# Vendo® Installation Instructions

The Next Dimension in Technical Service Information

**Kit Number:** 1184117 **Date:** 8-19-09

Installation Instructions: 1184105 Rev: A

**Subject:** Update the machine with current software **ECN:** 51537

Vendors: All VUE 30 and 40 machines Rev. Date: N/A

**Purpose:** To update older machines to current production level.

Parts List		
Quantity	Part Number	Description
1	1149131-61	VMC Software, VEC 15
1	1149143-19	PDC Software, Old Board
1	1179936-2.01	PDC Software, New Board
1	1165525	Harness, X-rail Ground
1	1167741	Harness, TVS Diode, Y-motor
1	1165317	Brkt, Y-motor Retainer
1	1184129	Adapter Tab, Grounding, X-Rail
2	1183394	Wire Nut, 22-16GA
1	V801489	Screw, #10-16 Self Tapping
2	1184099	Wire, Ground, Strip/Eyelet, 6 in.
1	1184105	Instl Instr, CCE Update, GFV

#### Installation

#### **PDC Software Update**

**Step #1** Identify which PDC software you need to update by identifying the PDC board located in the hand.

Step #2 Open the door.

Step #3 Press "Mode Button" on the VMC Board.

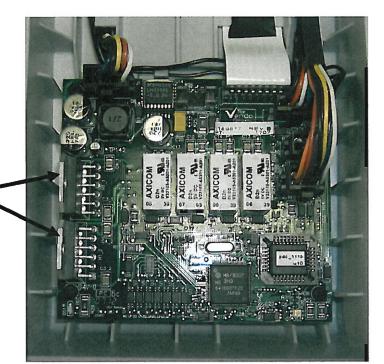
**Step #4** The Display should read "Diagnostics".

**Step #5** Press '2' to navigate to "Calibration". (Press Button '2', four times)

**Step #6** Press '4' to enter "Calibration".

Step #7 Display should read "PDC Software Maintenance Off".

- **Step #8** Press '4' to enter "PDC Software Maintenance" -"Off" should blink.
- Step #9 Press '2' to Change PDC Software Maintenance to "On".
- **Step #10** Press '4' to set. The PDC should move to the top of the machine and extend the hand.
- **Step #11 Power off** the machine by disconnecting the power source.
- **Step #12** Refer to the pictures below to identify which PDC board you have and which EPROM to use.



#### OLD BOARD: USE EPROM 1149143-19

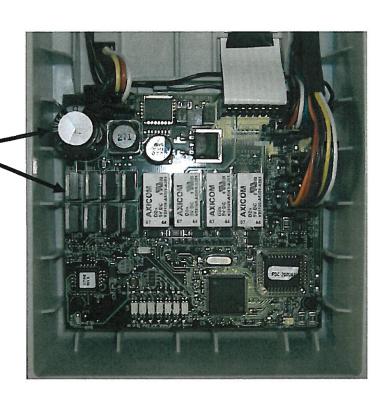
The old board has 2 motor drivers and no large capacitor.

PDC 1.19

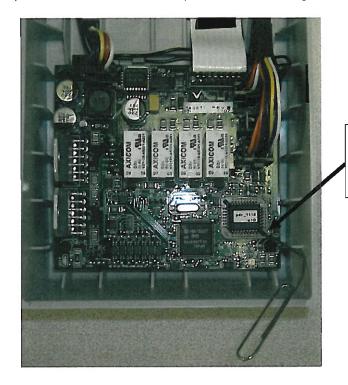
#### NEW BOARD: USE EPROM 1179936-2.01

The new board has 8 motor drivers and one large capacitor.

PDC 2.01



Step #13 Using a paper clip that has been unfolded, pull out the existing PDC EPROM.

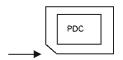


Use a bent paper clip to pry the current EPROM out of the board from the corner

Step #14 Insert the new corresponding EPROM.

