



Nissan North America, Inc.

One Nissan Way
Franklin, TN 37067

Mailing Address:
PO Box 685001
Franklin, TN 37068

March 24, 2023

Ms. Anne Collins
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 Ms. Collins:

We are transmitting the enclosed amendment to the Defect Information Report filed on February 16, 2023. This amendment updates section 5; Description of Safety Defect.

Very truly,

A handwritten signature in black ink, appearing to read "Will Swindell".

Will Swindell
Manager,
Technical Compliance

Encl.

DEFECT INFORMATION REPORT

1. Manufacturer:

Nissan Motor Kyushu
Nissan North America, Inc., Smyrna Plant
Renault Samsung

2. Vehicles Potentially Involved:

Certain Model Year 2017 - 2022 Nissan Rogue Sport and Model Year 2014 - 2020 Nissan Rogue vehicles as shown in the table below:

<u>Model</u>	<u>Dates of Manufacture</u>	<u>Plant</u>
MY 2017 - 2022 Nissan Rogue Sport	November 28, 2016 to June 20, 2022	Kyushu
MY 2016 - 2020 Nissan Rogue	April 18, 2016 to May 27, 2020	
MY 2014 - 2020 Nissan Rogue	August 7, 2013 to August 14, 2020	Smyrna
MY 2015 - 2020 Nissan Rogue	July 22, 2014 to March 16, 2020	Renault

Based on production records, this issue is unique to "S" Grade trim level Nissan Rogue Sport and Nissan Rogue vehicles equipped with a jackknife key manufactured at the Kyushu, Smyrna, and Renault plants listed above. Nissan Rogue Sport and Rogue vehicles manufactured after this date are unaffected because Intelligent Key (i-key) (e.g. push-to-start ignition button) was adopted into production and the jackknife style key was no longer manufactured. No other Nissan or INFINITI vehicles are affected.

In foreign markets, Nissan Kicks vehicles are equipped with the same jackknife key, but U.S. vehicles come standard with i-key and therefore are not affected. Additionally, the vehicle layout and orientation of the key cylinder are unique to the Nissan Kicks. Nissan has not seen any foreign market claims related to the subject condition in Kicks vehicles.

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

<u>Part Name</u>	<u>Part Description</u>	<u>Part Number</u>
Key Set	Jackknife Key Set	80561 - 4BA1B

The key set supplier (Tier 1) for the affected vehicles:

ALPS ALPINE CO., LTD
Supplier Code: A109
Address: 6-3-36, Furukawanakazato, Osaki City, Miyagi Prefecture 989-6181.

Hideki Konno, Director of Quality
+81 (229) 23 - 5111
hideki.konno@alpsalpine.com

3. Total Number of Vehicles Potentially Involved:

Approximately 712,458 vehicles total. Approximately 194,986 Nissan Rogue Sport and 517,472 Rogue vehicles may be affected.

<u>Model</u>	<u>Volume of Production</u>	<u>Plant</u>
MY 2017 - 2022 Nissan Rogue Sport	194,986	Kyushu
MY 2016 - 2020 Nissan Rogue	112,630	
MY 2014 - 2020 Nissan Rogue	192,769	Smyrna
MY 2015 - 2020 Nissan Rogue	212,073	Renault

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

Approximately 0.01%. 1% is used here because submission within NHTSA's safety portal will not allow a value less than 1%.

5. Description of the Defect:

The jackknife key may not hold the key blade in the extended "open" position. Over time the internal pivot of the jackknife key may weaken, and the key fob could unlock and rotate downwards. A folded key fob does not affect the ignition function. However, contact to the key fob in the folded position by the driver could inadvertently rotate the ignition into the "ACCESSORY" position, which will turn the vehicle off while driving, increasing the risk of a crash. Additionally, if the vehicle shuts off while driving, the airbags may not deploy in a crash where airbag deployment is warranted.

6. Chronology of Principal Events:

December 2020 - February 2021: Internal quality review identified nineteen (19) warranty repair claims since May 2014, which reported stall or shut off while driving. Nine (9) of these repair orders stated the key fob "folded" while in the ignition, causing the vehicle to shut off while driving. Nissan initiated an internal investigation and parts collection activity.

March 2021 - Nissan received one (1) field-returned jack-knife style key from a MY 2020 Nissan Rogue. The customer reported the key does not stay in the extended "open" position. Nissan sent the part to the supplier for further analysis.

