set declining balance
- Set change acceptance on low change
- Set overbuy options
- Set last bill stacking options
- Set card reader revalue options

1. Press , then press  until the display shows *CHANGE X.XX*.

X.XX represents the largest denomination coin or bill that can be changed without a purchase.

Examples:

CHANGE 0.00 - Forced vend; NO change returned without a purchase.

CHANGE .25 - Returns change without a purchase if nickels, dimes, or quarters are inserted.

CHANGE 1.00 - \$1 bills and SBAs will be changed without purchase. Nickels, dimes, and quarters are also returned.

2. Press  until one of the following is displayed:
3. *ACC <\$\$X.XX* -Accept any bill of value \$X.XX or less. Hold the last bill which meets or exceeds maximum price in escrow. (This is the normal setting.)
- OR -
4. *ACC.STKX.XX* -Accept any bill of value \$X.XX or less. Immediately stack the last bill.
5. **Example: If setting is *ACC.STK1.00*** and maximum price is \$1.50. This setting will immediately stack the second \$1.00 bill inserted.
6. Press  to display the desired choice.
7. 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.

Snack/Refreshment Center Programming Guide

- 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 inserts 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).

8. 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.

9. Press  until one of the following is displayed:

**DECLINING
BALANCE:**

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

10. *DECLINE.ON* - More than one vend is allowed, with a declining balance.

- OR -

11. *DECLINE.OFF* - A declining balance is not allowed.

12. Press  to display the desired choice.

Snack/Refreshment Center Programming Guide

13. Press  until one of the following is displayed:
 14. **REVALUE.ON** - Allows credit to be transferred onto the card
 15. **REVALUE.OFF** - Credit cannot be transferred to the card
 16. Press  to display the desired choice.
 17. CONTINUE.
-



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 , 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  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.

Snack/Refreshment Center Programming Guide

ADVANCED OPTIONS:

Press  to enable all trays.

Press  to deactivate all trays.

AN EXAMPLE . . .

You want to enable winners on all trays except E and F. Do the following:

- Press . The letters *A* through *F* appear in the display instead of the dashes.
- Press "E" and "F". The letters *E* and *F* in the display are replaced by dashes.



VIEW OR SET MACHINE CONFIGURATION

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

- 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)

- Press  until the appropriate configuration is displayed.

BE CAREFUL when you select your configuration, because selecting the wrong one will affect other choices later on, and could cause problems.

- CONTINUE.

Snack/Refreshment Center Programming Guide



IDENTIFY THE SELECTIONS IN THE MERCHANDISER

1. Press , then press  until the display shows something like this:

A.B.C.D.E.F.G.H.J.. This display means that all selections (A - J) 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. CONTINUE.
-



SET TEMPERATURE (SUPERVISOR MODE ONLY)

1. If your machine is equipped (and properly configured) with a refrigerated module,

press , then press  until the display shows $+/- +66^{\circ}F$. This means that $66^{\circ}F$ is the current temperature setting.

2. Press  to raise the setting; press  to lower the setting.
3. Press  to choose between display in $^{\circ}F$ or $^{\circ}C$.

4. CONTINUE.

Snack/Refreshment Center Programming Guide



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 , then press  until the display shows *CPLMTRS*.
2. Press the letter of the tray you want to couple, or press  to couple motors on tray A, then press  to get to the desired tray.

COUPLE ADJACENT MOTORS:

- a. The display shows *+R.+R.+R.+R.+R.*. 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 *R.R.+R.+R.+R.+R.*

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 *R.R.+R.+R.+R.*. 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. CONTINUE.

Snack/Refreshment Center Programming Guide



COUPLE/UNCOUPLE CAN SELECTIONS

Adjacent can columns can be electronically coupled together to act as a single selection. You can load two or more can columns with the same product, and the coupled columns will alternatively vend as any of the individual columns are selected for sale. Empty or jammed columns are automatically skipped. Sales data is kept under the original selection.

1. Press , then press  until the display shows *CPLMTRS*.
2. Press **E** or **F** as appropriate, to couple columns in the E or F can row. For example, Press **E**. The display shows *E.E.E.E.E*.
3. Continue by pressing the selection **number** of the leftmost of the columns you want to couple. Follow this example:
 - a. Press **0**. The display shows *+E.E.E.E*. Selections E0 and E1 are coupled together.
 - b. Press **1**. The display shows *+.+E.E.E*. Now, E0, E1, and E2 are coupled together.
 - c. Press **3**. The display shows *+.+.E+.E*. Now, E0, E1, and E2 are coupled together, and E3 and E4 are coupled.

