



# SERVICE BULLETIN

SB1334

<b>ADDRESSEES</b>	: ABC Customer Care and Parts Source Owners and operators of coaches listed under "Application"
<b>VEHICLE MODEL</b>	: TD925US
<b>MANUAL SECTION</b>	: 5.10 Brakes – Front axle brakes
<b>BULLETIN TYPE</b>	: Field Change Program
<b>DATE</b>	: March 17th, 2016
<b>SUBJECT</b>	: <b>To change "Quick release valve" of front axle brakes</b>
<b>TERMS &amp; CONDITIONS</b>	: Refer to the warranty section further in this Bulletin.

## APPLICATION:

Model	VIN
TD925US	42814 → 42820 42877 → 42879 42881 42892

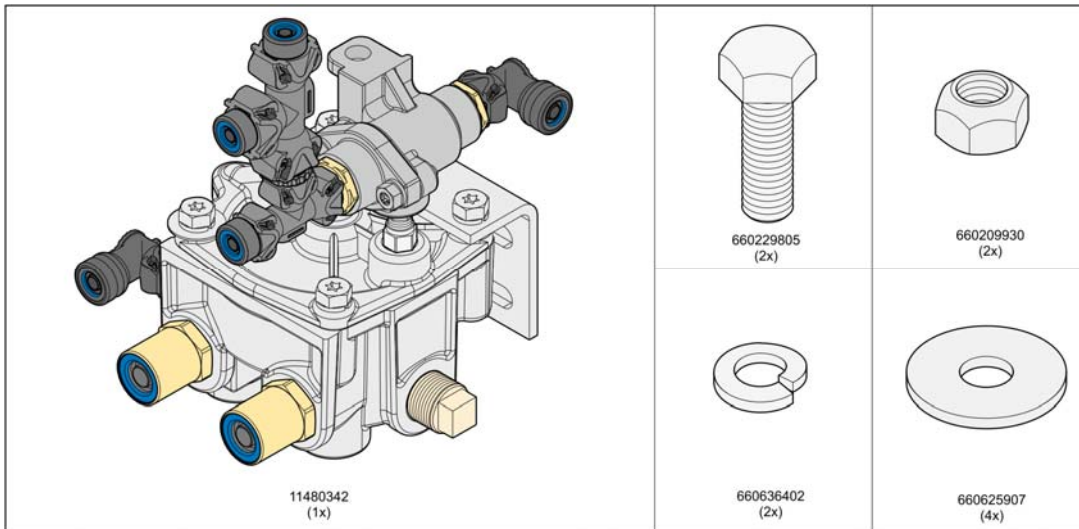
## DESCRIPTION:

- On the above mentioned units it is necessary to change the pre-assembled quick release valve VH11173539 (together with two-way valve VH637209080) of the front axle brakes by pre-assembled relay valve VH11480342.
- To address this change, Van Hool is conducting a Field Change Program, to install the parts provided in kit # VH11493383. Terms and conditions of which are explained further on under "Warranty".
- Owners and operators of the affected units should follow the procedure below to change the quick release valve of the front axle brakes.

## PARTS:

Conversion kit VH11493383 - Figure 1		
VH reference	Description	Qty.
11480342	Pre-assembled relay valve	1
660229805	Screw M8x1.25x25mm	2
660209930	Self-locking nut M8x1.25mm	2
660636402	Coil spring lock washer	2
660625907	Washer	4

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**Figure 1: Van Hool conversion kit 11493383**

## **PROCEDURE:**

If you do not have the expertise to perform this procedure, do not hesitate to go to your nearest ABC Customer Care & parts Source dealership.

### **1. General:**

This job should be executed by a technician experienced in air systems.

### **2. Special tools, equipment or services:**

No special tools, equipment or services are required.

