

Installation Instructions for Drop Sensor in National Machines

Note: Additional Part (VE9300PD) will be needed on a National 148 and 158.

1) Remove deflector. Reinstall screw removed from front glass frame. Retain screw and nut removed from delivery bucket. **(Figure 1)**

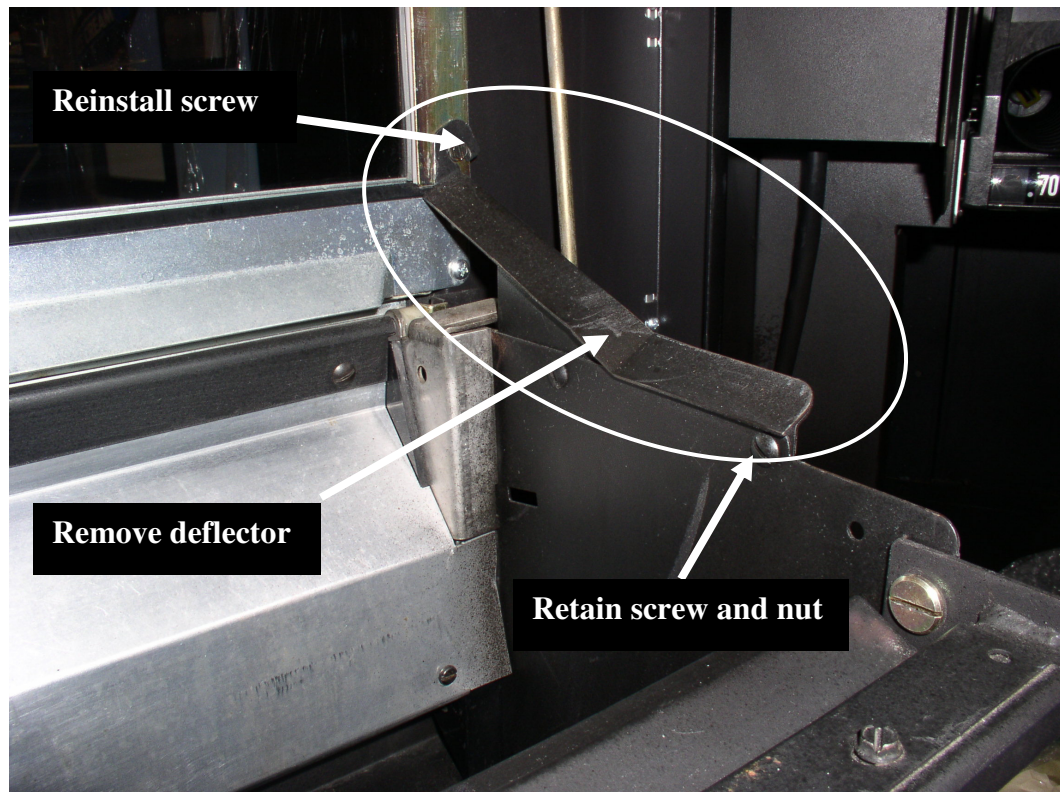


Figure 1 (typical representation)

2) Install sensor bracket assembly on delivery bucket. Insert stud, on sensor bracket assembly, into hole on delivery bucket. Rotate bracket down toward delivery bucket. Slide tab on bracket between delivery bucket and support bracket. Install screw and nut that was retained after removal of deflector and tighten. Install nut supplied in kit on stud on sensor bracket assembly and tighten. **(Figure 2)**

