

# AP 6000/7000/110 RETROFIT SENSOR KIT INSTALLATION INSTRUCTIONS

## 1. Kit Components

Locate the Sensor kit within your AP VMC Retrofit kit. This kit contains a Primary Sensor board mounted on a bracket, a Secondary Sensor board, and a Secondary Sensor shield. The two boards are connected by a 60" round Sensor cable. Another longer cable, the Sensor to VMC, is attached to the Primary board. **See Figure 1.**

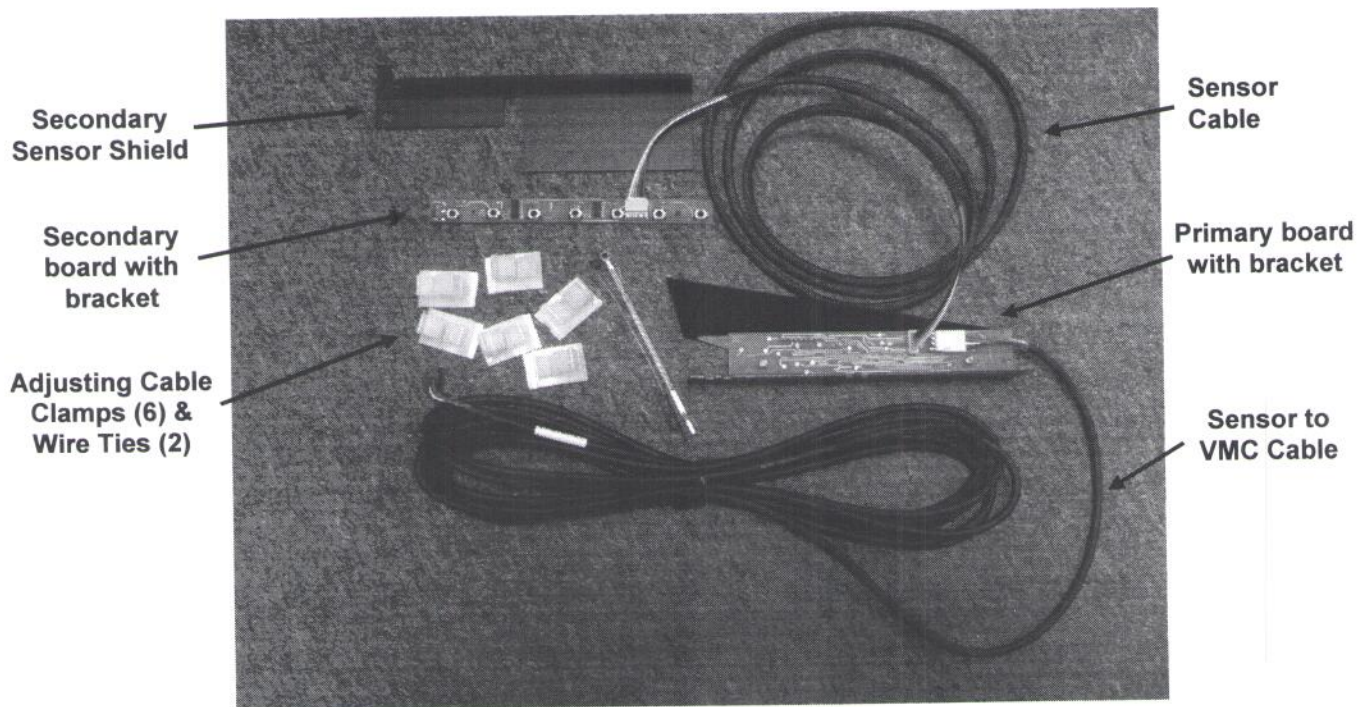


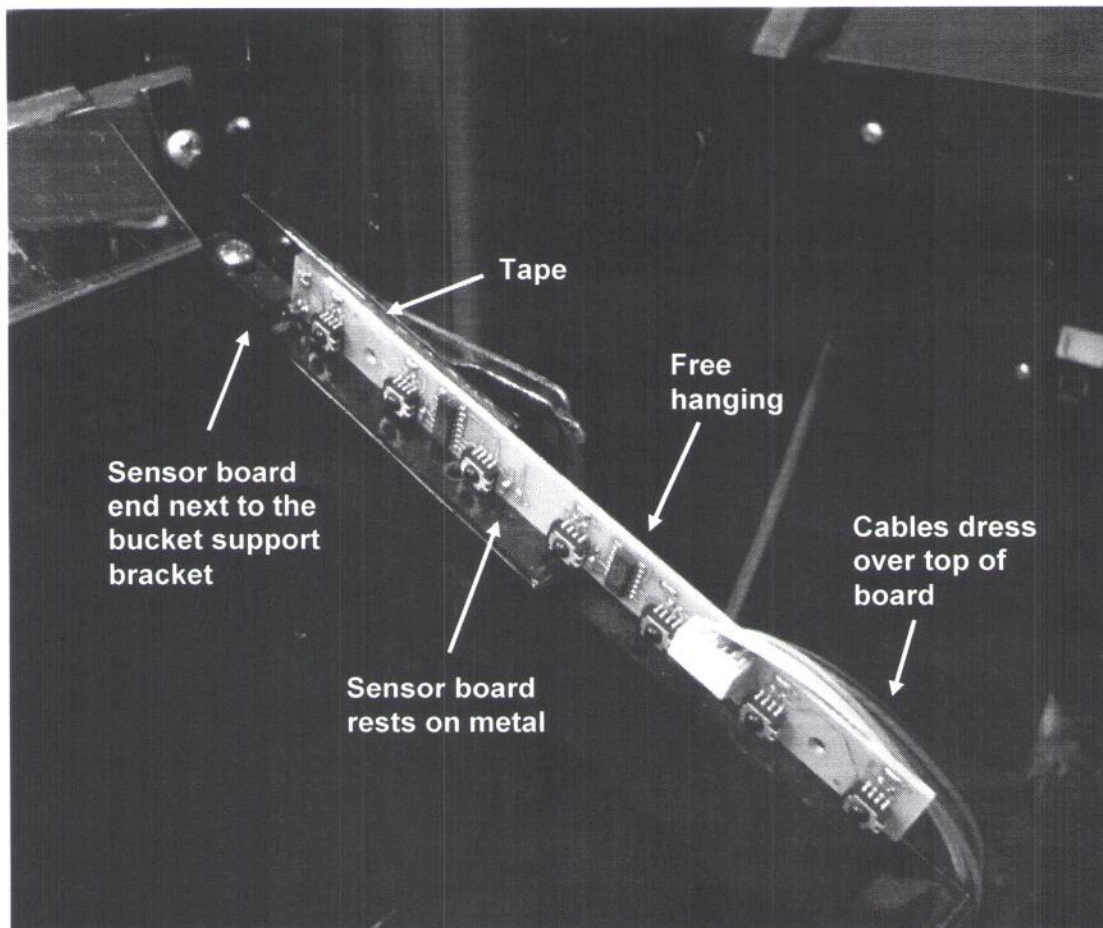
Figure 1

## 2. Secondary Board

The Secondary Board gets mounted with double sided tape to the vertical side edge of the drop bin on the hinge side of the door. The