



THE VENDO COMPANY

VEC 5.1-1061 - 1067 Programming Guide
DOOR OPEN CONTROL SEQUENCE
<ol style="list-style-type: none">1. Diagnostic Error Codes2. Sales Information3. Alternate Test Vend4. Control Operation & Programming

PROGRAMMING CHECKLIST
<p>NOTICE: Do not enter the programming modes of this control without authorization and proper training.</p> <p>The leading cause of vendor malfunction is a control board that is not properly programmed. When installing a new board or when trying to trouble shoot a vendor that is not operating as expected, follow these steps in the order listed.</p>
<ol style="list-style-type: none">1. Space to Sales (SSS). Confirm each selection has the correct column(s) assigned. Confirm each column is assigned to at least one selection. As a starting point, assign columns to selections using the Quick Set (SSSS) Mode and pressing the last selection button (Selection 9 or 10 depending on model).2. Options (OPTS) & (OPT 2). Check the settings for each of the different options. As a starting point, set all options to factory settings.3. Price Setting (COST). Set each selection to desired price from .00 (Free Vend) to \$99.954. Timer Control (TCTL). If an optional timing device or key switch is installed, check that the selections are set as desired. (Be sure the optional timing device is operating properly.)5. When exiting "Service Modes" (i.e. actuating the door switch) you must wait 30 seconds before the vendor will accept coins or bills.

For detailed instructions, refer to the Service and Operation Manual or call the Technical Services Department of The Vendo Company at 800-344-7216 or 559-439-1770.

ERROR CODES

ERROR CODE	ACTION	TO REMOVE ERROR CODE
<p style="text-align: center;">"NONE" No Reported Errors</p>	<p>No action needed</p>	<p>No Error Code to remove. Control board will automatically go to total historical vends.</p>
<p style="text-align: center;">"ER-1" Jammed Column</p>	<p>Press Mode Switch 1 time to identify jammed column(s)</p>	<p>Remove cause of motor jam and test vend all columns vended by that motor.</p>
<p style="text-align: center;">"ER-3" Door Left Open 1 Hour</p>	<p>Remove the error code and close the door</p>	<p>While ER-3 is displayed, press the mode switch then press and hold any selection switch for 2 seconds</p>
<p style="text-align: center;">"ER-4" Stuck Selection Switch</p>	<p>Press Mode Switch 1 time to identify stuck switch(es)</p>	<p>Automatically cleared when stuck switch is repaired.</p>
<p style="text-align: center;">"ER-5" MDB Changer Error (Valid only with MDB Interface)</p>	<p>Press Mode Switch 1 time to identify: "CCO" = Coin Changer Communication "TUBE" = Coin Tubes Low "ICB" = Inlet Chute Blocked</p>	<p>After repair, press any selection switch for 2 seconds while ER-5 is displayed.</p>
<p style="text-align: center;">"ER-6" MDB Coin Changer Error (Valid only with MDB Interface)</p>	<p>Press Mode Switch 1 time to identify: "ESC" = Excessive Escrow Attempts "JA" = Coin Jam in Changer "LO" = Low Coin Acceptance</p>	<p>After repair, press any selection switch for 2 seconds while ER-6 is displayed.</p>
<p style="text-align: center;">"ER-7" MDB Card Reader Error (Valid only with MDB Interface)</p>	<p>Press Mode Switch 1 time to identify: "CrOx" = Card Reader Error "Cr1x" = Invalid Card "Cr2x" = Tamper Error "Cr3x" = Manufactures Defined Error "Cr4x" = Communication Error "Cr5x" = Reader Requires Service "Cr6x" = Unassigned "Cr7x" = Manufactures Defined Error "Cr8x" = Reader Failure "Cr9x" = Communication Error-Inop Reader "CrAx" = Card Jammed "CrBx" = Manufactures Defined Error</p>	<p>After repair, press any selection switch for 2 seconds while ER-7 is displayed.</p>




