

**Part 573 Safety Recall Report****15V-389****Manufacturer Name :** Motor Coach Industries**Submission Date :** JUN 12,2015**NHTSA Recall No. :** 15V-389**Manufacturer Recall No. :** SB 425**Manufacturer Information :**

Manufacturer Name : Motor Coach Industries

Address : 200 East Oakton Street

Des Plaines IL 60018

Company phone : 847-285-2085

**Population :**

Number of potentially involved : 232

Estimated percentage with defect : 100

**Vehicle Information :**

Vehicle : 2014-2014 MCI D4500

Vehicle Type : BUSES, MEDIUM &amp; HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : MCI D4500 MODEL COACHES WITH ZF DRIVE AXLE, BEARING VINS 13151, 13293, AND 13311.

Production Dates : DEC 19, 2013 - APR 14, 2014

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2013-2014 MCI D4505

Vehicle Type : BUSES, MEDIUM &amp; HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : MCI D4505 MODEL COACHES WITH ZF DRIVE AXLE, VINS 12920, 13357

Production Dates : FEB 01, 2013 - APR 22, 2014

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

 Not sequential VINs

Vehicle : 2013-2015 MCI J4500

Vehicle Type : BUSES, MEDIUM &amp; HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : MCI J4500 MODEL COACHES WITH ZF DRIVE AXLES, VINS 66554, 66796-66798, 66823-66824, 66826, 66841-66842, 66844, 66960, 67000-67050, 67052-67088, 67090-67101, 67106-67107, 67109-67149, 67151-67169, 67172-67186, 67188,

67190-67199, 67201-67209, 67211-67213, 67222-67226, 67228-67229, 67231,  
67233-67239, 67245.

Production Dates : NOV 26, 2013 - MAY 22, 2015

**VIN (Vehicle Identification Number) Range**

Begin : NR

End : NR

Not sequential VINs

**Description of Defect :**

Description of the Defect : Please refer to Equipment Report submitted by ZF Group North America Operations ("ZF") on our about June 3, 2015, under transaction ID 15-0010516-16630-10 ("ZF Recall"). ZF reports that it discovered porosity at the hub carrier during a regular quality and engineering inspection at the assembly line.

Description of the Safety Risk : ZF reports that if the component fails there is the risk of an uncontrolled vehicle condition.

Description of the Cause : ZF reports that material accumulation in the area of porosity. Unfavorable feeder position. Unfavorable cooling gradient. Worst case casting parameter in respect of material. The porosity is located in an area with high stress and has a significant effect due to the hub carrier durability.

Identification of Any Warning that can Occur : ZF reports that crack initiation starting from the porosity area, oil leakage + run-out error, the caliper supports the hub carrier (no spontaneous loss of wheel), vibration/noise when braking. The driver notices the damage at an early stage and can bring the vehicle to a stop.

**Supplier Identification :**

**Component Manufacturer**

Name : ZF Group North America Operations

Address : 15811 Centennial Drive

Northville MICHIGAN 48167

Country : United States

**Chronology :**

ZF reports the following: 4/14/2015: ZF Passau - Porosities on hub carriers found during regular quality checking and also in assembly line by visual inspection 4/16/2015: ZF Passau - Start planning and scheduling of tests on tests bench, start X-raying of parts, stop of assembly line and blocking of parts in stock 4/21/2015: Information ZF Passau to ZF Gainesville 4/23/2015: Porosities confirmed on US-produced parts (supplier Neenah) 4/28/2015: X-raying of Neenah parts in Germany 5/5/2015 to 5/6/2015: SQE from Gainesville at supplier to improve process 5/12/2015: First meeting for risk assessment result: no risk of spontaneous failure but expected lifetime might not be reached, safety relevant 5/13/2015: Decision taken on first test results and actual knowledge to start field campaign in USA on axles with Neenah parts 5/14/2015: First Information given to affected US customers, start of campaign preparation 5/19/2015: Second meeting for detailing risk assessment 5/21/2015: Third meeting for finalizing risk assessment 5/19/2015: Start ZF internal process regarding NHTSA reporting obligations according ZF DG 03/07 6/1/2015: ZF-internal approval to announce to NHTSA.

ZF orally notified MCI on June 1, 2015, that ZF intended to file a recall.

**Description of Remedy :**

Description of Remedy Program : ZF reports the following: Short term: 1. Service inspection every 6 weeks/6000 miles of vehicles in the field to identify possible oil leaks which could consequently lead to a vehicle stop and immediate repair. 2. Based on OEM prioritization rework of axles at the OEM service center and production line to ensure the delivery of modified coaches to the end customer. Long term: OEM and ZF service network need to issue certified and registered letters to inform the end customer to bring the coach to the closest OEM/ZF Service center to perform the campaigns. ZF is covering parts and labor as well as administration costs for the registered letters.

How Remedy Component Differs from Recalled Component : ZF reports the following: Hub carriers which are free of unacceptable porosity.

Identify How/When Recall Condition was Corrected in Production : ZF reports the following: New casting process installed and verified at the supplier. To validate improvements, all parts are to be 200% x-rayed; first time at the foundry and second time by an independent company in Atlanta after the machining.

**Recall Schedule :**

Description of Recall Schedule : Upon receipt of ZF's remedy letter / service bulletin, MCI will prepare and submit its 577 documentation, and will mail same to customers within seven (7) days after NHTSA approval.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date : NR - NR

\* NR - Not Reported