



# Service Bulletin No. 1081

Circulate to listed addressees

<b>COACH MODEL</b>	: C 2045
<b>BULLETIN TYPE</b>	: Service Information
<b>MANUAL &amp; SECTION</b>	: Maintenance Manual : Chapter 9 - Electrical System
<b>DATE</b>	: May 31st, 2001
<b>SUBJECT</b>	: <b>Kneeling warning system</b>
<b>TERMS &amp; CONDITIONS</b>	: No claims will be accepted with reference to this Bulletin.

## APPLICATION :

The procedure supplement to this Bulletin is applicable to C2045 units only.

## DESCRIPTION :

The attached procedure explains how to finalize and put into use the pre-wired kneeling warning system of Van Hool Commuter Coaches.

## 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.

*Service personnel : please read, initial and circulate*

<b>Service Manager</b>	<b>Parts Manager</b>	<b>Warranty Administrator</b>	<b>Workshop Foreman</b>	<b>Service Technician</b>

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## TO ACTIVATE THE C2045 KNEELING WARNING SYSTEM

### APPLICATION :

The procedure below is applicable to C2045 units only.

### DESCRIPTION :

This procedure describes how to finalize and put into use the pre-wired kneeling warning system of Van Hool Commuter Coaches.

### PARTS :

Part #	Description	Qty.
Local purchase	Truck-Lite # 10075Y assembly kit includes : #10275Y LED amber light 12V #10700 3 inch grommet #94964 electrical plug	1
Local purchase	Various crimp connectors	#
Local purchase	Rivnut to accept 5/16 inch bolt	1
Local purchase	Tie wraps	#
Local purchase	Masking tape	#
VH660763000	Flasher	1
VH660752042	Relay	3
VH660760912	Buzzer	1
VH10671548	"KNEELING BUS" decal	1

### PROCEDURE :

#### 1. General :

- This job should be executed by an experienced automotive electrician.
- The work instructions below have been supplemented by wiring diagram VH 10661168.
- For more information refer to the Electrical Wiring Diagram Booklet that comes with the coach.

## 2. Special tools :

- Power drill, arbor and 3 inch hole saw.
- Rivnut installation tool.

## 3. Preparations :

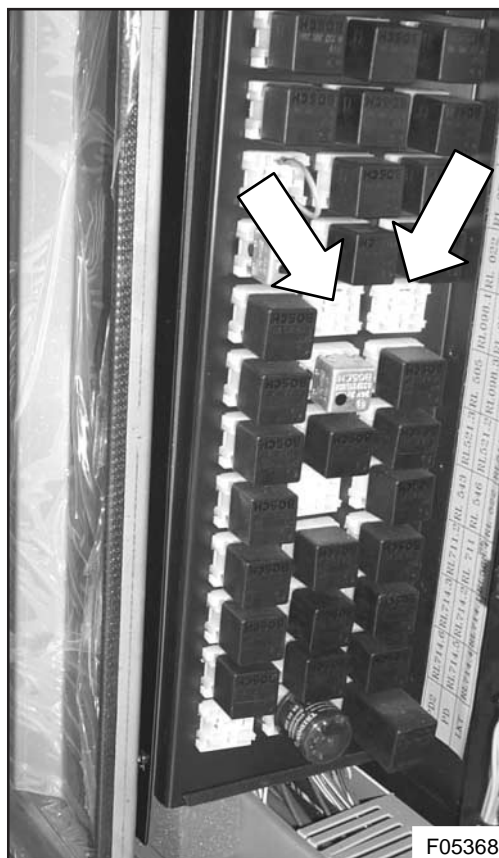
- Park the coach on a level surface, apply the parking brake and shut down the engine.
- Switch off all systems and turn off the battery master switch.
- Observe safe shop practices at all times.
- Read the entire procedure before beginning to work.

## 4. To activate the kneeling warning system :

- 1) In the luggage compartment, remove the access panels of the main junction box using a square key. Locate the vacant relay holder in position #75 on the relay rack. Remove and discard the jumper wire connecting terminals 30 and 87 (see Figure 1). Install one of the relays VH660752042 from the parts list (future designation : RL75).
- 2) Install the two remaining relays VH660752042 from the parts list in the vacant relay holders of positions # 76 and #77 (future designation : RL76 and RL77 respectively – see Figure 2).



**Figure 1 : Location of RL75 relay holder with jumper wire**



**Figure 2 : Location of relay holders RL76 and RL77**

- 3) Install flasher VH660763000 in the vacant holder of position #PD2 at the bottom row of the relay rack (see Figure 3). Future designation : PD2. Reinstall the junction box access panels.

