



SERVICE BULLETIN # 00256

426 INDUSTRIAL BOULEVARD • KEARNEYSVILLE WV 25430-2776 • USA
Phone: +1 304 728-7056 • Fax: +1 304 725-6579 • Toll Free: 800 931-9214

PAGE: 1 of 4

DATE: 10-03-06

REVISION: 02

SUBJECT: Installation of the Hall Effect Sensor

of People
Required



MODELS: RVV (model 400 only)

Kit Number

Kit Description

350536

Hall Effect Sensor Kit (model 400 only - not compatible with model 500 RVV NG)

TOOLS REQUIRED: Phillips screwdriver, drill, bits (13/64", 1/2", and #35 or 7/64"), wrenches (7/16", 11/32")

ESTIMATED INSTALLATION TIME: 30 minutes

REASON FOR BULLETIN: Beginning with serial number 200424MA00001, all model 400 Royal Vision Venders (RVV) have a Hall Effect sensor for detection of product in the elevator cup, instead of the microswitch used on older RVV's. This bulletin describes the proper procedure for converting from the older microswitch to the Hall Effect sensor.

INSTALLATION INSTRUCTIONS:

NOTE: This bulletin applies only to model 400 RVV's.

Note: If the control board software is lower than revision 4.280, it will also be necessary to replace the RVV controller chip. Revisions lower than 4.268 do not support the Hall Effect sensor.

1. Remove power to the vender by unplugging the vender's main power cord from the AC voltage source (wall outlet).
2. Disconnect the existing refrigeration harness from the control board. (See Figure 1 for location.)
3. Disconnect the door switch from the harness.
4. Disconnect the microswitch from the harness. Pull the harness back through the wire hole in the door frame.
5. Remove harness cover panel on door. (See Figure 2.) Then, remove the refrigeration harness.
6. Disconnect the harness at the refrigeration relay (pink boots).
7. Remove ballast box. Then, remove the harness from the bottom of the door (behind the ballast box area).
8. Remove the product sensing switch.
9. Attach the drill template to the door frame. (See Figure 3.) Mark the holes for the Hall Effect sensor with a center punch. Then, remove the drill template.
10. Drill the holes that were marked in the previous step. (See Figure 3 for hole sizes and instruction.)
11. With the 1/2" drill bit, bore out the backside of the middle hole drilled in Step 10 so that it is about 3/4" in diameter. Remove all foam from this new hole. **Note:** Be careful not to bore out the front side of the hole!
12. Using a pair of needle-nose pliers, hold the tap plate (from kit) in the hole created in Step 11 so that its hole lines up with the middle hole from Step 10. Mount the Hall Effect sensor so that the larger knob on the sensor goes through the hole in the door frame and through the hole in the tap plate. Route the sensor's pigtail through the lower hole. (See Figures 4 and 5.)
13. Connect the Hall Effect sensor harness to the new refrigeration harness.
14. Connect door switch to new harness.
15. Route harness through the door cover panel area. Secure it to the rest of the harnesses using wire ties. Then, reinstall the door panel.
16. Route the harness through the bottom of the door, behind the ballast box area and out the door to the refrigeration relay. Secure it to the other harnesses with wire ties. Re-install the ballast box.
17. Plug the blue-green wires from the new harness to the refrigeration relay.
18. Apply permagum around the area where the Hall Effect sensor wires cross the door frame. Also, use permagum to fill in the hole created for the tap plate in Step 11.
19. Remove the four nuts which secure the existing elevator cup top assembly. Replace the existing assembly with the new one from the kit. (See Figure 6 for location of nuts.)
20. Restore power to the vender by plugging the vender's main power cord into the AC voltage source (wall outlet).

In an effort to provide our customers with the latest information on our equipment, Royal Vendors sends service bulletins to customers using the original ship-to address or e-mail addresses, if supplied by our customers. We also post all service bulletins on our website at www.royalvendors.com. If for any reason a vender is moved to another location or is sold to another customer other than to whom Royal Vendors originally sent the machine, it is the responsibility of the original purchaser of the vender to notify the appropriate personnel of the service bulletin.

