



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**



1200 New Jersey Avenue SE.
Washington, DC 20590

Mr. James Cook

OCT 17 2019

DP19-002ig
NEF-102

████████████████████
Lawrenceville
Georgia ██████████

Dear Mr. Cook,

This letter concerns your petition dated July 23, 2019, requesting the National Highway Traffic Safety Administration (NHTSA) conduct a defect investigation into the unreasonable risk in the Occupant Classification System (OCS) sensor (mat) in model year 2011 Nissan Leaf. Based on a review of information contained in NHTSA's Vehicle Owner Questionnaire database, ODI has decided to grant the petition and open Preliminary Evaluation (PE) 19-015 to evaluate the cause, scope and frequency of the Occupant Classification System mat malfunction in model year 2011 to 2012 Nissan Leaf. A copy of the opening resume for the investigation is attached for your review. Thank you for submitting your petition.

Sincerely,

Stephen A. Ridella, Ph.D.
Director
Office of Defects Investigation

Enclosure



U.S. Department of Transportation
National Highway Traffic Safety Administration

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION
U.S. DEPARTMENT OF TRANSPORTATION
NHTSA
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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.