



SERVICE BULLETIN 331

426 Industrial Boulevard • Kearneysville WV 25430-2776 • USA
 Telephone: +1 304 728 7056 • technicalinquiry@royalvenders.com
 Toll-free in North America: 1 800 931 9214 • Fax: +1 304 725 4016
 Canada: +1 905 738 5777 • Mexico: +52 55 5203 6887
 Europe: +49 2158 95 1000 • Australia: +61 2 9890 5433

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Date: 3 Aug 2011

Revision: 01

SUBJECT: EMS Motion Sensor Installation

MODELS: GIII with EMS Software

Number of
People
Required



KIT NUMBER

KIT DESCRIPTION

303139	Motion Sensor Kit - Wide Port CDC Landscape
305139	Motion Sensor Kit - Wide Port non-CDC Landscape
231185	Motion Sensor Kit - Narrow Port CDC Landscape
211265	Motion Sensor Kit - Narrow Port non-CDC Landscape
292142	Motion Sensor Kit - Marketing Vender (CCR)



The following areas of this vender contain voltage which can cause serious injury or even death: the main power cord, supplying 115-230 VAC to the evaporator, EMI filter, and refrigeration system; the power line from the EMI filter to the ballast and transformer; and the ballast, which can produce upwards of 600 volts. Remove all power from the vender before working in any of these areas.

TOOLS REQUIRED: 7/16" (12 mm) and 11/32" (9 mm) wrenches

ESTIMATED INSTALLATION TIME: <15 minutes

BACKGROUND INFORMATION: Beginning with serial week 201135, all new GIII venders (804, 660, and 550 models) will be manufactured with the Energy Management System (EMS) installed. Venders built before 201135 may be retrofitted with EMS. This bulletin explains the procedure for installing the motion sensor for use with the EMS software and programming the controller for its use. **NOTE:** In order to use the Energy Management System, the vender **must have a KO controller with 67325 software installed.**

INTRODUCTION TO THE EMS SOFTWARE

By capturing and remembering when sales are made over time, the machine's lighting and refrigeration systems can be powered down at periods of inactivity. This is made possible by the addition of the EMS software.

What does the Delay ("dLay") setting represent in the Lighting Control and Refrigeration Control Modes?

The delay can be set anywhere from 0 minutes all the way up to 995 minutes. As an example, we will use a setting of 30 minutes for the Lighting Control delay and 90 minutes for the Refrigeration Control delay. This means, at these settings, if Lighting Control and Refrigeration Control are both Enabled to 2, the lights on the vender will come on 30 minutes prior to learned customer activity and turn off 30 after customer activity, based on what the EMS software has learned over a period of time. With the Refrigeration Control, the "dLay" (Delay) value is only used when exiting conservation mode; thus, that the refrigeration system will turn on 90 minutes prior to learned customer activity.

Note that in all venders with EMS Software, it is imperative that the time / date be set correctly in the Internal (Service) Menu. Incorrect time / date in the control board will cause a skewing of the pattern determined by the EMS Software, resulting in improper performance of the machine to the anticipated pattern.

Resetting the EMS time blocks

To reset the time blocks, simply change Lighting Control and Refrigeration Control so that both are both Enabled to 1. After changing them to 1, exit out of the Service Menu. Then, enter back into the menu and Enable Lighting Control and Refrigeration Control to 2.

See further programming instructions on page 4.