April 2021 through September 2021 - The initial supplier analysis of the key fob revealed an abrasion on the internal pivot edge. Because of the abrasion, the internal pivot edge became worn. This edge provides the resistance needed for the key to "lock" in the extended position. If the pivot edge is worn, it may allow the key to unlock from the extended position without pressing the release button. Additional supplier testing concluded an external impact occurred to the tip of the key blade that likely resulted in the internal damage to the pivot joint.

During this time, Nissan conducted warranty and field data searches for claims related to vehicles equipped with the jackknife style key fob. Certain Nissan Rogue, Rogue Sport vehicles have this style key fob. Additionally, for other markets, Nissan Kicks has a similar style key fob. Nissan Kicks vehicles for US Market come standard with remote keyless entry and push-to-start button as a standard feature.

Nissan continued the returned-parts collection activity and also collected other field parts without complaints to analyze the "real world" wear and tear on the internal pivot joint and test conditions that could lead to an abrasion on the pivot joint edge.

Concurrently, Nissan conducted a comparison study on jackknife keys from various OEMs. The study focused on the force required to "unlock" the jackknife key from the extended position without pressing the pivot release button. The study showed that of the six (6) OEM key designs, Nissan's required the highest amount of force to release the key without pressing the release button.

October 2021 through April 2022 - Nissan conducted an in-vehicle driver ergonomic study to evaluate whether there could be contact between the driver and the key fob. This study included driver representatives for both the 90th and the 10th percentile height and utilized full mobility of the driver's seat and the steering column. This study focused on Nissan models as well as other OEM vehicles that are equipped with a similar style jackknife key fob.

During this time, the automotive market was experiencing vehicle shortages that made it difficult to gain access to and purchase non-Nissan vehicles required for the study. Ultimately, Nissan was able to secure vehicles after some period utilizing other markets to gather the necessary dimensional data.

May 2022 through August 2022 - Nissan received two (2) additional field parts from the parts collection activity. Analysis of the parts identified damage to the internal pivot edge from wear and tear, potentially worsened with a heavy weight attached from added key fob accessories.

September 2022 through December 2022 – Nissan conducted an additional vehicle layout study using Computer Aided Engineering (CAE) to simulate the different effects of various seating and steering column tilt positions on the driver's knee clearance to the key fob on Nissan vehicles.

January 2023 – Activities conducted to date led Nissan to conclude that the following criteria must be met for the vehicle to shut off while driving:

1. The internal pivot edge of the key fob must be worn so there is minimum resistance when the key is "locked" in the extended position
2. The customer must have heavy weighted items (e.g. key chain accessories, multiple keys) hanging from the key fob. This creates the downward force needed to "unlock" the key and the fob portion may fold under the weight of attached accessories
3. The key fob must be oriented with the buttons facing downward when the key is inserted into the ignition switch. Once the key fob is rotated 90 degrees to the "ON" position, the key is now in an orientation that may allow the fob to "unlock" and fold downward if the pivot edge is worn and a sufficiently heavy weight is attached to the key fob.
4. While the key fob is in the unlocked position, the fob must be contacted by the driver's knee at its lowest point to inadvertently rotate the key into the "OFF" position

February 9, 2023 - Based on the review of field data, the above conclusions, investigation results, and out of an abundance of caution, Nissan decided to conduct a Voluntary Safety Recall Campaign for MY14-20 Rogue and MY17-22 Rogue Sport vehicles equipped with a jackknife key.

Nissan identified a total of two (2) field reports and (67) sixty-seven warranty claims for MY2014–2020 Rogue and twenty (20) warranty claims for MY2017–2022 Rogue Sport; no warranty claims related to the subject condition were identified on the Nissan Kicks. Nissan is not aware of any accident or injuries related to the subject condition.

7. Description of Corrective Action:

Dealers were notified on February 17, 2023. Nissan will notify owners beginning on March 29, 2023.

Nissan is preparing the remedy for this issue. In the interim, registered owners will be advised to avoid attaching accessories to the key fob and to use the key in the non-folding orientation until the remedy is available. In addition, dealers and rental fleets will be instructed on an interim remedy to insert a fastener into the key slot that will prevent the key from folding. When remedy parts are available,

dealers will insert a spacer into the key slot of the customer's key fob that will not allow the key to fold.

Nissan will include a statement in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy since the subject vehicles are no longer under warranty.

8. Copy of Notices:

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