In the above example, the E0, E1, and E2 selections are selling one product, and the E3 and E4 selections are selling another.

SPECIAL DISPLAY CHARACTERS

Under certain circumstances, the letters in the display will be replaced by these special characters:

Tray letter (E or F)	=	Column not empty; not coupled
-	=	Empty switch ON, 1 can left, not coupled (8 select can only)
+	=	Not empty, coupled to the selection on the right
#	=	Empty switch ON, 1 can left, coupled (8 select can only)
(blank)	=	Empty, not coupled
?	=	Empty, coupled
(trailing decimal point)	=	Motor is home
(leading apostrophe)	=	Motor is jammed

SOME FINAL NOTES:

Make sure the coupled selections are set to the same price.

You cannot couple between rows E and F. Coupling is disabled in TEST mode and defaults to direct selection.

Snack/Refreshment Center Programming Guide



SELECT WHEN THE CAN UNIT GOES OUT OF SERVICE (8 SELECT CAN UNIT ONLY)

1. Press , then press  until the display shows either

E +FOFF @0 OR *E +FOFF @1*

2. *OFF @ 0* means that each can selection will go out of service when the last can is vended. *OFF @1* means that one can is left when the unit goes out of service.

3. Press  to switch between the two choices.

4. CONTINUE.

NOTE

Do **NOT** manually remove cans from the can unit.



SELECT FRESH BREW OR FREEZE DRY

1. Press , then press  until the display shows either

J = FB.0.4.6.8.9

- OR -

J = FD.0.4.6.8.9

FB means that the machine is fresh brew, FD means the machine is freeze dry.

2. Press  to switch between the two choices. **Be sure you have selected the right configuration for your machine.**

3. CONTINUE.

Snack/Refreshment Center Programming Guide



SET UP CUP SIZES

1. Press , then press  until the display shows *CUP = X OZ*. "X" is the currently selected cup, and all throw times are set for that size.
2. Press  to choose between 5, 7, 8, and 9 ounce cups. When you switch between cup sizes, the display shows *CUP ? X OZ*. The question mark means that you have the option of setting the factory default throw times for the new size ("X") cups, or you may load the defaults for the present cup size. To do this, press and hold . The display momentarily shows *CLEARING*, then two beeps sound and *FINISHED* is displayed. See the tables on the next page for the factory default times.
3. CONTINUE.

Snack/Refreshment Center Programming Guide

Factory Default Throw Times (Fresh Brew Machine)

Selections	Throw times (in seconds) per size cup			
	5 oz	7 oz	8 oz	9 oz
Coffee	2.60	2.70	2.90	3.40
Extra Coffee (add to above time)	0.25	0.30	0.30	0.20
Water for coffee	4.30	5.00	5.90	6.40
Steep time	3.00	3.00	3.00	3.00
Extra steep time (add to above time)	2.00	2.00	2.00	2.00
Air compressor run time	8.00	9.00	10.00	11.00
Sugar	1.70	1.60	1.80	2.10
Extra sugar (add to above time)	0.35	0.60	0.60	0.60
Lightener	0.35	0.40	0.55	0.65
Extra lightener (add to above time)	0.15	0.15	0.10	0.15
Chocolate	2.60	2.90	3.40	3.80
Extra chocolate (add to above time)	0.30	0.35	0.65	0.65
Water for chocolate	8.65	10.20	12.00	13.00

Factory Default Throw Times (Freeze Dry Machine)

Selections	Throw times (in seconds) per size cup			
	5 oz	7 oz	8 oz	9 oz
Coffee	1.00	1.10	1.50	1.90
Extra Coffee (add to above time)	0.25	0.30	0.30	0.35
Water for coffee	6.80	8.00	9.45	10.25
Sugar	1.70	1.60	1.80	2.10
Extra sugar (add to above time)	0.35	0.60	0.60	0.60
Lightener	0.35	0.40	0.55	0.65
Extra lightener (add to above time)	0.15	0.15	0.10	0.15
Chocolate	2.60	2.90	3.40	3.80
Extra chocolate (add to above time)	0.30	0.35	0.65	0.65
Water for chocolate	8.65	10.20	12.00	13.00

Snack/Refreshment Center Programming Guide



SET UP A HOT DRINK

Be sure that the cup sizes you set in **SET UP CUP SIZES** on page 19 agree with the cup sizes actually in your machine.

