

13V-030 (5 pages) RECE



Toyota Motor Engineering & Manufacturing North America, Inc.

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

January 30, 2013

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 Lexus IS Wiper Arm and Wiper Motor

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 Lexus IS vehicles to address an issue with the wiper arm and the wiper motor.

Should you have any questions about this report, please contact me at (310) 468-8551.

Sincerely,

Vinnie Venugopal

V.Vamapad

General Manager

Toyota Motor Engineering & Manufacturing North America, Inc.

Enclosures Part 573, Defect Information Report

DEFECT INFORMATION REPORT

1. <u>Vehicle Manufacturer Name</u>:

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

Manufacturer of Wiper Arm and Wiper Motor:

DENSO CORPORATION

1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661, Japan

Country of Origin: Japan

2. <u>Identification of Affected Vehicles</u>:

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

Make/	Model	Manufac-	VIN		Production
Car Line	Year	turer	VDS	VIS	Period
Lexus/ IS250, IS350	2006 through 2012		****2*	62000000 - C2102727 65000013 - B5152530	August 23, 2005 through October 5, 2011
Lexus/ IS250C, IS350C	2010 through 2012	TMC	F***2*	A2500025 – C2522268	April 10, 2009 through October 6, 2011
Lexus/ IS-F	2008 through 2011		BP**2*	85000156 – B5009599	December 14, 2007 through July 10, 2011

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

3. Total Number of Vehicles Potentially Affected:

267,718 units

4. <u>Percentage of Vehicles Estimated to Actually Contain the Defect:</u>

Unknown

5. Description of Problem:

In the front wipers on the subject vehicles, there is high friction at the tightening surface between the wiper arm nut and the wiper arm that could result in the nut being insufficiently tight. If movement of wipers is restricted by an external load, such as a buildup of heavy snow on the windshield, the wiper motor torque may exceed the wiper arm slipping torque, and one or both of the wipers could become inoperative. If this occurs, driver visibility could be reduced, which could increase the risk of a vehicle crash.

6. <u>Chronology of Principal Events:</u>

May 2008 – December 2010

Toyota received a field technical report from the US market indicating that a front wiper for the passenger side became inoperative due to loosening of the wiper arm nut, which secures the wiper arm to the wiper motor. Toyota sporadically received similar field technical reports, but the affected parts could not be recovered and investigated. Toyota examined the tightening torque data of the wiper arm nuts during the vehicle assembly process, and confirmed that the nuts were tightened to the proper specification. There was no clear trend, and the failure rate was very low; therefore, Toyota presumed that the reports were attributed to the dispersion of the tightening torque at the vehicle assembly plant, and decided to continue to monitor field information. In order to enhance the wiper arm nut tightening torque control during vehicle assembly, the adjustment timing of air pressure for the tightening instrument was revised in July 2009.

January 2011 – July 2011

Toyota received a field technical report for a vehicle which was produced after the tightening torque control revision described above was implemented. Toyota inspected the affected vehicle, and recovered and investigated the affected parts. There was evidence of slippage

between the wiper arm and the motor shaft, but no abnormalities were found in the parts' shapes and dimensions. Although no abnormality could be identified, in July 2011 Toyota decided to switch the wiper arm nut for assembly with the one used for other Toyota and Lexus models which had lower friction at the tightening surface.

August 2011 – January 2013

Toyota continued its investigation, conducting field surveys and replication testing. It was discovered that, due to the difference in the paint material used on the wiper arm, friction on the tightening surface between the wiper arm and the wiper arm nut of left-hand drive (LHD) vehicles was higher than the friction on right-hand drive (RHD) vehicles. It was confirmed that, when both LHD and RHD vehicles' wiper arm nuts are tightened to the same torque and the wiper arms are operated with an external load, slippage could occur on the tightening surface only on LHD vehicles. All RHD vehicles and the LHD vehicles produced after the July 2011 wiper arm nut change would not experience the same phenomenon.

Toyota concluded that the tightening force for the wiper arm and the motor shaft on LHD vehicles produced before July 2011 could decrease due to high friction on the tightening surface of the wiper arm. When movement of the wipers is restricted by an external load, such as a buildup of snow on the windshield, slippage could occur on the tightening surface, resulting in an inoperative wiper arm.

January 24, 2013

Toyota decided to conduct a voluntary safety recall on the subject vehicles to replace the wiper arm nuts with improved ones.

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 Lexus dealer for cleaning of the mating surface of the wiper arm and the motor shaft. During reassembly, improved wiper arm nuts will be installed.

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 (Lexus's) General Reimbursement Plan.

8. Recall Schedule:

Notifications to the owners will begin in late February, 2013 and be completed by late March, 2013. Copies of the draft owner notification will be submitted as soon as it is available.

9. <u>Distributor/Dealer Notification Schedule:</u>

Notifications to distributors/dealers will be sent in mid- February, 2013. Copies of dealer communications will be submitted as they are issued.