Please note: The cut corner of the chip should be placed so that it is on the bottom left of the chip socket in the PDC Board.

Cut Corner on the PDC Software



### VMC Software Update

- **Step #1** With the power still off, remove the control board cover from the lower insulated panel.
- **Step #2** Using a paper clip that has been unfolded, pull out the existing VMC EPROM.
- Step #3 Insert the new VMC software (p/n 1149131-61).

Please note: The cut corner of the chip should be placed so that it is on the bottom left of the chip socket in the VMC Board.

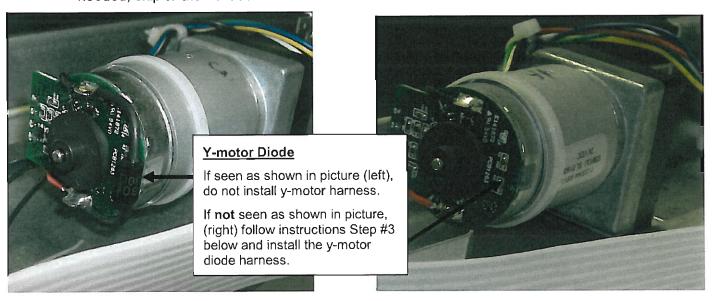
Cut Corner on the VMC Software



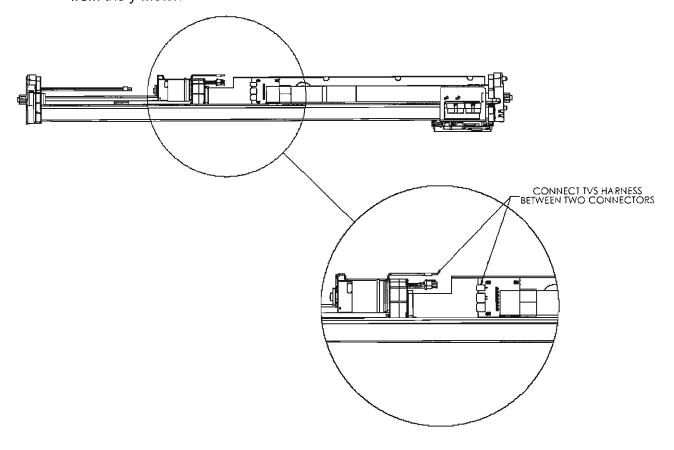
**Step #4** Replace power to the machine and allow the hand to go through its startup.

#### Y-Motor Diode

- **Step #1** Remove the x-rail cover.
- Step #2 Refer to the pictures below to determine if you need to install the y-motor diode harness. If not needed, skip to the next section.

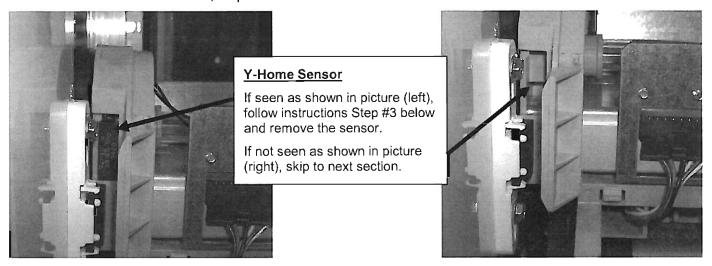


**Step #3 POWER OFF** the machine and install the y-motor diode harness (p/n 1147741) between the top connector on the PC board next to the y-motor and the red and black wire connector coming from the y-motor.

