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By Recall Management Division at 7:56 am, Sep 20, 2012

#### NISSAN NORTH AMERICA, INC.

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12V-462 (4 pages)

September 19, 2012

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 recall campaign will be initiated and your office provided with the notices. Nissan will notify dealers on September 19, 2012. Nissan plans to begin notifying owners on October 8, 2012. 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,

Swuddel for

Donald Neff Manager, Technical Compliance

Encl.

# **DEFECT INFORMATION REPORT**

### 1. Manufacturer:

Nissan North America, Inc.

### 2. Vehicles Potentially Involved:

Certain 2012 model year 2WD Nissan vehicles manufactured in the USA at the Smyrna, TN plant:

Model	Dates of Manufacture
MY 2012 Nissan Frontier	June 19, 2012 – July 12, 2012
MY 2012 Nissan Pathfinder	June 19, 2012 – July 12, 2012
MY 2012 Nissan Xterra	June 19, 2012 – July 12, 2012

No other Nissan or Infiniti models are affected because they are not equipped with a part that is the subject of this notice. The subject vehicle range was determined based on the production range of the affected part that may have been manufactured out of specification.

The front wheel hub supplier is:

Timken Automotive 3070 Gastonia Highway Lincolnton, NC 28092 (330) 438-3000

## 3. Total Number of Vehicles Potentially Involved:

Approximately 2,417 vehicles total. The approximate number by Model and Model Year is as follows:

Model	Number of Vehicles
MY 2012 Nissan Frontier	Approximately 1,781 vehicles
MY 2012 Nissan Pathfinder	Approximately 215 vehicles
MY 2012 Nissan Xterra	Approximately 421 vehicles

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

Unknown

#### 5. Description of the Defect:

Due to a supplier process issue that has since been corrected, certain 2WD Frontier, Pathfinder and Xterra vehicles may have been equipped with front wheel hubs that may not meet the design hardness specifications. A wheel hub that was manufactured below hardness specification may wear prematurely and eventually crack. While we expect this issue to first create noise and vibration that would give the customer warning of an issue, if the vehicle continues to be driven in this condition, the wheel hub may break and the driver may experience difficulty controlling the direction of the vehicle.

# 6. <u>Chronology of Principal Events:</u>

June 27, 2012 – During an in-house inspection, the supplier (Timken) discovered an abnormal increase in scrap rate that exceeded a daily monitoring trigger. An investigation was initiated at the supplier to determine the cause and scope of the issue.

As part of the investigation conducted by Timken, various process parameters were checked and testing performed on dimensional and metallurgical features.

June 29, 2012 to July 5 – During testing of a 30 piece study on metallurgical features of hubs, two suspect front wheel hubs were identified with hardness values below specification.

Timken confirmed the results of the testing and initiated immediate containment of all subject components (front wheel hubs). All customer shipments to Nissan were halted until the subject hubs were sorted and contained.

As part of the investigation, 100% testing of each part was initiated in production to test each part to ensure proper hardness.

July 5 – Nissan was notified of the issue but the potential effect of an outof-specification hub on vehicle safety was not yet identified and there was no field information associated with this issue.

July 2012 through August 2012 - Nissan conducted its own investigation to confirm the potentially affected vehicle population and the potential effect of this issue on vehicle safety.

August 2012 through September 2012 – During its investigation, Nissan implemented 100% front hub assembly inspection for hardness specification and conducted a yard audit. In parallel to yard inspection activities, additional analysis of this issue was conducted. While it was determined that the issue would not result in immediate part failure, Nissan concluded that the hubs could fail prematurely, and that the duration of the warning period following the onset of noise and vibration could not be predicted.

Throughout this investigation process, no customer complaints, injuries or accidents were reported as a result of this issue.

September 12, 2012 – Nissan determined that a safety related defect exists and that a recall campaign should be conducted.

## 7. Description of Corrective Action:

Owners of all potentially affected vehicles will be notified to take their vehicle to a Nissan dealer. The left and right side front hub bearing assemblies will be replaced at no cost.

### 8. Copy of Notices:

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