



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

ODI RESUME

Investigation: PE 04-040
 Prompted By: Steve Chan (IE04-027)
 Date Opened: 04/13/2004 Date Closed: 08/20/2004
 Principal Investigator: Cheryl Tuosto
 Subject: Front Suspension Ball Joint Breakage

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

Problem Description: The front suspension 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: This Preliminary Evaluation has been upgraded to an Engineering Analysis.

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

Date: 08/20/2004
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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 ball joint.

During the investigation, 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.

This Preliminary Evaluation has been upgraded to an Engineering Analysis to further investigate this issue, to assess the safety-related consequences, and to determine the scope of the affected population.

VNT
P-24-04