USI RETROFIT SENSOR KIT INSTALLATION INSTRUCTIONS

1. Kit Components

Locate the Sensor kit within your **USI VMC Retrofit** kit. This contains a set of Primary and Secondary Sensor boards mounted on brackets. Each is connected by a 60" round Sensor cable. Another longer cable, the Sensor to VMC, is attached to the larger of the two boards. **See Figure 1**.



Figure 1

2. Drop Bin Deflector Bracket Removal

Both of the deflector brackets on each side of the drop bin must be removed and won't be used again. For both sides, locate the drop bin anti-theft door mounting screw as shown in **Figures 2a & 2b**. Remove the nuts and brackets, but leave the screws in place temporarily to hold mechanism.



Figure 2a (Hinge Side)



Figure 2b (Swing Side)

3. Sensor Installation

The Primary Sensor goes on the hinge side of the drop bin as shown in **Figure 3a**. The Secondary Sensor goes on the swing side of the drop bin as shown in **Figure 3b**. The installation of both is the same. Remove the original screw and replace with the longer one supplied in the kit. Slide the bracket's slotted hole over the screw and rotate until the two pins on the bracket touch the top of the drop bin. Tighten the nut back onto the screw. Two new locking nuts are provided in the kit.



Figure 3a (Hinge Side)



Figure 3b (Swing Side)

A 1/8" hole has been provided in each bracket as a pilot hole for a secondary mounting screw. This can be used to drill through the bracket and drop bin for an additional screw on each side if desired. Two 8-32 screws and nuts are located in the kit.



4. Sensor 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.

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

The Primary and Secondary Sensor board sides of the cable should be dressed so the cable wraps around the back edge of the product bin. This prevents excess cable from being near the sensor where products could get hung on it. It also ensures the two boards are able to "see" each other with no obstructions.

The remainder of the cable should run along the outside of the bin down each side and across the bottom as shown in **Figure 4**. Five cable clamps are provided as needed to secure the cable. Routing the cable across the bottom prevents the excess from being caught in the gum dispenser mechanisms.



Figure 4

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 **J9** Drop Sensor header. See **Figures 5a** and **5b** for recommended cable dress near the door hinge. Three adjustable cable clamps are provided for routing the cable to the side and 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 5a

Figure 5b