Programming hot drinks in the Refreshment Center is based on a "family" concept. Your menu lists the coffee selections as **J0** (black coffee), **J1** (coffee with sugar), and so forth. All selections in the coffee "family" are grouped under **0**. Likewise, the espresso selections are grouped under **4**, and cappuccino selections under **6**.

All procedures for setting up the hot drinks are similar, so this example will demonstrate how to set up fresh brew coffee, selection **0**.

1. Press , then press  until the display shows **J = FB. 0.4.6.8.9**.
2. Press **0**. The display shows **0 = ON**. This verifies that the **0** selection is turned on.
3. Press . The display shows **0.PROD 2.70**. This means that the current selection **0** dry product throw time is 2.70 seconds. For another selection, the **0** would be replaced by that selection number. Enter a new time if desired.
4. Pressing  after each display will cause the following screens to appear:

0.PROD+	View and change the settings for an extra strong drink
0.WTR	View and change the settings for the water throw time
0.STP	View and change the steep time
0.STP+	View and change the steep time for an extra strong drink
0.AIR	View and change the air compressor running time
0.SUG	View and change the settings for sugar throw time
0.SUG+	View and change the settings for extra sugar throw time
0.LTR	View and change the settings for the lightener throw time
0.LTR+	View and change the settings for extra lightener throw time

CONTINUED . . .

Snack/Refreshment Center Programming Guide

0.WHP XXX Press to view and change the whipper settings as follows:

ON The drink is whipped unless **J** is pressed

OFF The drink is not whipped unless **J** is pressed

DIFFERENCES:

Some selections will not show all of these items. Examples: A freeze dry machine will not have any steep settings, selection **8** (cup only) has no settings available, selection **9** (chocolate) has only the product and water throw times displayed. In addition to the whipper option, selection **6** (cappuccino) only shows the following:

6.RATIO 14 View and set the ratio of chocolate to coffee. The default ratio is 14, meaning that 14% of the drink is chocolate; 86% is coffee.

OPTIONS:

- At any of the preceding displays, you can press  to test throw that item.
- At any of the preceding displays, you can press ***** or **#** (on the selection switch panel) to step through a list of that item's throw times for other selections where that item is active. For example, pressing **#** at the **0WTR** display will show the throw time for **4WTR**. This is a handy way to move from one selection to another without going to the **J = FB.0.4.6.8.9** screen first.

5. CONTINUE.



SET UP RINSE TIME

- Press , then press  until the display shows **RINSE XX**. "XX" is the currently selected time (in hours) that the bowls will be rinsed after the last hot drink vend.
- Press  to select the number of hours you want to wait until rinsing takes place.
- CONTINUE.

Snack/Refreshment Center Programming Guide



VIEW AND CONTROL DEFROST MODE (FROZEN FOOD MODULE ONLY)

1. Press , 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  to start a manual defrost cycle.
3. Press  to end a defrost cycle in progress.
4. Press . The display shows *DEFRST X/DY*. "X" indicates the number of defrost cycles per day (DY). Press  again to change the value of X.
5. Press  once to return to step 1.
6. CONTINUE.



SET UP BASIC SUREVEND™ OPTIONS

1. Press , then press  until the display shows one of the following:

SURE.V OFF. Choose this option if you do not want to use the SureVend™ feature.

SURE.V ON. The SureVend™ option is activated.

Press  to choose between these options. If you chose *SURE.V OFF*, you are finished with all SureVend™ functions. Otherwise, continue to the next step.

2. Press  until the display shows one of the following:

OPT'N SURE.V. If the SureVend™ system has any kind of a failure, the machine will revert to its normal operating mode, bypassing the SureVend™ feature.

MUST SURE.V. If the SureVend™ system has any kind of failure in the main delivery area (not the gum & mint unit), the machine will go temporarily out-of-service until the fault is corrected.

