



# SERVICE BULLETIN

SB1365

<b>ADDRESSEES</b>	: Owners and operators of coaches mentioned under "Application"
<b>VEHICLE MODEL</b>	: C2045, CX35, CX45, TX45
<b>MANUAL CHAPTER</b>	: 02.22 Traction engine – Air intake system
<b>BULLETIN TYPE</b>	: Field Change Program
<b>DATE</b>	: June 17th, 2016
<b>SUBJECT</b>	: To check engine air-intake pipe for interference damage
<b>TERMS &amp; CONDITIONS</b>	: Refer to the warranty section further in this Bulletin.

## APPLICATION:

The Field Change Program, which is subject of this bulletin, applies to the following vehicles:

Model	VIN
C2045 with Cummins ISX12 EPA 2013	46369, 46450 → 46454
CX35 with Cummins ISL9 EPA 2013	48776 → 48860
CX45 with Cummins ISX12 EPA 2013	48250 → 48267, 48271, 48282, 48288, 48296, 48307, 48308, 48315, 48316, 48322, 48337 → 48340, 48345, 48385 → 48399, 48445 → 48454, 48485 → 48499, 48520 → 48529, 48550 → 48559, 48580 → 48589, 48600 → 48624, 48645 → 48654, 48675 → 48684, 48705 → 48714, 48735 → 48744, 48765 → 48774, 48895 → 48909, 48925 → 48949, 48975 → 48999, 49025 → 49049
TX45 with Cummins ISX12 EPA 2013	41180 → 41193, 41286 → 41289, 41302 → 41307, 41360 → 41381, 41422 → 41440

## DESCRIPTION:

On the vehicles affected by this bulletin there is a possibility of interference between the engine air-intake pipe and a side access panel. This could damage the air-intake pipe over time allowing unfiltered air to enter the engine. This Service Bulletin gives step-by-step instructions to check, and if necessary, solve the problem.

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## **PARTS AND PRODUCTS:**

*NOTE: Order parts after reading the entire procedure! Necessary parts may be different according to the action to be taken.*

<b>VH reference</b>	<b>Description</b>	<b>Qty.</b>
11238280	Air-intake pipe (C2045-ISX12)	1
11434381	Air-intake pipe (CX35-ISL9)	1
11360476	Air-intake pipe (CX45/TX45-ISX12)	1
10656667	Hose clamp	2
660864945	Loctite 7063 degreaser	1

## **JOB QUALIFICATION:**

The task has to be carried out by an experienced automotive technician, trained in the operations at hand. If you are not sure that you are qualified, contact ABC Customer Care on 1-877-427-7278.

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

No special tools, equipment or services required.

## **PREPARATIONS:**

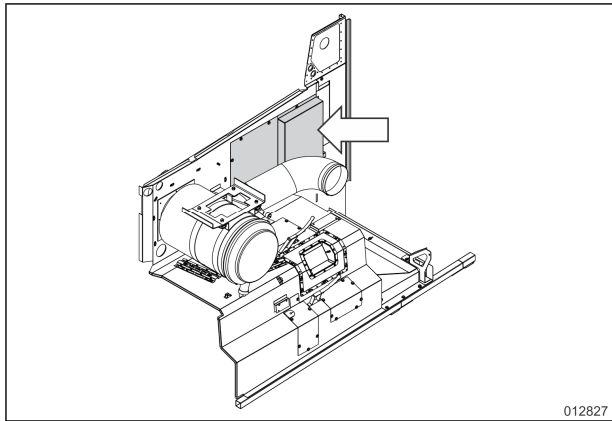
- Make sure that the parking brake is applied and stop the engine.
- Switch off all systems and turn off the battery isolation switch on the dashboard.
- Open the mechanical battery isolation switch.
- Install a "DO NOT OPERATE" warning message on the instrument panel.
- Put chocks in front of and behind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



## **WARNING!**

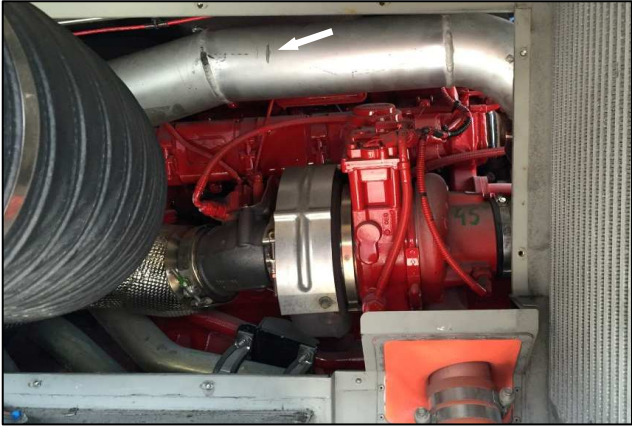

Observe safe shop practices at all times.

