



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

# ODI RESUME

Investigation: EA 04-024  
Prompted By: PE04-040 (Cheryl Tuosto)  
Date Opened: 08/20/2004  
Principal Investigator: Cheryl Tuosto  
Subject: Ball Joint Failure

Manufacturer: Toyota Motor North America, Inc.  
Products: 2002 MY Toyota Tundra  
Population: 110,377

**Problem Description:** The front suspension lower ball joint fails while driving resulting in a loss of vehicle control.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	3	15	15
Crashes/Fires:	0	1	1
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	28	28

\*Description Of Other: Toyota warranty claims pertaining to lower ball joint wear

**Action:** An Engineering Analysis has been opened.

Engineer: Cheryl Tuosto CAT  
Div. Chief: Jeffrey L. Quandt  
Office Dir.: Kathleen C. DeMeter

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**Summary:** ODI opened PE04-040 based on three consumer reports of alleged ball joint failure. The complaints allege that a front suspension ball joint separated while driving, which caused the suspension to collapse and resulted in a loss of vehicle control. All of these complaints involved the failure of a lower tension-type ball joint.

During PE04-040, Toyota identified a total of 15 complaints of lower ball joint separation, one of which resulted in a crash, and 28 warranty claims related to lower ball joint wear. ODI's analysis showed that of the 15 separations, 11 were on four-wheel drive vehicles (24.2 per 100,000 vehicles), which make up approximately 40% of the 2002 MY population (45,448 vehicles). ODI's analysis also showed that some drivers lost front braking ability as the brake line severed when the front suspension collapsed.

An Engineering Analysis has been opened to further investigate this issue, to assess the safety-related consequences, and to determine the scope of the affected population.

VICJ  
8-29-04