



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 11-020
Date Opened: 05/23/2011
Investigator: Chris Lash **Reviewer:** Jeff Quandt
Approver: Frank Borris
Subject: Brake Master Cylinder Internal Leak

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: NISSAN NORTH AMERICA, INC.
Products: 2007 - 2008 Nissan Altima
Population: 440,000 (Estimated)
Problem Description: The brake master cylinder may leak internally, resulting in illumination of the brake warning lamp and potential reduction in brake effectiveness.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	20	TBD	TBD
Crashes/Fires:	0	TBD	TBD
Injury Incidents:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD
Other*:	0	TBD	TBD

*Description of Other:

ACTION / SUMMARY INFORMATION

Action: A Preliminary Evaluation has been opened.

Summary:

The Office of Defects Investigation (ODI) has received 20 complaints alleging brake master cylinder leakage in the subject vehicles, including 16 received since October 2010. Two complaints allege a reduction in brake effectiveness. In the remaining 18 complaints, the only reported symptom was illumination of the brake warning lamp. Seventeen of the complaints stated that a Nissan Dealer diagnosed the problem as a leak in the brake master cylinder, including several that indicated brake fluid leaked into the brake booster assembly. In addition, ODI identified additional reports of master cylinder leakage in subject vehicles in field reports provided by Nissan in Early Warning Reporting submissions.

In July 2008, Nissan recalled approximately 169,000 model year (MY) 2007-2008 Nissan Sentra vehicles manufactured from start of MY 2007 production through February 22, 2008, to address a defect in the brake master cylinder that could result in brake fluid slowly leaking from the master cylinder into the brake booster assembly (Recall 08V-311). Nissan's defect information report identifies the defect condition as a gap in the internal seal groove in the body of some master cylinders. The report states that consequence of the leakage is reduced brake reservoir fill level, resulting in brake warning lamp illumination. Continued operation with the warning lamp illuminated for "a relatively long period of time" may result in loss of one brake circuit (the recalled vehicles brake system is split diagonally, so one front brake and the opposite side rear brake would be affected). In October 2009, Nissan expanded the scope of the Sentra recall by adding an additional 10,586 MY 2008 vehicles manufactured from February 23, 2008 through April 18, 2008 (Recall 09V-431).

A preliminary evaluation has been opened to assess the scope, frequency and safety consequences of the alleged defect.