board is positioned close to the product window with the sensor board end next to the bucket support bracket. The row of sensors are on the bottom.

**Before installing, clean the vertical edge with a dry cloth so it's free of any dirt or grime.**

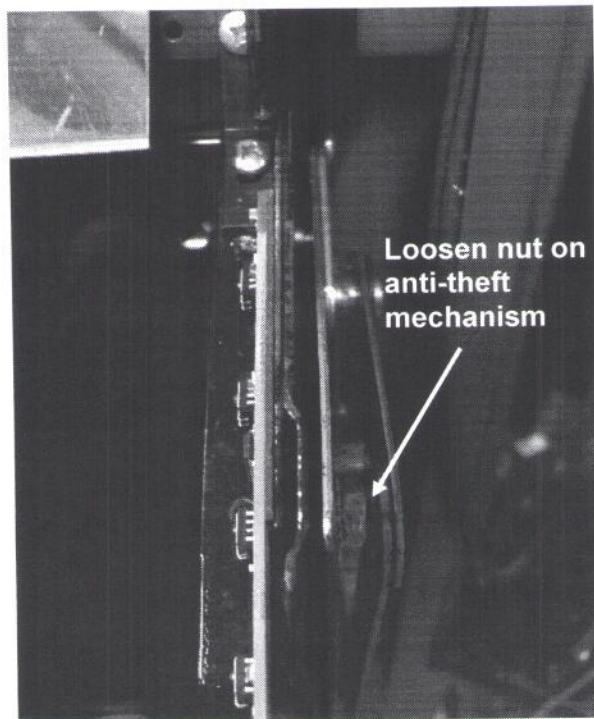
Remove the tape backing on the sensor board and stick the board to the vertical side edge. Apply pressure to enhance the adhesive bonding. Note that the upper part of the board rests on the metal; however the lower part does not touch anything. Dress the cable wires over the top edge of the board so they don't interfere with the sensors. **Figure 2a** shows the mounted board.



