



# SERVICE BULLETIN

SB1317A

<b>ADDRESSEES</b>	: ABC Customer Care and Parts Source Owners and operators of vehicles listed under "Application"
<b>VEHICLE MODEL</b>	: TX.., TDX..
<b>SYSTEM/SUBSYSTEM</b>	: 10.06 Exterior lighting and signaling devices – headlights
<b>BULLETIN TYPE</b>	: Product improvement
<b>DATE</b>	: January 21, 2016
<b>SUBJECT</b>	: Introduction of new headlamps
<b>TERMS &amp; CONDITIONS</b>	: ABC/Van Hool has been assisting customers with replacement glass headlamp assemblies until polycarbonate headlamp assemblies could be developed. As these assemblies are now available as a pair, and in kit #11475585, a special introductory price will be allowed for a limited time.

## **APPLICATION:**

Van Hool has changed the construction of the headlamps of the TX series of coaches from the following units onwards:

<b>Model</b>	<b>VIN</b>
TX40	41217
TX45	41390
TDX25	42807

## **DESCRIPTION:**

### **What has changed?**

- The new headlamps are constructed with a lens made of polycarbonate instead of glass. This makes the headlamp less sensitive for road debris damage.
- The high beam design of the new headlamps has been changed from halogen bulb to LED unit.

**Due to these changes the old glass headlamp assemblies cannot be installed on these coaches.** Polycarbonate headlamps can be replaced individually.

### **Instructions for coaches with glass headlamp assemblies**

**While complete new headlamp assemblies can be fitted in place of the old glass assemblies it is not allowed to use a glass and a polycarbonate headlamp on the same vehicle.** Van Hool will therefore make the following parts available as a retrofit kit. Each retrofit kit contains a LH and RH headlamp assembly, and the necessary hardware parts.

This Service Bulletin explains how to change from glass to polycarbonate headlamps.

*NOTE: Only new headlamp assemblies will be supplied in the future.*

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## **MATERIAL:**

### **Parts of retrofit kit VH11475585**

<b>VH reference</b>	<b>Description</b>	<b>Qty</b>
VH 11449703	LH polycarbonate headlamp (+ daytime running light control unit)	1
VH 11449704	RH polycarbonate headlamp (+ daytime running light control unit)	1
VH 11462805	Pre-assembled 4-pin connector socket	2
VH 660765912	Cable splice	4
VH 660766567	Cable tie 366 mm x 4,7 mm	20

- Only the new headlamp assemblies will be offered as service replacement.
- Material may be purchased through regular channels.
- Parts/Waste disposal: old headlamp assemblies that are still serviceable can be used on other coaches until such time as a complete changeover is required. Broken assemblies need to be discarded according to applicable environmental regulations.

## **TIME REQUIRED:**

The time required to achieve the retrofit is 3 hours.

## **JOB QUALIFICATION:**

- This job has to be carried out by an automotive technician.
- If you do not have the expertise to carry out present procedure, do not hesitate to go to your nearest ABC Customer Care & Parts Source service center.

## **SPECIAL TOOLS, EQUIPMENT OR SERVICES:**

This job doesn't require the use of special tools, equipment or services.

## **PREPARATIONS:**

- Make sure that the parking brake is applied and switch off the engine.
- Turn off the battery master switch.
- Switch off all systems and turn off the battery master switch.
- Open the mechanical battery switch.
- Install a "DO NOT OPERATE" warning message on the instrument panel.
- Place chocks in front of and behind the drive axle wheels.
- Read the entire procedure before beginning to work.




## **WARNING!**

Observe safe shop practices at all times.

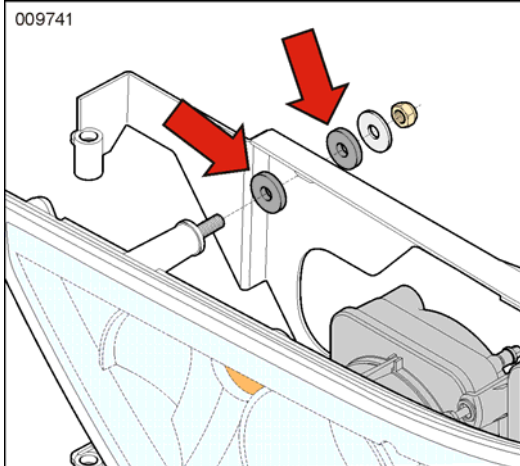
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## PROCEDURE TO CHANGE TO POLYCARBONATE HEADLAMPS