Installation Instructions for Drop Sensor in National Machines

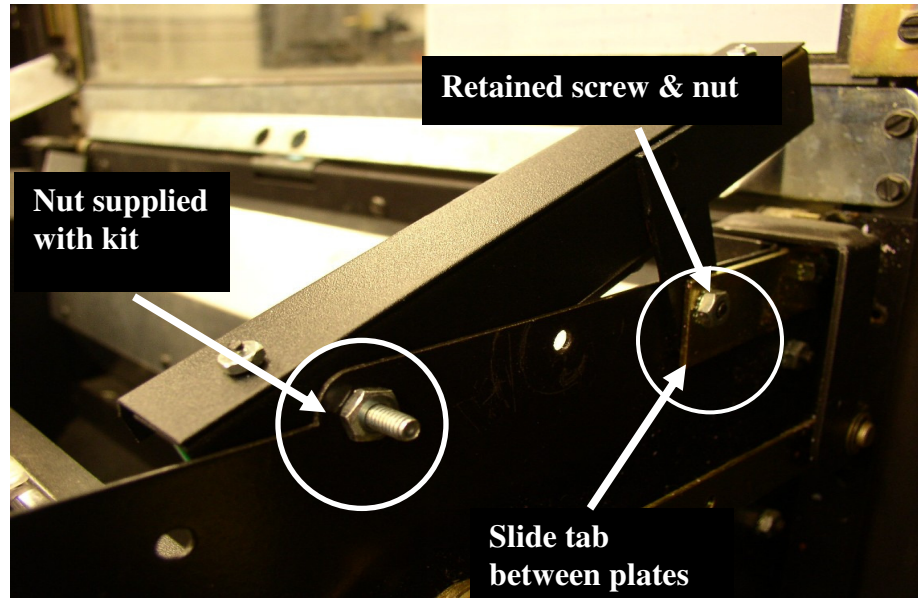


Figure 2 (Typical representation)

3) Plug 4-pin sensor harness into CN14 (National 147/148) or CN12 (National 157/158) of the SmartBoard harness board. Run 4-pin harness through to inside top of machine and continue over inside top of machine. Use tie cables (VE 4601) and tie cable hold-downs (VE 4560), provided in kit, to secure harness. Continue running harness toward hinged side main of door. (Figure 3)

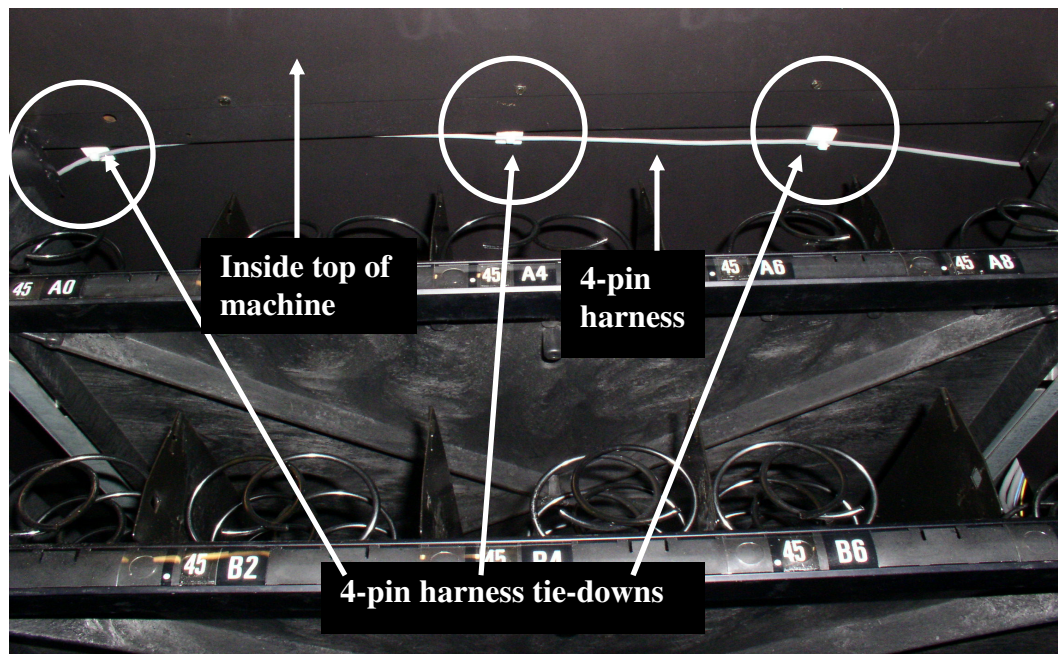


Figure 3 (Typical representation)

Installation Instructions for Drop Sensor in National Machines

4) Slide 4-pin harness through hole and down between plates. (**Figure 4**)

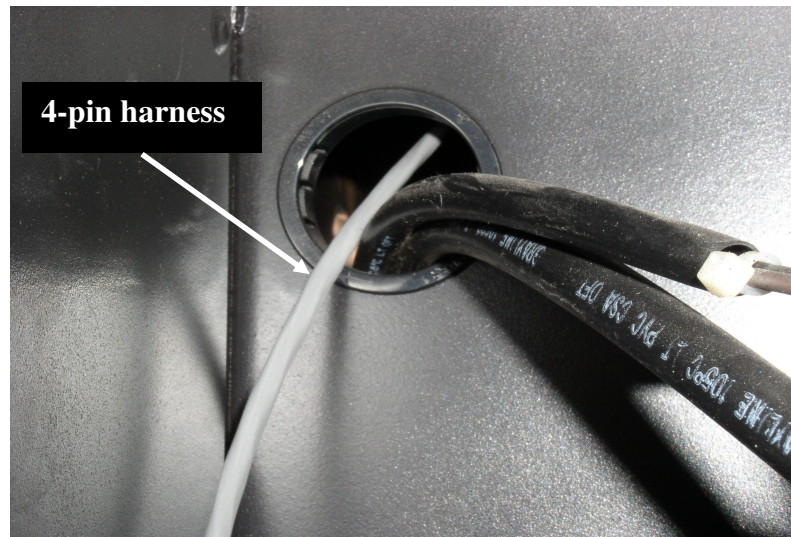


Figure 4 (Typical representation)