<p align="center">"ER-8"</p> <p>STS Assignment Error (SSS)</p>	<p>Press Mode Switch 1 time to identify: "SS_" = Unassigned Switch(es) "UA_" = Unassigned Column (5.1 Only) "DA_" = Doubly Assigned Column (5.1 Only)</p>	<p>Automatically cleared when assignment error is corrected through SSS program mode.</p>
<p align="center">"ER-9"</p> <p>MDB Bill Validator Error (Valid only with MDB Interface)</p>	<p>Press Mode Switch 1 time to identify: "BOPN" = Bill Box Open "BS" = Bill Validator Sensor Error "BJ" = Bill Jammed "BILL" = Defective Motor "BRCH" = ROM Checksum Error "BFUL" = Bill Box Full (5.1 Only)</p>	<p>After repair, press any selection switch for 2 seconds while ER-9 is displayed.</p>

SALES INFORMATION		
DESIRED DISPLAY	ACTION FOR DESIRED DISPLAY	NEXT CONTROL ACTION
<p>TOTAL HISTORICAL VENDS "CANS" (Non-Resettable)</p>	<p>If No Errors: No action is required to display total vend vend If Error Codes are not cleared: Press selection switches 1 and 2 at the same time</p>	<p>After 15 seconds, control will automatically go to alternate test vend operation.</p>
<p>VENDS BY SELECTION (Since Last Reset)</p>	<p>Pressing any selection button will display unit sales for that selection since the reset button was last pressed.</p>	<p>After 15 seconds, control will automatically go to alternate test vend operation.</p>
<p>TOTAL HISTORICAL CASH "CASH" (Non-Resettable)</p>	<p>From Total Vends: No action is required to display total cash From vends by selection: Press selection switches 1 and 2 at the same time</p>	<p>After 15 seconds, control will automatically go to alternate test vend operation.</p>

NOTE: OPTIONAL DOOR CLOSED DATA RETRIEVAL

If desired, **“Total Historical Vends”** and **“Vends By Selection”** may also be retrieved with the door closed after entering passcode. (Refer to “OPTS”, selection 5). After passcode, vends by selection may be reset by pressing selection switches 1 And 4 at the same time and holding for 3 seconds.

ALTERNATE TEST VEND		
DISPLAY	HOW TO DISPLAY	ACTION
“.00” OR “(VEND PRICE)” (With inner and outer doors separated)	Control board automatically reverts to this display from “Sales Information” Or “Control Operation & Programming” after 15 seconds of inactivity.	All vend and cash activities effect special test meters (counters) only and will not change normal (Door Closed) vend or cash meters.

CONTROL OPERATION & PROGRAMMING SUMMARY		
MODE	OPERATION	RESULT/RESPONSE
CHANGE PAY OUT “CPO” (Press Mode Switch One Time)	Press Selection Switch 1	.05  Pay Out
	Press Selection Switch 2	.10  Pay Out
	Press Selection Switch 3	.25  Pay Out
	Press Selection Switch 4	\$1.00 Coin Pay Out (If Coin Changer is Available)
COLUMN TEST VEND “TEST” (Press Mode Switch Two Times)	Press Selection Switch 1	Increases Displayed Column Number
	Press Selection Switch 2	Decreases Displayed Column Number
	Press Selection Switch 3	Vends Displayed Column Number
PRICE SETTING “COST” (Press Mode Switch Three Times)	Press Any Selection Switch	Selection’s Current Price Is Displayed
	Press And Hold Same Selection	Selection’s Price Increases
	Press And Hold Same Selection	Selection’s Price Decreases

CONTROL OPERATION & PROGRAMMING SUMMARY

MODE	OPERATION	RESULT/RESPONSE
OPTIONS "OPTS" (Press Mode Switch Four Times)	Bill Handling Press Selection Switch #1 (Continue to press #1 until desired setting is reached.)	Bill Handling 1 = Force Vend if bill is accepted. Scavenger lever will return change. 2 = Change Machine 3 = Bill accepted is held in escrow. Scavenger lever will return bill.
	Correct Change Acceptance Press Selection Switch #2 (Continue to press #2 until desired setting is reached.)	Correct Change Vending 1 = Only correct change accepted for vend 2 = Correct change or greater accepted for vend 3 = Same as #1 Special Application Only 4 = Same as #2 Special Application Only
	Zero Indicator Press selection switch #3 (Continue to press #3 until desired setting is reached.)	"o" in Display to Indicate Sold Out or Jammed Column(s) 1 = On 2 = Off
	Fast Price Set Press selection switch #4 (Continue to press #4 until desired setting is reached.)	Fast Price Set 1 = Each selection's price set individually 2 = All selections same price as selection 1's price
	Door Closed Data Press selection switch #5 (Continue to press #5 until desired setting is reached.)	Door Closed Sales Data Retrieval 1 = Off 2 = On (After 5 seconds, displays passcode)
	Control Board Identification Press selection switch #6	Displays control board ID and software revision level (Example: "1 5.1 1061")

