

**Response to
EA19-002**

INTRODUCTION

In responding to this Information Request ("IR"), information has been obtained from those places within Nissan likely to contain such information in the regular and ordinary course of business. When a particular Request seeks "documents" as defined in the IR, reasonable, good faith searches have also been made of corporate records that are likely to contain responsive information in those places where such records are likely to be found. We have not checked such documents as "calendars", "appointment books", "financial statements" and "personnel records" even though they are included in the definition of "documents" because such documents would not contain owner complaints, field reports, technical analyses or other information sought by Request 1 pertaining to the alleged defect. We have also searched for responsive documents and information only with respect to vehicles manufactured for sale in the United States, which we understand to be the scope for which the IR seeks information. Nissan has searched for and produced records that were created through July 24, 2020.

Responses are provided after each request, and Attachments are utilized as appropriate. The source of information used as a basis for the data in each Attachment, including the date the data were updated and retrieved, is identified at the beginning of each Attachment, as applicable. If a document itself is the source for the requested information and it is provided, we assume no further source identification is called for. If a document, drawing or component is requested, or if no responsive information is available, we assume no further source identification is called for.

With regard to claims of privilege, Nissan understands that it is acceptable to the Agency for Nissan to identify specific categories of privileged documents rather than any specific document. These specific categories are: 1) communications between outside counsel and Nissan Legal Department employees, other Nissan employees, or other Nissan-represented parties in litigation or claims; 2) communications between Nissan Legal Department employees and other Nissan employees or other Nissan-represented parties in litigation or claims; 3) notes and other work product of outside counsel or of Nissan Legal Department employees concerning communications with Nissan employees or consultants, and the work product of those employees or consultants done for or at the request of outside counsel or Legal Department employees; and 4) other categories to be identified later as necessary. For any privileged documents that are not included in these categories, such documents, if any, will be specifically identified on a separate privilege index at a later time. To the extent that a document is furnished, and unless the production of that document is inadvertent, Nissan is not asserting a privilege claim for that document, although the disclosure of such document does not waive the attorney-client privilege or work-product protection with respect to other documents prepared in connection with the specific litigation or claim or other litigation or claims. In addition, in submitting such documents, we reserve our right to claim the attorney-client privilege and/or work-product protection with respect to analyses that may be prepared subsequently in connection with these and other cases. Also, we understand documents specifically related to the preparation of the responses are not sought.

Nissan believes NHTSA's policy is to protect the privacy of individuals under exemption 6 of the Freedom of Information Act, 5 U.S.C. Section 552(b)(6). We understand that name, address, and other personal information of owners or other individuals, including Nissan personnel, contained in any of the attachments in this response will not be made available to the public. Therefore, Nissan is not requesting confidential treatment for this information pursuant to 49 CFR, Part 512, but we believe any private information concerning individuals should not be made public.

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The National Highway Traffic Safety Administration (NHTSA) in its Engineering Analysis EA19-002 has requested materials from Nissan North America, Inc. (“NNA”). In regards to NHTSA’s questions and requests in EA19-002, NHTSA sought information on subject vehicles identified as “All vehicles that use the subject component manufactured by Nissan for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions.” NNA has determined the subject vehicle scope to include the 2013-2018 model year Nissan Altima and the 2016-2019 model year Nissan Maxima vehicles. NHTSA has specifically requested information related to the left and right side lower control arms (rear spring links) that may fail or fracture due to corrosion, causing a separation at the connection point with the rear suspension member on the subject vehicles.

