



ZF Group North America Operations

Equipment Report

Transaction ID: 16-0010516-17636-10 (Original Report)

Required fields indicated with *

Your report has been submitted. Your Transaction No. is 16-0010516-17636-10.

Manufacturer: ZF Group North America Operations

15811 Centennial Drive
Northville MI 48167

[Eric Fredrickson](#) Lead Corp. Quality Engineer
60-5742,

This is a Safety Defect Report.

Equipment Information

ZF Control arm 0501 218 145

* **Brand/Trade:** ZF
 * **Model:** Control arm

Production Dates Begin: 06/23/2015
 End: 02/02/2016

 * **Part No.:** 0501 218 145
Size: 13 control arms

Function:
Wheel control
Descriptive Information:
 Connection between Chassis and wheel end. 13 control arms in 7 buses. Additional units are subject to recall outside of the US. Change of supplier starting with the production date 06/23/2015 to 02/02/2016. All control arms identified by customers as having been shipped into the USA are included in the recall population.

ZF Control arm 0501 211 327

* **Brand/Trade:** ZF
 * **Model:** Control arm

Production Dates Begin: 06/23/2015
 End: 02/02/2016

 * **Part No.:** 0501 211 327
Size: 24 control arms

Function:
Wheel control
Descriptive Information:
 Connection between Chassis and wheel end. 24 control arms in 12 buses. Additional units are subject to recall outside of the US. change of supplier starting with the production date 06/23/2015 to 02/02/2016. All control arms identified by customers as having been shipped into the USA are included in the recall population.

Number potentially involved: 37 **Estimated percentage of involved with defect:** 100%

Defect / Noncompliance Description

For this Defect/Noncompliance:

* **Describe the defect or noncompliance:**
 The hot crimping which connects the tube ends with the solid shafts of the control arm joint housings may crack along the crimp crease.
If a noncompliance, provide the applicable FMVSS:
If applicable, provide any further FMVSS affected:
Describe the cause:
 Root cause not yet determined.

* **Describe the safety risk:**
 Under load the tube then may separate from the shaft and control of vehicle may become difficult or lost affecting ability to steer the vehicle.
Identify any warning which can precede or occur:
 No warning

This Recall affects all vehicles.

If applicable, identify the manufacturer of the defective or noncompliant component. If the manufacturer of the component is unknown, provide the information for the company that supplied the subject component.

Component manufacturer

Company Information

Company Name: ZF Friedrichshafen AG
Country: Germany
Address 1: Graf-von-Soden-Platz 1

Company Contact Information

First Name: Andreas
Last Name: Loeffler
Position: Manager Corporate Governance

| | | | |
|-------------------------|-----------------|---------------|-------------------------|
| Address 2: | | Email: | andreas.loeffler@zf.com |
| City: | Friedrichshafen | Phone: | 497541774832 |
| State: | FOREIGN STATES | | |
| Zip/Postal Code: | 88046 | | |

Purchaser Information

| | | | |
|-------------------------|--|--------------------|--|
| Company: | Temsa Global Sanayi VE Ticaret A.S. | First Name: | |
| Country: | Turkey | Last Name: | |
| Address 1: | YOLGECEN MH. TURHAN CEMAL BERIKER BULVAR | Position: | |
| Address 2: | | Email: | |
| City: | SEYHAN / ADANA | Phone: | |
| State: | FOREIGN STATES | | |
| Zip/Postal Code: | 01355 | | |

| | | | |
|-------------------------|----------------------|--------------------|--|
| Company: | EvoBus GmbH | First Name: | |
| Country: | Germany | Last Name: | |
| Address 1: | Neue Straße 95 | Position: | |
| Address 2: | | Email: | |
| City: | Kirchheim unter Teck | Phone: | |
| State: | FOREIGN STATES | | |
| Zip/Postal Code: | 73230 | | |

Chronology of Defect / Noncompliance Determination

Provide the chronology of events leading up to the defect decision or test data for the noncompliance decision.:

ZF is not aware of any crashes, injuries or fatalities due to the defect. The defect appears to relate to the installation of a new sub-supplier for the tube in June, 2015. The tube was subject to 100% inspection in the production process at the ZF plant. A crack was found in September, 2015 in the production plant of ZF, and an investigation commenced including the ongoing inspection of all product and the removal of any with a crack (a total of 12 out of 2877). On January 21, 2016, a crack was found at a customer's plant, with two additional cracks found during February, 2016. Further investigation has not revealed root cause. The tube supplier has reverted to another approved sub supplier as of February 2, 2016. The affected tubes were built in Germany and delivered to customers outside of the U.S.A. In February, ZF was informed that at least one customer had shipped vehicles with affected parts to the United States market, and that customer advised that it would file a Defect Information Report. On March 1, 2016, ZF confirmed that a second customer had also shipped vehicles with affected parts to the United States market. On March 3, 2016, ZF determined that notification to NHTSA is appropriate. The safety recall will be conducted by the affected vehicle manufacturers. ZF understands that both vehicle manufacturers have or will file Defect Information Reports with regard to the vehicles in which the affected parts were installed.

Identify the Remedy

Describe the defect/noncompliance remedy program, including the manufacturer's plan for reimbursement.

Exchange of all parts produced with the aforementioned production period.

Describe what distinguishes the remedy component from the recalled component.

We have changed on the 3rd of February 2016 to another approved sub supplier with positive experience in the past.

Identify and describe how and when the recall condition was corrected in production.

We have changed on the 3rd of February 2016 to another approved sub supplier with positive experience in the past.

Identify the Recall Schedule

Describe the recall schedule for notifications.:

As to purchasers: according to our information, this has been completed by Temsa Global Sanayi VE Ticaret A.S and this does not apply to EvoBus GmbH. As to dealers: according to our information, this has been completed by Temsa Global Sanayi VE Ticaret A.S. According to our information, this has been also completed by EvoBus GmbH.

Planned Dealer Notification Begin Date:

Planned Dealer Notification End Date:

Planned Owner Notification Begin Date:

Planned Owner Notification End Date:

Manufacturer's identification code for this recall (if applicable):

N/A

Please be reminded that owner notification letters must be mailed no more than 60 days from submission of this report.

Manufacturer Comments to NHTSA Staff

Document Upload

There are 0 documents associated with this report.