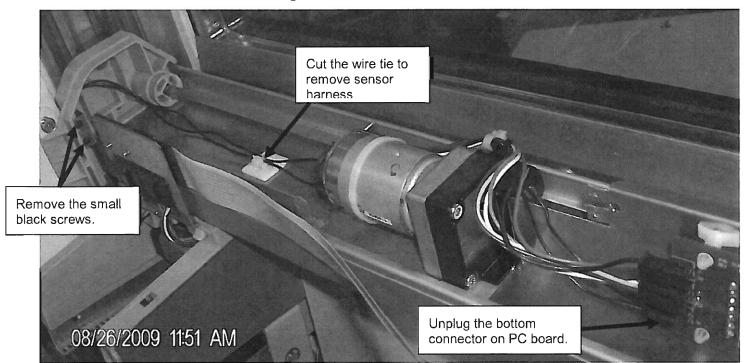


## Y-Home Switch Removal

- **Step #1** Remove the x-rail cover and look at the left side end cap.
- **Step #2** Refer to the pictures below to determine if you need remove the y-home sensor. If it does not need to be removed, skip to next section.



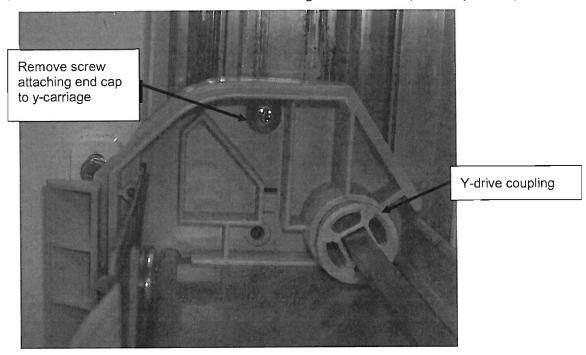
Step #3 Remove the y-home sensor by removing the (2x) small black screws holding the bracket against the left x-rail end cap. Unplug the harness from the bottom connection located on the PC board and cut the wire tie attaching the harness to the rail.



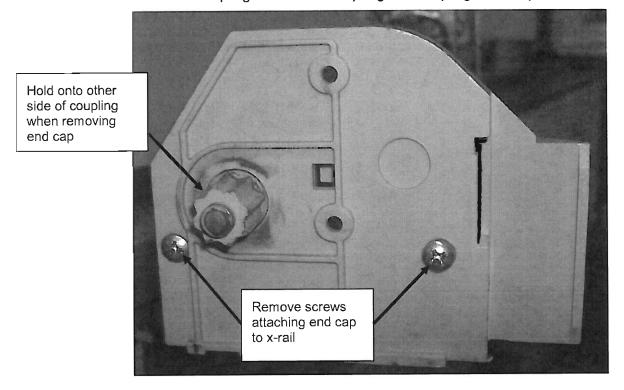
## **Grounding Harness Installation**

# NOTE: Refer to page 12 for picture of grounding hamess installed.

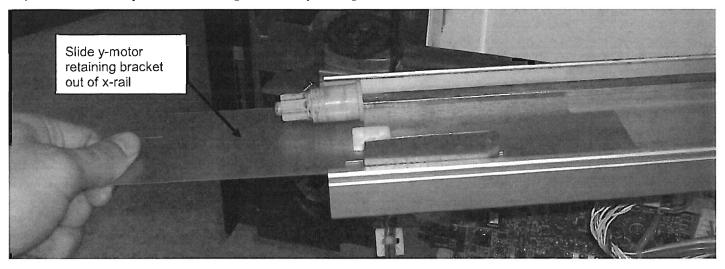
**Step #1** Remove the x-rail cover and remove the screw attaching the left end cap to the y-carriage.



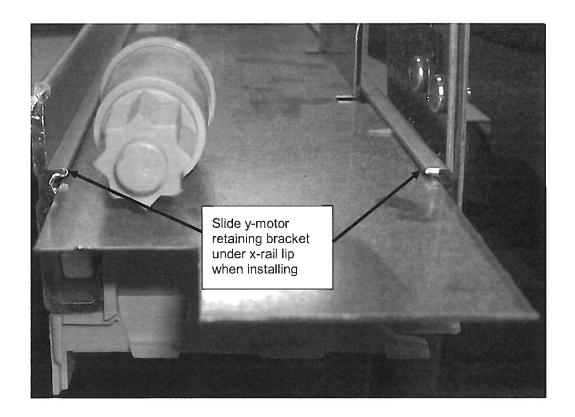
Step #2 Remove the x-rail from the y-carriage by pulling the y-drive coupling away from the end cap. See photo above. Remove screws securing the left end cap to the rail. When pulling the end cap off, hold other side of coupling to ensure the spring and coupling do not fly off.



