

ADDRESSEES	: ABC Customer Care and Parts Source Owners and operators of coaches listed under 'Application'
VEHICLE MODEL	: TD925US with steered trailing axle
MANUAL SECTION	: Chapter 4.10: Driveline/axle – Propeller shaft
BULLETIN TYPE	: Field Change Program
DATE	: March 21 th , 2016
SUBJECT	: To check propeller shaft for interference
TERMS & CONDITIONS	: Refer to the warranty section further in this Bulletin.

APPLICATION:

Model	VIN
TD925US 10-wheeler	42630 → 42647, 42691 → 42739* 42765*, 42766*, 42767 → 42780, 42846 → 42888

* The vehicles 42739, 42765 and 42766 are already factory fitted with shock absorbers VH11189594 on the drive axle. From 42889 onwards TD925US 10-wheelers are factory fitted with shock absorbers VH11189594 on the drive axle.

DESCRIPTION:

- It has been reported that the propeller shaft can interfere with the body structure in off-road circumstances (for example when driving on a vessel for overseas transportation). This can be observed by the presence of scratches, abrasion and/or other signs of interference on the propeller shaft (refer to figure 1).
- Customers of the affected vehicles should check the propeller shaft for signs of interference and follow the steps described in this Service Bulletin



Figure 1: Location of interference damage

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MATERIAL (for one coach):

VH reference	Description	Qty.
11446317	Shim, thickness 5 mm (0.2 inch)	4
11189594	Drive axle shock absorber	4

- Material may be purchased through regular channels.
- Parts/Waste disposal: discard old material according to applicable environmental regulations.

JOB REQUIREMENTS:

1. Technician's expertise and job supporting information:

- This job has to be carried out by a technician experienced in suspension systems.

2. Special tools, equipment or services:

- No special tools required

PROCEDURE:

1. Preparations:

- Park the coach safely, apply the parking brake, stop the engine, switch off all systems and turn off the battery master switch.
- Place chocks in front of and behind the drive axle wheels.
- Install a "DO NOT OPERATE" warning message on the instrument panel.
- Read the entire procedure before beginning to work.
- Wear protective clothing and eyewear.
- Observe the tightening torques specified in the maintenance manual when tightening screws and nuts.



WARNING!

Observe safe shop practices at all times.

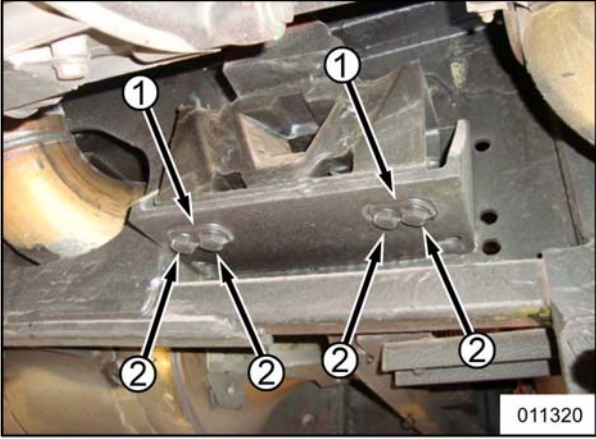

2. WORKING SEQUENCE:

Step	Action
1	Does the propeller shaft has scratches, abrasion, and/or other signs of interference as indicated in figures 1? <ul style="list-style-type: none">• If so, proceed with step 2.• If not, no further action is required.
2	Add shims underneath the engine mountings as explained under "STEP 2 IN DETAIL: To add shims underneath engine mountings".