1. State the number of each of the following, received by Nissan, or of which Nissan is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:

For subparts “a” through “f”, state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items “c” through “f”, provide a summary description of the alleged problem and causal and contributing factors and Nissan’s assessment of the problem, with a summary of the significant underlying facts and evidence. For items “e” and “f”, identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

- a. Consumer complaints, including those from fleet operators:

Table 1. Consumer Complaints Summary

Make	Model	Total Complaints
NISSAN	ALTIMA	403
NISSAN	MAXIMA	2

- b. Field reports, including dealer field reports:

Table 2. Field Reports Summary

Make	Model	Total Complaints
NISSAN	ALTIMA	14
NISSAN	MAXIMA	0

- c. Reports involving a crash, injury, or fatality:

Table 3. Crash, Injury & Fatality Report Count

Make	Model	Total Crash Complaints
NISSAN	ALTIMA	4
NISSAN	MAXIMA	0

Nissan found two (2) new reports of crashes in 2013 model year Altima vehicles which relate to, or may relate to, the alleged defect in the subject vehicles. In addition to the two (2) new reports of crash, two (2) reports of a crash in 2013 model year Altima vehicles were submitted in response to PE18-013. None of the four (4) reports involved an injury or fatality. These four (4) reports are vague and do not provide sufficient detail to determine the specific circumstances of the alleged crash or, in some cases, if indeed a crash occurred.

Nissan did not have an opportunity to investigate any of the allegations as three (3) of the four (4) vehicles had been repaired prior to the report being made and the remaining vehicle was totaled in an unrelated accident one-week after the alleged incident involving the rear lower spring link. As such, Nissan is unable to provide a summary description of the alleged problem and causal and contributing factors and Nissan's assessment of the problem with a summary of the significant underlying facts and evidence.

These four (4) reports are submitted as crashes in the interest of transparency.

d. Property damage claims:

NNA found zero (0) reports of property damage claims, which relate to, or may relate to, the alleged defect in the subject vehicles.

e. Third-party arbitration proceedings where Nissan is or was a party to the arbitration; and

NNA found zero (0) third party arbitration proceedings where Nissan is or was a party to the arbitration, which relate to, or may relate to, the alleged defect in the subject vehicles.

f. Lawsuits, both pending and closed, in which Nissan is or was a defendant or codefendant.

NNA found zero (0) lawsuits, pending or closed, in which Nissan is or was a defendant or co-defendant, which relate to, or may relate to, the alleged defect in the subject vehicles.

The answers given to Request No. 1 above were gathered from Nissan's data and are current as of July 24, 2020.

2. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 1, state the following information:
- a. Nissan's file number or other identifier used;
 - b. The category of the item, as identified in Request No. 1 (i.e., consumer complaint, field report, etc.);
 - c. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
 - d. Vehicle's VIN;
 - e. Vehicle's make, model and model year;
 - f. Vehicle's mileage at time of incident;
 - g. Incident date;
 - h. Report or claim date;
 - i. Whether the alleged failure was on the driver, passenger, or both sides;
 - j. Whether a crash is alleged;
 - k. Whether property damage is alleged;
 - l. Whether the vehicle was towed;
 - m. Number of alleged injuries, if any; and
 - n. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

The information available to Nissan requested in 2(a) through 2(n) is provided in a Microsoft Access database titled "EA19-002 DATA" which contains a table titled "REQUEST_NUMBER_TWO_DATA" in a file enclosed as Attachment A.

3. Produce copies of all documents related to each item within the scope of Request No. 1 and that allege a crash, injury, or fatality. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Nissan used for organizing the documents. Describe in detail the search methods and search criteria used by Nissan to identify the items in response to Request No. 1.

Documents requested within the scope of "Request No. 1" are being produced in a file enclosed as Attachment A in a folder titled "REQUEST NUMBER 2 DOCUMENTS". The documents are organized by category and stored as Adobe pdf files.

The search criteria used by Nissan to identify the documents in response to "Request No. 1" are set forth in Attachment C.

4. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Nissan to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign including campaign P9324.