**Figure 2a**

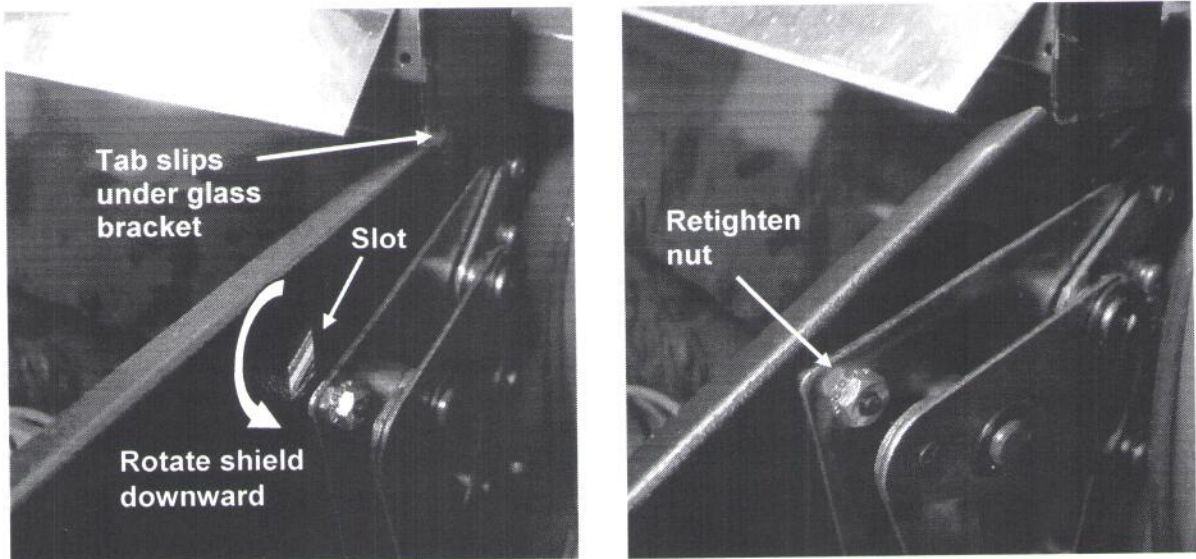


Loosen the nut on the mechanism as shown in **Figure 2b**.



**Figure 2b**

Slip the Secondary Sensor Shield tab under the glass mounting bracket and the slot over the screw that the nut was holding. Rotate the shield downwards so it gets trapped in the bracket and the mechanism. Retighten the nut. **Figure 2c** shows the shield mounting.



**Figure 2c**

### 3. Primary Board & Bracket

Note the Primary Sensor bracket has two pairs of mounting notches for the screws as shown in **Figure 3a**. It is important to use the correct notches so that the bracket fits as close to the window as possible.

- >> The AP6000/7000 machines use the upper notch pairs.
- >> The AP110 machines use the lower notch pairs.