### **3. Preparations:**

- Park the vehicle on a level-surfaced inspection pit with the front wheels straight. When using portable post lifts (always use 6 post lifts) instead of an inspection pit, always lower the suspension first.
- Apply the parking brake and stop the engine.
- Switch off all systems and turn off the battery master switch on the dashboard.
- Open the mechanical battery switch.
- Put a "DO NOT OPERATE" tag on the instrument panel before beginning any inspection or performing any repair.
- Open the rear engine compartment door and push on the red button of the safety switch and equip it with a key lock.
- Depressurize the compressed-air tank of the front-axle brakes by means of the tank drain valve. For the location of the air tanks, refer to chapter 13.17 of the maintenance manual.
- Read the entire procedure before beginning to work.



## **WARNING!**

**Observe safe shop practices at all times.**

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**4. Pneumatics - safety rules and installation recommendations:**

To avoid personal injury when working on or around the air system and its components, the following precautions should be taken:

- When lines are being disconnected, make sure to completely de-pressurize the system affected.
- Unless you are certain that all system air pressure has been vented, never connect or disconnect a pressurized line. It may whip, as air escapes. Also, never remove a component or open a line unless you are certain that all system air pressure has been vented.
- Keep hands away from the brake caliper; they may apply as the system pressure drops. Stay away from deflating air bellows.
- Never exceed the recommended air pressure and always wear safety glasses, when working on air systems.

Before installing a line, be sure to blow it out with compressed air to remove any dirt, which may have been allowed to enter while the tubing was in storage. Cap the line while routing it during installation.

- Tubing should be installed free of strain, twist or torsion. Avoid acute bending and stretching.
- When installed, check all tubing connections for tightness.
- Make sure there is adequate clearance between the tubing and anything it might be able to contact.
- Install tubing away from heat sources.

**5. Raufoss fittings:**

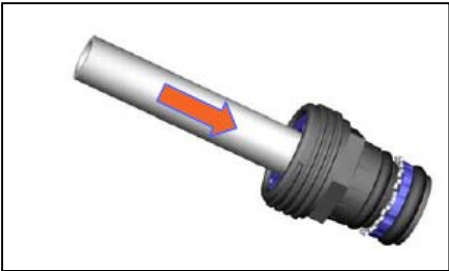
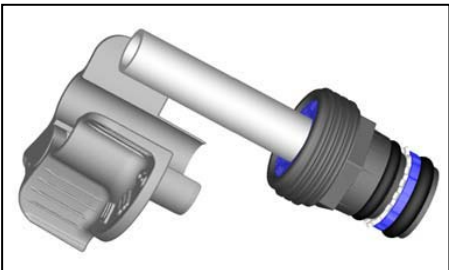
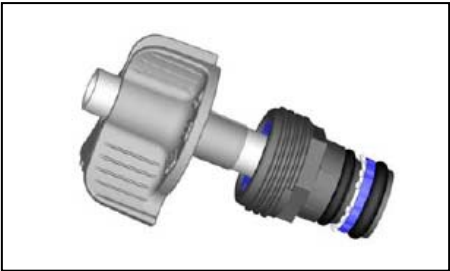
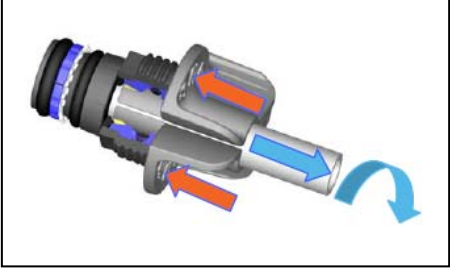
Most of the air lines are connected with Raufoss fittings. Please find some extra information about these fittings.

**a. To separate fitting housing from nipple**

Step	Action
1	<p>Open the snap arms on the fitting housing by using an ordinary snap ring pliers.</p> <div data-bbox="571 1375 1023 1697" data-label="Image"> </div> <p style="text-align: right;"><b>Figure 2</b></p>
2	Pull the housing from the nipple.


