TOYOTA

Toyota Motor Engineering & Manufacturing North America, Inc.

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

February 17, 2016

DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

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

Toyota Motor Manufacturing Canada Inc. ["TMMC"]
1717 Dundas Street, Woodstock, Ontario, Canada N4S 0A4

Affiliated U.S. Sales Company

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

Manufacturer of the Rear Seat Spring Assembly (Rear Seat Cushion Frame)

TOYOTA BOSHOKU CORPORATION
1-1 Toyoda-cho, Kariya-shi, Aichi 448-8651, Japan
Telephone: +81-566-26-7711

Country of Origin: Japan

TOYOTA BOSHOKU CANADA, INC.
230 Universal Rd., Woodstock, Ontario, N4S 7W3
Telephone: +1-519-421-7556

Country of Origin: Canada

2. Identification of Involved Vehicles and Affected Components:

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

Make/Car Line	Model Year	Manufacturer	Production Period
Toyota RAV4	2006 - 2012	TMC TMMC	July 28, 2005 through December 19, 2012
Toyota RAV4 EV	2012 - 2014	TMMC	July 24, 2012 through August 29, 2014

Applicability	Part Number	Part Name	Component Description
MY2006-2014 Toyota RAV4/ RAV4 EV	71650-42010 71650-0R010	Spring Assy, Rear Seat Cushion, RH	Rear Seat Cushion Frame
	71660-42010 71660-0R010	Spring Assy, Rear Seat Cushion, LH	

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

(2) Other Toyota and Lexus vehicles do not have the second row seats with the same seat cushion frame. Therefore, other Toyota and Lexus vehicles are not included in this recall.

3. Total Number of Vehicles Potentially Involved:

RAV4 : 1,121,255
RAV4 EV : 2,497
TOTAL : 1,123,752

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

Unknown

5. Description of Problem:

The subject vehicles are equipped with 3-point lap-shoulder belt assemblies in both outboard seating positions of the second row seats. Due to the shape of the metal seat cushion frame, in the event of a high-speed collision, principally in the frontal direction, there is a possibility that the lap belt webbing could contact a portion of the seat cushion frame, become cut, and separate. If this occurs, the seat belt may not properly restrain the occupant, which could increase the risk of injury to an occupant.

6. Chronology of Principal Events:

Mid October 2015 - Early February 2016

On October 15, 2015, Transport Canada (TC) contacted Toyota Canada Inc. (TCI) about a research test that it had conducted on a 2011 RAV4 vehicle. TC Crashworthiness Research Department was conducting research to evaluate rear seat occupant protection in order to assist in understanding restraint performance, injury mechanisms, and anthropomorphic test device (ATD) biofidelity. TC selected real world field crashes upon which to base its research.

TC conducted a research test on October 7, 2015 based on a crash that had occurred in Eastern Canada in May, 2011 between a 2011 RAV4 and a 2011 GMC Sierra that it had investigated at that time. During the research test, which attempted to reconstruct the 2011 crash, the seat belts in both second row outboard seating positions in the RAV4 separated. As a result of the contact from TC about this test, Toyota started an investigation.

In order to confirm and understand the details of the research test, Toyota requested TC to provide relevant test information and an opportunity for Toyota to inspect the test vehicle. A review of the test information indicated that the vehicle experienced a very severe impact (in the range of 74 km/h delta V) and appeared similar to the event which occurred in 2011.

On November 18, 2015, Toyota inspected the tested 2011 RAV4 vehicle at TC's Motor Vehicle Test Centre in Blainville, Quebec. The lap belt webbings of both second row outboard seating positions separated at 15 cm above the seat belt anchorage. Toyota requested that the rear seats and seat belts installed in the tested vehicle be sent to Toyota in Japan for further analysis.

Based on a review of TC's reconstruction test and the test vehicle inspection, Toyota conducted a series of sled tests with ATD's restrained in both second row outboard seats of a RAV4 white body. Using sled test crash pulses in the range of 56 to 77 km/h delta V, seat belt separation occurred in some of the tests. An analysis of high speed test video revealed that the lap belt webbing portion of the lap-shoulder belt moved forward along with the movement of the ATD at the time of impact. During this movement, the outboard lap belt webbing slid over a plastic cover located at the side of the rear seat, compressed the seat bottom cushion, and contacted a portion of the metal seat cushion frame flange edge, causing the seat belt webbing to be cut and separated.

On February 2, 2016, Toyota in Japan received the rear seats and seat belts which were installed in the RAV4 vehicle tested by TC and initiated a comparison evaluation with the rear seats and seat belts used in the sled tests conducted by Toyota. The location, origin, and manner of the webbing separation appeared to be similar, and the shape of the edge on the seat cushion frame appeared to be the same. Therefore, Toyota determined that the seat belts in the test vehicle separated as a result of contact with a portion of the metal seat cushion frame flange edge. Toyota also evaluated other Toyota and Lexus vehicles and confirmed that only 2006-2012 RAV4 and 2012-2014 RAV4 EV vehicles are equipped with a similar second row seat containing an outboard flange edge that has the possibility of cutting the seat belt webbing.

February 11, 2016

Based on the results of the above investigation, Toyota decided to conduct a voluntary safety recall campaign.

As of February 9, 2016, no Toyota field reports or warranty claims have been received that relate to, or may relate to, this condition.

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 a Toyota dealer. The dealers will install resin protectors on both second row seat cushion frames.

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 of Toyota models will occur by late March, 2016. A copy of the draft owner notification letter(s) will be submitted as soon as available.

9. Distributor/Dealer Notification Schedule:

Notifications to distributors/dealers were sent on February 17, 2016. Copies of dealer communications will be submitted as they are issued.

10. Manufacturer's Campaign Number:

G0F