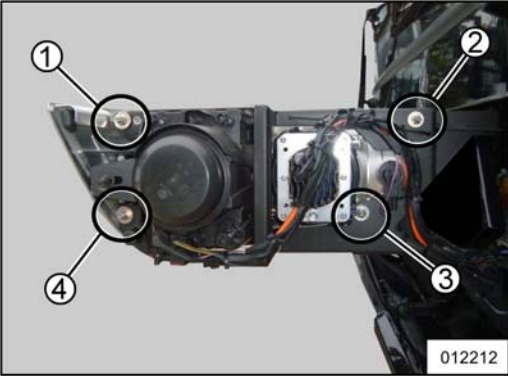
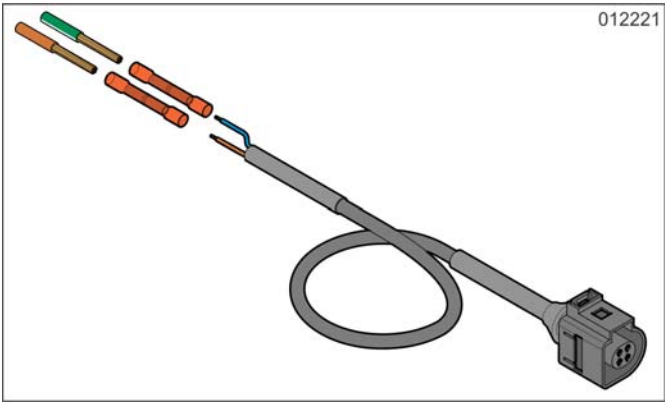
### 1. To remove headlamps

Step	Action
1	Lower the front bumper. The release knob of the headlamp holder is now accessible. 
2	Pull the release knob of the headlamp holder.
3	Swing open the headlamp holder.
4	Disconnect the electrical wiring at the headlamp.
5	Remove the fixing nuts and remove the headlamp assembly.
6	Repeat steps 1 up to and including 5 for the other headlamp.

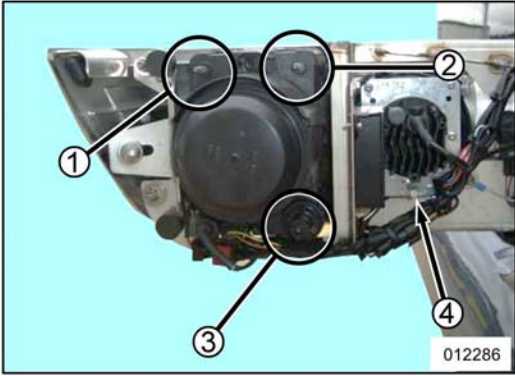
### 2. To install polycarbonate headlamps

Step	Action
1	Install the rubber washers as indicated in the figure. 

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<p><b>2</b></p>	<p>Install the fixing nuts of the headlamp and tighten them according to the sequence given in the figure. Tighten the nuts evenly by alternately turning every nut progressively further each time, until a torque of <math>1,8 \pm 0,1</math> Nm (<math>1.4 \pm 0.07</math> ft.lbf) is reached.</p> 
<p><b>3</b></p>	<p>Connect the pre-assembled connector socket 11462805 from the kit to the vehicle wiring of the high beam.</p> <ol style="list-style-type: none"> <li>Cut-off the two electrical wires attached to the connector socket of the high beam. The high beam connector socket can be identified by the color of the electrical wires (“blue-yellow” and “brown” for the LH headlamp, “green-white” and “brown” for the RH headlamp).</li> <li>Strip back the two cut electrical wires over a distance of 7.5 mm (0.29 inch).</li> <li>Strip back the blue and brown electrical wire of the pre-assembled connector socket over a distance of 7.5 mm (0.29 inch).</li> <li>Crimp the electrical wires of the vehicle wiring onto the wires of the pre-assembled connector socket by using the cable splices 660765912 from the kit: <ul style="list-style-type: none"> <li>for a LH headlamp: the “blue-yellow” electrical wire to the blue electrical wire of the pre-assembled connector socket, the brown electrical wire to the brown electrical wire of the pre-assembled connector socket;</li> <li>for a RH headlamp: the “green-white” electrical wire to the blue electrical wire of the pre-assembled connector socket, the brown electrical wire to the brown electrical wire of the pre-assembled connector socket;</li> </ul> </li> <li>Heat the splices with a hot-air blower until the ends snug around the electrical wiring to create a waterproof connection.</li> </ol> 
<p><b>4</b></p>	<p>Change the daytime running light control unit by a new control unit from the kit. Fixing screws tightening torque: maximum 2.5 Nm (1.8 ft.lbf).</p>
<p><b>5</b></p>	<p>Connect the vehicle wiring with the headlamp. Secure the wiring here and there with the cable ties from the kit.</p>

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6	<p><i>NOTE: The backside at the high beam is larger due to the switch-over to “LED” technology. Because of this it is possible that the headlamp cannot be swung home because the low beam control unit is preventing this. Change in that case the location of the control unit.</i></p> <p>Close the headlamp holder carefully and check for sufficient space at high beam height. Change, if necessary, the location of the low beam control unit.</p>
7	Push the headlamp home to lock.
8	Repeat this for the other headlamp.
9	<p>Check the headlamps setting. Each headlamp assembly has four adjusting screws: three for the low beam unit and one for the high beam unit (refer to figure).</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>1: Horizontal aim screw of low beam unit  2: Horizontal aim screw of low beam unit  3: Vertical aim screw of low beam unit  4: Vertical aim screw of high beam unit</p> </div> </div>

**HELP DESK:**

If there are any questions regarding this retrofit, please call ABC Customer Care & Parts Source toll-free for guidance on 1-877-427-7278.

**INFORMATION HANDLING:**

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

**VAN HOOL CUSTOMER PORTAL:**

Consult the Van Hool customer portal 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](http://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.