



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 04-047
 Prompted By: Manufacturer Contact
 Date Opened: 06/18/2004 Date Closed: 08/30/2004
 Principal Investigator: Sonny Murianka
 Subject: Service Brake Supply Tank Separation

Manufacturer: Van Hool, N.V.
 Products: 2000-2002 Van Hool C2045 Motor Coach Buses
 Population: 677

Problem Description: The mounting brackets for the service brake air tanks/reservoir are failing, potentially allowing the air tank to separate from the bus frame.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	20	20
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	0	0

***Description of Other:**

Action: This Preliminary Evaluation is closed. Van Hool has filed a safety recall to address ODI's 's concerns. Campaign number assigned to the recall is 04V-423.

Engineer: Sonny Murianka
 Div. Chief: Richard Boyd
 Office Dir.: Kathleen C. DeMeter

Date: 08/30/2004
 Date: 08/30/2004
 Date: 08/30/2004

Summary:

This investigation was opened to evaluate Van Hool's decision to conduct a field service campaign instead of a safety recall to repair the service brake air tank mounting brackets that are failing. This type of failure could result in the loss of air pressure necessary for proper service brake application. In addition, there is the possibility that the detached air tank could separate from the bus, striking vehicles operating behind or around the affected bus.

As the result of the agency's investigation into this matter, Van Hool has agreed to initiate a safety recall campaign and make necessary repairs to the air tank mounting system of 677 buses (motor coaches).

The action taken by Van Hool is sufficient to resolve the issues raised by this investigation. A copy of the safety recall is attached. Accordingly, this investigation is closed. The agency will take further action if warranted by the circumstances.

*Max
 07/13/04*



Bus and trailer manufacturers

TRANSMITTED BY E-MAIL AND ORIGINAL BY MAIL

Department Compliance and Regulations
 Extension : 2735/2715
 Contact : W.GEENS
 Our reference : WG902.027

Mr. Kenneth Weinstein
 Associate Administrator for Enforcement
 National Highway Traffic Safety Adm. (NHTSA)
 400 Seventh St., S.W.
 WASHINGTON, DC 20590
 USA

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 27, 2004

Dear Mr. Weinstein,


**Re. : FMVSS Standard 573 - Defect and Noncompliance Responsibility and Reports
 Air Tank Retention - Van Hool Model C2045**

ODI PE 04-047 dd. June 18, 2004.

Van Hool is submitting the following defect report to the agency concerning Air Brake Tank Retention. Please provide us with the NHTSA safety recall number to expedite the enclosed recall campaign.

We appreciate your assistance in this matter and look forward to your comments.

Yours sincerely,


 Wilfried Geens
 Compliance and Regulations


 Leopold Van Hool
 Managing Director

Enclosure - Report WG902.015 - 02

cc: V.H. Mr Dents Van Hool@, Mr. Filip Van Hool@ Heli Boterdaele@ W Van Rompuj@
 Luc Hendrickx@, Hugo De Roo@.

cc: ABC: Louis Hotard@, Georges Hunt@.

Van Hool N.V.
 Bernard Van Hoolstraat 58
 B-2600 Lier Kemingshooikt
 Belgium
 Telephone 03/420 20 20
 Telefax 03/422 30 68
 V.A.T. BE 404.060.033
 Registered in Mechelen No. 31.566

**Safety Defect and Noncompliance Report Guide for Vehicles
PART 573 Defect and Noncompliance Report¹**

On April 6, 2004, Van Hool NV and ABC Bus Companies, Inc., distributor for Van Hool N.V., decided to conduct an investigation regarding a possible defect which relates to motor vehicle safety that exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports.

Date this report was prepared: August 27, 2004

Furnish the manufacturer's identification code for this campaign (if applicable):

Reference - ODI PE 04-047 dd. June 18, 2004

1. Identify the full corporate name of the fabricating manufacturer of the vehicle being investigated. If the vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

<u>Manufacturer :</u>	<u>Import Agent :</u>
Van Hool N.V.	ABC Bus, Inc.
Bernard Van Hoolstraat 58	17489 West Colonial Dr.
B-2500 Lier-Koningshooikt, Belgium	Winter Garden, FL 34787

Identify the corporate official, by name and title, whom the agency should contact with respect to this investigation.