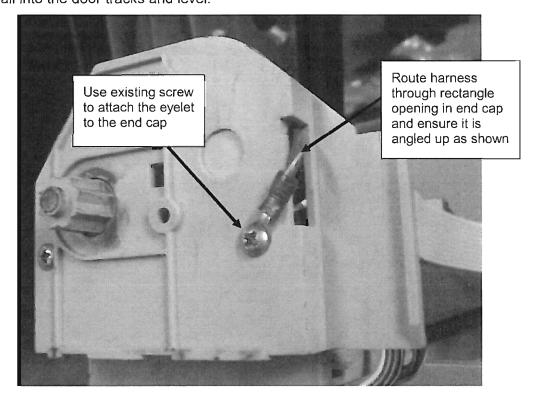
**Step #3** Remove y-motor retaining bracket by sliding it out of the x-rail.



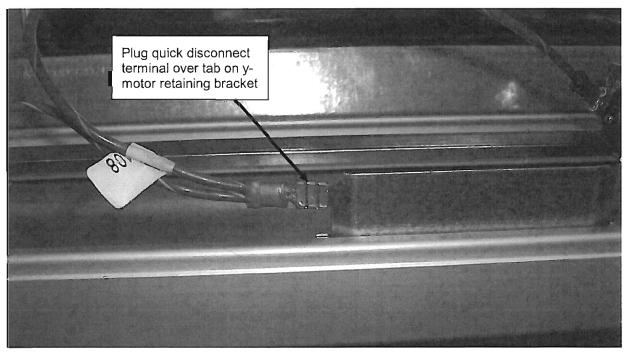
**Step #4** Slide in new y-motor retaining bracket with grounding insert (p/n 1165317) into x-rail. Rail should slide under upper lip of x-rail.



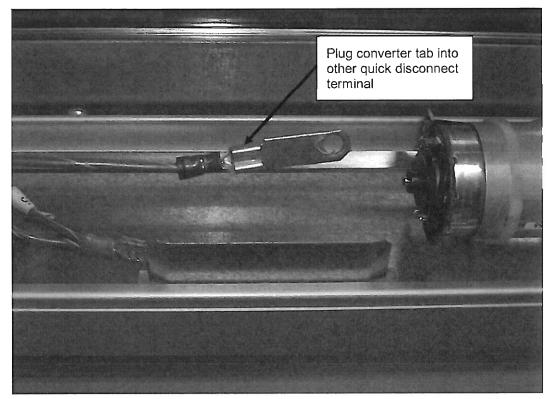
Step #5 Replace the end cap to the rail, attaching the end of the x-rail grounding harness (p/n 1165525) with the eyelet into the x-rail using the existing screw. Route the harness through the rectangle opening in the end cap. Ensure the harness is angled up as shown below to prevent interference. Replace the x-rail into the door tracks and level.



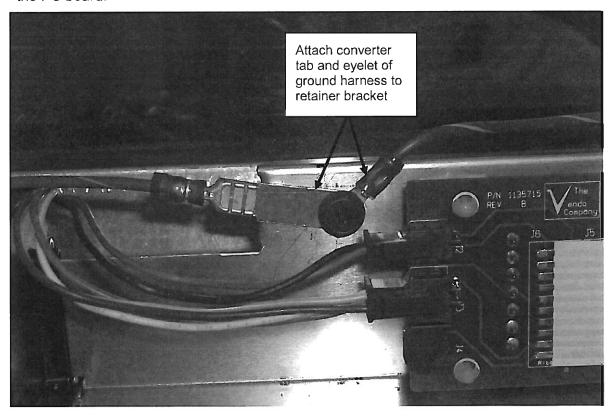
**Step #6** Plug the middle quick disconnect terminal over the tab on the y-motor retaining bracket.



