

Toyota Motor Engineering & Manufacturing North America, Inc.

Vehicle Safety & Compliance Liaison Office 19001 South Western Avenue Torrance, CA 90501

November 12, 2014

DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

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

Affiliated U.S. Sales Company

Toyota Motor Sales, USA, Inc. ["TMS"]
19001 South Western Avenue, Torrance, CA 90501

Supplier of the steering knuckle with the lower ball joint

Toyota Motor Corporation--Motomachi Plant

Country of Origin: Japan

2. Identification of Involved Vehicles:

Based on production records, we have determined the involved vehicle population as in the table below.

Make/	Model	Manufac-		VIN	Production
Car Line	Year	turer	VDS	VIS	Period
Toyota/ Camry	2011	TMC	BF3EK	B3013226 – B3014041	March 8, 2011 through July 20, 2011

Note: (1) Although the involved vehicles are within the above VIN range, not all vehicles in this range were sold in the U.S.

- (2) The involved Camry vehicles produced during the above-mentioned period were exported and sold only in Guam and Saipan (U.S. Federal Territories)
- (3) No other Toyota and Lexus vehicles use the affected lower ball joint.

3. Total Number of Vehicles Potentially Involved:

56

4. Percentage of Vehicles Estimated to Actually Contain the Defect:

Unknown

5. <u>Description of Problem</u>:

The front suspension system contains a lower ball joint which connects the front suspension lower arm to the knuckle arm. In the assembly process, the rubber boot on the ball joint could have been damaged by insufficiently maintained part carrier equipment. If the rubber boot is damaged, lubricant grease inside the ball joint could leak from the damaged boot, causing the ball joint to wear and loosen prematurely. If the vehicle is continuously operated in this condition, the lower ball joint may separate from the knuckle and could cause a loss of vehicle control, increasing the risk of a crash.

6. Chronology of Principal Events:

August 2014 – October 2014

In August 2014, Toyota was notified by the vehicle assembly plant in Russia that a rubber boot on the front lower ball joint had been damaged and lubricant grease inside the joint leaked. The lower ball joint is installed in-to the steering knuckle in Japan and shipped to vehicle assembly plants in Japan and Russia. Toyota investigated the production process and found that the rubber boot could come into contact with the anti-drop jig which is installed to the part carrier equipment located next to a machine for installing the ball joint into the knuckle arm. Toyota found that some of the ball joints installed into the knuckle arm had damage due to contact with the jig. The production of the knuckle assembly and delivery of the suspected vehicles was suspended. After the addition of a protector to the anti-drop jig, production was allowed to resume.

Toyota reviewed the drawing of the part carrier equipment to check the positional relationship between the anti-drop jig and the ball joint, and confirmed that there was no possibility of contact between the jig and the boot. Toyota conducted replication testing focusing on the relationship between wear of the jig and any possibility of contact of the boot with the jig. In addition, lower ball joints were recovered from in-use vehicles to assess the extent of damage on the rubber boot. As a result of further investigation, it was found that the shape of the lower ball joint rubber boot was changed in March 2011, and ball joints produced after March 2011 could have damage to the rubber boot caused by contact with the anti-drop jig.

November 6, 2014

Toyota decided to conduct a voluntary safety recall campaign to replace the lower ball joint on the affected vehicles if the rubber boot has been damaged.

As of November 6, 2014, Toyota is not aware of any crashes or injuries caused by this condition. No Toyota field reports or warranty claims related to this condition have been received by Toyota.

7. <u>Description of Corrective Repair Action:</u>

Toyota will notify owners by first class mail to return their vehicles to a Toyota dealer. The dealer will inspect, and if necessary, replace the ball joint if damage to the rubber boot is observed.

Reimbursement Plan for pre-notification remedies

The owner letter will instruct vehicle owners who have paid to have this condition remedied prior to this campaign to seek reimbursement pursuant to Toyota's General Reimbursement Plan.

8. Recall Schedule:

Notifications to owners will begin in mid December, 2014. A copy of the draft owner notification letter will be submitted as soon as it is available.

9. Distributor/Dealer Notification Schedule:

Notifications to distributors/dealers will be sent in late November, 2014. Copies of dealer communications will be submitted as they are issued.