



# SERVICE BULLETIN No.1167

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<b>COACH MODEL</b>	: T2145 and C2045
<b>BULLETIN TYPE</b>	: Field Change Program
<b>MANUAL &amp; SECTION</b>	: N/A
<b>MANUAL REVISION</b>	: No
<b>DATE</b>	: June 28, 2005
<b>SUBJECT</b>	: <b>Condenser fan relay wiring</b>
<b>TERMS &amp; CONDITIONS</b>	: Refer to the Warranty Information in this Bulletin.

## APPLICATION:

The Field Change Program subject of this Bulletin is applicable to following units:

Model	Engine	VIN
T2145	Cummins	44270 → 44299
	Detroit Diesel	44587 → 44609
C2045	Cummins	45375 → 45380, 45399 → 45423
	Detroit Diesel	45830 → 45832, 45864 → 45883, 45888, 45900 → 45903, 45935 → 45943
	Caterpillar	N/A

## DESCRIPTION:

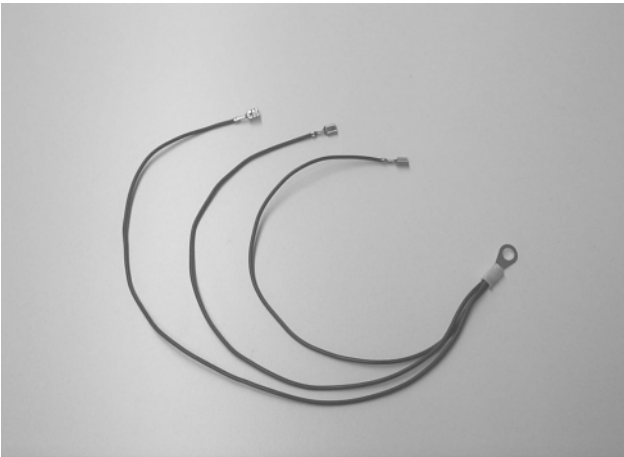
Ref.: Carrier/Sûtrak Technical Bulletin GB 04-SER-03

- Carrier/Sûtrak, manufacturers of the Sytronic HVAC switchboard used on T- and C-model coaches, have informed Van Hool that because of manufacturing inconsistency the terminal #87 (ground) wiring of relay sockets #K26M, #K24M and #K22M may have been improperly crimped.
- To improve the reliability of the system and avoid possible shorts, the above-mentioned relay socket ground wiring should be replaced by a dedicated wiring loom.
- Refer to the procedure on page 2/6 of this Bulletin for repair instructions.
- Information on parts supply and labor allowance is provided on page 5/6.

*Service personnel: please read, initial and circulate.*

Service Manager	Parts Manager	Warranty Administrator	Workshop Foreman	Service Technician

## **PARTS AND PRODUCTS:**



**Figure 1: Carrier/Sütrak wiring loom**

<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
VH 10962304	Wiring loom, Carrier 63.50.20.030	1

- Parts will be supplied by your nearest ABC Customer Care & Parts Source service center. Refer to the Warranty Information in this Bulletin for terms and conditions
- Parts and products disposition: discard according to applicable environmental regulations.

## **PROCEDURE:**

If you do not have the expertise to perform present procedure, do not hesitate to go to your nearest ABC Customer Care & Parts Source dealership.

### **1. General:**

- This job should be executed by an experienced HVAC technician.
- For more information refer to the Electrical Wiring Diagram Booklet that comes with the coach.

### **2. Special tools, equipment or services:**

- No special tools, equipment or services are required.

### **3. Preparations:**

- Park the coach on a level surface with the front wheels straight. Apply the parking brake and shut down the engine.
- Switch off all systems and turn off the battery master switch.
- Put a "DO NOT OPERATE" tag on the instrument panel.
- Read the entire procedure before beginning to work.

**CAUTION: Observe safe shop practices at all times.**

### **4. To replace the condenser fan relay ground wiring:**

Job time estimate: approximately 0.5 hours.

