



# SERVICE BULLETIN 286

426 Industrial Boulevard • Kearneysville WV 25430-2776 • USA

Telephone: +1 304 728-7056 • Fax: +1 304 725-6579

Toll-Free in North America: 1 800 931-9214 • technicalinquiry@royalvendors.com

Page: 1 of 5

Date: 15 Aug 07

Revision: 00

**SUBJECT:** RVV 500 Refrigeration Issue

**MODELS:** RVV 500

Number of  
People  
Required



**KIT NUMBER**

**KIT DESCRIPTION**

337499

RVV Refrigeration Replacement Kit

**TOOLS REQUIRED:** Phillips screwdriver, 3/8" (10 mm) nutdriver

**ESTIMATED INSTALLATION TIME:** 15 minutes

**REASON FOR BULLETIN:** In the last several months, Royal Vendors has seen an increase in refrigeration-related failures on the RVV 500. Royal Vendors has identified the issue to be related to the expansion valve. Failure of this valve to function properly can cause the software to shut down the refrigeration system due to insufficient cooling. When this happens, a "No Pull Down" error will be displayed in error codes. Royal Vendors has data that demonstrates the number of RVV 500s in the field that may exhibit this issue is relatively small. If your unit is not cooling properly and you find a "No Pull Down" error, please contact Royal Vendors to order a replacement refrigeration system under warranty.



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 power from the vender before working in any of these areas.

## REFRIGERATION UNIT REPLACEMENT INSTRUCTIONS:

1. Remove power from the vender by unplugging the vender's main power cord from the AC voltage source (wall outlet).
2. Remove the vender's refrigeration door and the inner door assembly. (See Figure 1.)
3. Unplug the refrigeration unit power cord from the main wiring harness. (See Figure 2.)
4. Remove the two bolts that secure the front of the refrigeration unit base plate. (See Figure 3.)
5. Remove the two screws that secure the refrigeration baffle to the side of the unit. (See Figure 4.)
6. Remove the bottom inner door channel and the mullion plate. (See Figure 5.)
7. Remove the evaporator cover. (See Figure 6.)
8. Remove the bolt and the screw that secure the evaporator. (See Figure 7.)
9. Remove the Permagem® that surrounds the refrigeration tubing. (See Figure 8.)
10. Remove the refrigeration unit from the vender. To remove the unit, slide it straight out. **NOTE:** Wearing gloves is recommended when handling the refrigeration unit. The aluminium fins on the evaporator and the condensor are very sharp. Be very careful when working around these areas.
11. Install the new refrigeration unit in the vender. When installing the unit, ensure that the evaporator slides securely into the rails mounted on the side wall of the evaporator section. (See Figure 9.)
12. Reinstall the bolt and the screw that were removed in Step 8 above.

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  
IN NORTH AMERICA, CALL TOLL FREE 1 800 931-9214**



**SUBJECT:** RVV 500 Refrigeration Issue

**MODELS:** RVV 500

13. Reinstall the two bolts that were removed in Step 4 above.
14. Reinstall the two screws that were removed in Step 5 above.
15. Reinstall the evaporator cover that was removed in Step 7 above. Note the evaporator cover tab slots shown in Figure 7. The tabs on the evaporator cover must be inserted into these slots.
16. Reseal the mullion area with Permagem®. Ensure that the Permagem® is installed thoroughly so no air will be allowed to leak into the evaporator section on the mullion plate has been reinstalled. The picture in Figure 8 shows the Permagem® correctly installed in this area.
17. Reinstall the mullion plate that was removed in Step 5 above. Once the mullion plate is installed, reinstall the bottom inner door channel.
18. Plug the refrigeration unit power cord into the main wiring harness.
19. Reinstall the refrigeration door and inner door assembly that were removed in Step 2 above.
20. Restore power to the vender by plugging the vender's main power cord into the AC voltage source (wall outlet).

**Figure 1.**

*Refrigeration door and inner door assembly*

Use a 3/8" (10 mm) nutdriver to remove the screws which secure the refrigeration door and the inner door assembly, as indicated by the white arrows in these photographs.