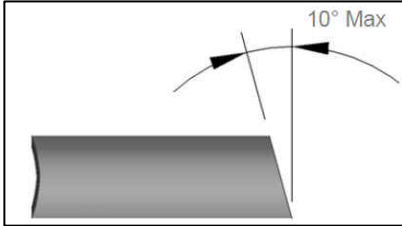
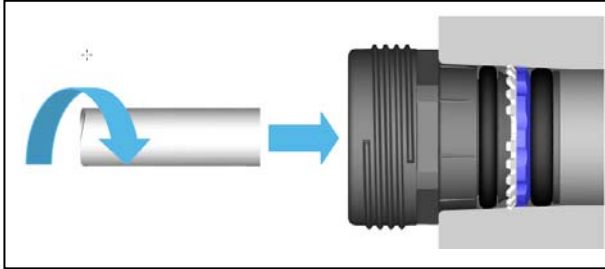
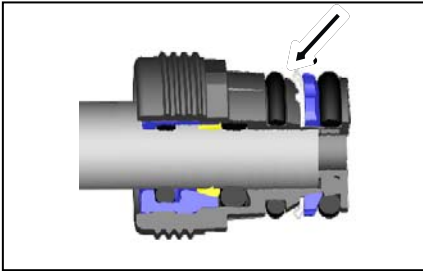
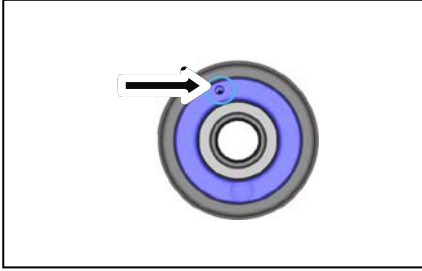
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**b. To separate air line from fitting housing**

Step	Action
1	<p>Push the air line to the bottom of the fitting housing.</p>  <p style="text-align: right;"><b>Figure 3</b></p>
2	<p>Apply the release tool to the air line by opening the slit.</p>  <p style="text-align: right;"><b>Figure 4</b></p>
3	<p>Close the slit when applied on the air line and press the release tool into the housing. Use silicone spray to ease the insert of the tool.</p>  <p style="text-align: right;"><b>Figure 5</b></p>
4	<p>Pull the air line out while pushing the tool. Turning the air line can ease the action.</p>  <p style="text-align: right;"><b>Figure 6</b></p>


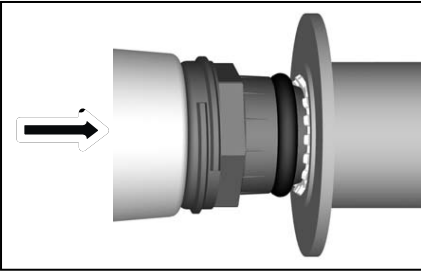
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c. To connect air line



Step	Action
1	<p> <b>CAUTION!</b>  <b>Never insert a damaged or dirty tube end into the fitting!</b></p> <p>Cut the air line at 90°. A maximum deviation of 10° is allowed. Secure the air line cutting process to avoid scratches, burrs, damage, or dirt.</p>  <p style="text-align: right;"><b>Figure 7</b></p>
2	<p>Insert the air line into the fitting housing by pushing and turning it simultaneously.</p>  <p style="text-align: right;"><b>Figure 8</b></p>
3	<p>Push the air line far enough until it has passed the main seal O-ring into the housing to avoid slipping out. The connection is sealed now.</p>  <p style="text-align: right;"><b>Figure 9</b></p> <p>If the air line is not fully assembled, a local slot in the blue cone element will give space for a displacement of the environmental seal O-ring. When pressurized this will give a clear whistle sound. The air line can be re-pushed under pressure. When the whistle sound is gone, the air line is fully assembled.</p>  <p style="text-align: right;"><b>Figure 10: Local slot in the blue cone element</b></p>