3. CONTINUE.

Snack/Refreshment Center Programming Guide



SET UP THE SUREVEND™ ANTI-JACKPOT FEATURE

The programmable anti-jackpot mode protects against unforeseeable cheating of the SureVend™ system by certain forms of tampering. A SureVend™ empty condition occurs when delivery of the product is not detected, and the customer's money is restored or returned. If a certain (user programmable) number of empty conditions occur, the machine will either revert to normal vending or go out of service (depending upon what you selected during **SET UP BASIC SUREVEND™ OPTIONS**, page 23. This condition will remain for a set number of minutes to discourage a possible thief from remaining near the machine.

1. Press , then press  until the display shows *ANTI.JP@ XX*. XX represents the number of empty conditions that will occur before the SureVend™ system is disabled for a certain number of minutes.
2. Enter the number of empty conditions using the number keys. (Entering **00** disables this feature.)
3. Press . The display shows *AJP.TMR XXM*. XX represents the number of minutes the SureVend™ system remains disabled after an anti-jackpot occurrence.
4. Enter the number of minutes using the number keys. (Entering **99** causes the SureVend™ system to remain disabled until the main door is closed after the next service call.)
5. CONTINUE.

Snack/Refreshment Center Programming Guide



SET REFUND OPTION

If a failed vend occurs, the customer's money may be returned, or the customer's credit could be restored to the machine for another selection.

1. Press , then press  until the display shows one of the following:

FAIL = CRSH. This means that the customer will automatically receive a refund if the vend fails.

FAIL = CRDT. This means that the customer's credit is restored to the machine if the vend fails, allowing another selection to be made. Additionally, the customer can press the coin return to receive a cash refund.

2. Press  to choose between these options.
 3. CONTINUE.
-



VIEW SOFTWARE VERSION

1. Press , and press  until the display shows *VER XXXXXX*.

"XXXXXX" represents the current software version number.

2. CONTINUE..
-



SET THE TIME OF DAY

1. Press . 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. CONTINUE.
-

Snack/Refreshment Center Programming Guide



SET THE DATE

1. Press , and press  until the display shows *MM/DD/YY X*. “MM” is the month, “DD” is the date, “YY” is the year, and “X” is the numbered day of the week.
 2. Enter the current month, date, and year using the number keys. The day of the week number will be calculated for you based on the date you enter. For example, press the following keys to enter June 22, 2001: **0, 6, 2, 2, 0, 1**. While you are doing this, the “X” character becomes a dash (-) until you have finished entering the month, date, and year. **Don't enter that day of the week number yourself!**
 3. Press  to switch between MM/DD and DD/MM formats.
 4. CONTINUE.
-



SET TIME-OF-DAY INHIBITED VENDING

1. Press , then press  until the display shows *INHIB ----*.
 2. Go to the **TIME INTERVAL EDITING** procedure (page 27) 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 , then press  until the display shows *FREEV ----*.
 2. Go to the **TIME INTERVAL EDITING** procedure (page 27) 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 , then press  until the display shows *DISCT ----*.
 2. Go to the **TIME INTERVAL EDITING** procedure (page 27) 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.DISCTON* or *1.DISCTOFF*. 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.

Snack/Refreshment Center Programming Guide

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 31). Press 0 to turn the message OFF for this time interval.

9. CONTINUE.

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 , then press  until the display shows *STANDBYXX*. "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  and follow the procedure given in **EDIT CUSTOM MESSAGES** (page 31).
4. CONTINUE..



SELECT AN OUT-OF-SERVICE MESSAGE

1. Press , then press  until the display shows *SERVICEXX*. "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  and follow the procedure given in **EDIT CUSTOM MESSAGES** (page 31).
4. CONTINUE..

Snack/Refreshment Center Programming Guide



SELECT A FREEVEND MESSAGE

1. Press , 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  and follow the procedure given in **EDIT CUSTOM MESSAGES** (page 31).
4. CONTINUE..

Snack/Refreshment Center Programming Guide



EDIT CUSTOM MESSAGES

1. Press , and press  until the display shows *EDIT MSG'S*. Press the number of the message you want to edit. *MESSAGEX* is displayed (X represents the message number you pressed).
2. Press . The message text is displayed with the first character flashing.
3. To view the message, press . The message scrolls across the display. To stop the scrolling, press .
4. When the character you want to change is flashing, either enter it directly, or use  and  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. Exam-

ple: If you want to enter an **L**, first press , then press  six times. Your **L** should now be displayed.

