SERVICE BULLETIN

SB1209

ADDRESSEES	: All
COACH/BUS MODEL	: T2140, T2145, C2045
BULLETIN TYPE	: Service Information
SECTION/CHAPTER	: Section 11 – Body and accessories Chapter 10.38 – Body structure
DATE	: October 8, 2007
SUBJECT	**: Reinforced chassis crossmembers**
TERMS & CONDITIONS	: No claims will be accepted with reference to this Bulletin.

APPLICATION:

The parts information in this Bulletin is typical to T2140, T2145 and C2045 units.
Details may differ depending on the type and make of transmission installed and the year of build.

DESCRIPTION:

1. Service history has shown that the sloped crossmember fitted underneath the transmission of the above-mentioned units is prone to cracking.
   To address the issue and ensure structural integrity of the chassis in the drive axle area, the crossmember, which comes in two sizes, has been revised and reinforced.
   The improvements include thicker mounting flanges (from 15/64 to 5/16 inch - 1, Figure 1) and 5/32 inch reinforcing gussets on top and underneath the bends (2, Figure 1).

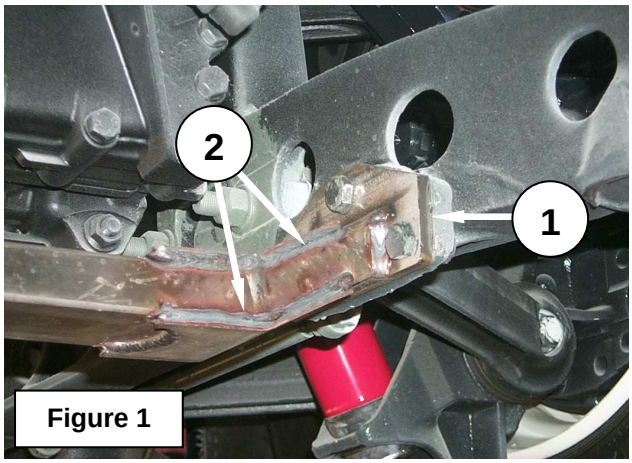


Figure 1

Description continued on next page.

2. Crossmember VH 11046326 (length: 29-27/32 inch between mounting flanges) is for service replacement purposes only.
   Crossmember VH 11044968 (length: 30-33/64 inch between mounting flanges) has been cut into production as from following units:

Model	Engine	VIN
C2045E	Cummins	46102 →
	Detroit Diesel	46753, 46757 → 46765, 46767 → 46791, 46803 →
	Caterpillar	47337 → 47340, 47413, 47415 → 47416, 47418 → 47419, 47423, 47425 → 47434, 47441 → 47493, 47497 →

Model	Engine	VIN T2140	VIN T2145
T2100E	Cummins	40162 →	44337, 44340 →
	Detroit Diesel	40626 →	44666 →
	Caterpillar	N/A	44842 →

3. On the following pages of this Bulletin all relevant details concerning the new crossmembers have been provided. This information should be copied and inserted in the relevant section of the coach Owner's/Operator's Spare Parts Manual.

4. Should replacement of a sloped transmission crossmember by a reinforced item be required, refer to the fitting instructions that have also been included with this Bulletin.
   Following these instructions will ensure a stress-free installation.

PARTS AND PRODUCTS:

Old parts

VH reference	Description	Qty
VH 10659163	Crossmember, transmission lower, two sizes	1
VH 10846850	Spacer for VH 10659163, 3/64-inch (1 mm)	#
VH 10846852	Spacer for VH 10659163, 5/64-inch (2 mm)	#
VH 660226501	Bolt, M12 x 1.75 x 30 mm, grade 8.8	6
VH 660207406	Nut, self-locking, M12 x 1.75 mm, grade 8.8	6