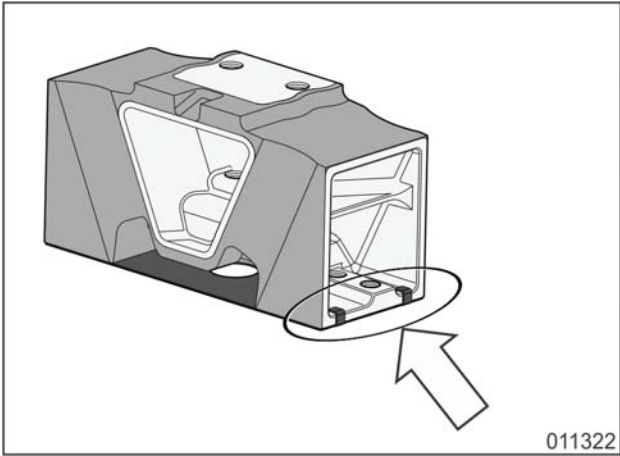
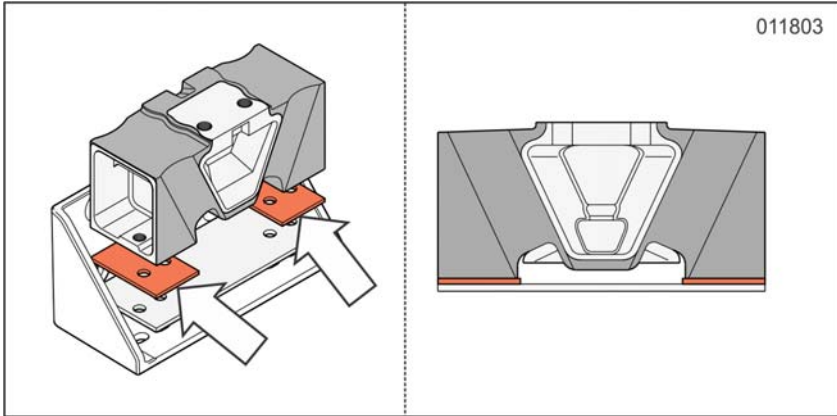
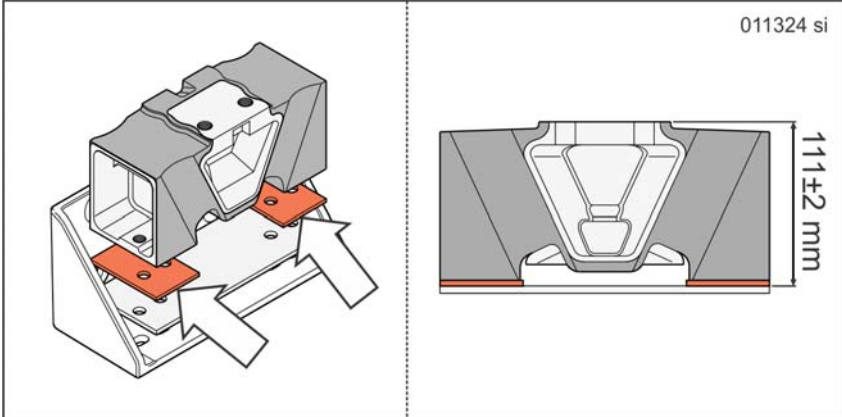
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3	Change the drive axle shock absorbers as explained under “STEP 3 IN DETAIL: To change shock absorbers of drive axle”.
4	Change the propeller shaft if any damage is deeper than the painted surface. Refer to the maintenance manual for instructions.

STEP 2 IN DETAIL: To add shims underneath engine mountings

Step	Action
1	<p>Remove the four screws (2) and spacers (1) securing the engine mounting to its support.</p>  <p style="text-align: right;">011320 Figure 2</p>
2	<p>Jack up the engine/transmission until there is enough clearance to install the shims further on.</p>  <p style="text-align: right;">011321 Figure 3</p>

