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

ODI RESUME

Investigation: RQ 06-005
Date Opened: 04/10/2006
Principal Investigator: Andrea Noel
Subject: Lower Ball Joint Separation

Manufacturer: Toyota Motor Corporation, Toyota Motor North America, Inc.
Products: 2004 MY Toyota Tundra
Population: 95,000 (Estimated)

Problem Description: Front suspension lower ball joint separation, resulting in loss of vehicle control.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	4	TBD	
Crashes/Fires:	0	TBD	
Injury Incidents:	1	TBD	
# Injuries:	1	TBD	
Fatality Incidents:	0	TBD	
# Fatalities:	0	TBD	
Other*:	0	TBD	

*Description Of Other:

Action: A Recall Query (RQ) has been opened.

Engineer: *Andrea Noel* A.A.N. Date: *04/10/2006*
Div. Chief: *Jeffrey L. Quandt* Date: *04/10/2006*
Office Dir.: *Kathleen C. DeMeter* Date: *04/10/2006*

Summary: In a letter dated August 5, 2005, Toyota submitted a Defect Information Report to NHTSA regarding a defect condition that could result in separation of front suspension lower ball joints in certain model year (MY) 2002-2004 Toyota Tundra and Sequoia, 2001-2004 Toyota Tacoma and 2001-2002 Toyota 4runner vehicles (see recall 05V-225 and ODI investigation EA04-024, copies attached). According to Toyota, a "manufacturing issue" with the subject ball joints could result in scratching of the surface of the ball, which could result in accelerated wear of the joint with the possibility of joint separation. Toyota indicated that the scratching condition affected lower ball joints manufactured between May 2001 and October 2003.

The Office of Defects Investigation has received 4 complaints alleging a total of 5 front suspension lower ball joint separation incidents while driving, causing the drivers to lose control of the vehicles. The four complainant vehicles were outside the scope of recall 05V-225. One complaint alleged that lower ball joint separations involving both front wheels within a four month period. The separation incidents occurred at reported mileages of 52,000, 70,595, 80,000 and 116,000.

A Recall Query has been opened to determine any potential safety-related consequences and the scope of the affected population.

A.A.N.
4/11/06

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

TOYOTA

TOYOTA MOTOR NORTH AMERICA, INC.

WASHINGTON OFFICE
1850 M STREET, NW, SUITE 600, WASHINGTON, DC 20036

TEL: (202) 775-1700
FAX: (202) 463-8513

May 16, 2005

15 V-225
(4 Pages)

Mr. Ronald Medford
Senior Associate Administrator, Vehicle Safety – NVS-010
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

Re: 2002-2004 Toyota Tundra/Sequoia, 2001-2004 Toyota Tacoma, 2001-2002 Toyota 4Runner Front Suspension Lower Ball Joint (EA04-024)
Part 573, Defect Information Report

Dear Mr. Medford:

In accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573, on behalf of Toyota Motor Corporation ["TMC"], we hereby submit the attached Defect Information Report concerning a voluntary safety recall of certain 2005 Toyota vehicles to address an issue with the front suspension lower ball joint. Please note that some of the vehicles included in this report are the subject of your agency's investigation, EA04-024.

Should you have any questions about this report, please contact Mr. Sid Yokoi or Mr. Chris Santucci at (202) 775-1707.

Sincerely,

TOYOTA MOTOR NORTH AMERICA, INC.

for Chris Tinto
Vice President

CT:cs
Attachment

DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Manufacturing, Indiana, Inc. ["TMMI"]
4000 Tulip Tree Dr. Princeton, IN 47670-4000

New United Motor Manufacturing, Inc. ["NUMMI"]
45500 Fremont Boulevard Fremont, CA 94538

Toyota Motor Corporation ["TMC"]
1, Toyota-cho, Toyota-city, Aichi-ken, 471-8571 Japan

Affiliated U.S. Sales Company

Toyota Motor Sales, USA, Inc. ["TMS"]
19001 South Western Avenue, Torrance, CA 90509

2. Identification of Affected Vehicles:
Based on production records, we have determined that the affected vehicle population as in the table below.

Make/ Car Line	Model Year	Manufacturer	VIN			Production Period
			WMI	VDS	VIS	
Toyota/ Tundra	2002 - 2004	TMMI	5TB	BN441, BT441 BT481, JN321 KT441, RN341 RT341, RT381	2S221132 - 4S441783	August 1, 2001 - September 30, 2003
Toyota/ Sequoia			5TD	BT44A, BT48A ZT34A, ZT38A	2S057720 - 4S209916	August 1, 2001 - September 30, 2003
Toyota/ Tacoma	2001 - 2004	NUMMI	5TE	GM92N, GN92N HN72N, NM92N PM62N, SM92N SN92N, WM72N WN72N	1Z864001 - 4Z357097	July 31, 2001 - December 23, 2003
Toyota/ 4Runner	2001 - 2002	TMC	JT3	GN86R, GN87R HN86R, HN87R	10213797 - 29078746	May 22, 2001 - August 23, 2002

Note: Although the involved vehicles are within the above VIN range, not all vehicles in this range were sold in the U.S.