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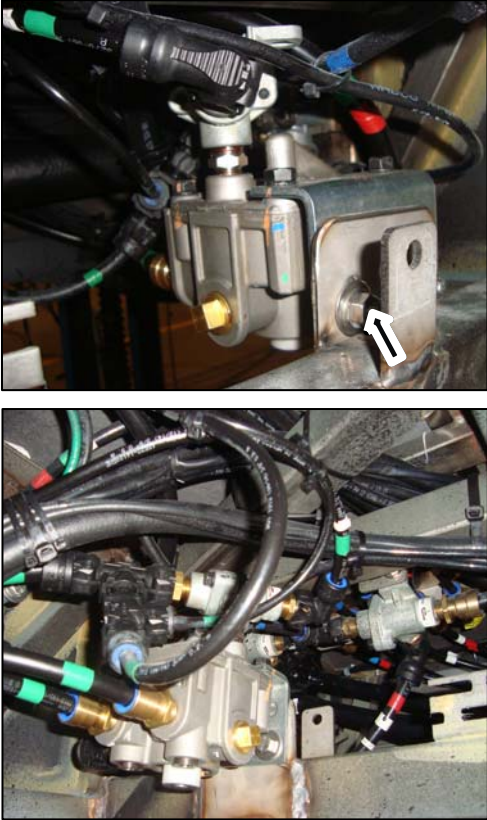
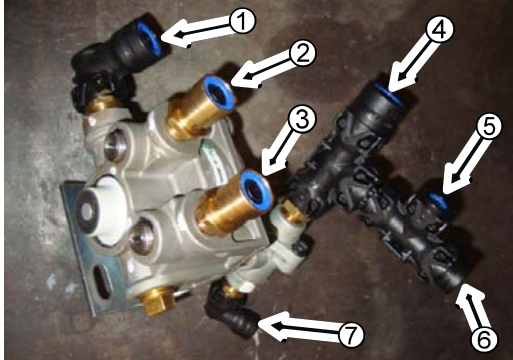
d. To connect fitting housing to nipple

Step	Action
1	<div data-bbox="395 280 486 369" style="display: inline-block; vertical-align: top;">  </div> <p data-bbox="491 302 1404 369"><b>Never force the nipple into the housing with an obviously angled position.</b></p> <p data-bbox="391 403 1404 470">Enter the nipple in a straight position in the housing during press-in operation. Push the nipple far enough into the housing until you hear 2 'clicks'.</p> <div data-bbox="694 481 1117 750" style="text-align: center;">  </div> <p data-bbox="694 757 1220 810"><b>Figure 11: Push the nipple far enough into the housing</b></p>

6. To change quick release valve by relay valve from kit:

Step	Action
6.1	<p data-bbox="352 958 1428 1025">Remove underneath the vehicle the protection panel located below the driver seat to get access to the pneumatic components.</p> <div data-bbox="545 1041 1069 1429" style="text-align: center;">  </div> <p data-bbox="1098 1406 1209 1438"><b>Figure 12</b></p>
6.2	<p data-bbox="352 1464 1295 1532">Remove quick release valve 11173539 (together with the two-way valve 11480411) from the front axle brakes.</p> <div data-bbox="545 1547 1069 1915" style="text-align: center;">  </div> <p data-bbox="1085 1861 1369 1915"><b>Figure 13: Quick release valve + two-way valve</b></p>

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<b>6.3</b>	Locate the already installed 5/8" air line marked with a red/green ring. Remove the plug of this line.
<b>6.4</b>	<p>Install pre-assembled relay valve 11480342 from the kit. Secure the valve to the bracket with screws 660229805 (2x), washers 660625907 (4x) coil spring lock washers 660636402 (2x) and nuts 660209930 (2x) from the kit.</p>  <p style="text-align: right;"><b>Figure 14: Fixation of pre-assembled relay valve</b></p>
<b>6.5</b>	<p>Connect the air lines to the pre-assembled relay valve 11480342 as follows:</p> <p>At the relay valve:</p> <ol style="list-style-type: none"> <li>1. Red-green 5/8" sup</li> <li>2. Green 1/2"</li> <li>3. Green 1/2"</li> </ol> <p>At the two-way valve:</p> <ol style="list-style-type: none"> <li>4. Green 5/8"</li> <li>5. Green 1/4"</li> <li>6. Green 3/8"</li> <li>7. Green 1, 3/8"</li> </ol>  <p style="text-align: right;"><b>Figure 15</b></p>
<b>6.6</b>	Check the air system for air leaks.

*End of procedure.*

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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<sup>3</sup>/<sub>4</sub> hour for labor will be awarded per coach repaired.

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

### **2. Claim references:**

- Causal part: quick release valve 11173539 (together with two-way valve 11480411)
- Job code: O05021N

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

## **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.