CONTROL OPERATION & PROGRAMMING SUMMARY

MODE	OPERATION	RESULT/RESPONSE
OPTIONS TWO "OPT 2" (Press Mode Switch Five Times) Options 2 Is Used Only On Models With VEC 5.1-1061. All Settings Should Remain At Factory Unless Special Applications Apply.	Acceptance Non-Tube Coins (Special application Only) Press selection switch #1 (Continue to press #1 until desired setting is reached.)	Acceptance of Non-Tube Coins 5 = Must have adequate change for existing credit, value of Non-Tube coin, and for all possible selections. (Factory Setting, USA) 6 = Must have adequate change for existing credit and value of Non-Tube coin (International)
	Multi-Vend Option (Special Application Only) Press selection switch #2 (Continue to press #2 until desired setting is reached.)	Allows Single Or Multiple Vends From One Purchase 5 = Does not allow multiple vends. (Factory Setting) 6 = Allows multiple vends.
	Product Count Press selection switch #3 (Continue to press #3 until desired setting is reached.)	Product count displays history of product vended. 5 = Count shows vends per selection. (Factory Setting) 6 = Count shows vends per price.
	Change Pay-Out (Special Application Only) Press selection switch #4 (Continue to press #4 until desired setting is reached.)	Change paid out when money is accepted. 5 = Yes, pay out change after selection is made. (Factory Setting) 6 = No, remaining credit will be erased after selection is made.

CONTROL OPERATION & PROGRAMMING SUMMARY

MODE	OPERATION	RESULT/RESPONSE
SPACE TO SALES "SSS"	TO DISPLAY CURRENT COLUMN TO SELECTION CONNECTIONS:	
	Press and release any selection	Displays current column(s) connected to that selection
(Press Mode Switch Six Times)	TO CONNECT AND DISCONNECT COLUMNS FOR A SELECTION:	
	Press and release the selection to be changed. Then press and hold same selection again for 3 seconds	Display shows "CO 1" (Column 1). Displayed column number may or may not flash. Flashing = Column is connected to the selection Continuous = Column is not connected to the selection
	Selection Buttons 1,2, 3 and 4 are now used as programming buttons to connect and disconnect columns.	
	Press (Selection) Switch 1	Increases displayed column number
	Press (Selection) Switch 2	Decreases displayed column number
	Press (Selection) Switch 3	Changes connection status of displayed column number
	Press (Selection) Switch 4	Records and ends connection changes for the selection. Display returns to SSS beginning.
	<i>Buttons 1,2,3 and 4 are used as selection switches again. After connection changes are made and door is closed, the new settings will be displayed.</i>	

CONTROL OPERATION & PROGRAMMING SUMMARY

MODE	PREPROGRAMMED SPACE-TO SALES CONFIGURATIONS										
QUICK SET SSS "SSSS" (Press Mode Switch Six Times to Display SSS. Then Press Reset Button Twice.)	SETTING	10	9	8	7	6	5	4	3	2	1
	SEL #	COL	COL	COL	COL	COL	COL	COL	COL	COL	COL
	1	1	1,2	1	1,2	1	1	---	---	1	1
	2	2	3	2	3	2	2	---	---	---	2
	3	3	4	3	4	3	3	---	---	---	3
	4	4	5	4	5	4	4	---	---	---	4
	5	5	6	5	6	5	5	---	---	---	5
	6	6	7	6	7	6	---	---	---	---	6
	7	7	8	7	8	---	---	---	---	---	7
	8	8	9	8	---	---	---	---	---	---	---
	9	9	10	---	---	---	---	---	---	---	---
10	10	---	---	---	---	---	---	---	---	---	

After "SSSS " is displayed, selection switches 1-10 are used to obtain desired settings. The most commonly used setting can be obtained by using the last selection switch.