**ANY QUESTIONS??? CONTACT ROYAL VENDORS' CUSTOMER SERVICE DEPARTMENT
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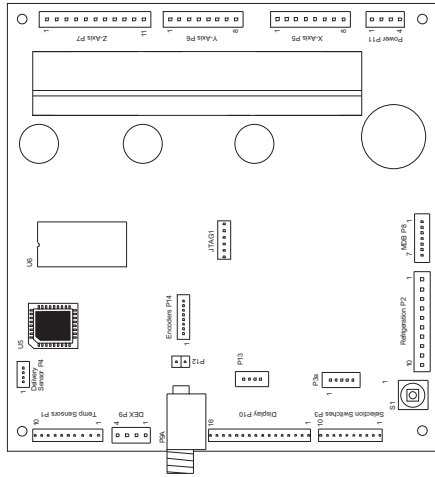
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MODELS: RVV (model 400 only)

Figure 1

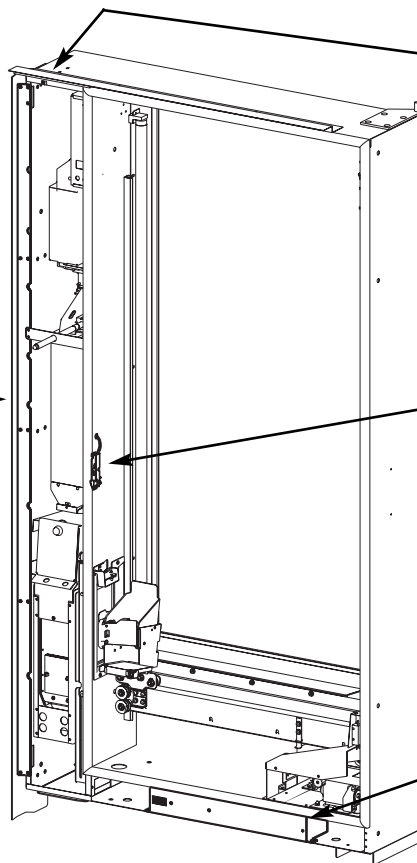
Control board



Location of refrigeration harness (which includes the delivery detection switch lead)

Figure 2

Inside the door



Door switch

Product sensing switch

Ballast box
Secured with carriage bolts

Harness cover panel
Secured by five screws

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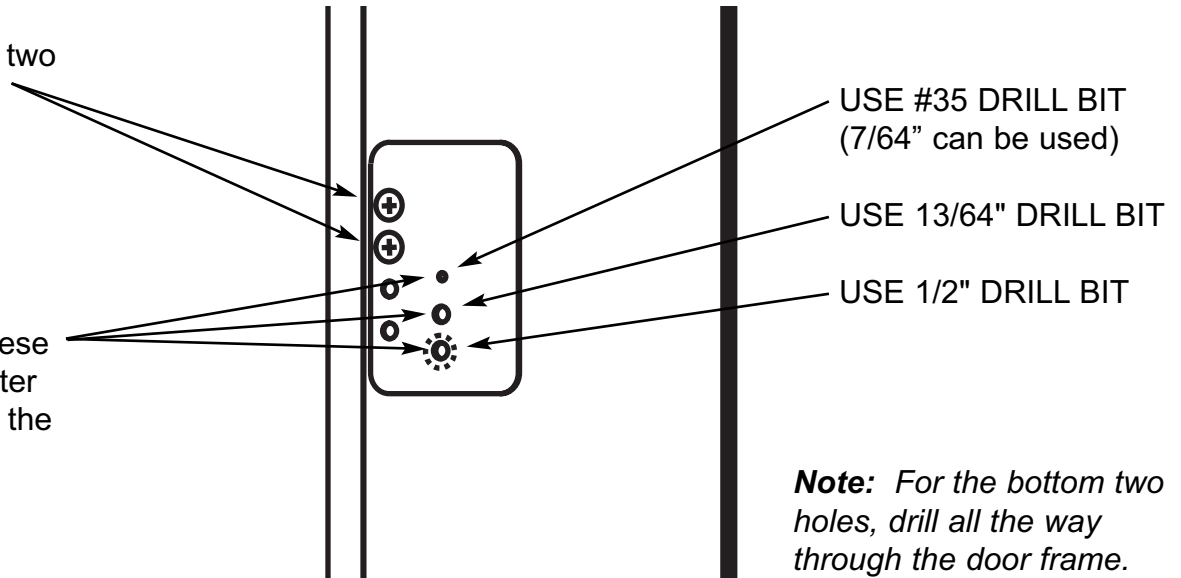
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Figure 3

Marking new holes

Insert screws in these two holes of the template.

Mark the centers of these three holes with a center punch. Then, remove the template, and drill the holes.