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.royalvenders.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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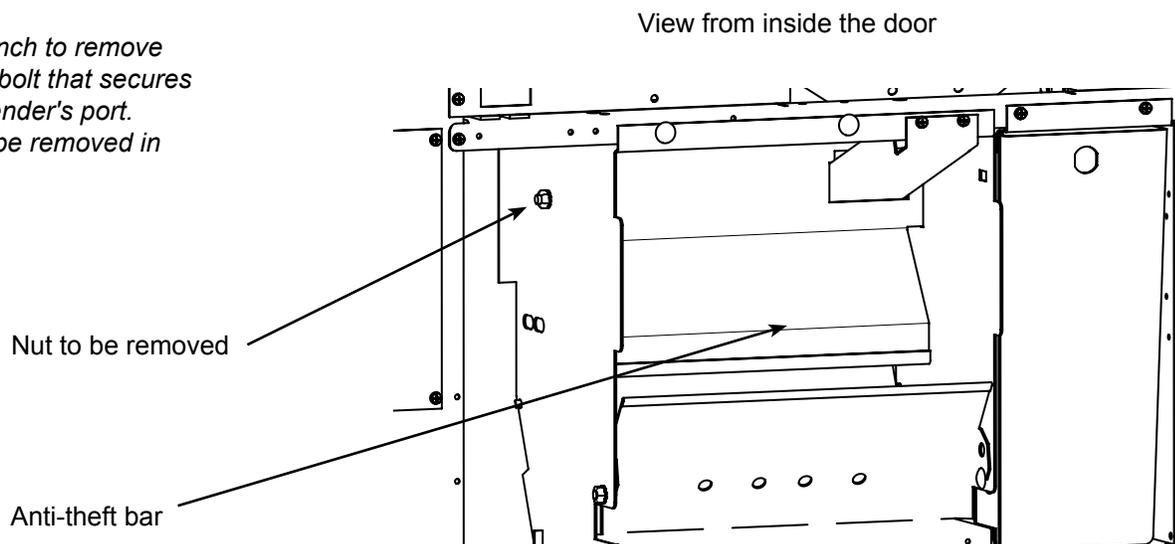
MODELS: GIII with EMS Software

INSTALLATION INSTRUCTIONS:

1. Remove power by unplugging the vender's power cord from the AC voltage source (wall outlet).
2. Using a 7/16" (12 mm) wrench, remove the nut from the carriage bolt that secures the anti-theft bar in the vender's port. (See Figure 1.) Then, remove the carriage bolt.
3. Install the new anti-theft bar (from the kit) in place of the old one. Secure it with the carriage bolt and nut that were removed in Step 2.
4. Plug the motion sensor end of the harness (included in the kit) into the motion sensor.
5. Using an 11/32" (9 mm) wrench, mount the motion sensor to the back of the anti-theft bar as shown in Figure 2.
6. Route the motion sensor harnessing through the external DEX port hole in the top of the vender's port. (See Figure 3.)
7. Route the harnessing through the door to the vender's control board.
8. Plug the control board end of the harness to P7 on the vender's control board, on pins 7-10.
9. Restore power by plugging the vender's power cord into the AC voltage source (wall outlet).

Figure 1.

Use a 7/16" (12 mm) wrench to remove the nut from the carriage bolt that secures the anti-theft bar in the vender's port. (Note: Some parts may be removed in this illustration for clarity.)



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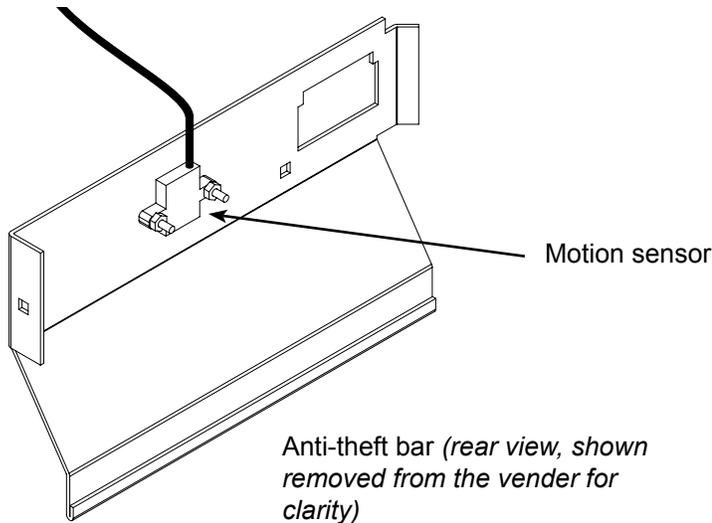
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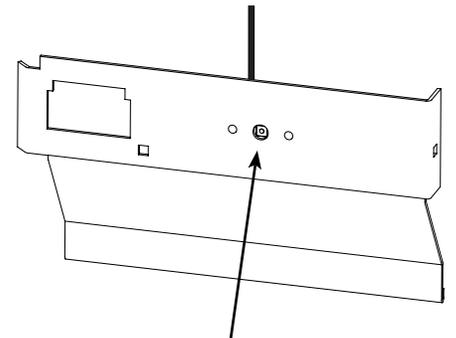
MODELS: GIII with EMS Software

Figure 2.

The motion sensor should be mounted on the anti-theft bar as shown here.



