



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

ODI RESUME

Investigation: EA 04-024

Prompted By: PE 04-040

Date Opened: 08/20/2004

Date Closed: 07/08/2005

Principal Investigator: Cheryl Tuosto

Subject: Ball Joint Separation

Manufacturer: Toyota Motor North America, Inc.

Products: 2002 MY Toyota Tundra

Population: 110,377

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

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	13	40	45
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	38	38

*Description of Other: Warranty claims related to lower ball joint wear and/or replacement

Action: This Engineering Analysis has been closed (Recall 05V-225).

Engineer: Cheryl Tuosto *CAT*

Date: 07/08/2005

Div. Chief: Jeffrey L. Quandt

Date: 07/08/2005

Office Dir.: Kathleen C. DeMeter

Date: 07/08/2005

Summary: ODI received 3 consumer reports of alleged ball joint separation on MY 2002 Tundra vehicles. 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. Based on these complaints, ODI opened PE02-040 and later upgraded to EA04-024 for MY 2002 Tundra vehicles. During EA04-024, additional failure data was identified as noted in the failure report summary above.

On May 16, 2005, Toyota notified NHTSA of a safety defect on MY 2002-2004 Tundra and Sequoia vehicles (produced between August 1, 2001 and September 30, 2003), MY 2001-2004 Tacoma vehicles (produced between July 31, 2001 and December 23, 2003), and MY 2001-2002 4Runner vehicles (produced between May 22, 2001 and August 23, 2002). The notification stated that due to a manufacturing issue with the front suspension lower ball joints (which connect the lower control arms to the steering knuckles of the front wheels) there is a possibility that the surface of the ball of the joint may have been scratched. Such scratches may result in significantly accelerated wear of the joint.

According to Toyota, if the [subject] vehicle is operated for an extended period of time in this condition, the ball joint may eventually experience excessive wear and looseness, resulting in increased steering effort, reduced vehicle self-centering, and noise in the front suspension. In extreme cases, when the driver continues to operate the vehicle in this condition, the lower ball joint may separate from the knuckle causing a loss of vehicle steering control.

Toyota will instruct owners to return their vehicles to any Toyota dealer for replacement of the front suspension lower ball joints. ODI will monitor the effectiveness of the remedy and take further action if warranted.

CAT
7/8/05