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By Recall Management Division at 12:10 pm, Mar 27, 2014

**Toyota Motor Engineering &  
Manufacturing North America, Inc.**

Vehicle Safety & Compliance  
Liaison Office  
Mail Code: S-104  
19001 South Western Avenue  
Torrance, CA 90501

March 27, 2014

Ms. Nancy Lummen Lewis  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
Attn: Recall Management Division (NVS-215)  
1200 New Jersey Ave, SE  
Washington, D.C. 20590

Re: Certain Toyota Avalon Vehicles  
Part 573, Defect Information Report

Dear Ms. Lewis:

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 Toyota Avalon vehicles to address an issue with the air bag module.

Should you have any questions about this report, please contact me directly.

Sincerely,



Abbas Saadat  
Vice President  
Toyota Motor Engineering & Manufacturing  
North America, Inc.

Enclosures  
Part 573, Defect Information Report

## DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Manufacturing, Kentucky, Inc. ["TMMK"]  
1001 Cherry Blossom Way, Georgetown, KY, 40324

Affiliated U.S. Sales Company

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

Manufacturer of Airbag Control Module:

TRW Automotive  
12001 Tech Center Drive, Livonia, MI 48150  
Phone: 734-855-2600

Country of Origin: U.S.

2. Identification of Affected Vehicles:

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

Make/ Car Line	Model Year	Manufac- turer	VIN		Production Period
			VDS	VIS	
Toyota Avalon	2003 - 2004	TMMK	BF28B	3U265810-3U339097 4U333766-4U391317	June 5, 2002 through December 20, 2004

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

Except for the vehicles in recall campaign 13V-029, no other Toyota or Lexus vehicle uses the same generation of the airbag control module in the affected vehicles.

3. Total Number of Vehicles Potentially Affected:

119,140

4. Percentage of Vehicles Estimated to Actually Experience Malfunction:

Unknown

5. Description of Problem:

The airbag control module for the supplemental restraint system (SRS) in the subject vehicles could have been manufactured with application-specific integrated circuits (ASICs) that are susceptible to internal shorting. When exposed to high inductive electrical noise from various vehicle electrical components, these ASICs could experience an internal short that creates abnormal current flow and increased heat. If this occurs, there is a possibility that the ASIC could become damaged. In some instances, the front airbag(s) and/or seat belt pretensioners could inadvertently deploy. An airbag that deploys inadvertently can, under some circumstances, increase the risk of minor injury and the possibility of a crash.

6. Chronology of Principal Events:

January 2013 – February 2013

In January 2013, Toyota initiated a voluntary recall campaign (13V-029) concerning the airbag control module issue on 2003-2004MY Toyota Corolla and Corolla Matrix vehicles. On these vehicles, Toyota determined that the high electrical noise generated by simultaneous operation of the wiper and washer can cause latch-up to occur. Due to a wide variation of ASIC insulation against electrical overstress, this condition could result in thermal damage to the ASIC and inadvertent airbag and/or seat belt pretensioner deployment. At that time, Toyota had received a few field technical reports from the U.S. market indicating inadvertent deployment of airbag or pretensioner on certain Toyota Avalon vehicles which had the same generation of the airbag control module. However, the failure rate of the Avalon vehicles was quite low compared to the Corolla and Matrix vehicles, and electrical noise, from the operation of the wiper and washer that could cause latch-up in Corolla and Matrix vehicles, had not been observed in the Avalon. Therefore Toyota decided to continue the investigation on the Avalon vehicles.

March 2013 – July 2013

In June 2013, Toyota received a field report indicating the inadvertent activation of the driver and front passenger pretensioners. The investigation of the returned airbag control module confirmed the damage of the ASIC which could be caused by electrical overstress; however, measurements of the electrical noise created by operation of electrical components on this vehicle did not find the noise which can cause latch-up.

August 2013 – November 2013

Toyota received two additional field reports indicating inadvertent activation of seatbelt pretensioners and inadvertent deployment of front airbags. The airbag control module was recovered from one of the vehicles, and damage of the ASIC which could be caused by electrical overstress was noted. In addition, the electrical noise created by operation of electrical components on these reported vehicles was measured.

December 2013 – late March 2014

Toyota analyzed the electrical noise obtained from the reported vehicle in detail. The results showed that a higher noise level than measured previously on three Avalon vehicles in the past was created by operation of the power seat, such as when the seat or seat back is moved forward or backward. It was confirmed that this noise level could cause latch-up and electrical overstress to be applied to the ASIC. This could result in damage to the ASIC and inadvertent deployment of the airbag(s) and/or pretensioners(s).

March 21, 2014

Toyota decided to conduct a voluntary safety recall campaign to install a noise filter to eliminate certain electrical noise created by operating certain electrical components in the vehicle, such as the power seat.

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 for installation of a noise filter between the airbag control module and its wire harness.

Reimbursement Plan for pre-notification remedies for Toyota Vehicles

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:

Toyota will provide a separate schedule of the owner notification mailing shortly. A copy of the draft owner notification will be submitted as soon as it is available.

9. Distributor/Dealer Notification Schedule:

Toyota will provide a separate schedule of the dealer notification schedule shortly.