

NISSAN**RECEIVED**

By Recall Management Division at 9:30 am, Apr 02, 2013

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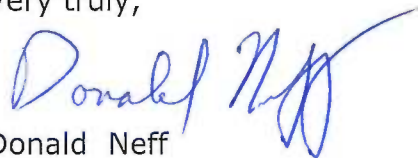
April 1, 2013

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 Ms. Lewis:

We are enclosing an update to a Defect Information Report previously submitted on February 28, 2013 in accordance with 49 CFR Part 573. The amended report updates the information regarding the model years, models and production ranges involved in the Occupant Classification System (13V-069) voluntary recall campaign. Nissan plans to notify dealers on April 1st and begin owner notification on April 8, 2013.

Very truly,



Donald Neff
Manager,
Technical Compliance

Encl.

DEFECT INFORMATION REPORT

1. Manufacturer:

Nissan North America, Inc., and Nissan Mexicana, S.A. de C.V.

2. Vehicles Potentially Involved:

<u>Model</u>	<u>Dates of Manufacture</u>
MY 2013 Nissan Altima	September 27, 2012 – January 28, 2012
MY 2013 Nissan LEAF	December 13, 2012 – February 6, 2013
MY 2013 Nissan Pathfinder	September 26, 2012 – January 30, 2013
MY 2013 Nissan Sentra	October 1, 2012 – January 30, 2013
MY 2013 Infiniti JX35	September 28, 2012 – January 25, 2013

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

The OCS supplier is:

Calsonic Kansei North America, Inc.
One Calsonic Way
Shelbyville, Tennessee 37162
931-680-6408

3. Total Number of Vehicles Potentially Involved:

Total number of vehicles: Approximately 82,038.

<u>Model</u>	<u>Total Number of Vehicles</u>
MY 2013 Nissan Altima	Approximately 43,307
MY 2013 Nissan LEAF	Approximately 537
MY 2013 Nissan Pathfinder	Approximately 20,997
MY 2013 Nissan Sentra	Approximately 12,923
MY 2013 Infiniti JX35	Approximately 4,274

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

Unknown

5. Description of the Defect:

In some of the affected vehicles, the strain gauge sensors used to determine the weight of the passenger seat occupant for the Occupant Classification System (OCS) may have been manufactured out of specification. More specifically, certain heat treatment anomalies which occurred, that have since been corrected, could cause the load cells within the strain gauge sensors to malfunction. If this malfunction occurs, the OCS system will permanently suppress the deployment of the passenger air bag regardless of occupant weight. The (red) supplemental air bag warning light (SRS Light) will illuminate to alert the vehicle operator and the (amber) front passenger air bag status light will illuminate to alert the front seat passenger.

6. Chronology of Principal Events:

December 2012 - Nissan first noticed an increasing trend of warranty claims regarding the SRS Light and/or the passenger airbag status light for certain MY2013 vehicle models.

December 23, 2012 - Nissan began more active field monitoring and initiated a parts collection program focusing its analysis on common parts. An audit of the OCS sensor supplier (Panasonic, a Calsonic sub-supplier) was conducted to verify manufacturing process change history. It was confirmed that no changes were made at Panasonic which would affect the OCS sensor performance.

January 2013 - Nissan received reports of certain vehicles at the Smyrna, TN plant in which both the SRS Light and the passenger airbag status light were on. Nissan design engineers recorded sensor outputs before shipping the incident parts to Panasonic in Japan for detailed inspection and teardown. Nissan and Panasonic engineers worked together to inspect the OCS sensors, and to conduct detailed teardown and material analysis. Additionally, several component level tests were conducted to attempt to replicate the condition that led to customer warranty claims. Based on this activity, it was found that the strain gauge sensors displayed permanent voltage offset after a load is applied. Upon discovering this, the team focused its study on the strain gauge sensors and the integrated load cells.

Concurrently with these activities, Nissan continued to monitor field data to determine if there was a defect trend and whether the issue was isolated to a certain production period.

January 28, 2013 - Nissan discovered that the strain gauge sensor supplier (Tier 2 to Panasonic) had made changes in its heat treatment process of the load cells. This change in process affected the material characteristics of the load cell, which affected sensor performance.

February 2013 - Nissan and suppliers conducted detailed technical studies to confirm the effect of heat treatment process deviation on sensor performance.

The strain gauge sensor supplier provided Nissan with lot traceability data that confirmed incident sensors by serial number. This traceability activity confirmed that incident sensors corresponded to an increase in customer warranty claims from a timing and VIN standpoint. Nissan is continuing the traceability activity to confirm the affected VIN range for the models listed in Section 2 above.

February 21, 2013 - Based on the foregoing, Nissan determined that a safety-related defect exists and that a recall campaign should be conducted. Nissan submitted a defect information report (DIR) on February 28, 2013.

March 2013 - Nissan continued to investigate the total subject vehicle population and conducted a comprehensive study of the collected incident parts, together with the supplier, to determine the manufacturing range of the potentially affected vehicles.

7. Description of Corrective Action:

Owners of all potentially affected vehicles will be notified beginning on April 8, 2013. The OCS sensors will be inspected, and if necessary, replaced with new OCS sensors manufactured to specification at no charge to the owner for parts or labor.

8. Copy of Notices:

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