Table 4. Warranty Data Summary

MAKE	MODEL	Model Year						
		2013	2014	2015	2016	2017	2018	2019
Warranty Claims for Broken or Cracked Rear Lower Spring Links								
NISSAN	ALTIMA	55	14	3	0	0	0	N/A
NISSAN	MAXIMA	N/A	N/A	N/A	3	2	0	0
Warranty Claims Specified in Technical Service Bulletin P9324								
NISSAN	ALTIMA	47,042	N/A	N/A	N/A	N/A	N/A	N/A
NISSAN	MAXIMA	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Separately, for each such claim, state the following information:

- a. Nissan's claim number;
- b. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number(s);
- h. Problem code(s);
- i. Diagnostic trouble code(s);
- j. Replacement part number(s) and description(s);
- k. Concern stated by customer;
- l. Cause as stated on the repair order;
- m. Correction as stated on the repair order; and
- n. Additional comments, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA."

The information available to Nissan requested in 4(a) through 4(n) is provided in a Microsoft Access database titled "EA19-002 DATA" containing a table titled "WARRANTY_DATA" in a file enclosed as Attachment A.

5. Describe in detail the search methods and search criteria used by Nissan to identify the claims in response to Request No. 4, including the labor operations, problem codes, diagnostic trouble codes, part numbers and any other pertinent parameters used.

Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions, diagnostic trouble codes and diagnostic trouble code descriptions applicable to the alleged defect in the subject vehicles. State whether the diagnostic trouble codes are automatically reported to the warranty database electronically or manually entered into the warranty database by a claims administrator.

State, by make and model year, the terms of the new vehicle warranty coverage offered by Nissan on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Nissan offered for the subject vehicles and state by

option, model, and model year, the number of vehicles that are covered under each such extended warranty.

The search criteria used by Nissan to identify the claims identified in response to Request No. 4 are set forth in Attachment C.

Descriptions of each labor operation code, problem code and part number are provided in the "WARRANTY_DATA" table included in Attachment A. There are no diagnostic trouble codes associated with this type of incident.

The terms of the new vehicle warranty coverage offered by Nissan on the subject vehicles are provided below in Table 5.

Extended warranty coverage options for the subject vehicles along with the number of vehicles covered under each extended warranty are provided below in Table 6. Terms and coverages for each extended warranty are also in a file enclosed as Attachment B in a folder titled "EXTENDED WARRANTY COVERAGES" stored as Adobe pdf files. The Gold Preferred extended warranty agreement extends coverage for rear lower spring links to up to 8 years 120,000 miles.

Table 5. New Vehicle Warranty Coverage

	Nissan Altima 2013-2018	Nissan Maxima 2016-2019
Basic Coverage	36mo/36,000mi	
Corrosion Coverage	60mo/unlimited mileage	
Powertrain Coverage	60mo/60,000mi	
Federal Emission Performance	24mo/24,000mi	
Federal Emission Defect	36mo/36,000mi	
Federal Emission Long Term Defect	96mo/80,000mi	
California Emission Performance	36mo/50,000mi	
California Emission Defect	36mo/50,000mi	
California Emission Long Term Defect	84mo/70,000mi	
Seat Belt	120mo/unlimited mileage	

Table 6. Extended Warranty Summary

Make	Model	Model Year	Gold	Gold Preferred	Silver	Silver Preferred	Coverage
NISSAN	ALTIMA	2013	51	92,476	2	2,573	Up to 8 years, 120,000 miles
NISSAN	ALTIMA	2014	36	67,768	1	1,866	
NISSAN	ALTIMA	2015	3	99,885	0	2,830	
NISSAN	ALTIMA	2016	0	45,696	0	1,292	
NISSAN	ALTIMA	2017	0	39,220	0	1,457	
NISSAN	ALTIMA	2018	0	21,513	0	1,088	
NISSAN	MAXIMA	2016	0	10,670	0	316	
NISSAN	MAXIMA	2017	0	9,348	0	340	
NISSAN	MAXIMA	2018	0	2,534	0	121	
NISSAN	MAXIMA	2019	0	5	0	0	

6. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Nissan has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals, and any documents related to campaign P9324. Also, include the latest draft copy of any communication that Nissan is planning to issue within the next 120 days.

