

RECEIVED

By Recall Management Division at 6:05 am, Mar 25, 2014

14V-138
(5 pages)

NISSAN NORTH AMERICA, INC.

Corporate Headquarters
One Nissan Way
Franklin, TN 37068

Mailing Address: P.O. Box 685001
Franklin, TN 37068-5001

Telephone: 615.725.1000

NISSAN

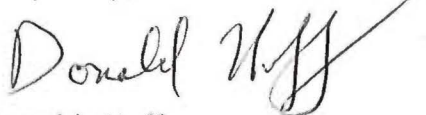
March 24, 2014

Ms. Nancy Lewis
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 Madam:

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 April 11, 2014 and vehicle owners beginning in mid-April 2014. We will not include information in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy as these vehicles are under warranty.

Very truly,



Donald Neff
Manager,
Technical Compliance

Encl.

DEFECT INFORMATION REPORT

1. Manufacturer:

Nissan North America, Inc. Smyrna Plant
Nissan North America, Inc. Canton Plant
Nissan Mexicana, S.A. de C.V. Aguascalientes plant
Nissan Mexicana, S.A. de C.V. Civac plant
Nissan Motor Co., Ltd. Tochigi Plant

2. Vehicles Potentially Involved:

| <u>Model</u> | <u>Dates of Manufacture</u> |
|------------------------------------|---------------------------------------|
| MY 2013-2014 Nissan Altima | March 6, 2012 to February 12, 2014 |
| MY 2013-2014 LEAF | November 21, 2012 to February 6, 2014 |
| MY 2013-2014 Nissan Pathfinder | June 20, 2012 to February 6, 2014 |
| MY 2013-2014 Nissan Sentra | August 27, 2012 to February 18, 2014 |
| MY 2013 NV200/Taxi | August 6, 2012 to December 7, 2013 |
| MY 2013 Infiniti JX35/ MY2014 QX60 | January 24, 2012 to February 6, 2014 |
| MY 2014 Infiniti Q50 | April 23, 2012 to January 7, 2014 |

No other Nissan or Infiniti vehicles are affected because this specific Occupant Classification System (OCS) is not utilized in any other Nissan or Infiniti vehicles.

The OCS supplier is:

Calsonic Kansei North America, Inc.
617 Potomac Pl
Smyrna, TN 37167
Tel: (615) 459-5525

3. Total Number of Vehicles Potentially Involved:

Total number of vehicles: Approximately 989,701

| <u>Model</u> | <u>Total Number of Vehicles</u> |
|---------------------------------|--|
| MY2013-2014 Nissan Altima | Approximately 544,139 |
| MY2013-2014 LEAF | Approximately 29,165 |
| MY2013-2014 Nissan Pathfinder | Approximately 124,202 |
| MY2013-2014 Nissan Sentra | Approximately 182,569 |
| 2013 NV200/Taxi | Approximately 6,696 |
| 2013 Infiniti JX35/ MY2014 QX60 | Approximately 63,698 |
| MY 2014 Infiniti Q50 | Approximately 39,920 |

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

Unknown

5. Description of the Defect:

Due to the sensitivity of the OCS software calibration, in some of the affected vehicles, and in certain rare instances, the Occupant Classification System (OCS) algorithm may not properly classify an adult passenger front seat occupant. More specifically, a combination of factors such as high engine vibration at idle when the seat is initially empty and then becomes occupied, or unusual occupant seating postures immediately upon being seated may cause the OCS to classify an occupied front passenger seat as empty. In some instances, the OCS may properly re-classify the passenger seat status if the vehicle comes to a stop and begins to idle again with lower vibration.

If the OCS classifies the passenger seat as empty, the OCS is designed to suppress the deployment of the passenger air bag, and the passenger air bag status light does not illuminate. Accordingly, if the classification is not corrected, there may be no warning that the air bag may not deploy in a crash where it is designed to deploy, potentially increasing the risk of injury to the front passenger seat occupant.

6. Chronology of Principal Events:

On February 28, 2013, due to a strain gauge sensor manufacturing issue, Nissan notified NHTSA that it would conduct a recall to inspect, and if necessary replace, the strain gauge sensors in certain vehicles that are also subject to this notice. Recall 13V-069 was implemented beginning in early April 2013.

Late June 2013 – September 2013 – During this time period, despite a significant reduction in warranty rates as result of recall 13V-069, Nissan noted that there were still some warranty claims and customer complaints related to OCS performance in the vehicles that received the recall remedy. Nissan began monitoring this issue to determine if there was a trend.

Nissan conducted two dealer visits to examine OCS systems and interviewed customers. Further, the supplier performed a tear-down study of an in-use part. Nissan preliminarily concluded that these complaints were unrelated to the strain gauge sensor issue and were likely caused by out-of-position occupants.

During this time, Nissan was contacted by NHTSA regarding several customer complaints related to the OCS performance in the subject vehicles. Nissan explained its findings to date and continued updating NHTSA on its field monitoring efforts.

In the course of the continued investigation, Nissan identified a possible passenger air bag non-deployment where the air bag status light was OFF. The Electronic Data Recorder data showed that the seat was classified as empty, which was inconsistent

with what was reported at the time of the accident. Nissan investigated this incident along with the OCS supplier and collected the incident parts but did not find any defect with the system.

In August, additional warranty parts were collected and sent to Nissan Japan for investigation.

On September 12, 2013, a teleconference was held with NHTSA to provide an update on the ongoing monitoring activities and provide a detailed explanation of the OCS system. Nissan explained that it would continue monitoring field data and try to identify opportunities for OCS algorithm improvement to account for unusual occupant seating postures.

October 2013 to November 2013 – Nissan continued studying system design improvement possibilities and monitoring field data. Nissan initiated the purchase and delivery of 4 in-use vehicles for evaluation.

In late October, while Nissan had not concluded that the issue was a safety defect, Nissan initiated a process to improve the OCS algorithm parameters for production vehicles. These production running changes were ultimately adopted across applicable models by mid-February of 2014.

November 2013 to January 2014 – In the course of its continuing investigation, Nissan identified two field incidents where the passenger air bag did not deploy and the passenger air bag status light was not illuminated. The investigation showed that the OCS classified the seat as empty and the passenger air bag did not deploy, when according to the reports, the seat was occupied. Nissan could not draw definitive conclusions based on the limited information available to it from these crashes.

Additionally, Nissan continued to study field trends and to confirm the predicted effectiveness of planned production running changes made to the OCS algorithm parameters. Nissan also received the 4 in-use vehicles and conducted a customer complaint re-creation study. Nissan also confirmed that the problems identified in these four customer complaints could be resolved by revising the OCS with new algorithm parameters.

February 2014 - March 2014 – Nissan continued the on-going investigation into OCS performance, and in mid-February, Nissan implemented a software calibration change in production vehicles. Concurrently, Nissan conducted additional field data analysis to verify the scope of the issue, including the potentially-affected vehicles, and whether the predicted incident rate indicated a defect trend. Additionally, Nissan determined that the above-mentioned concerns would be resolved by the OCS algorithm parameter changes that had been made in production.

March 19, 2014 – Nissan determined that a safety-related defect exists and that a recall campaign should be conducted.

7. Description of Corrective Action:

Owners of the potentially affected vehicles will be notified beginning in mid-April 2014. The OCS algorithm will be reprogrammed to improve the sensitivity to vehicle vibration at idle and to reduce the potential for classifying the seat as empty when it is occupied by someone with an unusual seating posture. This reprogram will be offered at no charge to the customer.

8. Copy of Notices:

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