TIMER CONTROL "TCTL" (Press Mode Switch Seven Times)	<i>NOTE: This mode has no meaning or effect for vendors as produced. This mode is effective only when an optional timer or key switch device is installed.</i>	
	Press any selection switch	Displays Selection's Current Setting Yes = Always vends regardless of timer No = Vending controlled by timer operation
	Press Same Selection	Changes Selection's Setting (Factory Setting = All Selections Set to No)

For detailed instructions refer to the Service & Operation Manual or you may call the Technical Services Department of The Vendo Company at 800-344-7216 or 559-439-1770.

2/10/96

1. PRODUCT

12 OZ. CANS - 2.60 x 4.84 Long

2. PRODUCT CAPACITY

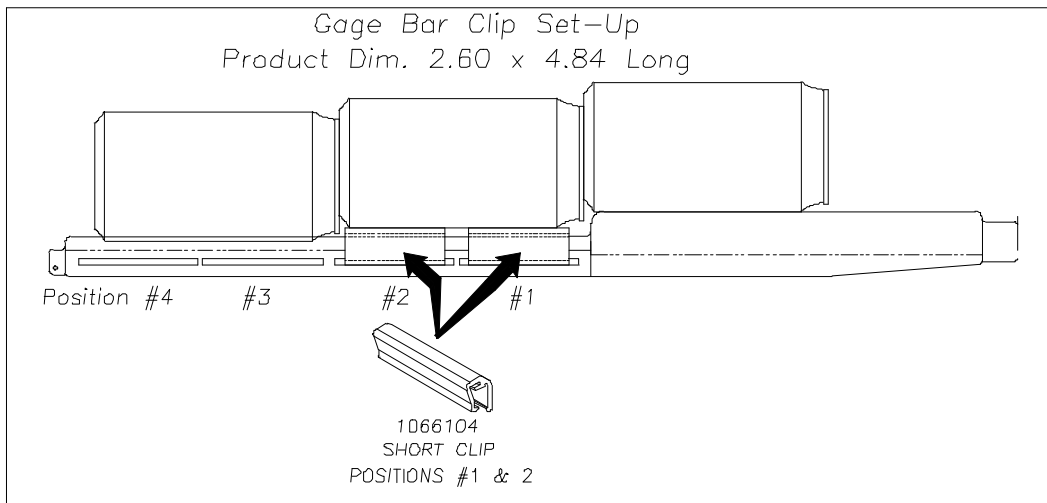
48 PER COLUMN - 72", 57 PER COLUMN - 79"

3. SET UP GUIDE UNIVENDOR-2

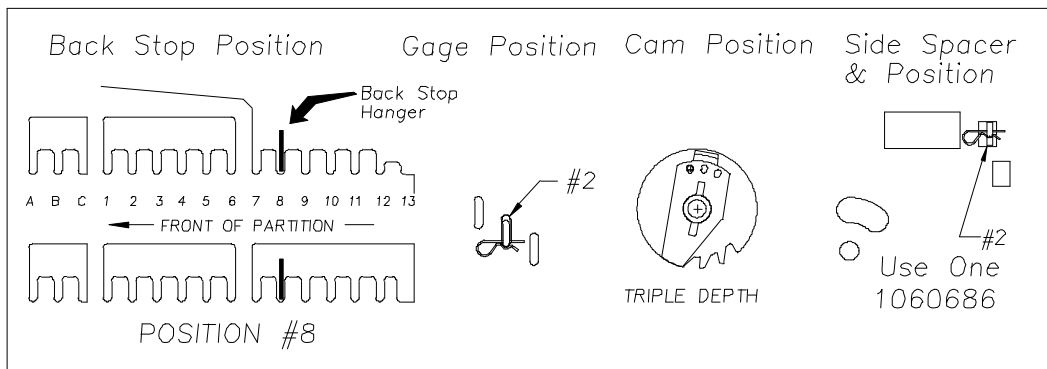
Product	CAM POSITION	BACK SPACER	GAGE BAR	Sold out Lever	SIDE SPACER	GAGE BAR CLIP	
						Part No.	Position
12 oz CANS	3	8	2	389242 SHORT	1060686	1066104 White	1 & 2

Note: To properly vend 12 oz. Cans. The Univendor-2 must have the columns setup correctly.