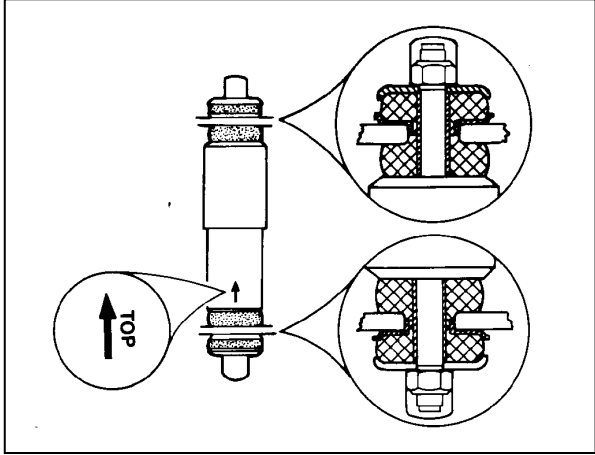
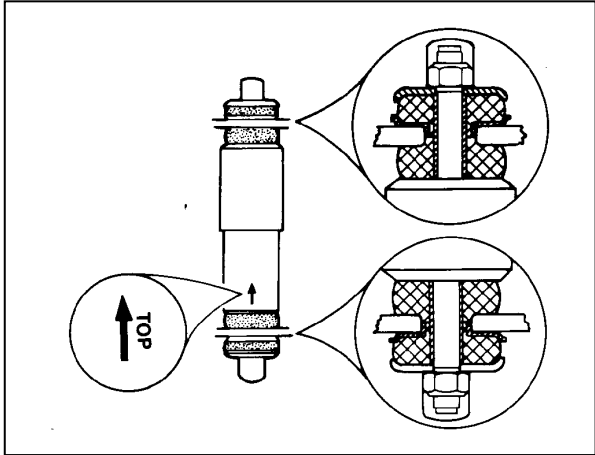
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<p>3</p>	<p>Wring the hooks of the mounting retaining plate flat and remove the retaining plate.</p>  <p style="text-align: right;">Figure 4</p>
<p>4</p>	<p>Insert the shims (refer to "MATERIAL" earlier in the text) under the mounting as shown in the figure.</p>  <p style="text-align: right;">Figure 5</p>
<p>5</p>	<p>Fit the mounting fixing screws together with the spacers and tighten the screws hand tight only at this stage.</p>
<p>6</p>	<p>Lower the engine/transmission.</p>
<p>7</p>	<p>Measure the distance (rubber mounting + shim) indicated in the figure. The distance should be 111 ± 2 mm (4.37 ± 0.08 inch).</p>  <p style="text-align: right;">Figure 6</p>

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8	Tighten the mounting fixing screws with the recommended torque (refer to maintenance manual).
9	Repeat these steps for the other mounting.

STEP 3 IN DETAIL: To change shock absorbers of drive axle

Step	Action
1	<p>Remove dust cap, nut, cupped washers, spacing ferrule and rubber bushings.</p> <div style="text-align: right;">  <p>Figure 7</p> </div>
2	Pull stud end out of upper mounting hole and lift shock absorber out of lower mounting hole.
3	Smear the stud threads of the new shock absorbers lightly with “Never-Seez” to make nut removal easier at a later stage.
4	<p>Install the new shock absorbers in reversal of removal. Be sure that the arrow marked “TOP” is in upward position (refer to figure below for proper location of cupped washers, spacing ferrule and rubber bushings). Tighten the nuts to a torque of 100 Nm (70 ft.lbf).</p> <div style="text-align: right;">  <p>Figure 8</p> </div>

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WARRANTY:

1. Terms and conditions:

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

Parts: parts will be supplied through regular channels, free of charge.

Labor allowance: 1 hour for labor will be awarded per coach repaired.

Campaign expiration date: Service Bulletin issue date + 1 year.

2. Claim references:

- Causal part: propeller shaft
- Job code: B30119

Claim submission: Contact ABC Customer Care Warranty Department for guidance.

Monitoring and performance: The claim records pertaining to this Bulletin will be used to determine that the remedy has been executed in accordance with the manufacturer's instructions and to evaluate the status of this Field Change Program.

INFORMATION HANDLING:

Important supplements to and modifications of technical information not yet included in the manual, are communicated by means of Service Bulletins.

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.