5) Run 4-pin harness out from bottom of plates and follow Gum and Mint tray harness. Secure 4-pin harness with cable ties (VE 4601) and cable tie hold-downs (VE 4560) too Gum and Mint harness. Bring 4-pin harness up back of door to sensor bracket, using cable ties and cable tie hold-downs to secure. (**Figure 5**)

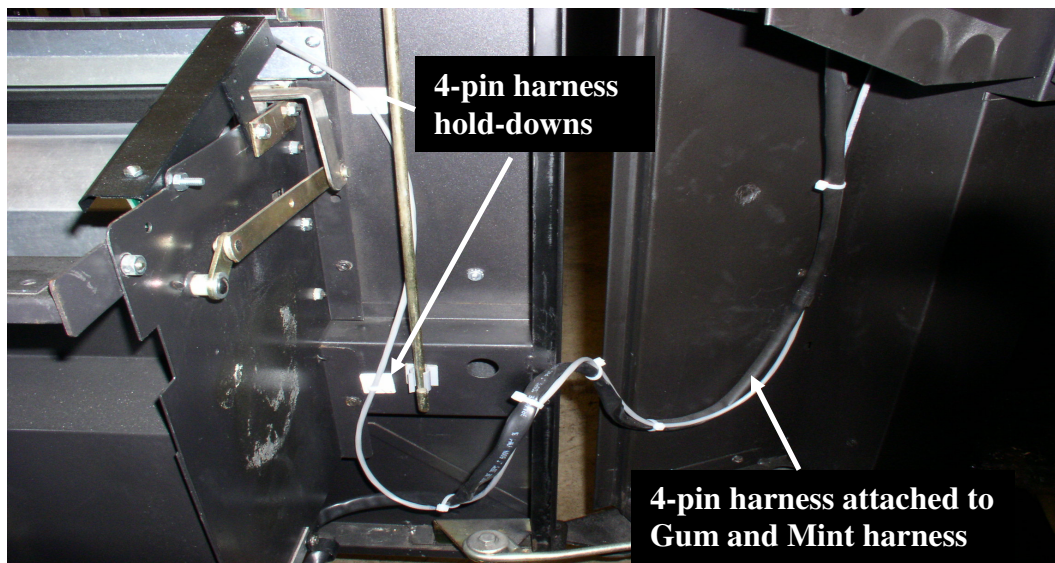


Figure 5 (Typical representation)

Installation Instructions for Drop Sensor in National Machines

6) Top plate of sensor bracket must be removed before 4-pin harness can be plugged into sensor board. Remove two nuts from top of sensor bracket and lift off top plate from sensor bracket. Plug 4-pin harness into sensor board and replace top plate. Reinstall two nuts and tighten. (Figure 6)

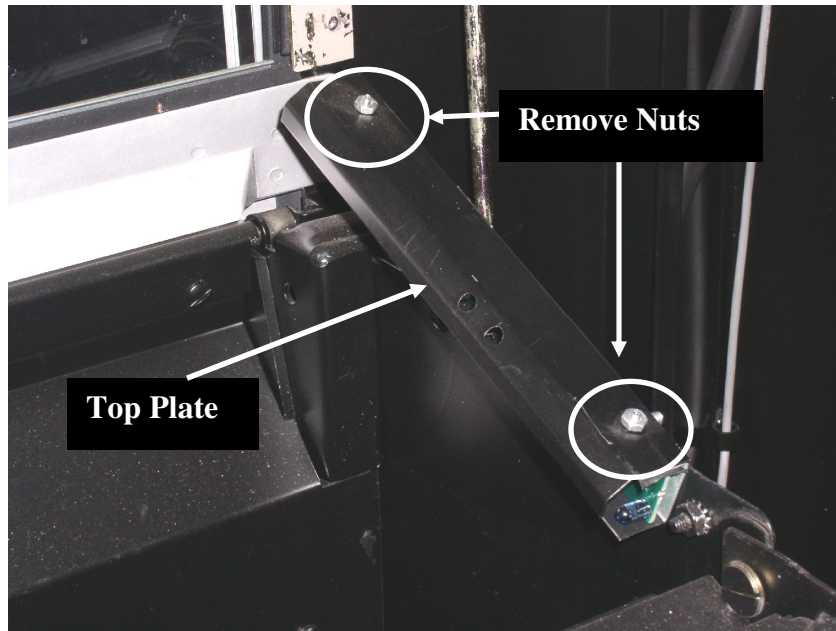


Figure 6 (Typical representation)