Snack/Refreshment Center Programming Guide

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.

Snack/Refreshment Center Programming Guide

0	A	J	U	{	
1	B	L	V	}	
2	C	M	W	#	
3	D	N	X	P	
4	E	O	Y	+	
5	F	P	Z	-	>
6	G	Q	(SPACE)	/	?
7	H	R	_	.	@
8	I	S	\$	<	0
9	J	T	'	/	



VIEW COLD UNIT TEMPERATURE

1. Press . Depending on how your machine is configured, the display will show, for example, *TEMP 38° F*. This example shows that the temperature is 38 degrees Fahrenheit.

NOTE

If a food module door has been opened recently, the above display will include a numerical value indicating how many minutes remain in the health control grace period.

2. To change the display units, press . The display now shows *TEMP 5° C*.

An apostrophe preceding the **F** or **C** means the heater is on defrost. A decimal point following the **F** or **C** means the compressor is running. An **I** in the display means the displayed temperature is invalid.

NOTE

When the machine door is closed, you can view the temperature by pressing **#** on the selection panel.

3. CONTINUE.

Snack/Refreshment Center Programming Guide



PAYOUT COINS

1. Press . If a dumb mech was selected, the display shows *NDQ=123*; if an MDB mech was selected the display shows *PRY 123*.
2. Press . A dumb mech pays out one *N*ickel; an MDB mech pays a coin from tube 1. Press . A dumb mech pays out one *D*ime; an MDB mech pays a coin from tube 2. Press . A dumb mech pays out one *Q*uarter; an MDB mech pays a coin from tube 3.
3. To continuously pay out coins, hold down the appropriate key.
4. CONTINUE.

Snack/Refreshment Center Programming Guide



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.

Snack/Refreshment Center Programming Guide



VIEW NONRESETTABLE SALES AND VEND DATA

1. Press . 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. CONTINUE.
-



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 to view the date and time of the last vend of that selection.
-



VIEW TOTAL PAID SALES

1. Press , 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. CONTINUE.

Snack/Refreshment Center Programming Guide



VIEW CARD READER PAID SALES

1. Press , then press  until the display shows ****\$ XX.XX**. (Not shown if total is zero.)
 2. Press , 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 39.
 3. CONTINUE.
-



VIEW COUPON SALES

1. Press , then press  until the display shows ****\$ XX.XX**. (Not shown if total is zero.)
 2. Press , then press  until the display shows **TKN XX.XX**. "XX.XX" is the amount of money collected from card reader sales. Also, see **VIEW DISCOUNT SALES BY TIME INTERVAL**, page 39.
 3. CONTINUE.
-



VIEW TOTAL PAID VENDS

1. Press , then press  until the display shows **** XX**. "XX" is the total number of paid vendes for the entire machine.
 2. If desired, view this data by tray and individual selection.
 3. CONTINUE.
-



CLEAR ALL RESETTABLE DATA

1. Press . The display shows **NR\$ XX.XX**. This is a running total, and is not resettable.
 2. Press and hold . Two beeps sound and the display shows **CLEARING** momentarily, and then changes to **FINISHED**. All data is cleared.
 3. CONTINUE.
-

Snack/Refreshment Center Programming Guide



CLEAR PAID SALES DATA ONLY

1. Press , 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 . 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. CONTINUE.
-



VIEW AMOUNT IN COIN BOX

1. Press , 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. CONTINUE.
-



VIEW AMOUNT IN VALIDATOR

1. Press , 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  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  again to show the quantities of other bills, such as \$5s, \$10s, or \$20s.
 3. CONTINUE.
-

Snack/Refreshment Center Programming Guide



VIEW FREEVEND SALES BY TIME INTERVAL

1. Press , then press  until the display shows *-0\$ XX.XX*. (This is the total value of unpaid vends and is only shown if not zero.)
 2. Press , 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. CONTINUE.
-



VIEW DISCOUNT SALES BY TIME INTERVAL

1. Press , then press  until the display shows ***\$ XX.XX*.
 2. Press , 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 37.
 3. Press  to view intervals 2 through 4.
 4. CONTINUE.
-



VIEW FREE VENDS

1. Press , then press  until the display shows *-0\$ XX.XX* (provided the total is not zero).
2. Press , then press  until the display shows *FRV XX.XX*. "XX.XX" is the total machine-wide freevends, shown even if zero.
3. CONTINUE.

