

ADDRESSEES	: Owners and operators of vehicles listed under “Application” ABC Customer Care and Parts Source
VEHICLE MODEL	: CX45, TX40, TX45
MANUAL SECTION	: 6.10 Transmission
BULLETIN TYPE	: Product Improvement
DATE	: January 12 th , 2017
SUBJECT	: Introduction of new transmission oil filler pipe assembly
TERMS & CONDITIONS	: This service bulletin does not entitle to any reimbursement.

APPLICATION:

As from following units, Van Hool has introduced a new transmission oil filler pipe assembly.

Model	VIN
CX45 Detroit Diesel	49159
TX40 Detroit Diesel	41230
TX45 Detroit Diesel	41482

DESCRIPTION:

- The new oil filler pipe removes possible stress on the grommet (part #11147825) that seals the oil filler pipe assembly to the transmission housing due to vibrations of the oil filler pipe assembly. The grommet prevents moisture and foreign material from entering the transmission housing and, in this way contaminating the transmission fluid.
- New parts are supplied as a kit. This service bulletin gives step-by-step instructions to install the improved oil filler pipe assembly.
- This product improvement bulletin is applicable to previous units with DD13 engine:

Model	VIN
TX40	41200 up to including 41226
TX45	41100 up to including 41199 41231 up to including 41469
CX45	48200 up to including 49158

JOB QUALIFICATION:

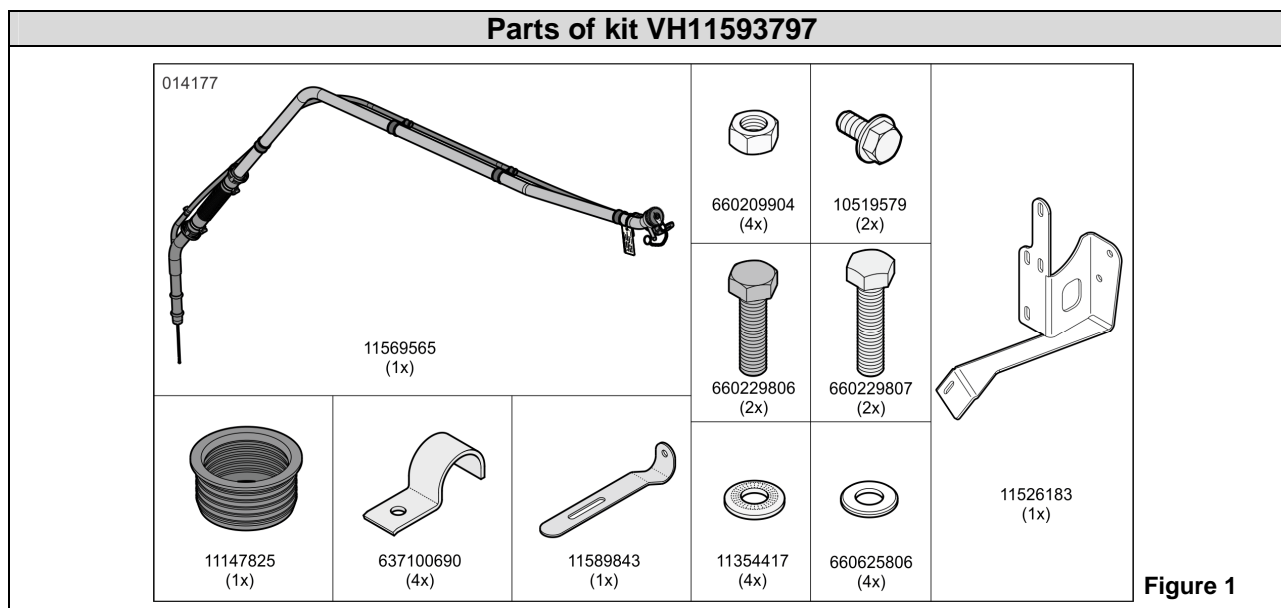
This task has to be carried out by an experienced automotive technician, trained in the operations at hand.

