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**Nissan North America, Inc.**

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January 14, 2022

Mr. Jeff Giuseppe  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
Attn: Recall Management Division (NVS-215)  
Room W48-302  
1200 New Jersey Avenue, SE  
Washington, D.C. 20590

Dear Mr. Giuseppe:

We are transmitting the enclosed supplement to the Amended Defect Information Report filed on April 29, 2021. This supplement updates section(s) 6 and 7: Chronology of Principal Events and Description of Corrective Action, respectively.

Very truly,

A handwritten signature in black ink, appearing to read "Derek Latta", with a long horizontal flourish extending to the right.

Derek Latta  
Manager,  
Technical Compliance

Encl.

## **DEFECT INFORMATION REPORT**

1. Manufacturer:

Nissan Mexicana, S.A. de C.V. Aguascalientes 1 & 2 plants

2. Vehicles Potentially Involved:

Certain Model Year 2016-2019 Nissan Sentra vehicles manufactured from December 1, 2015 (SOP) to November 23, 2019 (EOP) at the Aguascalientes 1 and 2 plants.

This issue is unique to Model Year 2016-2019 Nissan Sentra vehicles due to the combination of clevis pin grease that uses a high concentration of silicon, and a bulb system that uses a high current switch. Specifically, the layout of the clevis pin and brake lamp switch being in close proximity to one another is unique on the Sentra model. No other Nissan or INFINITI vehicles share this specific combination of factors and are therefore unaffected by the issue described in Section 5 below.

The name, description and part number of the recalled components are below:

<b><u>Part Name</u></b>	<b><u>Part Description</u></b>	<b><u>Part Number(s)</u></b>
SWITCH ASSY-STOP LAMP	Stop Lamp Switch	25320 AX10A
GROMMET	Grommet	24268 6KE0A

3. Total Number of Vehicles Potentially Involved:

Approximately 807,376 vehicles may be affected as shown in the table below:

<b><u>Model Year / Model</u></b>	<b><u>Number of Vehicles</u></b>
MY 2016 Nissan Sentra	164,276
MY 2017 Nissan Sentra	231,360
MY 2018 Nissan Sentra	168,289
MY 2019 Nissan Sentra	243,451

4. Percentage of Vehicles Estimated to Actually Contain the Defect:

Approximately 20.2%<sup>1</sup>

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<sup>1</sup> The estimated percentage of vehicles involved with defect is 20.2. However, 20% is used on NHTSA's safety portal because it will not allow decimal values.

5. Description of the Defect:

The stop lamp switch may become contaminated with off-gassing from silicon-based grease used in surrounding components (HVAC and brake booster clevis pin) in close proximity. Oxidation may occur at the switch contact surface due to electric arcing, resulting in silicon dioxide build-up. This build-up may lead to open circuit issues and an inoperative stop lamp switch.

If this condition occurs, the customer may notice a malfunction indicator light (MIL) ON, the rear stop lamps may not illuminate and/or the engine may not start. Rear stop lamps not illuminating could potentially increase the risk of a rear end crash.

6. Chronology of Principal Events:

In late 2015, Nissan switched from a low-current to a high-current brake lamp switch and from Light-Emitting Diode (LED) bulbs to regular bulbs for rear lamps in Sentra vehicles. Nissan noticed that after the change, warranty claims began to increase. Nissan opened an investigation to study the rate increase. The majority of these claims indicated a 'no-start' condition and the incident rate, while higher than the low-current LED lamps, was not initially significant.

Initial investigation led to possible silicone contamination of the switch, so Nissan added fluorine grease on the rod of the stop lamp switch in production as a sealant to avoid the silicone intrusion into the switch. From 2016 until late 2017, a seasonal trend in the warranty incidents was observed and Nissan continued to investigate the issue. At the time it was unclear if the source of the silicone contamination was external or internal to the manufacturing process. To better understand the issue, Nissan continued to monitor the lower frequency claims throughout 2017.

In 2018, Nissan observed an increase in the seasonal trend in these vehicles and initiated a returned part investigation to collect parts for analysis. Nissan also initiated scramble activities to secure customer vehicles that were experiencing these issues. Testing of the collected samples provided evidence of silicone contamination. In October 2018, Nissan removed silicone grease from the HVAC blower assembly to reduce the potential for contamination. Incident rates for vehicles produced after this countermeasure showed decreased incident rates. Nissan continued to collect pre-countermeasure parts. Testing of the collected samples provided evidence that grease used in the brake clevis pin had the possibility to come into contact with the stop lamp switch. Nissan adopted an additional countermeasure in production to clean grease from the brake booster clevis pin.