Snack/Refreshment Center Programming Guide



VIEW WINNERS

1. Press , then press  until the display shows *-0\$ XX.XX* (provided the total is not zero).
 2. Press , then press  until the display shows *WIN XX.XX*. "XX.XX" is the total machine-wide winners, shown even if zero.
 3. CONTINUE.
-



VIEW TIME DATA

1. Press , then press  until the display shows *TIME DATA*.
2. Press . 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:

HEALTH OFF 01/30 14.09 MAX. 69°F

This example shows that the health control timer turned off on January 30 (01/30) at 2:09 pm (14.09), and the maximum temperature reached was 69°F.

NOTE

The temperature display units will be in °C if you selected Celsius during the temperature display function.

Snack/Refreshment Center Programming Guide

5. The following message scrolls across the display:

LAST POWER 01/30 13.51 FOR 00. 0.23

6. 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).

7. 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).

8. 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).

9. 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).

10. 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).

11. 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).

12. CONTINUE.

NOTE

Refer to **VIEW DATA THREE DIFFERENT WAYS** (page 36) to view the date and time of the last vend of that selection.

Snack/Refreshment Center Programming Guide



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. CONTINUE.
-



VIEW TOTAL UNPAID VENDS

1. Press , 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. CONTINUE.
-



VIEW NUMBER OF TEST VENDS

1. Press , 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. CONTINUE.
-



VIEW MACHINE ID NUMBER

1. Press , then press  or  until the display shows *I.D. XXXXXX*. The X's represent the 8-digit machine ID number.
 2. You can edit the machine ID number if the SUPERVISOR access code has been previously entered.
 3. CONTINUE.
-

Snack/Refreshment Center Programming Guide



VIEW SUREVEND™ DATA

Certain SureVend™ data can be viewed if the values are not zero.

1. Press , then press  until the display shows *SV.EMPT XXXX*.
XXXX represents the number of times credit was restored or returned because of SureVend™. Press  to reset this count.
2. Press . The display shows ***SV XXXX*. XXXX represents the total number of SureVend™ corrected vends, viewable by selection. These are vends which normally would not have delivered product if SureVend™ was not in use.
Press and hold  to reset this count.
 - a. Enter a selection letter/number to view the count for that selection.
 - b. Either enter another selection letter/number, or press  to scroll through all selections.
3. Press . The display shows *WD.SV XXXX*. XXXX represents the total number of vends, viewable by selection, made while SureVend™ was not in use. Press and hold  to reset this count.
 - a. Enter a selection letter/number to view the count for that selection.
 - b. Either enter another selection letter/number, or press  to scroll through all selections.
4. CONTINUE.

Snack/Refreshment Center Programming Guide



TEST VEND SELECTIONS AND VERIFY CREDIT ADDED

1. Press . 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. CONTINUE.
-



TEST THE DISPLAY

1. Press , then press  until the display shows *DSPLYTEST*.
2. Press  to light all display segments; press  to turn them off.
3. Pressing a **NUMBER KEY** on the control panel causes all segments to display that character.
4. CONTINUE.

Snack/Refreshment Center Programming Guide



TEST THE MOTORS

1. Press , then press  until the display shows *TEST MTRS.*
2. Press  to interrogate all motors. The display stops at the first motor with a known error, or will show the total number of homed motors and the total of empty can motors.
3. Press  to run all snack motors one time. The display stops at any motor showing an error.

- OR -

- Press  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.

Error Messages

Display	Probable Cause
<i>QUK.CYCL</i> .id	The motor (designated by its id number) cycles through its positions too quickly; it is probably shorted.
<i>CPL.ERR</i> .id	An unresolved electronically coupled motor (designated by its id number).
<i>TEST</i> id	The motor failed (designated by its id number), test it individually.
<i>TIMEOUT</i> id	The motor (designated by its id number) did not leave home or reach home in the expected time; possibly jammed.