Wilfried Geens - Compliance and Regulations - Van Hool N.V.

Tel. : + 32 3 420 27 35 Fax. : + 32 3 482 44 17 E-Mail : wilfried.geens@vanhool.be

Name and Title of Person who prepared this report.

Wilfried Geens - Compliance and Regulations - Van Hool N.V.



Signed: Wilfried Geens

¹Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, for each defect or noncompliance condition which relates to motor vehicle safety.

This guide was developed from 49 CFR Part 573, "Defect and Noncompliance Reports" and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Mr. Jon White at (202) 366-5227 or by FAX at (202) 366-7882.

I. Identify the Vehicle Models Involved in the Investigation

2. Identify the Vehicles Involved in the Investigation, for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide:

Make(s): Van Hool **Model Years Involved:** 2000 - 2001 + 2002 **Model(s):** C2045

Production Dates: Beginning: September 1999 **Ending:** December 2001

VIN Range: Beginning at 45001 to 45361, and from 45501 to 45816

Vehicle Type: Motorcoach **Bodystyle:** Commuter C2000

Descriptive information which characterizes/distinguishes the investigated vehicles from those model vehicles not included in the investigation:

See enclosed leaflet, exhibit 1.

Production changes were made as from VIN 45362 and VIN 45817 forward.

Identify the approximate percentage of the production of all the investigated models distributed by your company between the inclusive dates of manufacture provided above, that the investigated model population represents. For example, if the investigation involved Widgets equipped with certain items of equipment from January 1, 1996 through April 1, 1997, then what was the percentage of the investigated Widgets of all Widgets manufactured during that time period.

100 % of the C2045 coaches produced during the identified period (up to and including VIN 45361 and 45816)

II. Identify the Investigation Population

3. Furnish the total number of vehicles investigated potentially containing the defect or noncompliance.

Number of Vehicles:

Model	Year	Potentially Involved
C2045 with Cummins engine	2000	63
C2045 with Detroit engine	2000	50
C2045 with Cummins engine	2001	242
C2045 with Detroit engine	2001	210
C2045 with Cummins engine	2002	56
C2045 with Detroit engine	2002	56

Total Number Potentially Affected by the Investigation: 677

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance: 100 %

Identify and describe how the investigation population was determined--In particular how the investigated models were selected and the basis for the beginning and final dates of manufacture of the investigation vehicles:

Production cut-in of a change in the air tanks mounting brackets retention to the coach structure has been provided. With time, coaches manufactured prior to the cut-in may experience fatigue failures depending on the road conditions and the severity of their operation.

III. Describe the Defect or Noncompliance

5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.

The mounting brackets of two air tanks located above the drive axle (drive axle air brakes at the LH and auxiliary air tank at the RH) and one air tank (tag axle air brakes) located above the third axle may break loose.

Describe the cause(s) of the defect or noncompliance condition.

Vibrations weaken the attaching points of the tanks to the coach structure.

Describe the consequence(s) of the defect or noncompliance condition.

Some of the above mentioned air tank brackets have broken of.

Identify any warning which can (a) precede or (b) occur.

The failures of the air tank suspension bracket will always alert the driver before a major breakdown occurs. A defective tank fixation will be detected during the mandatory preventive maintenance inspections of the pneumatic system and visual inspections of the underframe. A defective tank fixation, still suspended by the airlines will cause noise. Possible loss of air will be indicated by the pressure gauges on the instrument panel. In case of too low an air pressure, a buzzer and a red warning lamp will alert the driver. If the driver ignores these low pressure warnings too, the spring brakes will stop the vehicle automatically.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.

Not applicable.

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:

Not applicable.

IV. Provide the Chronology in Determining the Defect/Noncompliance

If the campaign is for a defect, complete Item 6, otherwise Item 7.

6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.

To date, customers complaints have identified about 20 vehicles which have experienced air tank retention failures, 1 drive axle tank, 7 tag axle tanks, 10 auxiliary tanks and 2 tanks with non defined location. No accidents, injuries, fatalities have resulted from these

incidents. Warranty claims have been filed by ABC-Bus Companies, Inc. with Van Hool N.V.

