



# ODI RESUME

U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

Investigation: EA 05-006  
 Prompted By: PE04-077 (Cheryl Tuosto)  
 Date Opened: 03/25/2005      Date Closed: 08/17/2005  
 Principal Investigator: Cheryl Rose  
 Subject: Alternator Failure / Engine Stalling

Manufacturer: Nissan North America, Inc.  
 Products: 2003-2004 Nissan Murano  
 Population: 125,466

Problem Description: The alternator fails to provide charging voltage causing the engine to stall.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	115	325	431
Crashes/Fires:	0	2	2
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	2,295	2,295

\*Description of Other: Alternator replacement warranty claims

Action: This Engineering Analysis has been closed (Recall 05V-319).

Engineer: Cheryl Rose CA

Date: 08/17/2005

Div. Chief: Jeffrey L. Quandt

Date: 08/17/2005

Office Dir.: Kathleen C. DeMeter

Date: 08/17/2005

Summary: ODI received 14 reports of alleged engine stalling due to alternator failure on MY 2003-2004 Murano (subject) vehicles. All of the complaints reported that the vehicle could not be restarted after the stall occurred. Based on these complaints, ODI opened PE04-077 and later upgraded to EA05-006 for the subject vehicles. During EA05-006, additional failure data were identified as noted in the failure report summary above.

On July 12, 2005, Nissan notified NHTSA of a safety defect on MY 2003-2005 Murano vehicles produced from April 8, 2002 and September 24, 2004 (Recall 05V-319). The notification stated that "an open circuit in the alternator can occur due to wire fatigue caused by movement of the rotor coil during rapid changes in engine speed in vehicles equipped with a continuously variable transmission (CVT). Higher engine compartment temperature in the Murano compared to other Nissan models may also be a contributing factor to the wire fatigue."

Nissan also reported that when this happens, the charge warning and brake warning lamps will illuminate and the battery will begin to discharge. After a short time, the engine will then enter a "fail safe" mode that limits vehicle speed. Very shortly after reaching this condition, the engine will stop. NHTSA's testing, however, showed that although the warning lamps illuminate, the vehicle speed is limited to only 4-7 mph rather than what NHTSA considers a "fail safe" mode.

Nissan will instruct owners to return their vehicles to any Nissan dealer for an alternator inspection and replacement, if required. Note: Some vehicles may have had the newly designed alternator previously installed under warranty.

Consequently, this investigation is closed. ODI will monitor the effectiveness of the remedy and take further action if warranted.

8/17/05