4. CONTINUE.

Snack/Refreshment Center Programming Guide



TEST THE FOOD MODULE DOOR (FOOD, FROZEN, OR OUTDOOR SNACK ONLY)

1. Press , then press  until the display shows *FOOD 0123**.

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

-  Vend door lock switch is locked
- 1** Loading door is closed
- 2** Food door (retractable door on the outdoor snack) is open
- 3** Food door (retractable door on the outdoor snack) is closed
- *** Door is jammed or other error exists

2. Press  to move the vend door to a new position; vend door will lock if the door is opened. To test the inner door on the outdoor snack, manually open and close the door while watching the display.
 3. CONTINUE.
-



TEST THE COFFEE AIR COMPRESSOR

1. Press , then press  until the display shows *AIR TEST*.
 2. Press  to run the air compressor.
 3. CONTINUE.
-



RINSE THE MIXING BOWLS

1. Press , then press  until the display shows *RINSE *9*.
2. Press  to rinse the coffee mixing bowl; press  to rinse the chocolate bowl.
3. CONTINUE.

Snack/Refreshment Center Programming Guide



TEST DROP A CUP AND TEST SWITCHES

1. Press , then press  until the display shows *CUP T.P.P.M.*

T = Tank error (low water)

P = Waste pail full

P = Cup turret empty

M = Mug switch actuated

Actuate these switches to cause these codes to go on and off in the display.

2. Press  to drop a cup.
 3. CONTINUE.
-



TEST THE BREWER

1. Press , then press  until the display shows *BREWER 1*. The 1 in the display means the brewer is in the "home" position.

2. Press  once. The brewer moves to the next position. Continue to press

 until the **1** is displayed again, meaning the brewer is "home".

3. CONTINUE.
-



TEST THE WHIPPER(S)

1. Press , then press  until the display shows *WHIP*.

2. Press . The whipper runs for one cycle. If more than one whipper is installed, each will run for one cycle.

3. CONTINUE.



TEST THE SUREVEND™ SYSTEM

1. Press , then press  until the display shows one of the following:

SV.TST OK

This means the SureVend™ system is operating properly.

SV.TST XX

XX represents the location of a blockage. The sensing zone numbers 1 - 9 may appear (1 being closest to the glass), or the letter H, designating a blockage in the gum & mint unit. This display changes as the location of the blockage changes, accompanied by a beep. You may use this screen to test the product coverage of the SureVend™ sensors, but the accuracy may be somewhat lower than in actual vend situations.

SV.TST CAL

This means that calibration values are high. Press  to view the calibration values. This condition may be caused by dirt, misalignment of the SureVend™ sensors, or a partial blockage of a sensor.

- From any of the previous displays, press  to view the real-time calibration

values. Press  to return to the *SV.TST* screen.

- A calibration value of **0** indicates a shorted detector. This will normally require replacing the hinge-side PC assembly.
- A calibration value of **1** means that the zone could not be calibrated, indicating a blocked or damaged sensor.
- Calibration values above **A** are abnormal and may require adjusting the alignment or cleaning the sensors.

SV.TST COMM

This indicates a loss of communication with the SureVend™ system. Check all harness connections between the main controller and the SureVend™ controller.

2. CONTINUE.

Snack/Refreshment Center Programming Guide



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 . Data is downloaded into your PDCD.

NOTE

Depending upon the setting selected in **SET PRINTER OR DEX OPTIONS** (page 6), data may be cleared after the download is complete.

3. CONTINUE.
-



SET FREEVEND OPTIONS

1. Press  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 ON - 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 (see **ENTER A FREEVEND CODE**, page 4) is not **0000**, the code must be entered first.

Press  to allow free vending of specific selections. Press the letter of the selection you want to vend. For example, the display shows ***.AC-----**. Selections A and C will allow free vends.

- 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  until the option you want is displayed.
 3. CONTINUE.
-

Snack/Refreshment Center Programming Guide



VIEW DIAGNOSTIC MESSAGES

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

Error Messages

<i>NO ERRORS</i>	None of the following errors are detected:
<i>KEYPAD XY</i>	Key(s) x, y stuck.
<i>ROM ERROR</i>	Error in the programming EPROM. MACHINE WILL NOT OPERATE.
<i>RAM ERROR</i>	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*.