SPECIAL TOOLS, EQUIPEMENT OR SERVICES:

No special tools are needed.

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MATERIAL:



VH reference	Description	Qty
11574110	Oil filler pipe assembly	1
11147825	Grommet	1
660229806	Screw M8x30 mm	1
660625806	Washer M8	1
637100690	Pipe clamp dia. 33 mm	1
11354417	Lock washer M8	1
660209904	Nut M8	1
660229807	Screw M8x35 mm	2
660625806	Washer M8	2
637100690	Pipe clamp dia. 33 mm	2
11354417	Lock washer M8	2
660209904	Nut M8	2
11589843	Bracket	1
11526183	Bracket	1
660209904	Nut M8	1
11354417	Spring washer M8	1
637100690	Pipe clamp dia. 33 mm	1
660625806	Washer M8	1
660229806	Screw M8x30mm	1
10519579	Self-locking screw M8x16mm	2

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 steering wheel.
- Cold engine.
- **Read the entire procedure before beginning to work.**

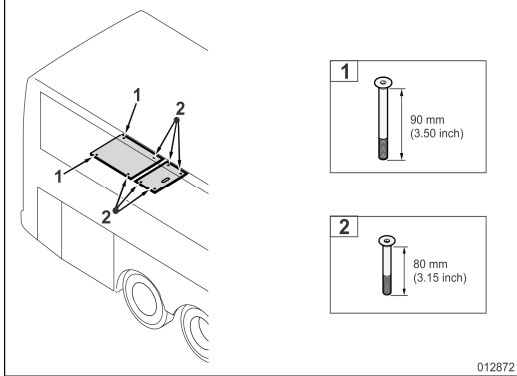
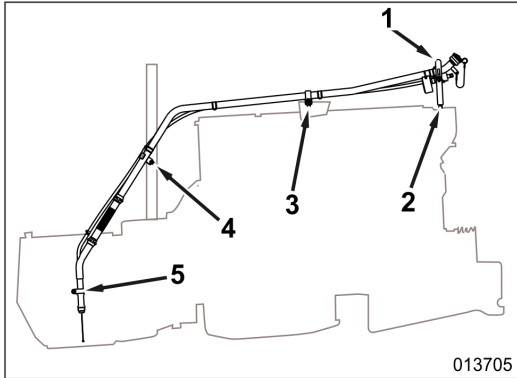


WARNING!

Observe safe shop practices at all times.

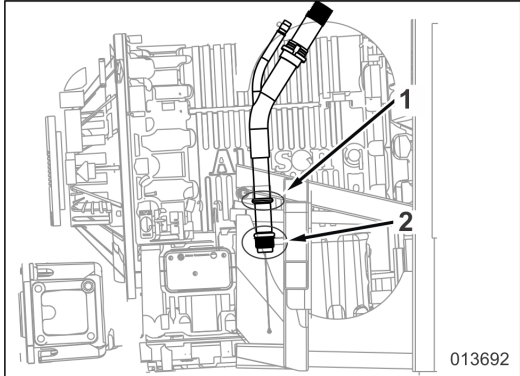
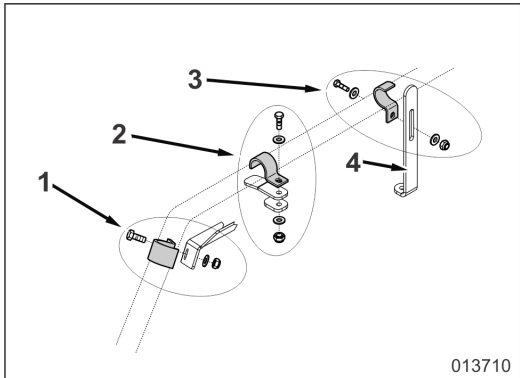
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PROCEDURE:

Step	Action
1	<p>Open the engine compartment door and both interior floor traps above the engine.</p> <p><i>NOTE: Pay attention to the location of the floor trap fixation screws. Do not mix them up at reinstallation!</i></p>  <p>012872 Figure 2</p>
2	Place a drip pan under the transmission at the pipe location. Clean any debris from area that may enter transmission when the pipe assembly is removed.
3	<p>Remove the pipe assembly installed as follows:</p> <ol style="list-style-type: none"> Remove pipe clamp (1) and its bracket (2). Keep the fasteners apart for re-use later. The bracket itself will be changed by the improved one from the kit. Remove the pipe clamps (3, 4, 5). Take away the oil pipe assembly by twisting and lifting it from the rear of the coach. <p><i>NOTE: Make sure that the grommet in the transmission housing is removed. It is possible that it stays behind when removing the oil pipe assembly.</i></p>  <p>013705 Figure 3</p>
4	Install the new pipe assembly as explained under "STEP 4 IN DETAIL".
5	Install bracket 11526183 as explained under "STEP 5 IN DETAIL".
6	Check the new pipe assembly installation for interference with coolant pipes.
7	Check the transmission oil level and adjust if necessary.

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STEP 4 IN DETAIL: To install new pipe assembly

Step	Action
4.1	Install grommet 1147825 from the kit in the transmission housing.
4.2	Remove the tape from the new oil filler pipe assembly.
4.3	<p>a. From the rear of the vehicle: carefully install the oil pipe assembly in the transmission housing ensuring the grommet (2) installed in step 4.1 stays in place during installation.</p> <p>b. Install pipe clamp (1) removed in step 3 and tighten the screw with a torque of 25 Nm (18 ft.lbf).</p> <p><i>NOTE: Pay attention to the routing of the pipe. Correct any interference issues that may be present during installation.</i></p>  <p>013692</p>
4.4	<p>Secure the new pipe assembly as follows:</p> <p>a. Secure the new bracket 11589843 (4) from the kit to the engine by using the fasteners removed in step 3a.</p> <p>b. Secure the frontmost pipe clamp 637100690 (1) with screw 660229806, washer 660625806, lock washer 11354417 and nut 660209904 to the bracket.</p> <p>c. Secure the two rearmost pipe clamps 637100690 (2 and 3) with screw 660229807, washer 660625806, lock washer 11354417 and nut 660209904 to the brackets.</p> <p><i>NOTE: Pay attention to the routing of the pipe. Correct any interference issues that may be present during installation.</i></p>  <p>013710</p>

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STEP 5 IN DETAIL: To install bracket 11526183 to prevent interference between coolant pipe and new transmission oil filler pipe

Step	Action
5.1	<p>Locate the bracket of the engine coolant pipes in the engine compartment.</p> <div data-bbox="587 360 1142 734" data-label="Image"> </div> <p>Figure 6</p>
5.2	<p>Remove the bracket. Keep the fasteners aside for reuse afterwards.</p>
5.3	<p>Install new bracket 11526183 from the kit as follows:</p> <ol style="list-style-type: none"> Secure the bracket to the chassis by using the two self-locking screws 10519579 (2) from the kit. Secure both coolant pipes to the bracket by using the fasteners removed in step 5.2. Secure the oil filler pipe to the bracket by using clamp 637100690 (4) and the fasteners (screw 660229806, washer 660625806, spring washer 11354417 and nut 660209904) from the kit. <div data-bbox="604 1097 1125 1473" data-label="Image"> </div> <p>Figure 7</p>

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HELP DESK:

If there are any questions, please call ABC Customer Care & Parts Source toll-free for guidance on 1-877-427-7278. Listen for the prompts for warranty and select that option.

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.

VAN HOOL CUSTOMER PORTAL:

Consult the customer portal regularly for the latest service documentation. Beside the maintenance manual, you will also find the operating manual and the spare parts catalogue of your vehicle on the customer portal. The customer portal is accessible through www.vanhool.be, and only with a code (password) from Van Hool. If you do not have a password yet, request it by using the link on the Van Hool website.

INFORMATION HANDLING:

Important additions and modifications regarding technical information not yet included in the manual will be communicated through Service Bulletins.