



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 19-015
Date Opened: 10/09/2019
Investigator: Iulian Gugiu **Reviewer:** Scott Yon
Approver: Stephen Ridella
Subject: Front Occupant Classification System Mat

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Nissan North America, Inc.
Products: Model Year 2011-2012 Nissan Leaf
Population: 19,500 (Estimated)
Problem Description: The occupant classification system mat, which acts as a sensor for the front passenger side air bag, may malfunction causing the passenger side air bag not to operate as intended.

FAILURE REPORT SUMMARY

| | ODI | Manufacturer | Total |
|------------------------------|-----|--------------|-------|
| Complaints: | 12 | TBD | TBD |
| Crashes/Fires: | 0 | TBD | TBD |
| Injury Incidents: | 0 | TBD | TBD |
| Number of Injuries: | 0 | TBD | TBD |
| Fatality Incidents: | 0 | TBD | TBD |
| Number of Fatalities: | 0 | TBD | TBD |

ACTION / SUMMARY INFORMATION

Action: Open this Preliminary Evaluation.

Summary:

A defect petition (see DP19-002) was received July 23, 2019 alleging that the occupant classification system (OCS) sensor (mat) in model year (MY) 2011 Nissan Leaf vehicles is defective and affects the proper deployment of the passenger front air bag. The petitioner provided a list of potentially related NHTSA reports and noted a Nissan recall involving later MY Leaf vehicles with OCS defect. NHTSA is granting the petition and opening this preliminary evaluation in response.

Since receiving the defect petition, the Office of Defects Investigation (ODI) has determined that the MY 2011 and 2012 Leaf share a common OCS design, both using the same sensor mat for passenger presence sensing. Starting in MY 2013, Leaf OCS was changed to a design using a different sensing system, one that did not use the mat present in prior model year Leafs. While MY 2013-2016 Leaf vehicles were recalled for an OCS defect under recall 16V-244, a recall influenced by ODI investigation EA15-004, earlier MY Leaf vehicles were not included because they were not affected by the particular defect involved in that recall.

ODI identified and reviewed 13 vehicle owner questionnaire (VOQ) reports in its database, one of which is a duplicate, involving MY 2011 and 2012 Leaf vehicles that allege a problem with the OCS. The VOQs indicate that an OCS warning light illuminated at which point the vehicle was diagnosed and it was determined the sensor mat was the cause of the OCS problem. Most of the VOQs also noted the high cost of repair, which apparently involves replacement of the passenger front seat, according to complainants. None of the VOQs allege a problem with the performance of the passenger air bag, an injury, or a fatality due to the failure of the OCS.

This preliminary evaluation has been opened to further assess the scope, frequency, and potential safety-related

consequences of the alleged sensor mat failure in the subject MY 2011-2012 Nissan Leaf vehicles.

The ODI reports cited above can be reviewed at NHTSA.gov under the following identification (VOQ) numbers: 11234415, 11207486, 11196006, 11193208, 11180021, 11176324, 11172159, 11152569, 11123812, 11103556 (duplicate of 11180021), 11102456, 11101830, 11052546.