

U.S. Department of Transportation

National Highway Traffic Safety Administration

# **ODI RESUME**

**Investigation:** PE 12-021 **Date Opened:** 07/19/2012

Investigator: Derek Rinehardt
Approver: Frank Borris

**Subject:** Rear Differential Failure

**Date Closed:** 03/05/2013 **Reviewer:** Jeff Quandt

### MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Chrysler Group LLC

**Products:** 2009-2010 Dodge Ram 1500

Population: 230,098

Problem Description: The rear axle pinion nut can loosen causing rear axle lock-up and/or rear drive shaft

detachment increasing the risk of a loss of vehicle control or a crash.

### **FAILURE REPORT SUMMARY**

	ODI	Manufacturer	Total
Complaints:	46	371	403**
Crashes/Fires:	1	9	9**
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0

<sup>\*\*</sup> Total eliminates duplicates received by ODI and manufacturer.

#### **ACTION / SUMMARY INFORMATION**

Action: This Preliminary Evaluation has been closed. Recalls 12V-474 and 13V-038.

## **Summary:**

In a letter dated October 2, 2012, Chrysler Group LLC (Chrysler) submitted a Defect Information Report (DIR) to NHTSA identifying a safety defect in approximately 48,058 vehicles built with an axle pinion nut that can loosen, which could result in lock-up of the rear axle and/or separation of the rear drive shaft from the rear axle (NHTSA Recall No. 12V-474). The vehicles involved in this recall are model year (MY) 2009 and MY 2010 Dodge Ram 1500 (46,677) and Dodge Dakota (1,381) vehicles manufactured between July 1, 2009 and November 30, 2009 built with 9.25" rear axles built at Chrysler's Detroit Axle Assembly Plant. Chrysler stated it determined during this time frame there were instances of 9.25" axles built with rear axle pinion nuts that were missing the adhesive patch. The remedy for these vehicles is to install a pinion nut retainer.

In a review of data in its complaint database and data submitted by Chrysler, the Office of Defects Investigation (ODI) identified 194 reports (including 3 crash reports) of rear axle lock up and/or drive shaft separation outside of the scope of recall 12V-474.

In a letter dated February 5, 2013, Chrysler submitted a second DIR to NHTSA identifying another safety defect in approximately 278,150 vehicles built with 9.25" rear axles and outside of the scope of recall 12V-474 that could also result in lock-up of the rear axle and/or rear drive separation (NHTSA Recall No. 13V-038). Chrysler stated that analysis of field return parts from this vehicle population, undersized pinion splines were found as the likely factor contributing to the loosening of the pinion nut. The vehicles involved in this recall are: 266,091 MY 2009–2012 Dodge Ram 1500 vehicles manufactured from 2/28/09 through 6/30/09 and 12/1/09 through 10/20/11 (including 183,421 MY 2009-2010 subject vehicles); 8,475 MY 2009–2010 Dodge Dakota vehicles manufactured from 2/18/07 through 6/30/09 and 12/1/09 through 7/9/10; 2,346 MY 2009 Chrysler Aspen vehicles manufactured from 1/19/07 through 12/18/08; and 1,238 MY 2009 Dodge Durango vehicles manufactured from 1/17/07 through 12/18/08. The remedy for these vehicles is the same as for 12V-474.

Investigation: PE 12-021 Close Resume Page 1 of 2

The failure counts in this resume are for the subject MY 2009-2010 Dodge Ram 1500 vehicles only. The recalled vehicle counts are based on current estimates from Chrysler and may differ from estimates in the original DIR's.

This Preliminary Evaluation is closed.

The ODI report cited above can be reviewed at www-odi.nhtsa.dot.gov/complaints under the following identification (ODI) numbers: 10489593, 10489091, 10488952, 10485174, 10485096, 10484596, 10484490, 10483394, 10483370, 10482853, 10482816, 10482438, 10479806, 10479352, 10478724, 10477460, 10477354, 10476923, 10476691, 10475939, 10475241, 10475158, 10473147, 10472488, 10470655, 10470516, 10470231, 10470152, 10469969, 10469548, 10469435, 10468759, 10468024, 10467819, 10467805, 10467683, 10467196, 10466630, 10464240, 10448778, 10445208, 10443542, 10439902, 10375394, 10362531, 10353440

Investigation: PE 12-021