**ANY QUESTIONS? CONTACT ROYAL VENDORS' CUSTOMER SERVICE DEPARTMENT  
IN NORTH AMERICA, CALL TOLL FREE 1 800 931-9214**

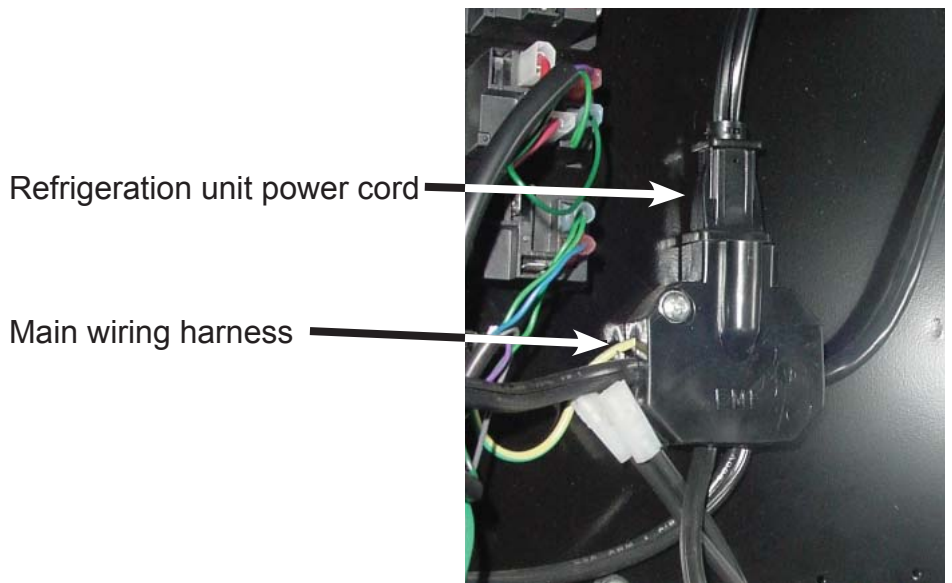


**SUBJECT:** RVV 500 Refrigeration Issue

**MODELS:** RVV 500

**Figure 2.**

Unplug the refrigeration unit power cord from the main wiring harness.



**Figure 3.**

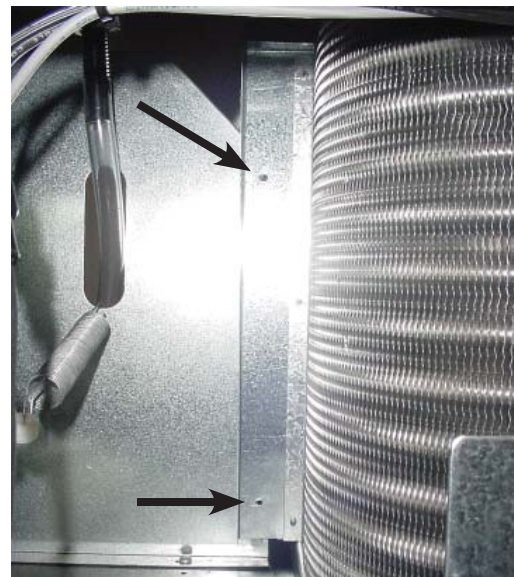
Refrigeration base plate

Use a 3/8" (10 mm) nutdriver to remove the screws which secure the refrigeration unit base plate, as indicated by the white arrows in the photograph.



**Figure 4.** Refrigeration baffle

Use a Phillips screwdriver to remove the screws which secure the refrigeration baffle to the side of the unit, as indicated by the black arrows in the photograph.