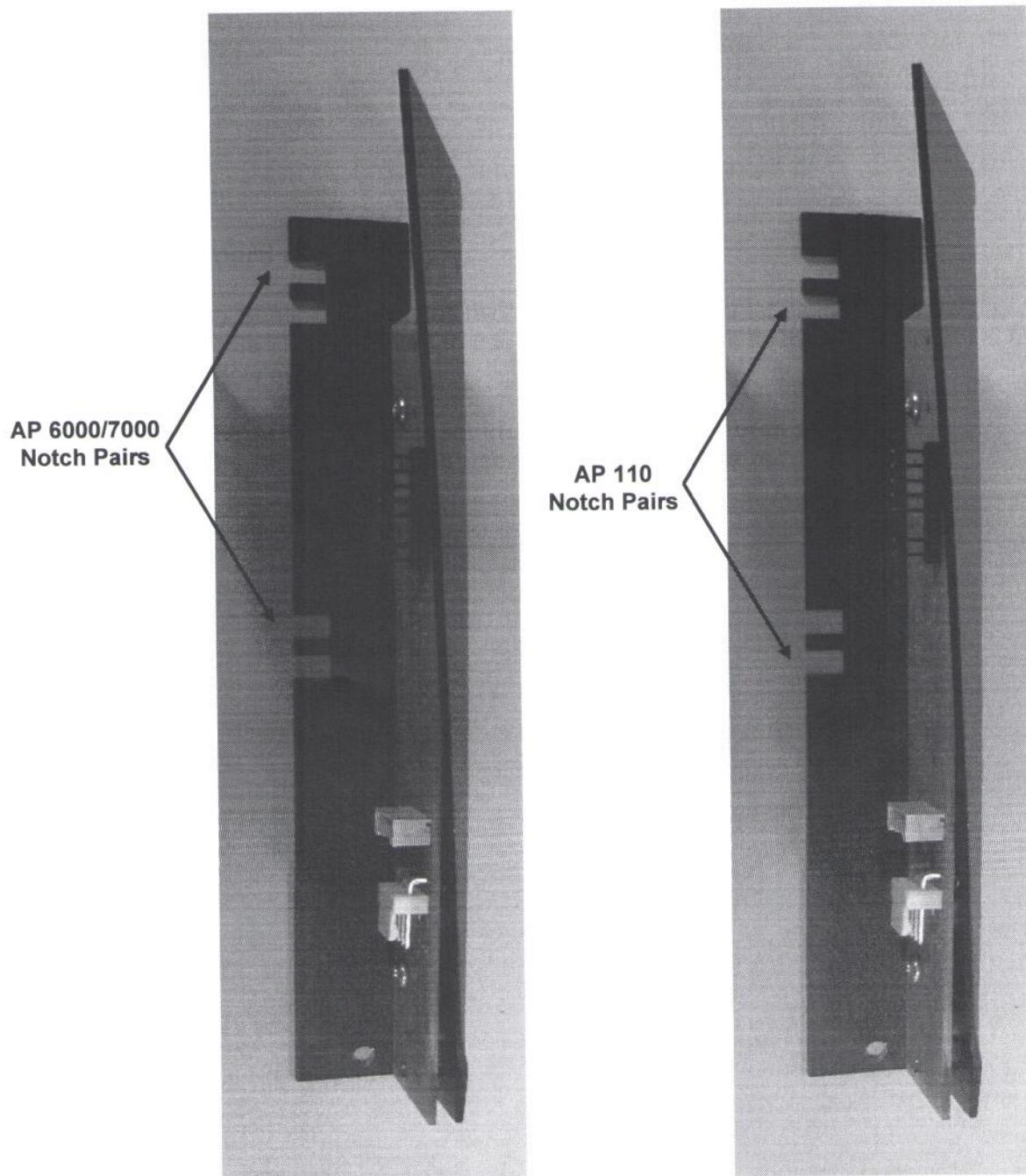