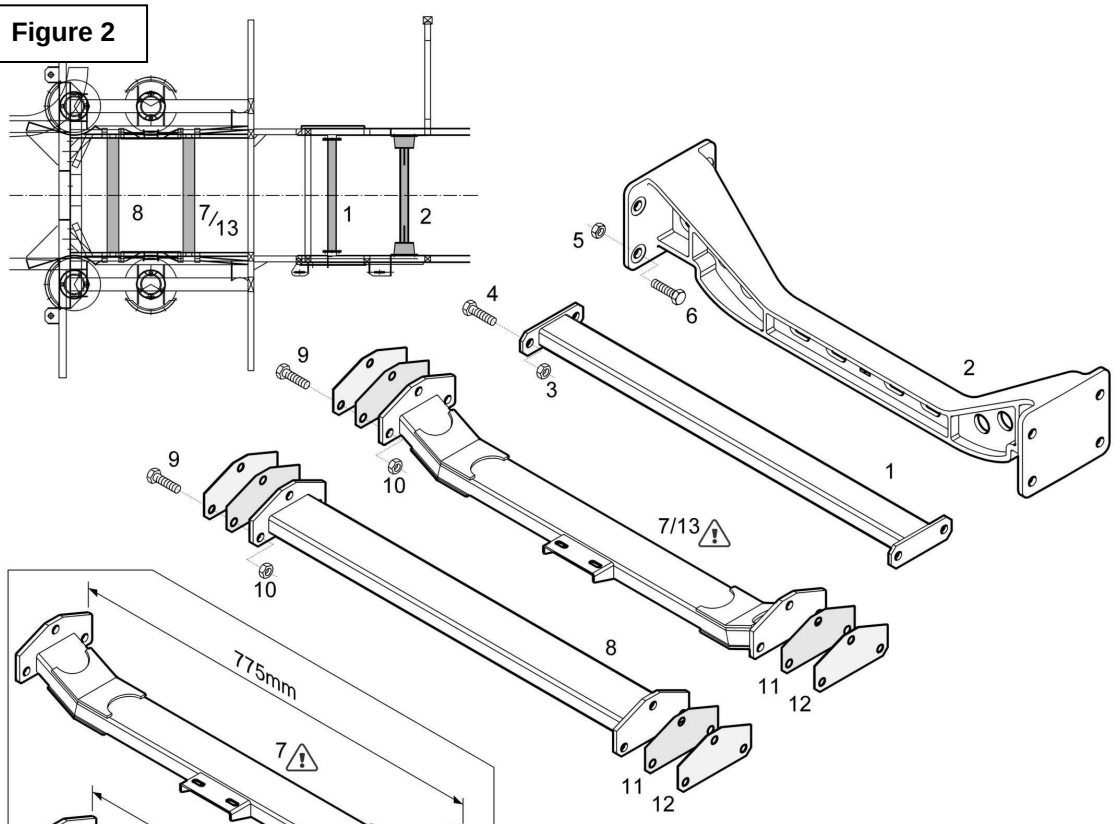
New parts

ATTENTION: you will require either crossmember VH 11046326 (length: 29-27/32 inch between mounting flanges,) or crossmember VH 11044968 (length: 30-33/64 inch between mounting flanges).

VH reference	Description	Qty
See note	Crossmember, transmission lower, reinforced	1
VH 10846850	Spacer for VH 11046326/VH 11044968, 3/64-inch (1 mm)	#
VH 10846852	Spacer for VH 11046326/VH 11044968, 5/64-inch (2 mm)	#
VH 660226501	Bolt, M12 x 1.75 x 30 mm, grade 8.8	6
VH 660207406	Nut, self-locking, M12 x 1.75 mm, grade 8.8	6

- Old and new parts are interchangeable, but only the new will be offered as service replacements.
- Parts may be purchased through regular channels.
- Parts and products disposition: discard according to applicable environmental regulations.

Figure 2



13 (758mm)	7 (775mm)
VIN T2140: 40000 - 40147 40501 - 40610	VIN T2140: 40148 → 40611 →
VIN T2145 43000 - 43500 44001 - 44300 43501 - 43999 44501 - 44614	VIN T2145 44301 → 44615 → 44801 →
VIN C2045: 45001 - 45457 45501 - 45999 46501 - 46510	VIN C2045: 45458 → 46511 → 47001 →

Pos.	Q.	Ref.N°	Description	Denominación	Spec.
1	1	10672652	Crossmember	Travesaño	
2	1	10671117	Crossmember	Travesaño	
3	4	660207406	Lock nut	Tuerca de frenado	DIN 980 M12x1,75 k.=8.8
4	4	660226601	Screw	Tornillo	DIN 933 M12x1.75x35mm k.=8.8
5	8	660207206	Lock nut	Tuerca de frenado	DIN 980 M14x2,00 k.=8.8
6	8	660228014	Screw	Tornillo	DIN 933 M14x30 k.=8.8
7	1	11044968	Crossmember	Travesaño	775mm
8	1	11044954	Crossmember	Travesaño	
9	12	660226501	Screw	Tornillo	DIN 933 M12x1,75x30 k.=8.8
10	12	660207406	Lock nut	Tuerca de frenado	DIN 980 M12x1,75 k.=8.8
11	#	10846850	shim	Placa de ajusta	d.=1mm
12	#	10846852	shim	Placa de ajusta	d.=2mm
13	1	11046326	Crossmember	Travesaño	758mm

Underframe assembly - crossmembers
Conjunto de bastidor - traversaños

2007-02-16
1038.06-1002

PROCEDURE:

To replace the sloped transmission crossmember

1. General:

- This job should be executed by an automotive technician.
- For more information refer to the Maintenance Manual, the Spare Parts Manual, and the Operating Manual.

2. Special tools, equipment or services:

- This job requires no special tools, equipment nor services.

3. Preparations:

- Park the coach on a level-surfaced service pit with the front wheels straight.
  If portable post lifts are going to be used, lower the suspension first.
- 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 sloped transmission cross member:

1) Referring to position 7/13, Figure 2, locate the sloped crossmember underneath the transmission.

2) Take note of the crossmember installation, as this may be directional.

3) If fitted, undo and remove the clamp nuts securing the cooling system tubing to the center bracket.

4) Undo and remove the bolts and nuts securing the crossmember to the chassis mounting pads.

5) Lower and remove the old crossmember and spacers, if fitted.

6) Check that crossmember length is correct for the application.
   Trial fit the new reinforced crossmember.

7) Without using spacers, secure the new crossmember temporarily with bolts and nuts to one side only in order to determine the clearance between the crossmember mounting flange and the chassis mounting pad.

8) Measure the gap between the crossmember mounting flange and the chassis mounting pad.
   Determine the number of spacers required to fill the gap so as to obtain a stress-free installation of the crossmember (see parts list).

9) Undo and remove the temporary fixings.
Recover the crossmember.

10) Using new bolts and self-locking nuts, reinstall the crossmember in the proper direction, dividing the spacers (if required) evenly left and right between the crossmember mounting flanges and the chassis mounting pads.
Tighten the fasteners to a torque of 52 ft.lbf (70 Nm).
If fitted, reinstall the clamp nuts securing the cooling system tubing.
Secure hand tight.

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.

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