

NISSAN GROUP  
OF NORTH AMERICA



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Nissan North America, Inc.  
One Nissan Way  
Franklin, TN 37067

Mailing Address:  
PO Box 685001  
Franklin, TN 37068

June 9, 2016

Mr. Gregory K. Rea  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
Attn: Recall Management Division (NVS-215)  
Room W48-302  
1200 New Jersey Avenue, SE  
Washington, D.C. 20590

Dear Sir:

We are transmitting the enclosed Defect Information Report in accordance with 49 CFR Part 573. A voluntary recall campaign will be initiated and your office provided with the notices. Nissan plans to notify dealers on June 9 and will notify all affected owners within 60 days of DIR submission to bring their vehicle into an Infiniti retailer.

Very truly,

A handwritten signature in cursive script that reads "Derek Latta for".

Derek Latta  
Manager,  
Technical Compliance

Encl.

## **DEFECT INFORMATION REPORT**

1. Manufacturer:

Nissan Motor Co., Ltd. Tochigi Plant

2. Vehicles Potentially Involved:

Certain 2014-2016 Model Year Infiniti Q50 vehicles equipped with optional Direct Adaptive Steering (DAS) shown in the table below:

<b><u>Model Year/Make/Model</u></b>	<b><u>Dates of Manufacture</u></b>
MY2014-2016 Infiniti Q50	December 26, 2012 to December 11, 2015
MY2014-2016 Infiniti Q50 Hybrid	December 10, 2012 to December 17, 2015

This issue is specific to Q50 models equipped with optional Direct Adaptive Steering (described in Section 5 below) manufactured during the subject time period. No other Nissan or Infiniti vehicles are equipped with DAS.

3. Total Number of Vehicles Potentially Involved:

Approximately 28,182 vehicles are subject to this recall:

<b><u>Model Year/Make/Model</u></b>	<b><u>Number of Vehicles</u></b>
MY2014-2016 Infiniti Q50	20,828
MY2014-2016 Infiniti Q50 Hybrid	7,354

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

100%

5. Description of the Defect:

The subject vehicles are equipped with an optional DAS (steer-by-wire) system. During normal operation, the amount of electrical current delivered to the steering actuator motors is designed to vary based on ambient temperatures. Under certain rare conditions, a combination of low battery voltage at engine start up (~7 volts), combined with a large steering angle when the vehicle is parked (customer parks the car with wheels turned) can cause an immediate error in the steering ratio calculation algorithm at vehicle startup; which may lead to a noticeable change in steering responsiveness and turning radius. If this issue occurs, the steering wheel is noticeably off-

center and the "VDC warning lamp" telltale illuminates to warn the driver. If these warnings are ignored, and the vehicle is driven in this condition, it could increase the risk of a crash.

#### 6. Chronology of Principal Events:

October 2015 – Nissan received a technical report concerning a vehicle that exhibited the subject condition, where the steering was visibly "off center" after vehicle start up. The issue was reviewed and a software improvement opportunity was identified. There were no additional known incidents involving the subject condition in the U.S. market.

December 2015 – While Nissan did not believe the subject condition was a safety defect, Nissan implemented a production software update.

April 2016 to May 2016 – Nissan received a second technical report potentially attributable to the subject condition. Nissan began to assess the subject condition, which included dynamic testing. More specifically, a vehicle performance test was conducted and the results showed that if the voltage was low (~7 volts) and the vehicle steering angle was large at the time the customer shut off the vehicle, the neutral steering position may be changed at vehicle start up. If this occurred, the "VDC warning lamp" would illuminate to alert the customer of the issue.

June 2, 2016 – While Nissan is aware of only one additional incident attributable to this issue, there is sufficient visual warning to the customer; out of an abundance of caution, Nissan decided to conduct a Safety Recall Campaign and is reporting in accordance with the defect notification requirements specified in 49 CFR Part 573.

#### 7. Description of Corrective Action:

Infiniti retailers will reprogram the Direct Adaptive Steering ECU with the improved software to prevent this issue from occurring. This service will be provided at no cost to the customer.

We will not include a statement in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy as the subject vehicles are under warranty.

#### 8. Copy of Notices:

Copies of all notices will be provided to NHTSA as they become available.