## **PROCEDURE:**

<b>Step</b>	<b>Action</b>
<b>1</b>	<p>Open the exterior access door of the radiator compartment, located on the left very rear side. Remove the screws and take the side panel away to get access to the air-intake pipe between the air-cleaner and the turbocharger.</p> <div data-bbox="568 1563 1182 1982"></div> <p>012827</p>

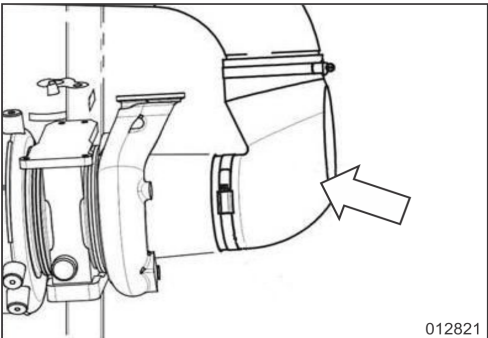
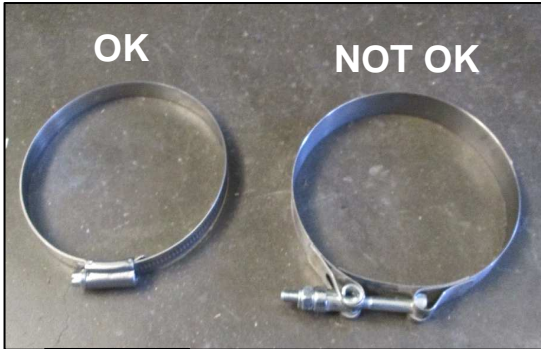
**Figure 1**

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2	<p>Are there any signs of damage on the air-intake pipe?</p> <ul style="list-style-type: none"> <li>• If so, go to step 3.</li> <li>• If not, go to step 4.</li> </ul>  <p style="text-align: right;"><b>Figure 2</b></p>
3	<p>Is the damage deeper than 1.3 mm (0.05 inch)?</p> <ul style="list-style-type: none"> <li>• If not, reposition the elbow hose at the turbocharger to prevent interference afterwards. Follow the steps as described under "STEP 3A IN DETAIL".</li> <li>• If so, change the air-intake pipe as described under "STEP 3B IN DETAIL".</li> </ul>
4	<p>Flatten the raised edge of the retaining plate of the side panel with a hammer.</p>  <p style="text-align: right;"><b>Figure 3</b></p>
5	Check the air-intake system for leaks when tubing has been removed.
6	Reinstall the side panel.
7	Close the access door of the radiator compartment.

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**STEP 3A IN DETAIL: To reposition elbow hose at turbocharger**

Step	Action
3A.1	<p>Remove the elbow hose at the air-intake pipe and the turbocharger.</p>  <p>012821 <b>Figure 4</b></p>
3A.2	<p>Degrease the contact surfaces on the hose and the pipe with Loctite 7063.</p>
3A.3	<p>Are hose clamps of the type shown at the left in figure 5 used to secure the elbow hose?</p> <ul style="list-style-type: none"> <li>• If so, go to step 3A.4.</li> <li>• If not, order two hose clamps 10656667 and go to step 3A.4.</li> </ul>  <p><b>Figure 5</b></p>
3A.4	<div data-bbox="352 1279 443 1373"> </div> <p><b>CAUTION!</b></p> <p><b>Do not use any lubricant to ease installation!</b></p> <p>Install the elbow hose on the turbocharger. Push the air-intake pipe in the elbow hose. Direct the elbow hose to create a clearance of at least 1 cm (0.4 inch) everywhere between the air-intake pipe and the side access panel when installed. Secure the hose to the air-intake pipe and the turbocharger by using the hose clamps 10656667. Tighten the clamps to a torque of <math>5 \pm 0.5</math> Nm (<math>3.7 \pm 0.4</math> ft.lbf).</p>

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### STEP 3B IN DETAIL: To replace air-intake pipe

Step	Action
3B.1	Remove the elbow hose at the air-intake pipe and the turbocharger (refer to figure 4).
3B.2	Remove the air-intake pipe at the air-cleaner side. <div data-bbox="639 367 1085 703" data-label="Image"> </div>
3B.3	Degrease the contact surfaces on the hose and the pipe with Loctite 7063.
3B.4	Are hose clamps of the type shown at the left in figure 7 used to secure the elbow hose at the turbocharger? <ul style="list-style-type: none"> <li>• If so, go to step 3B.5.</li> <li>• If not, order two hose clamps 10656667 and go to step 3B.5.</li> </ul> <div data-bbox="612 909 1152 1258" data-label="Image"> </div>
3A.4	<div data-bbox="351 1294 443 1384" data-label="Image"> </div> <p><b>CAUTION!</b></p> <p><b>Do not use any lubricant to ease installation!</b></p> <p>Push the new air-intake pipe in the hose at the air-cleaner side. Install the elbow hose on the turbocharger. Push the new air-intake pipe in the elbow hose at the turbocharger. Direct the elbow hose at the turbocharger to create a clearance of at least 1 cm (0.4 inch) everywhere between the air-intake pipe and the side access panel when installed. Secure the hose to the air-intake pipe and the turbocharger by using the hose clamps 10656667. Tighten the clamps to a torque of <math>5 \pm 0.5</math> Nm (<math>3.7 \pm 0.4</math> ft.lbf). Secure the hose at the air-cleaner side to the air-intake pipe by using the already installed hose clamp. Tighten the clamp to a torque of <math>5 \pm 0.5</math> Nm (<math>3.7 \pm 0.4</math> ft.lbf).</p>

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:**

- 20 minutes for checking and adjusting the air-intake system
- 30 minutes for checking the air-intake system and changing the air-intake pipe (parts will be awarded per coach).

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

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

- Causal part: 11360476 Air-intake pipe  
10656667 Hose clamp
- Job code: A20552 H (checking and adjusting the air-intake system)  
A20552 V (checking the air-intake system and changing the air-intake pipe)

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

## **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](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.

## **INFORMATION HANDLING:**

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