On October 24, 2019 Nissan issued NTB19-082 which relates to the alleged defect in some of the subject vehicles. Specifically, NTB19-082 is related to a Service Campaign issued to dealers to replace rear lower links on certain specific model year 2013 Altima vehicles (those located in the following salt states Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin, and Washington D.C.). On October 31, 2019, NTB19-082 was amended to NTB19-082a to only include specific states (Ohio, Vermont and Wisconsin). Finally, on December 6, 2019, NTB19-082a was amended to NTB19-082b to remove the specific states mentioned in NTB19-082a with the intention to once again include all salt states in the service campaign.

Copies of all three service campaign bulletins (NTB19-082, NTB19-082a and NTB19-082b) are enclosed in Attachment D.

7. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions"), including any statistical analyses intended to project future failure frequencies that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Nissan. Nissan's response should include the testing conducted at Nissan's Technical Center in Arizona in November 2019 which was attended by representatives from ODI, VRTC, Transport Canada, and Nissan's safety office personnel. For each such action, provide the following information:
- a. Action title or identifier;
 - b. The actual or planned start date;
 - c. The actual or expected end date;
 - d. Brief summary of the subject and objective of the action;
 - e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

In addition to the actions identified in Nissan's final response to PE18-013 provided to ODI on February 1, 2019, Nissan conducted testing at Nissan Technical Center's Arizona Proving Grounds in November of 2019. This testing was attended by personnel from ODI, VRTC, Transport Canada and Nissan. A description of the testing, summary of results obtained from the testing and video files of the testing were delivered to NHTSA under separate cover on multiple dates in December of 2019.

8. Furnish Nissan's assessment of the alleged defect in the subject vehicle, including:
- a. The causal or contributory factor(s);
 - b. The failure mechanism(s);
 - c. The failure mode(s);
 - d. The risk to motor vehicle safety that it poses; and
 - e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
 - f. The reports included with this inquiry.

Nissan does not believe this issue poses an unreasonable risk to motor vehicle safety.

In the course of Nissan's investigation of multi-3-link rear suspension incidents related to the alleged defect in subject vehicles, Nissan determined that, over time and under certain conditions, a small crack may propagate along the weld bead between the rear lower spring link collar and rear lower spring link arm. Certain conditions, such as the amount of suspension stroke, cycles of suspension stroke and operation in areas where there is extensive use of road salt for snow and ice control, may contribute to this crack propagating during the course of suspension stroke by inducing corrosion within the bushing located inside of the rear lower spring link collar. This corrosion within the bushing subsequently increases the twist reaction force of the bushing, thereby increasing stress in the rear lower spring link collar-to-arm weld joint. Over time, with enough corrosion and with the increased stress applied to the joint, the crack in the collar-to-arm weld joint may propagate. In rare instances, the rear lower spring link collar may separate from the rear lower spring link arm, leaving three of four connection points for the multi-3-link rear suspension.

With respect to incident rate, Nissan has determined the current incident rate for the alleged defect to be 0.024%. As noted in response to question 2, there are four (4) reports alleging a crash (zero involving an injury or fatality) that could be related to this condition. However, all reports are vague and do not provide additional detail describing the damage or extent of the incident. Nissan did not have an opportunity to inspect these vehicles. Thus, these crash allegations cannot be positively attributed to this condition. Further, Nissan did not find allegations of any property damage claims, third-party arbitration proceedings, or any lawsuits, pending or closed, in which Nissan is or was a defendant or codefendant.