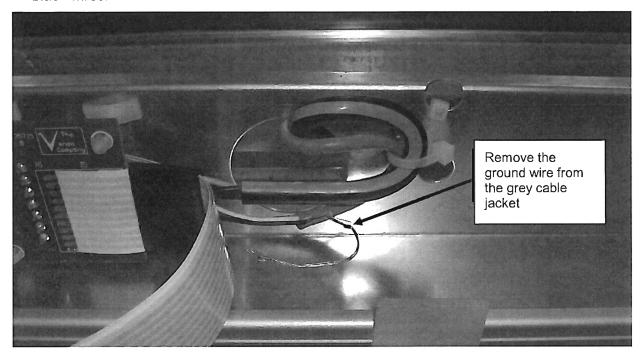
Step #7 Plug the converter tab (p/n 1184129) into the other quick disconnect terminal.



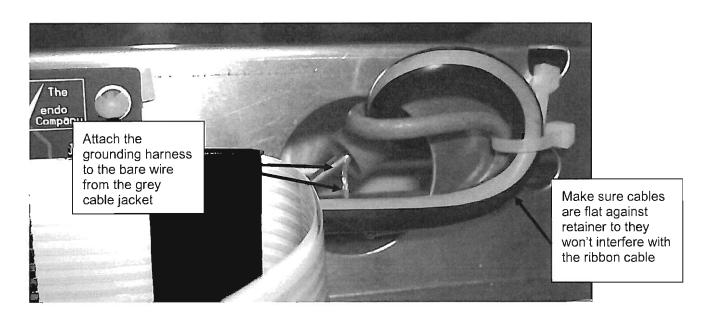
Step #8 Next, use the self tapping screw (p/n V801489) to attach the other end of the converter tab and the eyelet of the ground wire (p/n 1184099) included in kit to the right side motor retainer bracket next to the PC board.



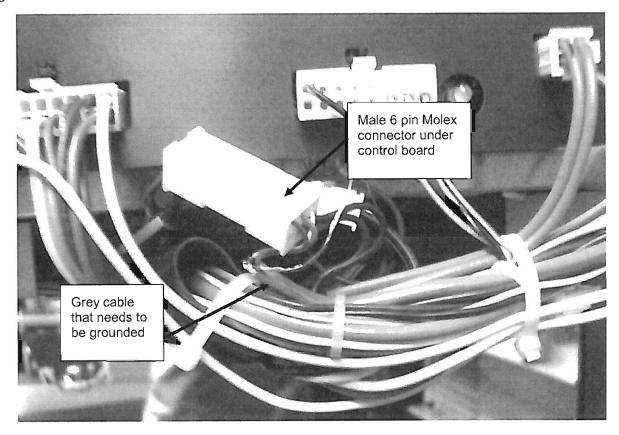
**Step #9** Cut grey cable jacket open with knife to expose the ground wire. Be careful to not cut the red or black wires.



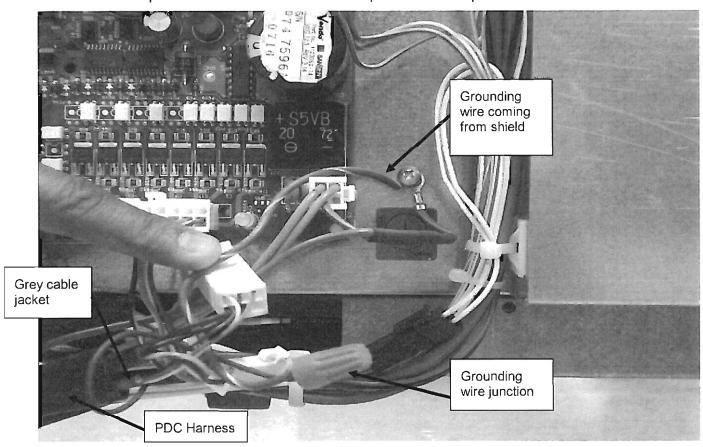
Step #10 Route the grounding harness behind the right motor retainer. Using the wire nut (p/n 1183394), attach the bare end of the grounding harness to the ground wire pulled from the cable jacket in Step #4. Ensure the cable will not interfere with the ribbon cable during movement.