4. GAGE BAR CLIP SET UP.



5. SET UP GUIDE.



6. SOLD-OUT LEVER TO BE SHORT STYLE WITH FRONT SPACER. SPRING TO BE LOCATED ON THE RIGHT SIDE (LOW PRESSURE SETTING).

1. PRODUCT

20 OZ. STRAIGHT WALL PET BOTTLE - 2.90 Top x 8.00 Long

2. PRODUCT CAPACITY

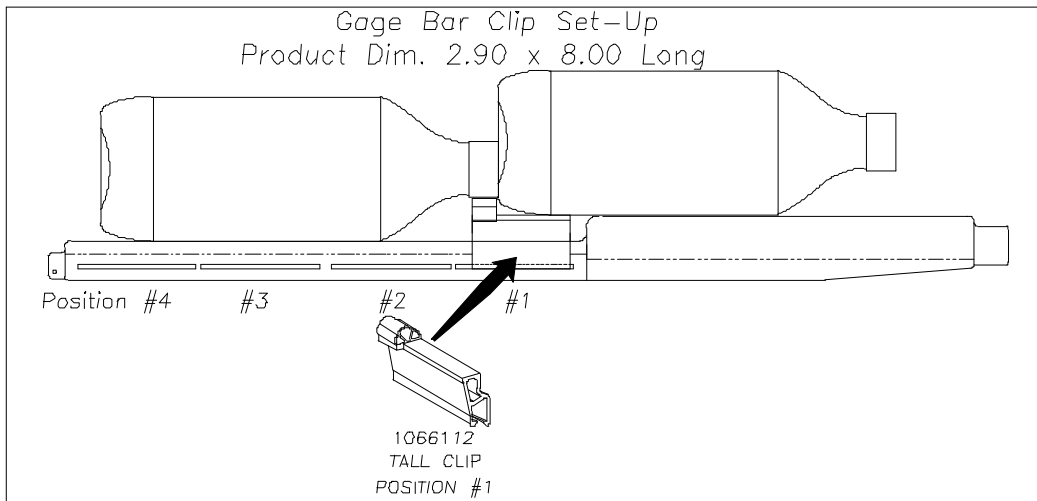
28 PER COLUMN - 72", 32 PER COLUMN - 79"

3. SET UP GUIDE UNIVENDOR-2

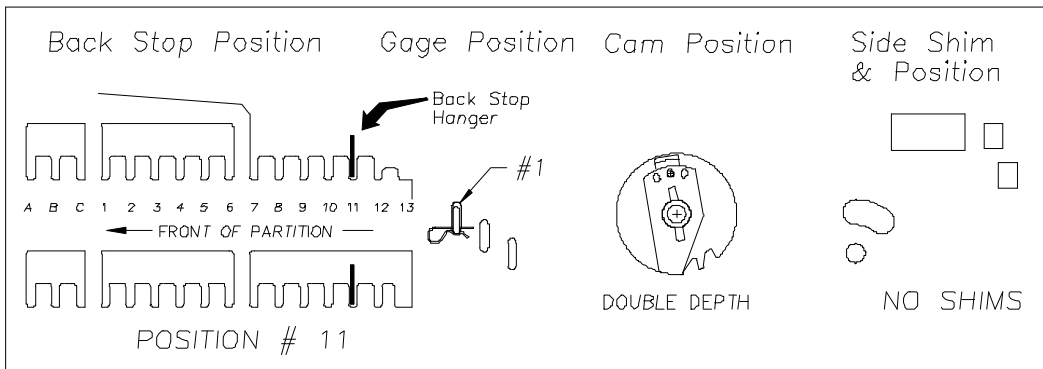
Product	CAM POSITION	BACK SPACER	GAGE BAR	Sold out Lever	SIDE SHIM	GAGE BAR CLIP	
						Part No.	Position
20 oz Straight Wall	2	11	1	389242 SHORT	NONE	1066112	1

Note: To properly vend 20 oz. Straight Wall. The Univendor-2 must have the columns setup correctly.