October 2019 through March 2020 – Nissan continued to collect incident parts from the field as part of the ongoing field incident monitoring activity, and return to the supplier for analysis. This activity included analysis of vehicles to collect stop lamp switch parts with the alleged 'no-start' condition for further investigation.

In order to obtain additional stop lamp switch parts for analysis, Nissan continued to pursue scramble activities. Nissan worked with Sentra customers to locate and organize scramble opportunities to inspect vehicles that matched the subject condition of the customer complaints. The investigation of a part collected during a scramble activity in January 2020 revealed a significant amount of grease on the brake pedal. The stop lamp switch part was collected and sent to the supplier for further analysis. In addition to the parts collection activity, Nissan conducted analysis of customer field data.

April 2020 through September 2020 – The investigation of return parts confirmed that grease inside the stop lamp switch housing caused a buildup of silicone dioxide on the contacts, which resulted in an intermittent failure. Nissan concentrated its investigation on the differences between Sentra and other Nissan models with a similar stop lamp switch and brake pedal design. The investigation focused on how the clevis pin grease was getting inside the stop lamp switch, and the effect of having a high-current stop lamp switch versus a low-current switch used in other models. This portion of the investigation was rather complex, in that it involved horizontal confirmation of the design differences of six (6) different Nissan models, in multiple markets, across several manufacturing plants.

October 2020 through December 2020 – Nissan analyzed the design difference in distance between the clevis pin and stop lamp switch for Sentra models versus other Nissan models. The Sentra had the shortest distance between the brake booster clevis pin and stop lamp switch (17.83mm). This was almost half the next shortest distance of any other model. This shorter distance, in combination with the high current switch (12.05A), resulted in a unique susceptibility to silicone contamination not present in other Nissan models.

January 2021 through February 2021 – Nissan initiated a design study of the subject condition to analyze how silicone contamination of the stop lamp switch would affect a vehicle equipped with a mechanical key ignition versus a vehicle equipped with a push-to-start ignition system. The study showed that Sentra vehicles equipped with a push-to-start ignition system that were affected by this condition may experience a malfunction indicator light (MIL) ON, the rear stop lamps may not illuminate and/or the engine may not start. However, after one ignition OFF/ON cycle, the customer would be unable to drive the vehicle because a 'no-start' condition occurs, thereby significantly reducing the risk of driving with inoperative rear stop lamps.

Sentra vehicles equipped with a mechanical key ignition system that were affected by this condition may experience similar symptoms as push-to-start ignition systems, but with one key difference. Owners could continue to drive with the possibility of having inoperative

rear stop lamps since they would not experience a 'no-start' condition with the mechanical key system.

February 24, 2021 - Upon reviewing the results of the scrambles, design study, and comprehensive parts investigation, Nissan decided to conduct a recall campaign to remedy this issue due to the safety risk of driving with inoperative stop lamps. Nissan was not aware of any accidents or alleged injuries relating to the subject condition.

September 2021 through December 2021 - Due to lower than expected inventory of replacement parts, Nissan continued discussions with the supplier for an updated parts schedule. Upon receiving estimated parts availability timing, Nissan reached out to NHTSA to explain the additional parts delay. Nissan also decided to send affected customers a second interim notification advising them of the new final remedy timing.

7. Description of Corrective Action:

Owners of all potentially affected vehicles received an interim notification beginning on April 20, 2021. Dealers were notified on March 9, 2021. The interim notification instructed owners to schedule an appointment with their dealers for repair if their vehicle is experiencing the subject condition. The remedy will be to replace the stop lamp switch and install a switch protective grommet, at no cost to owners for parts or labor.

Due to limited parts availability, owners will receive a second interim notification in late January 2022, reminding owners to schedule an appointment with their dealers for repair if their vehicle is experiencing a subject condition. When additional remedy parts are available in Summer 2022, all remaining owners will receive a final notification advising them to bring their vehicles into the dealer for repair.

Your office will be provided with the interim Part 577 owner notification.

8. Copy of Notices:

Copies of all notices will be provided to NHTSA as they become available.