<i>TEMP REF</i>	The temperature reference on the main PCB CANNOT BE READ.
<i>TEMP SNSR</i>	The primary temperature sensor cannot be read.
<i>TEMP RANGE</i>	The primary temperature sensor is out of range.
<i>TEMP2 SNSR</i>	The secondary temperature sensor cannot be read.
<i>TEMP2 RANGE</i>	The secondary temperature sensor is out of range.
<i>CHK PRICE</i>	Price error detected and changed to maximum - check prices.
<i>CHK CONFIG</i>	A PRODUCT CONFIG value was out of bounds and set to nominal - check all PRODUCT CONFIGS.
<i>HEALTH OFF</i>	Presently out of service because of a health control temperature error (MAX. xx°F). Machine will not operate.
<i>ERR ABC</i> (etc)	Error exists on tray A, B, C, etc. Motor may be jammed, not home, or a couple error exists.
<i>NONE READY</i>	No selection is ready to vend. Check that no time-of-day inhibits are active.
<i>CUP T.P.?</i>	Errors: T = tank (low water); P = waste pail; ? = no cups.
<i>JCOMM ERR</i>	Cannot talk to RC3 coffee section.
<i>BREW ERR **</i>	Brewer jammed or open.
<i>FOOD 01234*</i>	Some errors associated with the food door exists.
<i>FOOD 1.2.*</i>	(The * is flashing.) Jammed door.
<i>TIMEOUT</i>	
<i>FOOD 1.2.3.</i>	(The 2 is flashing.) Door seen as open and closed.
<i>BOTH SW.2+3.</i>	
<i>FOOD 1.2.NO</i>	
<i>SHUT SW.3</i>	(The 3 position is flashing.) Could not find the closed position.

Snack/Refreshment Center Programming Guide

Error Messages (Continued)

<i>FOOD1.3.NO OPENS.W.2</i>	(The 2 position is flashing.) Could not find the open position.
<i>FOOD_3. AUX.DR.OPEN</i>	(The 1 position is flashing.) The loading door is open.
<i>FOOD1._NOT SHUT</i>	(The 3 position is flashing.) Not in the shut position.
<i>NO.MECH</i>	Coin mech not detected - machine will not operate if configured for coin mech.
<i>MECH.COMM</i>	Incomplete coin mech communications -- check harness.
<i>MECH.SENSOR</i>	Coin mech reporting a bad tube sensor - replace mech.
<i>MECH.ROM</i>	Replace the coin mechanism.
<i>MECH.JAM</i>	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.
<i>MECH.ACCEPT</i>	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
<i>DBV.COMM</i>	Incomplete bill validator communications -- check harness.
<i>DBV.SENSOR</i>	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.
<i>DBV.ROM</i>	ROM checksum failure. The unit will disable itself until the error is corrected. Replace the validator.
<i>DBV.JAM</i>	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.
<i>DBV.MOTOR</i>	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.
<i>DBV.STACKR</i>	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.
<i>DBV.ACCEPT</i>	The vending machine is telling the bill validator not to accept any bills. Check the enabled channels of the bill validator.
<i>CARD.F.COMM</i>	Incomplete card reader communications - check cables. The card reader is not operational.

Snack/Refreshment Center Programming Guide

Error Messages (Continued)

<i>CARD.COMM</i>	Incomplete card reader communications. Check cables or replace unit.
<i>CARD.ERR</i>	Card reader is indicating it has a problem.
<i>CARD.F.ERR</i>	Card reader is indicating it has failed. Replace unit.
<i>CARD.ERRXX</i>	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.
<i>CARD.F.ERRXX</i>	Card reader has failed and indicates code XX. The code is defined by the card reader manufacturer. To correct, contact card reader manufacturer.
<i>CARD.F.JAM</i>	Card reader has failed because card is jammed in the unit. Remove the jammed card.
<i>CARD.SERV</i>	Card reader requires service. The unit is still operational.
<i>SV.EMPTY NN</i>	Selection NN was marked as empty by the SureVend™ system because a product delivery was not detected. This error is cleared upon closure of the main service door.
<i>SV.TST XX</i>	This diagnostic automatically enters the appropriate SureVend™ test screen. See TEST THE SUREVEND™ SYSTEM , page 49.
<i>AJP.TMR XX.XM</i>	This appears if the SureVend™ anti-jackpot timer is active, showing the time remaining on the timer. This timer is cleared upon closure of the main service door.
<i>AJP XXX MM/DY</i> <i>HR.MM</i>	This shows the total number of times the SureVend™ anti-jackpot feature occurred plus the date and time of the last occurrence. Press



to reset this count.

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**