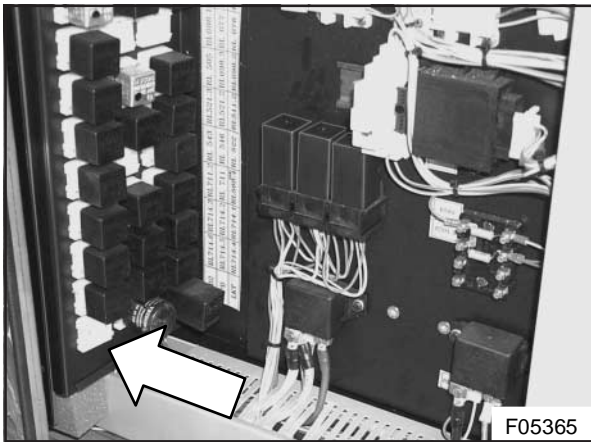


Figure 3 : Location of flasher holder PD2

- 4) In the stepwell, undo and remove the six pan head bolts securing the access panel of the right-hand headlamp cluster. Remove the panel. Next, undo and remove the four pan head bolts securing the right-hand lower fascia. Remove the fascia.
- 5) Cut loose and unwrap the wire harnesses shown in Figure 4. The sleeve containing two yellow wires and a brown wire is the warning system pre-wiring. Roll up the sleeve with the pink and blue wire and resecure it to the front chassis crossmember with tie wraps.

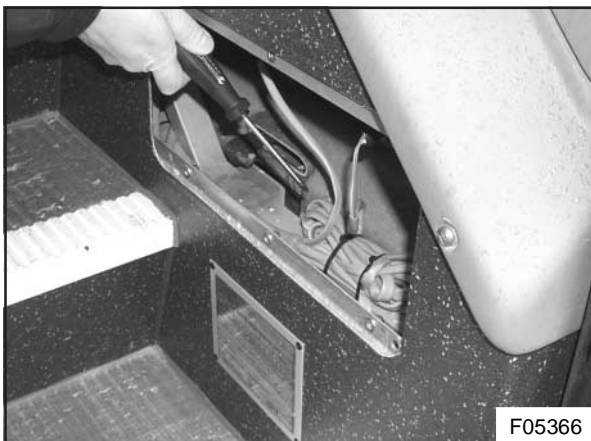
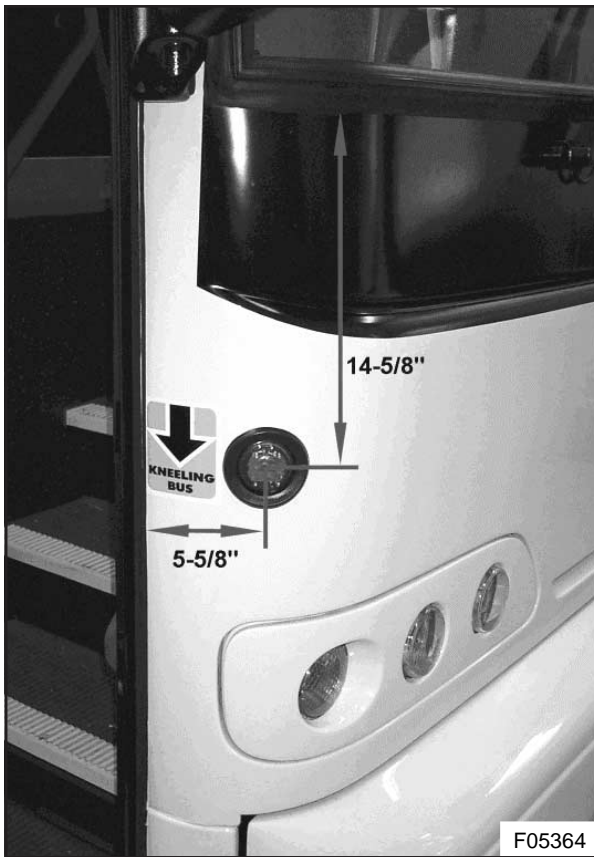


