

NISSAN GROUP
OF NORTH AMERICA



Nissan North America, Inc.

One Nissan Way
Franklin, TN 37067

Mailing Address:
PO Box 685001
Franklin, TN 37068

December 19, 2018

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 Defect Information Report in accordance with 49 CFR Part 573. This report relates to Model Year 2009 Murano vehicles equipped with ABS Hydraulic Control Units (HCU) manufactured by Continental. Most vehicles in this report are subject to an ongoing Service Campaign, which will be superseded by this Recall. Nissan will issue Part 577 letter to re-notify owners of vehicles within the Service Campaign population that have not yet remedied their vehicles.

Nissan plans to notify dealers of the campaign re-classification on December 20, 2018 and begin owner notifications via first class mail within 60 days.

Very truly,

A handwritten signature in black ink, appearing to read "Derek Latta", written over a horizontal line.

Derek Latta
Manager,
Technical Compliance

Encl.

DEFECT INFORMATION REPORT

1. **Vehicle Manufacturer:**

Nissan Motor Co., Ltd., Japan

2. **Units Potentially Involved:**

Model Year 2009 Nissan Murano vehicles manufactured from July 9, 2007 (Start of Production) through August 29, 2009 (End of Model Year 2009 Production).

Model Year 2010-2014 Nissan Murano vehicles are equipped with the same part, but exhibit significantly lower rates of malfunction.

Approximately 22,131 Model Year 2009 Nissan Murano vehicles remedied through Nissan's Service Campaign have already received the remedy and are not part of the recall population.

The supplier of the Anti-Lock Brake System (ABS) actuator is:

Continental Automotive Corporation
New Stage Yokohama Bldg. 11F, 1-1-32,
Shin-Urashimacho, Kanagawa-ku, Yokohama, JAPAN; 221-0031
TEL ; +81-45-444-4903

The name, description and part number of the recalled component is below:

<u>Part Name</u>	<u>Part Description</u>	<u>Part Number(s)</u>
ACTR & ECU ASSY	ABS Actuator and HCU	47660-1AA0B 47660-1AD0B 47660-1GR0B 47660 1AA0C

3. **Total Number of Units Potentially Involved:**

Approximately 86,265 vehicles are subject to this notice.

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

Approximately 0.4%

5. **Description of the Defect:**

The preventative zinc coating used on the normally closed (NC) valve armatures within ABS Hydraulic Control Units (HCU) may react with brake fluids containing specific corrosion preventative additives. This reaction can cause the formation of a

gelatinous material, which may cause the NC valves to close slowly. Over time, the gel can solidify to an extent such that the spring used to return the valve to the closed position may not be able to overcome the gel buildup, allowing the NC valve to remain open.

If one of the four NC valves remains open, fluid may enter into an accumulator. This additional fluid may have the net effect of causing brake pedal travel to increase a small amount; however, sufficient braking force to slow/stop the vehicle in normal vehicle operation will remain even if the subject condition is present. Although the hydraulic braking system remains intact and full braking force is maintained once the pedal travels the additional distance, if the condition occurs, the initial increase in brake pedal travel could result in increased stopping distance.

6. Chronology of Principal Events:

May 2017 to July 2017 – Nissan received a Preliminary Evaluation (PE17-002) Information Request from NHTSA for the MY 2009 Nissan Murano regarding the subject HCU. Nissan responded in July 2017 and explained its preliminary view that the subject issue does not represent an unreasonable risk to safety, because full braking force is maintained and the incident rate was low, not indicating a defect trend. Nissan also reiterated that it would continue working with NHTSA to study the issue further, including actively monitoring field data and studying potential customer satisfaction initiatives. Nissan also met with NHTSA to discuss returned parts disassembly processes.

Nissan also participated at a joint vehicle evaluation at VRTC of a MY 2009 Nissan Murano that exhibited the subject condition, and also another vehicle that did not. Driving demonstrations using both vehicles were conducted. After the demonstration, NHTSA removed the HCU from the incident vehicle that exhibited the subject condition for inspection.

August 2017 to February 2018 – Nissan, with assistance from HCU supplier, actively investigated the root-cause of the subject condition and the potentially affected vehicle population. Concurrently, Nissan remained in frequent contact with NHTSA to update the agency on the status of its investigation and help prepare for dynamic testing at VRTC. Nissan and NHTSA also continued to discuss root-cause and review data. Nissan also submitted Weibull analysis and cumulative hazard analysis to NHTSA.

February 2018 – Nissan informed NHTSA that it began implementing a Service Campaign on the subject vehicles manufactured before October 31, 2008. Nissan previewed the owner notification with NHTSA and issued an owner notification letter strongly encouraging customers to remedy their vehicles. The remedy involved flushing the vehicle brake system with DOT 4 fluid, testing for the possible stuck valve condition, and if necessary, replacing the HCU.

February 2018 to October 2018 – Nissan continued to carry out the Service Campaign and dialogue with NHTSA on the subject condition. This included observing dynamic testing of a vehicle exhibiting the subject condition at VRTC to evaluate the potential impact of NHTSA's vehicle instrumentation on the HCU and vehicle braking performance during stuck valve simulation. Nissan did not believe dynamic testing conducted at VRTC represented scenarios similar to known real world incidents. It continued to believe the issue was not a safety defect and is being appropriately addressed through the ongoing Service Campaign.

October 2018 to late November 2018 – Nissan received and responded to an Engineering Analysis (EA18-001) from NHTSA regarding the subject issue.

December 13, 2018 – After further data analysis and consultation with NHTSA, Nissan decided to reclassify the ongoing Service Campaign as a Safety Recall to further promote campaign completions and to add later Model Year 2009 Nissan Murano production to the scope of the campaign.

7. Description of Corrective Action:

Nissan will notify all potentially affected owners beginning February 4, 2019. For owners of vehicles previously subject to a Service Campaign that have not yet remedied their vehicles, Nissan will also issue a Part 577 letter to re-notify them. Nissan will include a statement in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy.

Nissan plans to notify dealers of the campaign re-classification on December 20, 2018. The remedy remains unchanged. Dealers will flush the brake system with DOT 4 fluid. The HCU will then be tested to detect a possible stuck valve condition. If necessary, HCU will be replaced.

8. Copy of Notices:

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