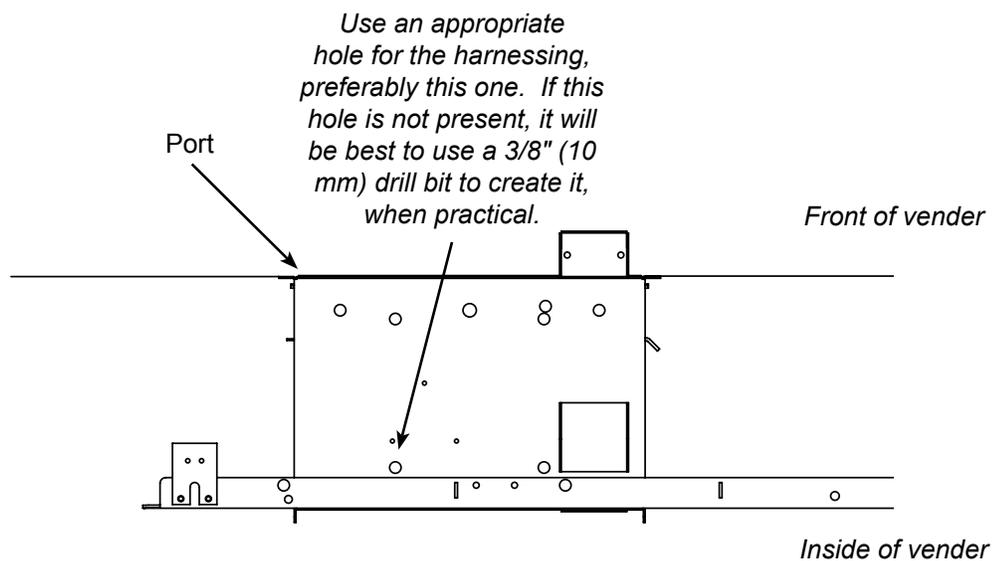
Front view of anti-theft bar with motion sensor mounted



The eye of the motion sensor should appear through this hole in the anti-theft bar.

Figure 3.

Shown here is the top of the CDC port. The motion sensor harness should be routed through a suitable hole in the top of the port. From there, route the harness through the door to the control board.



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ENERGY MANAGEMENT SYSTEM (EMS) PROGRAMMING INSTRUCTIONS:

Time Programming ("tinE")

NOTE: It is imperative that the current time setting be programmed first before setting the EMS functions.

1. Go to "tinE" in the Service Menu, and press <enter>.
2. Scroll to "hour", and press <enter>. Set the current time (in 24-hour format). Press <enter>.
3. Exit back to the "tinE" prompt.

Lighting Control ("Lit")

1. Scroll to "Lit" in the Service Menu. Press <enter>.
2. At "Enb", press <enter>. Scroll to "2", and press <enter>.
3. Scroll to "dLAy", and press <enter>.

A note on "dLAy" (Delay Setting): *The default activity based time delay setting for lighting is 30 minutes. "dLAy" is only used when "Enb" is set to "2". This setting is used to determine the length of time, before activity is detected in the pattern usage memory, that the conservation mode for the lighting is disabled. It is also the length of time, after no activity is detected in the pattern usage memory, until the lighting shifts to the conservation mode. Note, five blocks of consecutive zeroes are still required in order for this "dLAY" value to be in effect when transitioning to conservation mode. The controller should immediately shift out of conservation mode if activity is sensed.*

4. Press <up> or <down> to increase or decrease the delay setting. Press <enter>.
5. Exit back to the "Lit" prompt.

Refrigeration Control ("rFrG")

1. Scroll to "rFrG" in the Service Menu. Press <enter>.
2. At "Enb", press <enter>. Scroll to "2", and press <enter>.
3. Scroll to "dLAy", and press <enter>.

A note on "dLAy" (Delay Setting): *The default activity based time delay setting for refrigeration is 90 minutes. This setting is used to determine the length of time, prior to activity being detected in the pattern usage memory, that the conservation mode is disabled and the temperature shifts to the cold set-point ("SEtP"). "dLAy" is only used when "Enb" is set to "2". The controller should immediately shift from the storage set-point ("Stor") to the cold set-point if activity is sensed.*

4. Press <up> or <down> to increase or decrease the delay setting. Press <enter>.
5. Exit back to the "rFrG" prompt.

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