In December 2017 Nissan completed a mode assessment involving multiple dynamic driving scenarios when a rear lower spring link was intentionally separated from the rear suspension member. The assessment revealed no evidence of contact between the rear lower spring link and the road, nor any contact to brake related components. All maneuvers were able to be brought to a safe stop without incident. The assessment noted when travelling forward on a road surface with cracks, seams or manholes, an operator of a vehicle with the alleged defect would detect an abnormal condition due to the rear of the vehicle shaking left to right while maintaining control of the vehicle to bring it to a safe and complete stop. Similarly, when travelling in reverse, an operator would detect a decrease in creep speed and an associated noise caused by contact between the tire and the rear wheel house protector/finisher. Based on the above analysis and assessment, Nissan concluded this condition did not affect the subject vehicle safety.

Of note, most consumer complaints indicate the operator of an affected vehicle became aware of a difference in vehicle dynamics (potentially due to a separated rear lower spring link) and either 1) safely drove their vehicle home or to a dealer or 2) they brought their vehicle to a safe and complete stop; both scenarios lend support to Nissan's assessment above.

In addition to the above dynamic analysis, Nissan also conducted static vehicle inspections where a rear lower spring link was intentionally separated from the rear suspension member to determine detectability in a vehicle stopped (engine off) condition. Through this analysis and inspection Nissan determined that in a static condition customers could easily detect an abnormality in an affected rear lower spring link by visually noting a change in vehicle posture caused by a change in camber.

In January 2018, to improve durability, Nissan implemented countermeasures that 1) changed the weld bead from a single weld to a double weld bead and 2) implemented a brushing operation to the collar weld location in order to improve e-coat adhesion. Both countermeasures increased durability performance approximately 9x.

As noted in the response to question 7, Nissan conducted additional vehicle testing in Arizona in November 2019. This testing involved multiple severe dynamic maneuvers using vehicles equipped to simulate separation of the rear lower spring link at a point in the maneuver where the failure would have the greatest potential to induce vehicle instability. Planning for these tests was done in conjunction with both NHTSA and Transport Canada. The vehicles were operated by a human driver or with robotic steering input and clearly demonstrated margin to acceptable criteria, controllability during the event and an ability to safely maneuver the vehicle after the event occurred. In addition, during maneuvers, the vehicles demonstrated no wheel lift, vehicle component to pavement contact or tire de-beading. Steering effort to maintain a travel lane was minimal both during and after an event. Personnel from both agencies were present during the testing and were afforded the opportunity to give input during the testing as well as experience the separation.

Due to the low incident rate, high detectability of the condition, and low risk of adverse vehicle dynamics, Nissan does not believe this issue poses an unreasonable risk to motor vehicle safety. Nissan will continue to monitor service campaign completions and any claims for pre-countermeasure vehicles and will update its assessment as warranted.

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ATTACHMENT C
Request 1 and Request 4 Search Criteria

Data submitted subject to Requests 1 and 4 was gathered from relevant databases on July 24, 2020. The search criteria used by NNA to identify the claims identified in response to Request No. 1 & No. 4 is as follows:

Model years: 2013-2018 (Altima) & 2016-2019 (Maxima)

Models: The specific models were defined using NML Production codes L33 (2013-2018 Altima) and A36 (2016-2019 Maxima)

Verbatim Keyword Search

Relevant verbatim must contain:

- A. The words **REAR CONTROL ARM**. The words can be in any order (i.e. *CONTROL REAR ARM*) but must be located within 30 words of one another.
AND
- B. At least one word from the following list:
RUST, CORROSION, CORRODED, OXIDATION, CRACK, BROKE, SEPERATED, SEPARATED, LOSE

Phrases that would apply to the above list but not be relevant were excluded:

- Exclusions: **WINDSHIELD CRACK**

Warranty Data included additional criteria.

Specifically, the following PNC codes were added as additional criteria: 55019, 54529, 55111, 55120 & Z38NA

A description of each PNC code can be found in Attachment A in the table titled "WARRANTY_DATA".

The resulting data was reviewed for relevancy to the request. Any non-relevant documents were removed. Any documents, where relevancy could not be determined because the verbatim was too vague, are included in the submission.

Descriptions of the parts, trouble codes, and labor operation codes are included in the data attached in Attachment A responsive to Request 4.

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