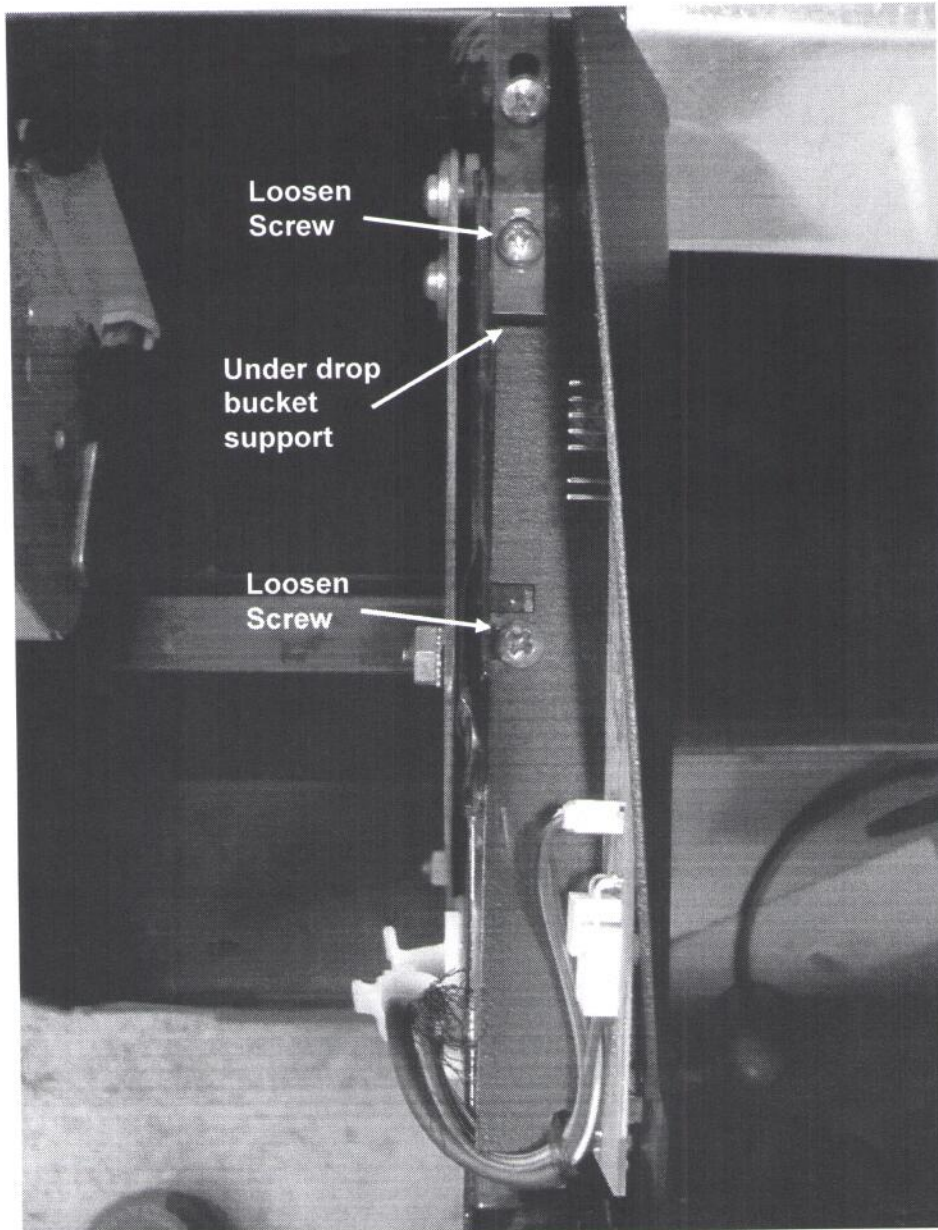