4. GAGE BAR CLIP SET UP.



5. SET UP GUIDE.



**6. SOLD-OUT LEVER TO BE SHORT STYLE WITH FRONT SPACER.
SPRING TO BE LOCATED ON THE RIGHT SIDE (LOW PRESSURE SETTING).**

1. PRODUCT

473 ML, 16 OZ. ARROWHEAD - WATER PET BOTTLE - 2.58 x 7.50 Long

2. PRODUCT CAPACITY

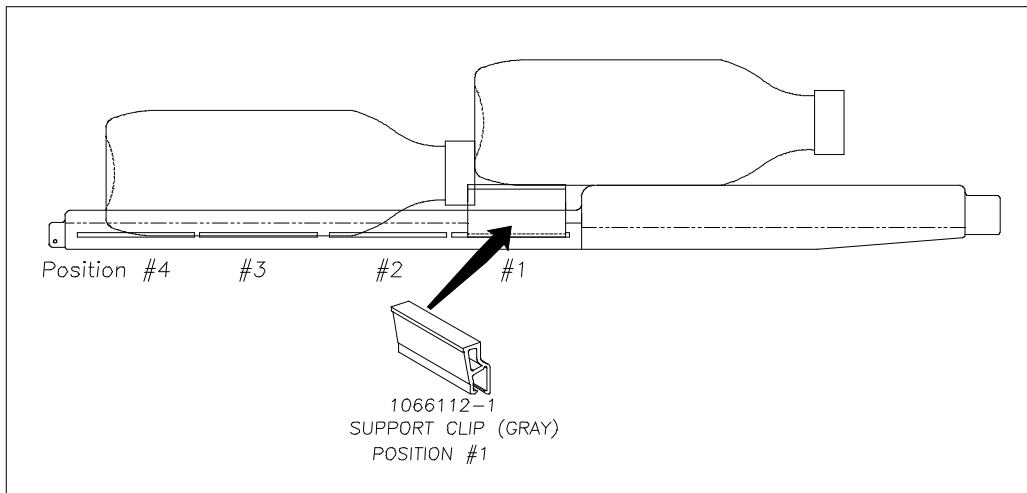
34 PER COLUMN - 72", 44 PER COLUMN - 79"

3. SET UP GUIDE UNIVENDOR-2

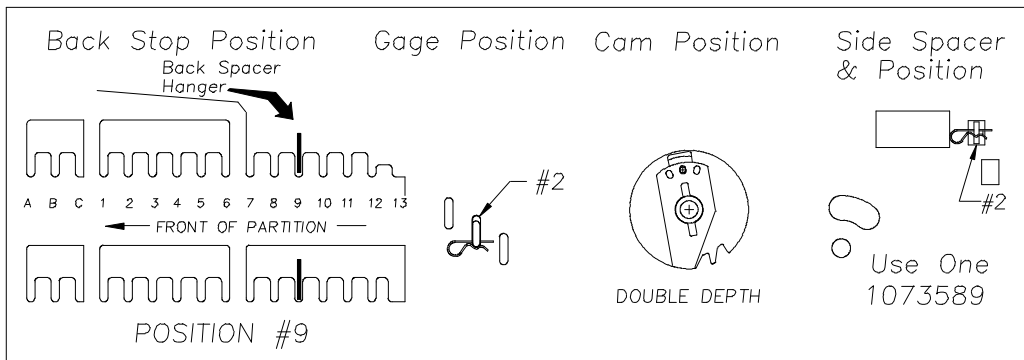
Product	CAM POSITION	BACK SPACER	GAGE BAR	Sold out Lever	SIDE	GAGE BAR CLIP	
					SPACER	Part No.	Position
16 OZ Arrowhead	2	9	2	389242 SHORT	1073589	1066112-1	1

Note: To properly vend Arrowhead 16oz.The Univendor-2 must have the columns setup correctly.

4. GAGE BAR CLIP SET UP.



5. SET UP GUIDE.



6. SOLD-OUT LEVER TO BE SHORT STYLE WITH NEW FRONT SPACER #1077457. SPRING TO BE LOCATED ON THE RIGHT SIDE (LOW PRESSURE SETTING).

7. FOR OTHER PRODUCT SET UP GUIDES CONTACT VENDO COMPANY. TEL: (209) 439-1770 FAX: (209) 439-2083.