Component Containing Defect: Front suspension lower ball joint
Manufacturer Name: SOMIC ISHIKAWA INC.
Address: 500, Furukawa-cho, Hamamatsu-City, Shizuoka Pref., 435-8560 Japan
Telephone: +81-53-425-2111

3. Total Number of Vehicles Potentially Affected:

774,856

4. Percentage of Vehicles Estimated to Actually Experience Malfunction:

Unknown

5. Description of Problem:

In the subject vehicles, due to a manufacturing issue with the front suspension lower ball joint, (which connects the lower control arm to the knuckle of the front suspension) there is a possibility that the surface of the ball of the joint may have been scratched. If the 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.

6. Chronology of Principal Events:

In April 2004, Toyota received a Preliminary Evaluation (PE) Information Request (IR) letter regarding front suspension lower ball joint separation on 2002 MY Tundra vehicles from NHTSA. Toyota cooperated fully with NHTSA to investigate the issue. Toyota's internal investigation identified a scratch occurring on the surface of the ball of the ball joint, and Toyota provided this information to NHTSA. However, Toyota could not identify a relationship between the ball surface scratch and wear of the ball joint (including ball joint separation). Therefore, in June 2004, Toyota responded to NHTSA's IR, concluding that there was no evidence of the existence of a safety related defect in the subject vehicles.

In August 2004, NHTSA upgraded this investigation to an Engineering Analysis (EA). Since there were some reports of ball joints that had failed on vehicles with low mileage, Toyota continued to investigate the issue. No other factors, aside from the surface scratch, were identified. Toyota modified the test protocol for ball joint wear to better reflect customer vehicle driving habits. As a result, it was found that lower ball joint wear could be accelerated by the ball surface scratch under a specific test condition, when compared to ball joints without the surface scratch. Production records indicate that the lower ball joints manufactured from May 2001 to October 2003 may have been scratched during the assembly process.

In May 2005, as a result of their in depth investigation of the issue, Toyota decided to conduct a voluntary safety recall campaign. This safety campaign will also be conducted in Canada, Japan, Australia and other countries.

7. Description of Corrective Repair Action:

All known owners of the subject vehicles will be notified by first class mail to return their vehicles to any Toyota dealer for replacement of the front suspension lower ball joints.

Reimbursement Plan for pre-notification remedies

The owner letter will instruct vehicle owners that have had their front lower ball joint(s) replaced for a similar condition prior to this campaign to seek reimbursement by mailing a copy of their repair order, proof-of-payment, and proof-of-ownership for reimbursement consideration.

(i) The beginning date of the Toyota reimbursement plan will be:
The reimbursement plan will cover repairs made no earlier than the following date, when the first vehicles of each subject vehicle were manufactured.

Toyota Tundra/ Toyota Sequoia:	August 1, 2001
Toyota Tacoma:	July 31, 2001
Toyota 4Runner:	May 22, 2001

(ii) The ending date of Toyota reimbursement plan will be:
The ending date shall be at least 10 calendar days after the date on which the last owner notification was mailed, however Toyota will further review requests for reimbursement from involved vehicle owners on a case-by-case basis.

(iii) Toyota may exclude reimbursement, if:
   a. the pre-notification repair was not of the same type (repair, replacement, or refund of purchase price) as the recall remedy;
   b. the pre-notification repair was not reasonably necessary to correct the defect or noncompliance that led to the recall or a manifestation of the defect or noncompliance.
   c. the pre-notification remedy was not reasonably necessary to correct the defect or noncompliance; or
   d. the repair was conducted as a result of vehicle accident or another reason not specifically related to the defect or noncompliance.

(iv) Toyota will reimburse eligible customers for at least the cost of the front lower ball joint, and the replacement labor. Other costs may be reimbursed on a case-by-case basis.

(v) Owners requesting reimbursement must submit the appropriate documentation: repair order, proof-of-payment, and proof-of-ownership to Toyota for reimbursement consideration.

8. Recall Schedule:

Mailing of the owner notifications will commence in early July, 2005 and be completed around December, 2005. Copies of the owner notification and dealer instructions will be submitted as soon as they are available.

9. Distributor/Dealer Notification Schedule:

Notifications to distributors/dealers will be sent in mid-June, 2005.