Detailed information, see exhibit 2 in attachment.

7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.

Not applicable

V. Identify the Remedy

8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the campaign condition and the remedy.

To be provided.

Clearly describe the distinguishing characteristics of the remedy component/assembly versus the investigated component/assembly.

The cause of the failure is due to a possible fatigue from vibration of the air tank brackets. Adding stabilizer braces will eliminate the cause of the problem. We refer to enclosed exhibit 3 (to be provided), showing the proposed action for remedy.

Identify and describe how and when the investigation condition was corrected in production. If the production remedy was identical to the remedy in the field, so state. If the product was discontinued, so state.

In the fall of 2001, the air tanks mounting brackets were extended to provide dual attaching points with the coach structure. This prevents the air tanks from flexing the former single point bracket attachment to the coach structure.

The recall remedy will accomplish the same goal by (to be provided)

VI. Identify the Investigation Schedule

Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the investigation.

Subject to NHTSA's approval of manufacturer's proposed recall remedy including proposed documents (Notification letter, Service Bulletin including Owner's Certification Letter) we can start this campaign within 30 days after confirmation of NHTSA's approval.

VII. Furnish Investigation Communications

9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this investigation from the time your company determines the defect or noncompliance condition on, not just the initial notification. A DRAFT copy of the notification documents should be submitted to this office by Fax (202-386-7882) for review prior to mailing.

Note that these documents are to be submitted separately from those provided in accordance with Part 573.8 requirements.

We refer to (to be provided) :

Proposed Service Bulletin Including Owner's Certification Letter (see exhibits 3+ 5).

Notification letter (see exhibit 4).

EXHIBITS (to 573 defect Report)

- ◆ Exhibit 1 : Leaflet C2045
- ◆ Exhibit 2 : Overview of warranty claims - WG 902.023 - 01
- ◆ Exhibit 3 : Draft Service Bulletin N°, to be provided
- ◆ Exhibit 4 : Draft Owner's notification letter, to be provided
- ◆ Exhibit 5 : Draft Owner's certification letter, to be provided

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Series



ABC
COMPANIES

AIR TANK RETENTION - CLAIMS

EXHIBIT 2

#	CLAIM		VIN	DATE		MILEAGE	TANK
	REF. N°	DATE		DELIVERY	FAILURE		
1	US301037	28-jun-02	45062	08-sep-00	25-jun-02	72024	A
2	US302363	25-aug-02	45066	23-sep-00	13-aug-02	121288	T
3	US307540	13-jun-03	45077	20-nov-00	10-jun-03	157943	A
4	US141358	18-jul-01	45088	27-okt-00	15-jun-01	57155	A
5	US152844	08-apr-02	45088	19-nov-00	29-mrt-02	127152	0
6	US305348	16-jan-03	45112	25-apr-01	06-jan-03	129363	A
7	US311041	24-mrt-04	45113	09-apr-01	24-mrt-04	230150	A
8	US311131	26-mrt-04	45119	15-mai-01	22-mrt-04	195000	0
9	US309079	16-okt-03	45143	05-dec-01	10-okt-03	73166	A
10	US307827	09-jul-03	45161	26-jun-01	25-jun-03	112878	A
11	US150483	22-jan-02	45191	14-mrt-01	22-jan-02	41000	T
12	US306851	12-feb-03	45244	31-dec-01	10-feb-03	226986	A
13	US304909	20-dec-02	46269	21-aug-01	18-dec-02	130934	A
14	US304743	13-dec-02	45304	22-aug-01	02-dec-02	162598	T
15	US307731	27-jun-03	45328	26-sep-01	23-jun-03	195564	T
16	US137911	26-apr-01	45372	27-okt-00	29-mrt-01	72541	T
17	US147087	26-nov-01	45512	06-mrt-01	13-nov-01	24486	T
18	US307480	09-jun-03	45545	12-feb-01	27-mai-03	203970	D
19	US303161	28-sep-02	45680	29-jun-01	18-sep-02	71136	A
20	US311590	03-mai-04	45089	22-feb-01	29-apr-04	82212	T

TANK IDENTIFICATION

D = Drive axle tank

A = Auxiliary tank

T = Tag axle tank

0 = Non defined tank