



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation:	PE 19-015	Date Closed:	06/01/2020
Date Opened:	10/09/2019	Reviewer:	Scott Yon
Investigator:	Taylor Collins		
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:	20,474
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 frontal air bag not to operate as intended.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	20	43	52**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	41	41

*Description of Other: Warranty Claims.

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: Close this Preliminary Evaluation.

Summary:

Preliminary Evaluation (PE) 19-015 was opened as a result of Defect Petition (DP) 19-002 which alleged that model year (MY) 2011 and 2012 Nissan Leaf were affected by the same defect addressed in an earlier recall, NHTSA Safety Recall 16V-244, but were not included in the scope of that recall. NHTSA 16V-244 involved a defect in the Occupant Classification System, a system intended to suppress deployment of the passenger's frontal air bag under certain specific conditions. Although the DP19-002 analysis determined the allegation that earlier MY Leaf vehicles should have been included in 16V-244 was not founded, the Office of Defects Investigation nonetheless granted the petition and commenced this investigation into the 2011 and 2012 Leaf since OCS failures were reportedly occurring in these vehicles. Further details on DP19-002 can be found at NHTSA.gov.

On October 25, 2019, ODI sent an information request letter to Nissan North America (Nissan) requesting pertinent information on the subject 2011 and 2012 Leaf. Nissan provided its response on December 13, 2019. ODI has reviewed the information Nissan provided as well as new reports submitted to NHTSA's Vehicle Owner Questionnaire database. Based on review of all available information, and at this time, ODI has identified evidence supporting that a total of 76 subject vehicles likely experienced a failure of the subject passenger seat OCS mat. The count represents an incidence rate of about 0.4% on subject vehicles that average 8 to 9 years in service.

Consistent with Nissan's explanation of how the subject OCS was intended to function, ODI's review of the reports indicates that when an OCS mat failure occurs, two different warning indicators appear on the instrument panel. The warnings provide clear and unambiguous notice to occupants that an OCS problem has been detected, and the

owner's manual provides further information regarding the meaning and consequences of the detected failure, as well as advice to seek service. Additionally the OCS will store a diagnostic trouble code to aid service technician diagnosis, and the occupant warnings remain present until the underlying failure has been corrected.

In its responses to ODI, Nissan also provided its assessment of the alleged defect in the subject vehicles, stating that it does not believe that an unreasonable risk to safety exists. Nissan states that its assessment of failed OCS mats recently collected from the field showed that external factors (e.g., damage from foreign objects) were responsible for the failures, rather than a design or manufacturing defect. Nissan also cited clear visual warnings and low incidence rates occurring in comparatively older vehicles as factors in its determination that a recall was not warranted. Lastly Nissan noted that most of the complaints received for this issue involved a high customer expense for the cost of repair for the OCS system, which is consistent with ODI's observations. Nissan is apparently considering a reduction in repair part cost as a means to address the customer satisfaction aspect of these complaints.

Based on the analysis conducted, this investigation will be closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. NHTSA reserves the right take additional actions if warranted by future circumstances.

The 20 ODI numbers cited above can be reviewed at [NHTSA.gov](https://www.nhtsa.gov) under the following identification (ODI) numbers: 11176324, 11193091, 11286687, 11290303, 11152569, 11207486, 11180021(duplicate of 11103556), 11103556, 11196006, 11287002, 11101830, 11193208, 11256669, 11172159, 11282156, 11102456, 11123812, 11311406, 11280868, 11234415