

**RECEIVED**

By Recall Management Division at 11:27 am, Sep 18, 2013

**NISSAN NORTH AMERICA, INC.**

Corporate Headquarters  
One Nissan Way  
Franklin, TN 37068

Mailing Address: P.O. Box 685001  
Franklin, TN 37068-5001

Telephone: 615.725.1000

**NISSAN**

September 16, 2013

Ms. Nancy Lewis  
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 Madam:

We are transmitting the enclosed Defect Information Report in accordance with 49 CFR Part 573. A voluntary safety recall campaign will be initiated and your office provided with the notices. Nissan plans to notify dealers on September 16, 2013 and will notify all affected owners on September 27, 2013.

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

Very truly,



Donald Neff  
Manager,  
Technical Compliance

Encl.

## **DEFECT INFORMATION REPORT**

1. Manufacturer:

Nissan North America, Inc.

2. Vehicles Potentially Involved:

Certain 2013 Model year Nissan Titan and Armada vehicles manufactured from February 22, 2013 through May 3, 2013.

There are 2,880 brake master cylinders (identified by serial number) that are potentially affected. These parts have been traced to the specified vehicle production range identified below (and also certain Titan and Armada vehicles manufactured for sale outside the U.S. and its territories). Because of limitations on Nissan's ability to trace the potentially affected components, not all of the vehicles identified below contain the subject brake master cylinder. No other Titan and Armada vehicles outside this population are affected. None of the subject brake master cylinders were installed in any other Nissan models.

The brake master cylinder supplier is:

Continental Automotive Systems  
Paseo de las Colinas No.219  
Parque Industrial y de Negocios Las Colinas  
Silao, Guanajuato, México CP 36270

Phone: +52 (472) 722 8682

3. Total Number of Vehicles Potentially Involved:

<b><u>Model</u></b>	<b><u>Number of Vehicles</u></b>
MY 2013 Nissan Titan	Approximately 1,660
MY 2013 Nissan Armada	Approximately 1,587
TOTAL:	Approximately 3,247

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

Unknown

5. Description of the Defect:

Due to a supplier manufacturing irregularity that has since been corrected, the subject vehicles may be equipped with an out-of-specification brake master cylinder. Specifically, a burr on the primary piston may, intermittently, not allow the pressure valve pin to seat properly. If this occurs, the pressure to the front brakes in the primary brake circuit will be reduced. The secondary circuit (rear brakes) will continue to receive pressure and function properly. If this intermittent condition occurs, normal brake pedal travel will increase and brake output will decrease resulting in increased braking distance. The brake system warning indicator will illuminate as designed to warn the driver.

6. Chronology of Principal Events:

April 2013 – May 2013 – During a routine quality check, a Nissan Titan was reported with the brake warning indicator "ON." Nissan initiated an investigation into why this issue occurred.

The supplier (Continental) representative was unable to duplicate the reported event in the vehicle. The brake master cylinder was removed from the incident vehicle and sent to the supplier for teardown inspection and contamination study.

The master cylinder was reassembled at the supplier and retesting showed a non-conformance in the primary circuit. Upon disassembly, it was found that the center valve did not operate to specification. A burr on the piston inside of the brake master cylinder was identified as the root cause, inhibiting its normal function.

May 2013 – June 2013 – Nissan began a joint investigation with the supplier and initiated a warranty parts return activity. In addition, Nissan contacted the sub-supplier (Samot) and continued to investigate return brake master cylinders that had been returned under warranty. The investigation revealed that a tooling set-up issue at the sub-supplier resulted in incomplete machining of the piston; which could leave a burr on the end of the piston.

Upon identifying the root cause of the issue, both the supplier and sub-supplier initiated plant countermeasure activities to prevent recurrence.

June 2013 – August 2013 – Nissan monitored field data for potentially related issues and conducted an analysis to determine the effect of the subject condition on braking performance. The analysis was compared to the FMVSS No. 135 requirements and it was concluded that the vehicles still met the stopping distance performance requirements specified in FMVSS S7.10.4 of No. 135. Concurrently, Nissan and the supplier worked to identify the range of potentially affected brake master cylinders and trace that population to the subject vehicles.

September 9, 2013 – Nissan determined that a safety related defect may exist and that a recall campaign should be conducted.

7. Description of Corrective Action:

Owners of the subject vehicles will be notified and the brake master cylinder serial number will be inspected. The master cylinder will be replaced at no charge to customers for parts or labor if it falls within the affected production range.

8. Copy of Notices:

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