- 1) In the luggage compartment locate and open the HVAC junction box to reach the switchboard (see Figure 2)



**Figure 2: Carrier/Sûtrak HVAC switchboard**

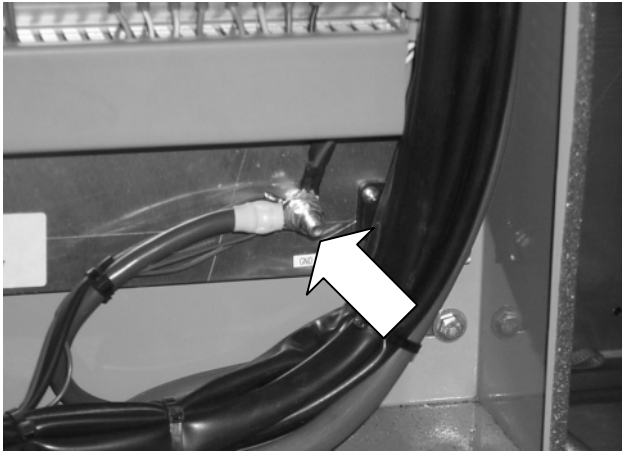
- 2) Locate condenser fan relays #K26M, #K24M and #K22M (see Figure 3).



**Figure 3: Relays upper and lower cable duct**

- 3) Remove the guard from the lower cable duct (see Figure 3).
- 4) To access the relay bank mounting screws, remove relays #K3A, #K23M and #K28M. Undo and remove the sheet metal screws securing the relay bank to the junction box back plate. Withdraw the relay bank.
- 5) Remove relays #K26M, #K24M and #K22M. To remove the #87 ground terminal press down the terminal locking tab with a small screwdriver and withdraw the terminal from the #K26M, #K24M and #K22M relay sockets.

- 6) Undo and remove the nut securing the relay ground wires to the junction box back plate (see Figure 4).  
Remove relay #K26M, #K24M and #K22M terminal #87 ground wires.



**Figure 4: Switchboard ground stud**

- 7) Install the female blade terminals of wiring loom VH 10962304 in the now vacant #87 slots in the #K26M, #K24M and #K22M relay sockets respectively.  
Hook-up the ring terminal to the switch panel ground stud.  
Secure with the M8 nut. Tightening torque: 15 ft.lbf (20 Nm).
- 8) Reinstall #K26M, #K24M and #K22M relays into their respective sockets.
- 9) Attach the relay bank to the switchboard back plate with the sheet metal screws.
- 10) Reinstall relays #K3A, #K23M and #K28M.
- 11) Reinstall the lower cable duct guard.
- 12) Close the HVAC junction box.

*Procedure complete.*

### **DISCLAIMER:**

The procedures contained herein are not exclusive. Van Hool cannot possibly know, evaluate, or advise the transportation industry of all conceivable ways in which a procedure may be undertaken or of the possible consequences of each such procedure. Other procedures may be as good, or better, depending upon the particular circumstances involved.

Each carrier who uses the procedures herein must first satisfy itself thoroughly that neither the safety of its employees or agents, nor the safety or usefulness of any products, will be jeopardized by any procedure selected.

### **SERVICE INFORMATION:**

Service Bulletins are issued to supplement or supersede information in the Van Hool manuals. Note Service Bulletin number, date and subject on the register at the end of the relevant chapter(s). File Service Bulletin separately for future reference.

## **WARRANTY INFORMATION:**

### **1. Claim references:**

- Causal parts: VH 10740439 and VH 10757133
- Job code: E50342H

### **2. Terms and conditions:**

Van Hool will accept warranty claims for this repair as follows:

#### **Parts:**

- Supply: parts will be supplied free of charge through regular channels.
- Disposition: discard parts according to applicable environmental regulations.

**Labor allocation:** 0.5 (one half) hour of labor will be awarded per coach repaired.

**Campaign expiration date:** Service Bulletin issue date + 6 months.

**Claim submission:** Contact ABC Customer Care & Parts Source for guidance.

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