Figure 3a



Loosen the two drop bin mounting screws on the non-hinge side of the door and slide the Primary Board & Bracket under the screws. Note that the bracket goes under the drop bucket support. Retighten the screws. Refer to **Figure 3b**.



**Figure 3b**

#### 4. Sensor and VMC Cable Connections

Confirm the Primary and Secondary Sensor boards are connected with the Sensor Cable. The connectors are polarized so take note to how they are plugged in.

The Secondary Sensor side of the sensor cable is dressed down the edge of the drop bucket and across the bottom or rear (installer preference). Cable clamps should be used to hold the cable as shown in **Figure 4a**.

>>> Clean the area where the clasps go so it is free of any dirt or grime <<<

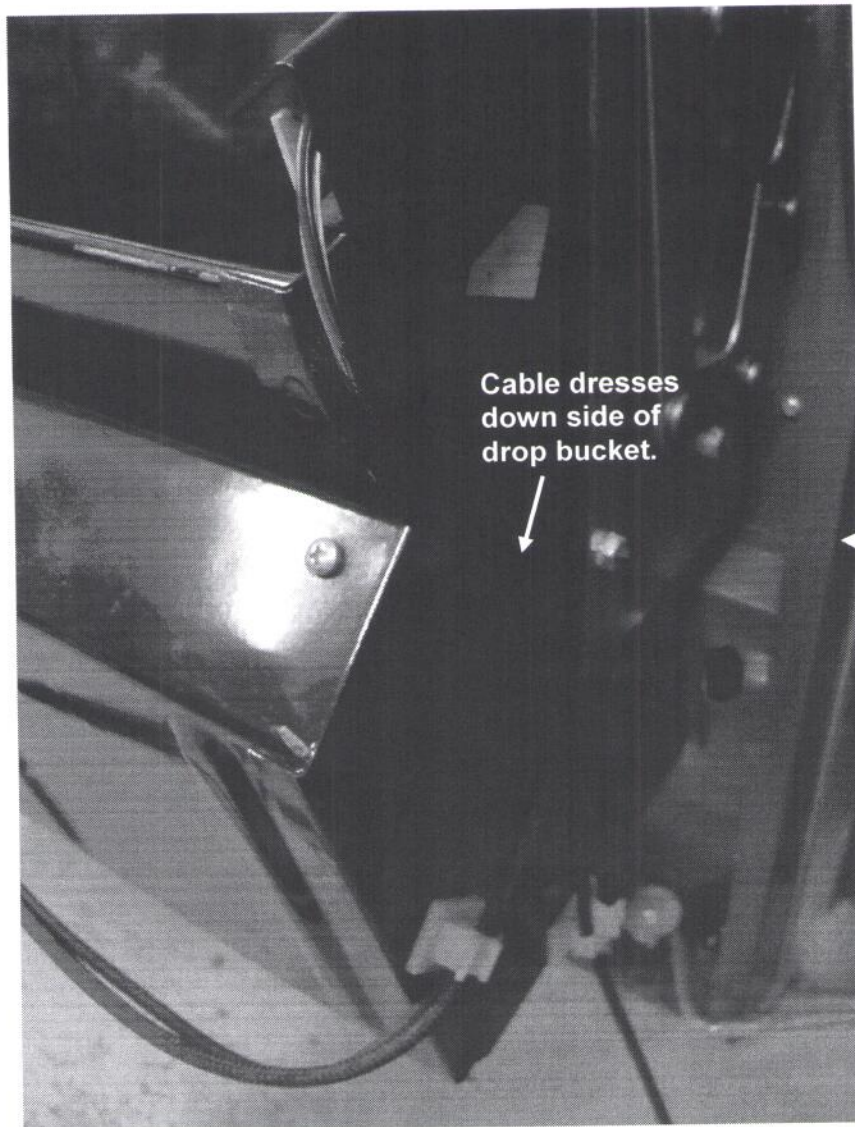
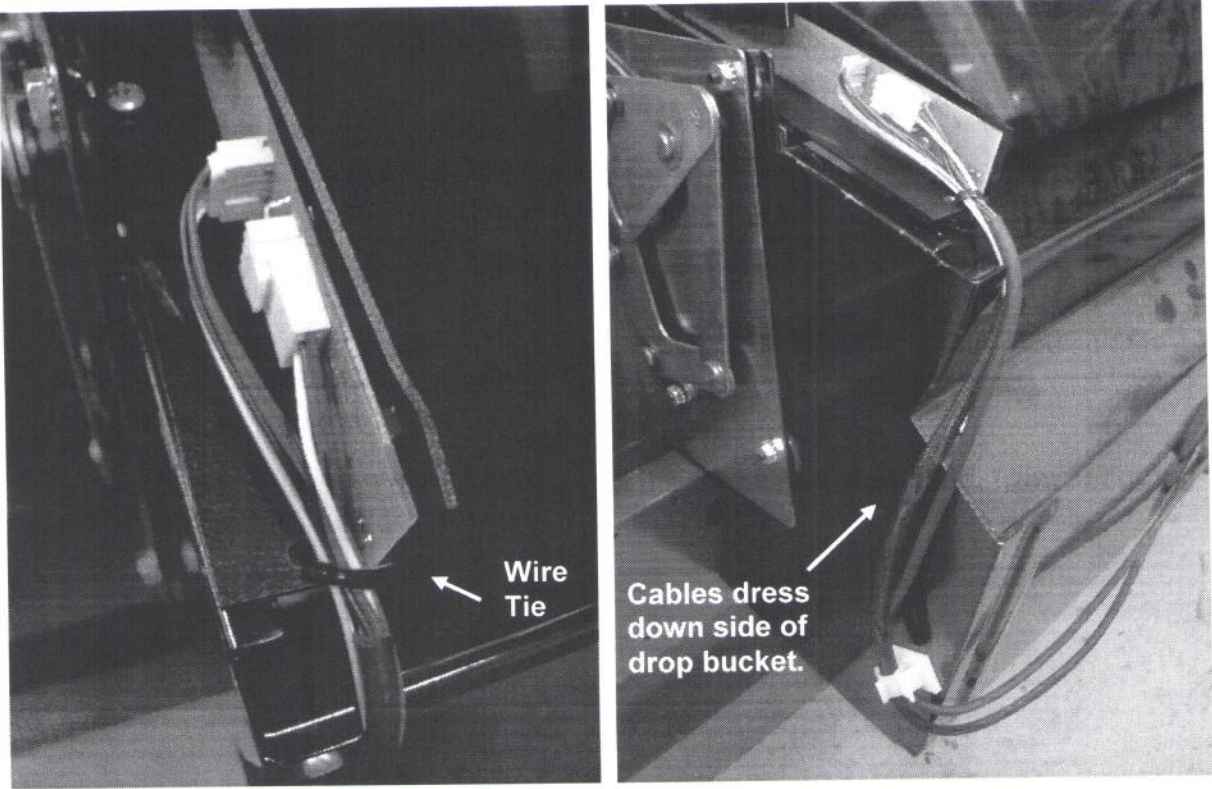