**ANY QUESTIONS? CONTACT ROYAL VENDORS' CUSTOMER SERVICE DEPARTMENT IN NORTH AMERICA, CALL TOLL FREE 1 800 931-9214**

**SUBJECT:** RVV 500 Refrigeration Issue

**MODELS:** RVV 500

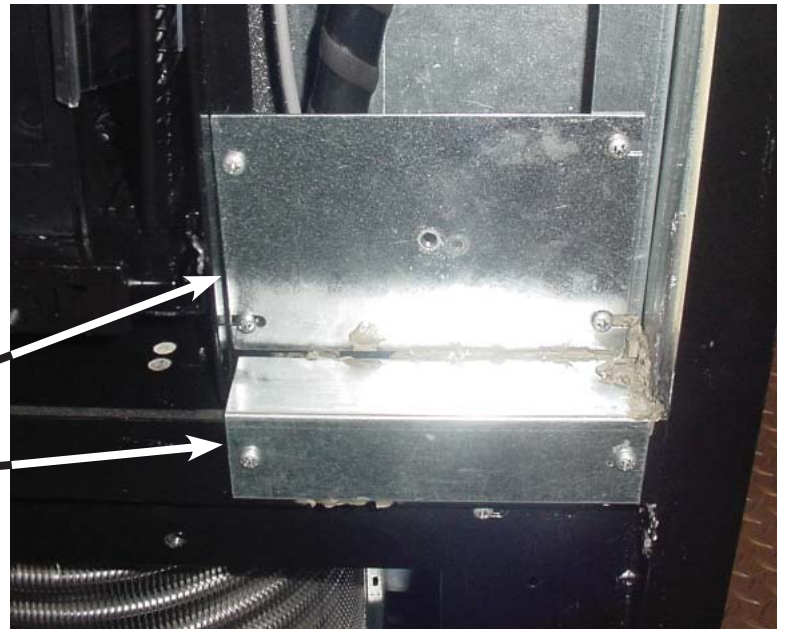
**Figure 5.**

*Bottom inner door channel and mullion plate*

Use a Phillips screwdriver to remove the screws which secure the bottom inner door channel and the mullion plate.

Bottom inner door channel

Mullion plate



**Figure 6.** *Evaporator cover*

Use a Phillips screwdriver to remove the screws which secure the evaporator cover, as indicated by the white arrows.



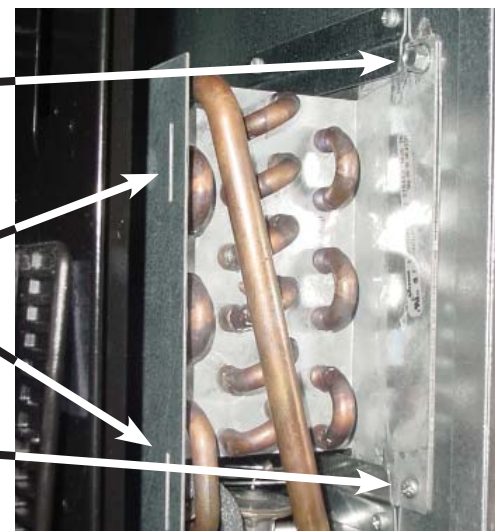
**Figure 7.** *Evaporator*

Use a 3/8" (10 mm) nutdriver to remove the bolt that secures the evaporator. Use a Phillips screwdriver to remove the screw that secures the evaporator. (Note the evaporator cover tab slots in this photograph.)

Bolt

Slots

Screw



**ANY QUESTIONS? CONTACT ROYAL VENDORS' CUSTOMER SERVICE DEPARTMENT  
IN NORTH AMERICA, CALL TOLL FREE 1 800 931-9214**



# SERVICE BULLETIN 286

426 Industrial Boulevard • Kearneysville WV 25430-2776 • USA

Telephone: +1 304 728-7056 • Fax: +1 304 725-6579

Toll-Free in North America: 1 800 931-9214 • [technicalinquiry@royalvendors.com](mailto:technicalinquiry@royalvendors.com)

Page: 5 of 5

Date: 15 Aug 07

Revision: 00

**SUBJECT:** RVV 500 Refrigeration Issue

**MODELS:** RVV 500

**Figure 8.**

*Permagum®*

When resealing this area with Permagum®, ensure that it is installed thoroughly so no air will be allowed to leak into the evaporator area.



**Figure 9.**

*Evaporator slides*

Ensure that the evaporator slides securely into the rails mounted on the side wall of the evaporator section, as indicated by the white arrows.



**ANY QUESTIONS? CONTACT ROYAL VENDORS' CUSTOMER SERVICE DEPARTMENT  
IN NORTH AMERICA, CALL TOLL FREE 1 800 931-9214**