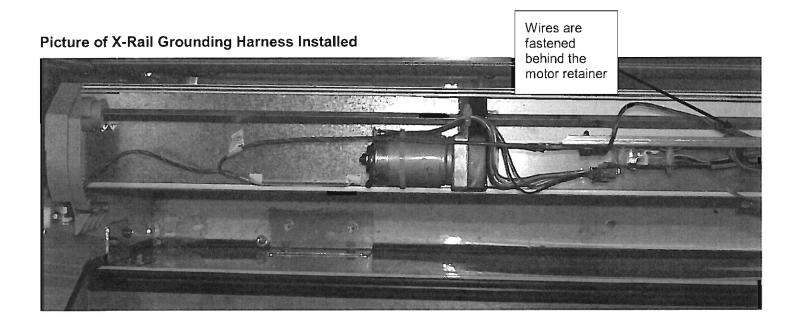


Step #11 Check the other end of the PDC harness that attaches to the VMC control board and ensure that it is grounded. If not, proceed to Step #7. If harness is grounded, replace the control board cover and proceed to test procedure. To check if grounded locate the grey cable jacket coming from the PDC harness coming from underneath the control board. The harness has a 6 pin male Molex connector attached at the end. The grey cable leading up to that Molex connector is the one that needs to be grounded.



Step #12 Cut the grey cable jacket and expose the ground wire. Extend the ground wire by adding green wire (p/n 1184099) included in kit using the wire nut (p/n 1183394). Remove the grounding screw on the lower right side of the board and wrap the other end of the green wire around it. Replace the screw. Replace the control board cover and proceed to test procedure.





#### **Vending Test Procedure**

- **Step #1** Plug in the machine and follow the procedure to activate "Discovery Level 2".
- **Step #2** Enter the Service Mode by pressing the Mode Button on the VMC board.
- Step #3 Press "2" to scroll to "Calibration".
- Step #4 Press "4" to enter.
- Step #5 Press "2" to scroll to "Discovery".
- Step #6 Press "4" to enter.
- **Step #7** Press "4" to activate "Level 0" will flash.
- Step #8 Press "2" to scroll to "Level 2".
- **Step #9** Press "4" to enter. Display will read, "Pls Close Door".
- Step #10 Close the door and press "1" if the display reads "Press 1 to Accept". Otherwise, the machine will perform automatically. The PDC hand will scan the right most tray location first and then proceed to the left most tray locations before returning to the "home" position.
- **Step #11** Open the door again and press the Mode Button on the VMC board.
- **Step #12** Press "2" to scroll to "Test Mode".
- **Step #13** Press "4" to enter "Vending" will be displayed.
- **Step #14** Press "4" to enter "Close Door to Vend" will be displayed.
- Step #15 Close the door and vend from the four corners, selections "10", "17", "50" and "57". During each vend, ensure that the hand is aligned in the middle of the center gate.

## **Vendor Update Verification Form**

Fill out form and fax to SandenVendo America engineering department at **(214) 221-7014**. Also ensure that you return the unused and replaced EPROMS to receive credit.

Name of Technician:	Date of Upgrade:
Unit Serial #:	
Was a Y-home switch removed? Y / N	
Did the vendor have a lower ground wire connec	tion at the VMC board? Y / N
Did the VMC EPROM get replaced? Y / N	
Did the PDC EPROM get replaced? Y / N	
Was the vending test procedure performed? Y /	N
Were there any issues observed/discovered duri	ng testing? Y/ N
If there were issues, please describe:	
	_
List any other notes or observations:	