

U.S. Department of Transportation

National Highway Traffic Safety Administration

Part 573 Safety Recall Report

25V508

Manufacturer Name: Nissan North America, Inc.

Submission Date: Aug 07, 2025

NHTSA Recall No.: 25V508

Manufacturer Recall No.: R25C3

Manufacturer Information

Population

Manufacturer Name: Nissan North America, Inc.

Total number of potentially involved: 13,719

Address: P. O. BOX 685001

Estimated percentage with defect: 100%

Franklin TN, 37068-5009

Vehicle Information

Vehicle 1: 2025-2025 NISSAN FRONTIER

Product Category: Light Vehicles

Product Type: Light Truck

Fuel / Propulsion: Compression Ignition Fuel

Production Dates: Dec 12, 2024 - Jun 17, 2025

Number of potentially involved: 13,719

Descriptive Information:

This issue is specific to certain Nissan Frontier vehicles equipped with Daytime Running Lamps and an Engine Control Module that was programmed with the affected software. Based on production records, the defect is unique to these models and dates of manufacture; no other Nissan or INFINITI vehicles are affected.

Defect / Noncompliance Description

Description of the defect or noncompliance:

Nissan Frontier vehicles are equipped with the Idle Stop-Start (ISS) system, which automatically shuts off the engine when the vehicle is at a complete stop, such as at a traffic light, and restarts it when the driver is ready to move again. In certain Frontier vehicles that are equipped with Daytime Running Lamps (DRLs), the Engine Control Module (ECM) data may contain a software logic error that can cause momentary disruption in communication with the Body Control Module. As a result, whenever the ISS cycles the engine from off to on, the DRLs when in use, experience a brief (approximately 0.3 seconds) reduction in light intensity before returning to normal operation. This condition reoccurs with every ISS cycle, thus, the DRLs may not meet the requirements of \$6.1.1.4 of Federal Motor Vehicle Safety Standard (FMVSS) No. 108; Lamps, reflective devices, and associated equipment. This subject condition is limited to when DRLs are active. DRLs are not active when headlamps are on, therefore overall vehicle visibility is not compromised.

25V508

FMVSS1: 108 - Lamps, reflective devices, and assoc. Equipment

FMVSS2:

Description of the safety risk, including crash, fire, death, injury:

A perceptible change in DRL intensity may also lead to potential misinterpretation (i.e. signaling) by other vehicles or pedestrians, increasing the risk of a crash.

Description of the cause:

Identification of any warning that can occur:

There is no preceding warning.

Component Manufacturer

Tier of Supplier:

Supplier Type:

Name:

Address:

Country:

Involved Components

Component Name 1: Engine Control Module ROM Software

Component Description: 2WD_ISS_ASCD_FEB_MANUAL_A/C

Component Part Number: 23710 9BY7C

Component Name 2: Engine Control Module ROM Software

Component Description: 2WD_ISS_ICC_FEB_MANUAL_A/C

Component Part Number: 23710 9BY8C

Component Name 3: Engine Control Module ROM Software

Component Description: 4WD ISS ASCD FEB MANUAL A/C

Component Part Number: 23710 9BY9C

25V508

Component Name 4: Engine Control Module ROM Software

Component Description: 4WD_ISS_ICC_FEB_MANUAL_A/C

Component Part Number: 23710 9BZ0C

Component Name 5: Engine Control Module ROM Software

Component Description: 2WD_ISS_ASCD_FEB_AUTO_A/C

Component Part Number: 23710 9BZ1C

Component Name 6: Engine Control Module ROM Software

Component Description: 2WD_ISS_ICC_FEB_AUTO_A/C

Component Part Number: 23710 9BZ4C

Component Name 7: Engine Control Module ROM Software

Component Description: 4WD_ISS_ASCD_FEB_AUTO_A/C

Component Part Number: 23710 9BZ5C

Component Name 8: Engine Control Module ROM Software

Component Description: 4WD_ISS_ICC_FEB_AUTO_A/C

Component Part Number: 23710 9BZ6C

Component Name 9: Engine Control Module ROM Software

Component Description: 2WD ISS ASCD FEB MANUAL A/C

Component Part Number: 23710 9BY7D

Component Name 10: Engine Control Module ROM Software

Component Description: 2WD_ISS_ICC_FEB_MANUAL_A/C

Component Part Number: 23710 9BY8D

Component Name 11: Engine Control Module ROM Software

Component Description: 4WD_ISS_ASCD_FEB_MANUAL_A/C

Component Part Number: 23710 9BY9D

25V508

Component Name 12: Engine Control Module ROM Software

Component Description: 4WD_ISS_ICC_FEB_MANUAL_A/C

Component Part Number: 23710 9BZ0D

Component Name 13: Engine Control Module ROM Software

Component Description: 2WD ISS ASCD FEB AUTO A/C

Component Part Number: 23710 9BZ1D

Component Name 14: Engine Control Module ROM Software

Component Description: 2WD_ISS_ICC_FEB_AUTO_A/C

Component Part Number: 23710 9BZ4D

Component Name 15: Engine Control Module ROM Software

Component Description: 4WD_ISS_ASCD_FEB_AUTO_A/C

Component Part Number: 23710 9BZ5D

Component Name 16: Engine Control Module ROM Software

Component Description: 4WD_ISS_ICC_FEB_AUTO_A/C

Component Part Number: 23710 9BZ6D

Chronology

On April 21, 2025, during a routine evaluation of a Model Year 2026 Nissan Frontier, a Nissan engineer observed a momentary disruption of the DRLs when the vehicle came to a stop and the Idle Stop-Start (ISS) system activated. The vehicle was guarantined for further investigation.

Late April 2025 through May 2025 – The internal investigation into the subject vehicle revealed that the Body Control Module (BCM) signaled the DRLs to be in the "on" position. However, when the ISS system engaged and the engine restarted, there was a momentary 0.3 second reduction in DRL light intensity before returning to normal operation. This behavior repeated with every ISS cycle.

Further investigation traced the issue to a software update to the Engine Control Module (ECM) as part of a running change for Model Year 2025.5 Frontier vehicles. The change was implemented for an unrelated concern and caused and unexpected change to the BCM and DRL behavior.

25V508

June 2025 - Nissan initiated a software update for the ECM to deactivate the logic causing the DRL disruption. Concurrently, Nissan began a market analysis to evaluate the potential impact of this condition on customer vehicles.

July 2025 – Nissan determined that the subject condition may not conform to requirements defined in S6.1.1.4 *Daytime running lamps* of Federal Motor Vehicle Safety Standard (FMVSS) No. 108; Lamps, reflective devices, and associated equipment. A perceptible change in DRL intensity could also potentially lead to misinterpretation by other road users or pedestrians, increasing the risk of a crash.

July 31, 2025 - Nissan decided to conduct a recall campaign to remedy this issue for vehicles potentially equipped with the affected Engine Control Module software in the U.S. market.

Nissan is not aware of any warranty claims, accident or injuries related to the subject condition.

Related NHTSA Recall Number:	
Description of Remedy	

Remedy	Type:	Software

Consumer Advisories: Do Not Drive Park Outside

Description of remedy program:

Dealers will be instructed to update the software on the vehicle's Engine Control Module. Repairs will be performed free of charge for parts and labor and may take up to one (1) hour to complete.

How remedy component differs from recalled component:

Identify how/when recall condition was corrected in production:

Reimbursement Plan

Description of reimbursement program:

Nissan will not include a statement in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy as the subject vehicles are under warranty.

Period of reimbursement:

25V508

Costs to be reimbursed:		
Address for reimbursement claims:		
Recall Schedule		
Description of recall schedule:		
Dealers will be notified on August 8, 2025. Owners of all potentially affected vehicles will be notified by first-class mail beginning on September 17, 2025.		
Planned Dealer Notification Date: Aug 08, 2025	☐ No Dealers	
Planned Interim Owner Notification Date:	☐ No Owners	
Planned Remedy Owner Notification Date: Sep 17, 2025	☐ Phased Recall	
Date when VIN will be searchable: Aug 08, 2025		