Figure 4a



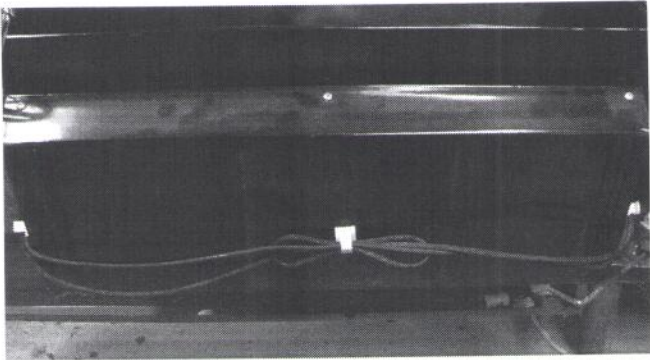
The Primary Sensor board side of the sensor and VMC cables should be dressed so the cables wrap around the back edge of the product bin as shown in **Figure 4b**. A wire tie is already installed to lock the cables to the bracket.

**It is very important to keep the cables tied to the bracket to keep them from snagging in the machine when the door is closed.**



**Figure 4b**

The remainder of the cable should run along the outside of the bin. Make sure the cables are **OUTSIDE** of the bin and not in the path of the boards. The two boards should be able to “see” each other with no obstructions. The cable can either be mounted across the rear of the bin as shown in **Figure 4c** or below the bin.



**Figure 4c**

## 5. Sensor to Vending Machine Controller (VMC) Cable Connections

Use the Sensor to VMC Cable that is already connected to the Primary Sensor board to connect to the controller. The unconnected end will plug into the VMC's **J3** Drop Sensor header. See **Figure 5** for recommended cable dress near the door hinge. Adjustable cable clamps are provided for routing the cable across the bottom of the cabinet. Insure the cable clamp shown is toward the rear of the vertical frame so the vend bin will close properly without hitting it.

>>> Clean the area where the clasps go so it is free of any dirt or grime <<<

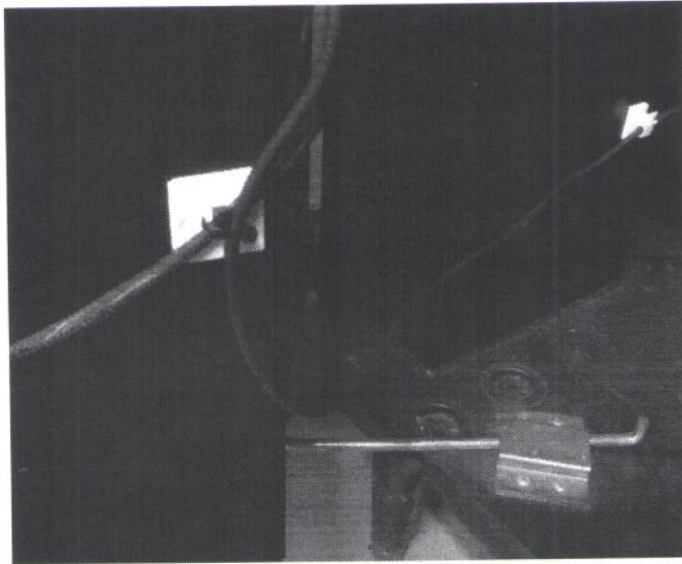


Figure 5

## 6. Door Closure Checkout – **IMPORTANT !!!**

Once the sensor kit is completely installed, close the door slowly to ensure that the Primary Sensor and cables clear all internal frame metalwork. Although unlikely, in the event that there is an interference, bend the metalwork slightly until there is sufficient room for the sensor to clear.