



Nissan North America, Inc.

One Nissan Way
Franklin, TN 37067

Mailing Address:
PO Box 685001
Franklin, TN 37068

July 17, 2023

Dr. Cem Hatipoglu
Acting 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 Dr. Hatipoglu:

We are transmitting the enclosed Defect Information Report in accordance with 49 CFR Part 573. A voluntary recall campaign will be initiated and your office provided with the notices.

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 North America, Inc., Smyrna Plant

2. Vehicles Potentially Involved:

Model Year 2018 - 2023 Nissan LEAF vehicles as shown in the table below:

<u>Model</u>	<u>Dates of Manufacture</u>	<u>Plant</u>
MY 2018 - 2023 Nissan LEAF	September 29, 2017 to March 15, 2023	Smyrna

Based on NNA-Smyrna production records, the subject programming logic for the Vehicle Control Module (VCM) was used in vehicle production for MY 2018 - 2023 LEAF vehicles, manufactured during the specified time period outlined above. No other Nissan or INFINITI vehicles in the US market are affected.

Nissan is recalling other models outside of the U.S. for a similar issue. However, these are e-POWER equipped models that are not substantially similar to vehicles offered in the U.S. Nissan does not offer e-POWER vehicles in the U.S. market.

The name, description and part number of the subject VCM software versions are below:

<u>Part Name</u>	<u>Part Description</u>	<u>Part Number</u>
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA2A
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA2B
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA3A
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA3B
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA4A
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA4B
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA5A
CONTROL MODULE - PWR TR	VCM ROM Data MY 2018	237D0-5SA5B
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG4A
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG4B
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG4C
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG4D
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG5A
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG5B
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG5C
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG5D
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG6A
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG6B
CONTROL MODULE - PWR TR	VCM ROM Data MY 2019 - MY2023	237D0-5SG6C

CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG6D
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG0A
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG0B
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG0C
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG0D
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG1A
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG1B
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG1C
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG1D
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG2A
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG2B
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG2C
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG2D
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG3A
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG3B
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG3C
CONTROL MODULE – PWR TR	VCM ROM Data MY 2019 – MY2023	237D0-5SG3D

3. Total Number of Vehicles Potentially Involved:

Approximately 66,159 MY 2018 - 2023 Nissan LEAF vehicles total.

<u>Model</u>	<u>Volume of Production</u>
MY 2018 Nissan LEAF	13,361
MY 2019 Nissan LEAF	16,053
MY 2020 Nissan LEAF	10,029
MY 2021 Nissan LEAF	6,611
MY 2022 Nissan LEAF	12,533
MY 2023 Nissan LEAF	7,572

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

Approximately 100%.

5. Description of the Defect:

On LEAF vehicles with affected VCM software, there is a risk of sustained engine torque if a driver takes both of the following actions within 8 seconds after deactivating cruise control, Intelligent Cruise Control or ProPILOT Assist functions: (a) switches driving mode (i.e. from 'D' to 'B' position, or 'ECO' mode, or e-Pedal 'ON'); and (b) then applies and releases the accelerator pedal. If this condition

occurs, in certain operating conditions the vehicle may continue accelerating unless the brake is applied or may not slow down as expected following release of the accelerator pedal; which may increase the risk of a crash.

6. Chronology of Principal Events:

In December 2021, internal testing on a trial vehicle observed a motor torque deceleration delay following deactivation of Intelligent Cruise Control. Nissan investigated but was unable to recreate the condition.

In early 2022, Nissan conducted computer simulations in an effort to replicate the reported condition by analyzing data from the incident test vehicle. After repeated testing of multiple parameters, Nissan identified a specific sequence of actions that it believed could potentially lead to the reported phenomenon. However, Nissan had been unable to recreate the condition on an actual vehicle.

Spring 2022 through Summer 2022 – Nissan continued to attempt to replicate the phenomenon under real-world conditions. After extensive on-track testing, Nissan had limited success in reproducing the incident condition.

Late 2022 through Spring 2023 - After extensive computer simulation and on-track testing, Nissan identified the following sequence of actions are required to be completed in under eight (8) seconds for the phenomenon to occur:

1. Cruise Control, Intelligent Cruise Control or ProPILOT Assist is disengaged; and
2. Immediately:
 - a. Shift drive modes from 'D' to 'B' or 'ECO' or e-Pedal 'ON'; and
 - b. Press accelerator pedal and then release

For Reference, the B mode engages the regenerative braking system more aggressively on downhill slopes, and helps reduce brake use. The mode is selected by manually shifting from 'D' to 'B' using the shift lever.

July 11, 2023 - Nissan assessed that the risk of the issue occurring under real-world conditions is very low. This issue has not occurred outside of controlled track or simulated test environments. However, out of an abundance of caution, Nissan decided to conduct a recall campaign to reprogram the VCM.

Nissan is not aware of any warranty claims, accidents, or injuries attributed to this condition.

7. Description of Corrective Action:

Dealers will be notified beginning July 18, 2023. Owners of all potentially affected vehicles will be notified beginning August 30, 2023. Dealers will be instructed to reprogram the vehicle control module. All repairs will be performed free of charge for parts and labor and may take up to thirty minutes to complete.

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.