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**Nissan North America, Inc.**

One Nissan Way  
Franklin, TN 37067

Mailing Address:  
PO Box 685001  
Franklin, TN 37068

September 11, 2024

Ms. Eileen Sullivan  
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

Re: 24V470

Dear Ms. Sullivan:

We are transmitting the enclosed supplement to the Defect Information Report filed on June 21, 2024. This supplement updates section 6: Basis for Determination of the Existence of a Noncompliance

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 Co., Ltd., Tochigi plant

2. Vehicles Potentially Involved:

Certain INFINITI vehicles manufactured at the Tochigi, Japan plant during the production periods shown in the table below:

<u>Model Year/Model</u>	<u>Dates of Manufacture</u>
MY 2014-2018 INFINITI Q50	December 10, 2012 to June 25, 2018
MY 2012-2013 INFINITI M35 Hybrid	April 7, 2010 to September 9, 2013
MY 2014 - 2018 INFINITI Q70 Hybrid	November 7, 2013 to January 29, 2018
MY 2011 - 2013 INFINITI M56	October 6, 2009 to October 31, 2013
MY 2014 -2019 INFINITI Q70	November 6, 2013 to August 26, 2019
MY 2015 - 2019 INFINITI Q70L	July 21, 2014 to September 21, 2019

This issue only affects two-wheel-drive (2WD) models. Based on production records, the defect (described in Section 5 below) is unique to these models and dates of manufacture; no other INFINITI (or Nissan) vehicles are affected.

The name, description and part number(s) of the recalled component(s) are below.

<u>Part Name</u>	<u>Part Description</u>	<u>Part Number</u>
Propeller shaft	VQ35H Prop Shaft	37000-4GA0B
Propeller shaft	VQ35H Prop Shaft	37000-1MG0A
Propeller shaft	VQ35H Prop Shaft	37000-1MG0E
Propeller shaft	VQ35H Prop Shaft	37000-3WG0A
Propeller shaft	VQ35H Prop Shaft	37000-3WG0B
Propeller Shaft	VK56 Prop Shaft	37000-1MC1A
Propeller Shaft	VK56 Prop Shaft	37000-6AE0B

The name and address of the Propeller Shaft supplier is:

Hitachi Astemo, Ltd.  
Shin-Otemachi Building, 2-1, Otemachi 2-chome  
Chiyoda-ku, Tokyo, 100-0004 Japan

Name: Tamio Tsuchiya (Director Quality Assurance Department)  
Phone: +81-3-4232-5300  
Email: tamio.tsuchiya.tm@hitachiastemo.com

3. Total Number of Vehicles Potentially Involved:

Approximately 7,236 vehicles total.

<u>Model</u>	<u>Volume of Production</u>
MY 2014-2018 INFINITI Q50	3,919
MY 2012-2013 INFINITI M35 Hybrid	1,071
MY 2014 - 2018 INFINITI Q70 Hybrid	158
MY 2011 - 2013 INFINITI M56	1,594
MY 2014 -2019 INFINITI Q70	193
MY 2015 - 2019 INFINITI Q70L	301

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

Approximately 100%.

5. Description of the Defect:

Due to a supplier specification change, certain INFINITI vehicles may contain a propeller shaft with reduced fatigue strength. Over time, this condition may cause the propeller shaft to fracture at the press-fit joint of the ball yoke, resulting in a loss of motive power while driving. An unexpected loss of motive power while driving at high speed may increase the risk of a crash.

Additionally, if the propeller shaft breaks while driving, an affected vehicle may move after placing the shifter into 'Park.' If the driver does not engage the parking brake, potential for movement of the vehicle increases the risk of injury or crash.

6. Chronology of Principal Events:

February 2022 - During supplier developmental testing for a foreign-market model, a propeller shaft fractured. Nissan collected the failed test part for analysis and launched an investigation together with the supplier into the test outcome.

March 2022 through November 2022 - Initial findings from the test part analysis pointed to a failure at the connection between the press fitting of the universal joint and the propeller shaft. Nissan continued its investigation to determine whether this test outcome was an isolated incident by identifying models which were equipped with the same propeller shaft design and by testing production samples from foreign-market models.

Nissan conducted various bench tests, including fatigue strength testing, on similar parts to evaluate potential failure modes. Nissan also worked with the supplier to review production records and specification documents to determine if any changes were made to the part design.

December 2022 through July 2023 - The supplier identified a specification change which reduced the press fit length of the ball-yoke to the propeller shaft applied on the subject two-wheel drive (2WD) INFINITI vehicles during the affected production periods (identified in section 2 above).

Nissan investigated the effects of the reduced press fit length of the ball-yoke and the differences between other Nissan and INFINITI models with the same propeller shaft design as the test vehicle. Nissan initiated a design study of the subject condition to evaluate the potential effects from a broken propeller shaft. The study involved durability testing and thermal analysis. This also included a comprehensive vehicle study of the undercarriage layout and how a potential propeller shaft fracture could affect surrounding components. Concurrently, Nissan conducted an initial market search for propeller shaft fractures on the subject INFINITI models and found no reported cases.

August 2023 - The design study identified several important observations in the event of a fracture:

- 1) An undercarriage panel covers the propeller shaft and would prevent the propeller shaft (and any debris) from making contact with the road surface.
- 2) There would be no interference with the parking brake cable and the parking brake system would operate normally.
- 3) There are no flammable parts near the propeller shaft. Additionally, it is unlikely that multiple short circuits would occur in the hybrid battery harness; therefore risk of a thermal event is low.

Nissan confirmed there are no field incidents or reports of a broken propeller shaft in the U.S. market or globally.

September 2023 through June 2024 - Nissan initiated a field parts collection activity to investigate the durability performance of the subject propeller shaft design. During this time, Nissan collected seven (7) total parts and began conducting bench testing to understand the potential durability risk of the press-fit length reduction. Testing of the collected samples showed that a propeller shaft with a reduced press-fit length does not

meet internal Nissan standards and may be subject to fracture under normal driving conditions.

June 13, 2024 - Upon reviewing the results of the design study and parts collection test results, Nissan decided to conduct a Voluntary Safety Recall for all potentially affected vehicles equipped with the subject propeller shaft.

Nissan has confirmed there are no market reports related to the subject condition. Nissan is not aware of any accident or injuries related to the subject condition.

7. Description of Corrective Action:

Retailers were notified of the recall on June 25, 2024. Beginning August 12, 2024, owners of all potentially affected vehicles were notified to bring their vehicle to an INFINITI retailer for replacement of the propeller shaft. All repairs will be performed free of charge for parts and labor and may take up to one (1.0) hour to complete.

Nissan/INFINITI included a statement in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy because 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.