



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

## ODI RESUME

Investigation: EA 03-023  
Prompted By: PE03-032  
Date Opened: 11/19/2003  
Principal Investigator: Peter Kivett  
Subject: Front Suspension Upper Ball Joint Failure

Manufacturer: DaimlerChrysler Corporation  
Products: MY 2000 - 2002 Dodge Durango  
Population: 363,282

Problem Description: The front suspension maintenance-free upper ball joint allegedly fails while driving.

### FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	20	12	28
Crashes/Fires:	3	2	5
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: An Engineering Analysis has been opened.

Engineer: Peter Kivett

Date: 11/19/2003

Div. Chief: Jeffrey L. Quandt

Date: 11/19/2003

Office Dir.: Kathleen C. DeMeter

Date: 11/19/2003

Summary: In July 2003, ODI opened PE03-032 based on 4 consumer complaints alleging separation of an upper ball joint. Complaints alleged an unexpected collapse in the front end and in some occasions the ball joint separation is alleged to have resulted in the wheel, brake rotor, and steering knuckle separating from the vehicle. Since opening the PE, ODI has received 23 additional complaints related to ball joint separation.

DaimlerChrysler has identified a wear-out concern in the subject ball joints that is believed to occur after water intrusion evacuates the joint lubricant. DaimlerChrysler does not believe the condition poses an unreasonable risk to safety because the suspension design in the subject vehicles significantly reduces the likelihood of joint separation. Over 99 percent of the failures are related to worn ball joints (e.g., noise complaints). DaimlerChrysler revised the repair procedure in August 2003 to allow the upper ball joints to be serviced separately from the upper control arm and reduce repair costs.

DaimlerChrysler changed the supplier of the subject ball joints from TRW to New Castle Machining & Forge for MY 2000 vehicles. MY 2000 Durango vehicles account for 25 of the separation complaints. The upper ball joint was redesigned in MY 2003. An Engineering Analysis has been opened to further assess the alleged defect in MY 2000-02 Durango vehicles.

VLS 11-20-03