Figure 4 : Location of warning system pre-wiring

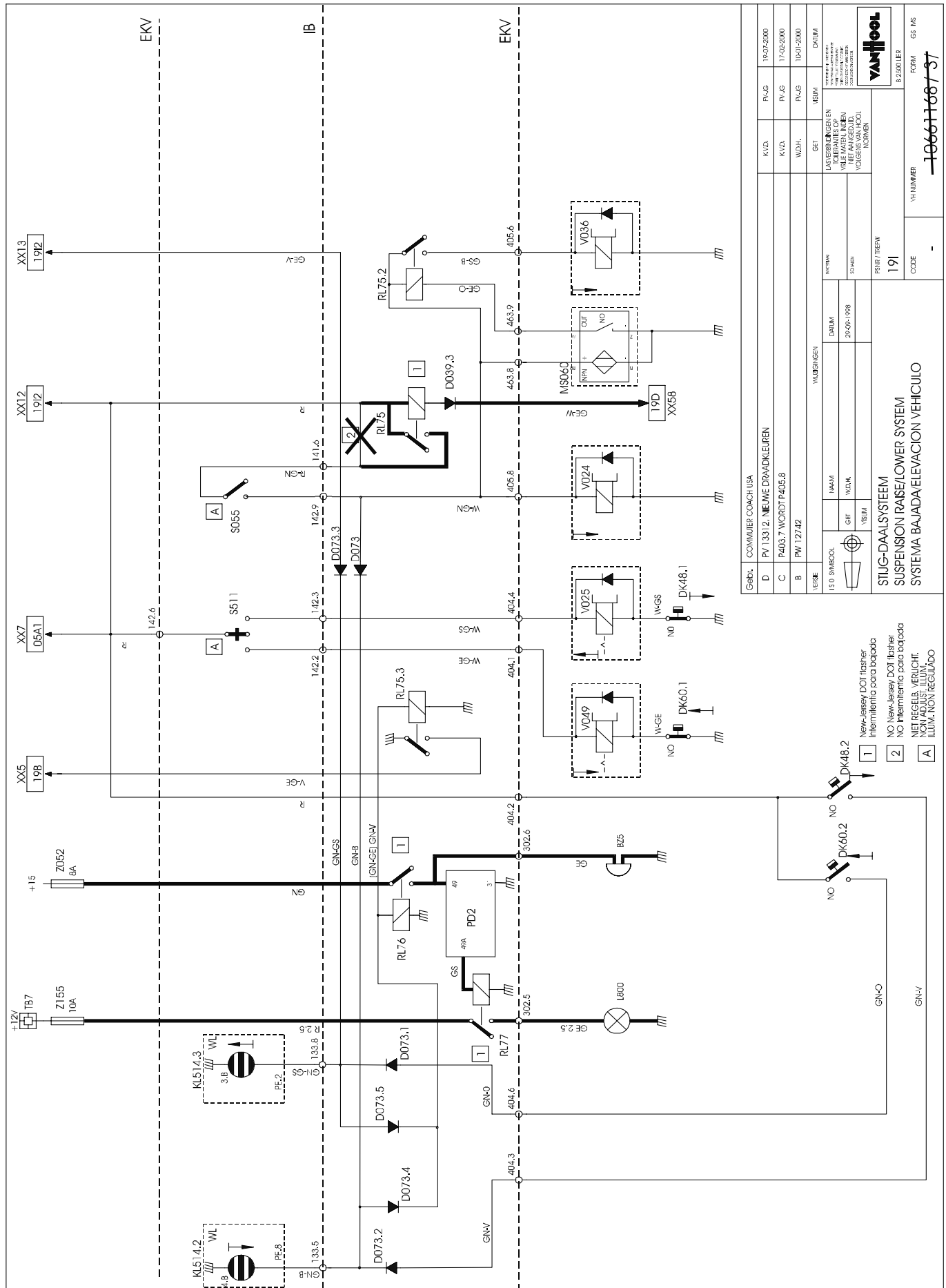
- 6) Working outside the coach, next to the entrance door, tape up the area where a hole needs to be cut in the front cap to install amber light #10275Y and grommet #10700. Mark the center spot of the hole referring to the dimensions in Figure 5. Cut the hole using the power drill, arbor and holesaw.



**Figure 5 : C2045 kneeling warning light installation dimensions**

- 7) Make a 1 inch lengthwise cut in the three-wire sleeve and pull out the yellow 12AWG (2.5 mm<sup>2</sup>) wire. Route this wire via the central main wire harness passage to the upper dashboard compartment. It may be necessary to pierce the silicone sealing first. Secure with tie wraps.
- 8) Cut the yellow wire to length and connect it to the plus terminal of the amber light. Cut a piece of 12AWG brown wire about 3 feet long. Connect one end to the minus terminal of the light and the other end to the ground stud on the wiper motor mounting bracket. Install the warning light and grommet. Reinstall the facia.
- 9) To install the buzzer, lower the front bumper. Drill a hole in the bulkhead next to the right-hand bumper block, to accept the Rivnut. Install the Rivnut with the appropriate tool and secure the buzzer hand-tight with a 5/16 inch bolt and washer. Make sure the buzzer drain hose points down.
- 10) Route the sleeve with the yellow and the brown 16AWG (1.0 mm<sup>2</sup>) wires towards the bulkhead area behind the front bumper. Secure with tie wraps. Cut the sleeve and wires to length. Connect the yellow wire to the plus terminal of the buzzer. Connect the brown wire to the minus terminal of the buzzer. Tape up the wires.
- 11) Close the bumper, reinstall the headlamp access panel, start the engine and check that :
  - the warning light and buzzer are activated, when the coach is lowered or raised at the front.
  - it is impossible to put the coach in motion during the kneeling cycle.
- 12) Stick the "KNEELING BUS" decal next to the flashing light as shown in Figure 5.

*Procedure complete.*



Gebd:	COMMIEP COACH USA				
D	PV 133.12. NIEUWE DRAADKLEUREN	K.V.D.	P.V.G.	1909-2000	
C	P403.7 WORDOT P405.8	K.V.D.	P.V.G.	1708-2000	
B	PW 127.42	W.D.H.	P.V.G.	1000-2000	
VERB:	VULBEREKEN	GET	IBIM	DATUM	
15.0 SYMBOL					
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