



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: EA 19-002
Prompted by: PE18-013
Date Opened: 07/29/2019
Investigator: Pedro Bonilla **Reviewer:** Scott Yon
Approver: Stephen Ridella
Subject: Rear Suspension Control Arm Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Nissan North America, Inc.
Products: MY 2013-2018 Nissan Altima
Population: 2,043,354

Problem Description: The lower control arm (lower spring link) of the rear suspension system may separate from the chassis due to corrosion.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	91	48	139
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0

ACTION / SUMMARY INFORMATION

Action: PE18-013 has been upgraded to an Engineering Analysis.

Summary:

In response to the Office of Defects Investigation's (ODI's) information request (IR) letter dated December 6, 2018, Nissan provide an interim response on January 18, 2019, and a final response on February 1, 2019. The majority of the Nissan and ODI failure reports are from vehicles registered in so called "salt belt" states. No crashes, injuries or fatalities have been confirmed as of this date.

Nissan's IR response indicated the MY 2013 through early 2018 Nissan Altima shared a common rear lower control arm design. Accordingly ODI has expanded the scope of the investigation to include all potentially affected vehicles. Nissan reported implementing a design change in January 2018 to improve the durability of the lower control arm, and also provided an analysis indicating that the design change resulted in a significant (which Nissan estimated between 5 to 9 times) improvement to its durability.

Nissan acknowledges that a crack may develop in the lower control arm due to stress and loading from normal use of the vehicle, and that road salts commonly used for snow and ice treatment results in corrosion that exacerbates growth and progression of the crack. Once the crack develops, continued use of the vehicle causes the control arm to separate at one of four attachment points that connect it to the vehicle chassis. Nissan determined the current incident rate was 0.003%. Based on testing it conducted as well as observations from field failures, Nissan maintains the separation, whether it occurs either statically or while in motion, is readily detectable, that the separated component does not contact the road surface or braking components, and that the vehicle remains controllable and can be safely brought to a stop. Nissan states that due to low incident rate, high detectability, and low risk of adverse vehicle dynamics, it does not believe the subject control arm failure poses an unreasonable risk to motor vehicle safety.

Nonetheless, Nissan has indicated its intentions to conduct a non-safety, proactive field action for MY 2013 Altima in specific states with high salt usage. Launch of the potential action would be in phases, likely beginning in late 2019 in salt belt states with higher incident rates, and would involve replacement of the lower control arms. Components recovered from the field action are expected to be used to study additional remedy options.

During the Engineering Analysis, ODI will continue to collect and analyze complaint and field data in its efforts to fully assess the scope and frequency of the alleged defect. More importantly, ODI will also seek additional information and data regarding the potential safety consequences of rear lower control arm failure, both from evidence collected from field failures and through more rigorous and comprehensive vehicle testing to be conducted by either Nissan and/or NHTSA.

The ODI reports (VOQs) cited above can be viewed at NHTSA.gov under the following reference numbers: 11234334, 11234232, 11234189, 11233771, 11233234, 11232381, 11231589, 11230323, 11230184, 11229023, 11229003, 11228730, 11228651, 11228631, 11228625, 11223086, 11222602, 11222427, 11222303, 11221802, 11219943, 11217980, 11217542, 11217505, 11217290, 11210699, 11209647, 11208580, 11208274, 11207545, 11206310, 11205711, 11205461, 11203864, 11203005, 11195416, 11193545, 11193020, 11192269, 11192066, 11191270, 11191207, 11191185, 11191042, 11190360, 11190323, 11187334, 11187157, 11186747, 11186195, 11185664, 11185632, 11185589, 11183799, 11183295, 11183198, 11182705, 11182528, 11182265, 11182137, 11182088, 11181373, 11181223, 11181155, 11181009, 11180126, 11176565, 11176261, 11176135, 11175821, 11172604, 11172200, 11172065, 11170019, 11169930, 11165194, 11163833, 11163489, 11162559, 11162195, 11161956, 11161497, 11161117, 11157323, 11157234, 11156772, 11141169, 11139516, 11129476, 11122829, 11114374