

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

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

May 16, 2012

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

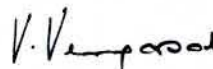
Re: Certain 2013 Lexus GS350 Variable Gear Ratio Steering System  
Part 573, Defect Information Report

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 2013 Lexus GS350 vehicles to address an issue with the Variable Gear Ratio Steering System.

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

Sincerely,



Vinnie Venugopal  
General Manager  
Toyota Motor Engineering & Manufacturing  
North America, Inc.

Enclosures  
Part 573, Defect Information Report

## 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

Manufacturer of Steering Control ECU:

DENSO CORPORATION  
1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661, Japan  
Telephone: +81-566-25-5511

2. Identification of Affected Vehicles:

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

Make/ Car Line	Model Year	Manufac- turer	VIN		Production Period
			VDS	VIS	
Lexus GS350	2013	TMC	BE1BL		December 12, 2011 through February 7, 2012

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

Only two-wheel drive F Sport grade Lexus GS350 vehicles for which production started on December 12, 2011 (new model) are affected. Vehicles manufactured after the date described above are not affected, because those vehicles have updated steering control ECU programming for the Variable Gear Ratio Steering ("VGRS") control system as mentioned in section 6 below. In addition, other Lexus and Toyota models with a similar VGRS system are not affected, because they do not have the same programming for the VGRS system that results in the problem described below.

3. Total Number of Vehicles Potentially Affected:

663 units

4. Percentage of Vehicles Estimated to Actually Experience Malfunction:

Unknown

5. Description of Problem:

On certain 2013 Model Year Lexus GS350 vehicles, the steering control ECU programming for the VGRS system could cause the steering wheel to become off-centered by a maximum of up to approximately 110 degrees when restarting immediately after the vehicle is parked with the steering wheel turned. If this occurs and a driver does not realize that the steering wheel is off-centered when pulling from a parked position, the vehicle could maneuver in an unexpected direction and result in a crash.

6. Chronology of Principal Events:

On February 15, 2012, during an in-house test drive on a 2013 Model Year GS350 vehicle, the steering wheel became off-centered after the vehicle was parked and restarted. Toyota began an investigation of that vehicle to identify the cause of the steering wheel off-center condition. The history in the vehicle's steering control ECU indicated that, although the vehicle was parked with the steering wheel turned, the VGRS angle data was reset to 0 degrees right after the restart.

Toyota and the supplier then began the process of verification of the programming for the VGRS system. It was found that, if the ignition is turned on again shortly after the ignition is turned off, the VGRS actuator angle data, which is set based on the steering wheel angle when the vehicle is parked, may be initialized and default to 0 degrees, causing the steering wheel to become off-centered. The VGRS system was updated on February 23, 2012 to eliminate the possibility of the steering wheel becoming off-centered. Vehicles still within Toyota's control were also updated.

Toyota then investigated the possible scope of the condition and its effect on other systems which use the steering wheel angle data to assess the risk to motor vehicle safety. No safety concerns were identified in these systems. With regard to an off-centered steering wheel, it was concluded that there is a possibility that the vehicle could maneuver in an unexpected direction, such as when the driver attempts to pull the vehicle from a parked position without realizing that the steering wheel is off-centered.

On May 10, 2012, Toyota decided to conduct a voluntary safety recall on the subject vehicles to update the VGRS system.

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 to update the VGRS system.

Reimbursement Plan for Pre-notification remedies for Lexus

As the owner notification letter will be mailed out well within the active period of the Lexus New Vehicle Limited Warranty ("Warranty"), all involved vehicle owners for this recall would have been provided repair at no cost under the Lexus Warranty.

8. Recall Schedule:

Notifications to the owners will be sent starting in early June, 2012 and be completed by late June, 2012.

Copies of the owner notification and dealer instructions will be submitted as soon as they are available.

9. Distributor/Dealer Notification Schedule:

Lexus's notifications to distributors/dealers will be sent on May 16, 2012.

Copies of dealer communications will be submitted as they are issued.