7) Remove two screws holding deflector. Install reflective tape to opposite side of delivery bucket of sensor bracket over holes from screws removed. Punch screws through reflective tape. Reinstall screws holding deflector. **Note: When installing reflective tape. Position tape as close as possible to rear part of delivery bucket.** (Figure 7)

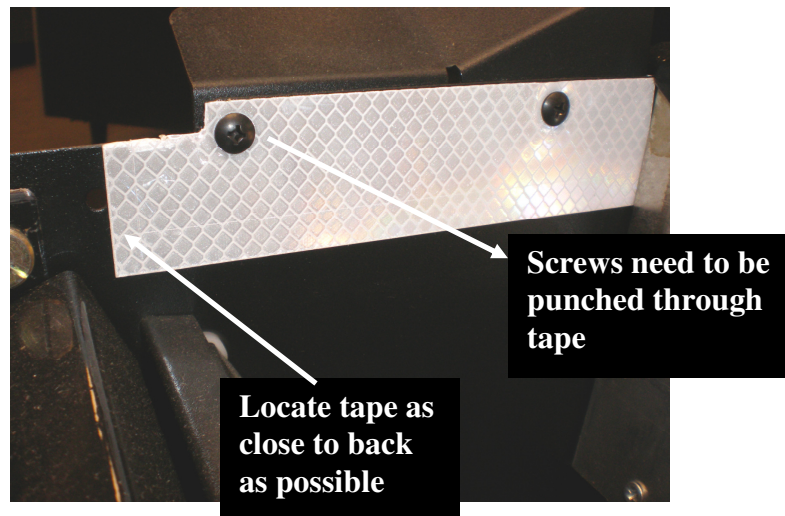


Figure 7 (Typical representation)

Installation Instructions for Drop Sensor in National Machines

8) Locate magnet, included in kit (VE 9308A) with two-sided tape intact, on right side of delivery door. **Note: Do not remove backing on two-sided tape, until ready to permanently affix. (Figure 8)**

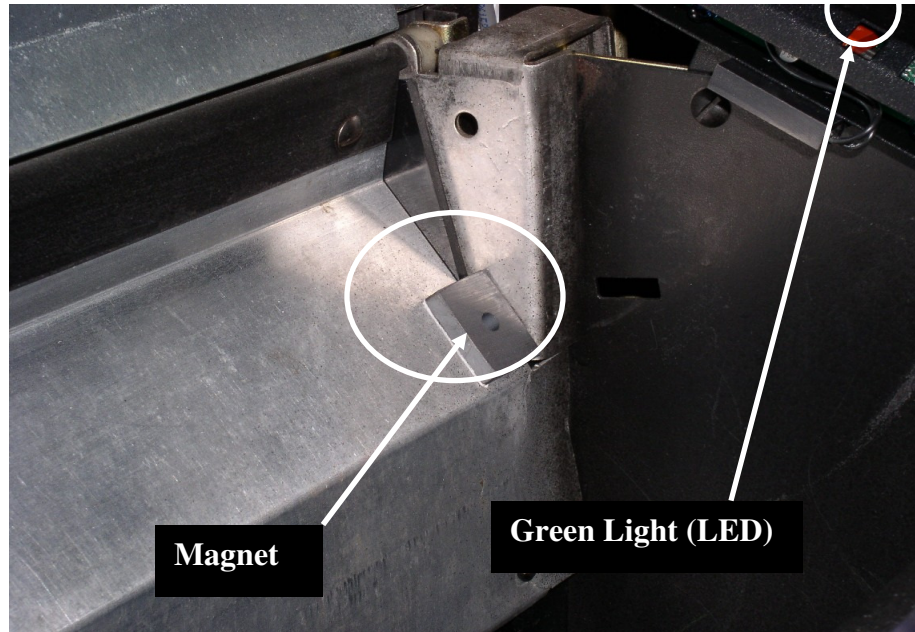


Figure 8 (Typical representation)

9) Move delivery door up and down. Green light (LED) on sensor board should go on when door is $\frac{1}{2}$ to $\frac{2}{3}$ open and go off when delivery door is $\frac{3}{4}$ closed. Adjust magnet to get proper results. When proper placement is found, remove backing on two-sided tape and affix firmly to delivery door. **(Figure 8)**