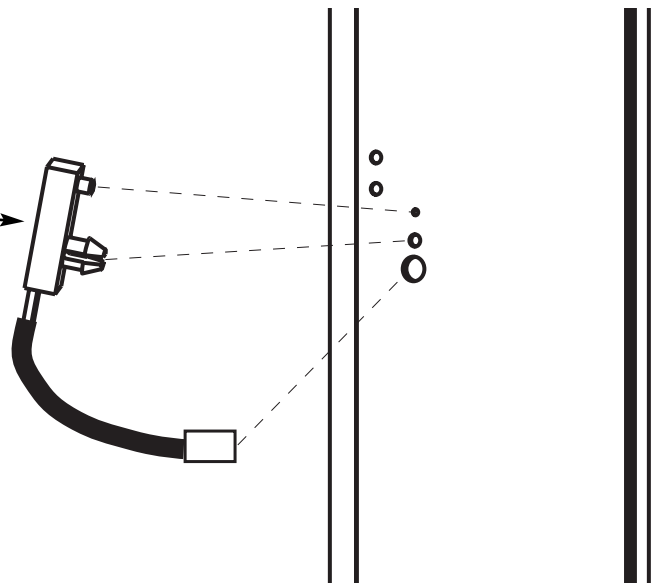


Note: For the bottom two holes, drill all the way through the door frame.

Figure 4

Installing the Hall Effect sensor

Hall Effect Sensor
Using the holes made with the template, snap the Hall Effect sensor to the door frame. Route the wiring through the largest hole, and pull it firmly.



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Figure 5

Profile view of mounted Hall Effect Sensor

Snap the larger knob to the tap plate to secure the sensor.

Note: It is absolutely critical to remove all foam from the hole created for the sensor's larger knob.

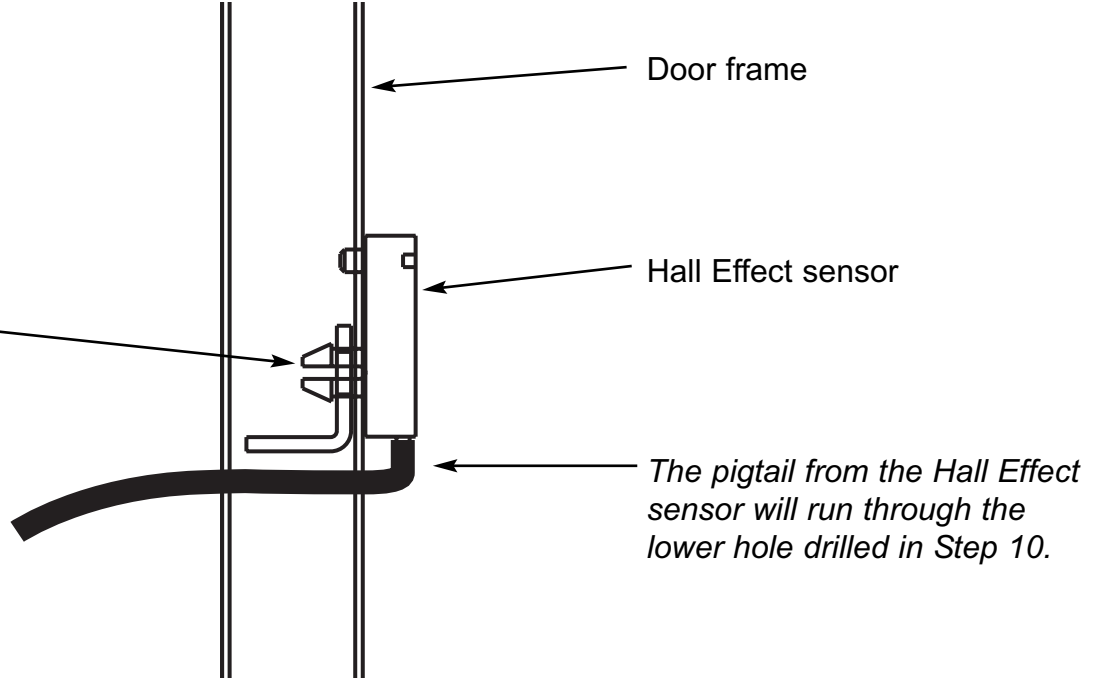


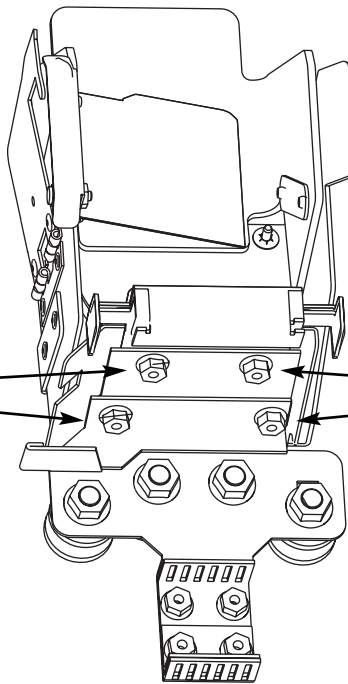
Figure 6

Bottom of elevator cup

Remove these nuts to remove cup top assembly.

Remove these nuts to remove cup top assembly.

Note: Some very early models may have a hinged stop lip attached to the bottom brackets. Remove this lip, if present.



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