



NISSAN NORTH AMERICA, INC.

Corporate Office
P.O. Box 685001
Franklin, TN 37068-5001
Telephone: 615.725.1000

September 17, 2015

Mr. Frank S. Borris II
Acting Associate Administrator for Enforcement
National Highway Traffic Safety Administration
Attn: Recall Management Division (NVS-210)
Room W48-302
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Dear Mr. Borris:

We are transmitting an update to the August 18, 2015 Part 573 report for Recall 15V-468 to supplement the information on the root cause investigation, vehicles affected, remedies, and owner notification.

Very truly,

Donald Neff
Manager,
Technical Compliance

Encl.

DEFECT INFORMATION REPORT

1. Manufacturer:

Nissan North America, Inc.

2. Vehicles Potentially Involved:

Nissan has determined that a subset of Model Year 2016 Nissan Maxima vehicles manufactured from March 19, 2015 (start of production) to June 2, 2015 at the Smyrna, TN plant are affected.

Nissan is adding certain Altima 3.5 vehicles (equipped with a V6 engine) produced prior to June 2, 2015 to this recall.

Nissan is still continuing its investigation into whether this issue possibly affects certain other Nissan vehicles equipped with similar fuel tanks and will provide further additional updates to NHTSA as quickly as possible.

The fuel tank supplier is:

Plastic Omnium-Anderson
Auto Inergy Division
5100 Old Pearman Dairy Road
Anderson, SC 29265

Jim Hogg
Plant Director, Anderson SC
Auto Inergy Division
Mobile: (864)-245-4707

3. Total Number of Vehicles Potentially Involved:

Approximately 5,458 Model Year 2016 Maxima vehicles

The number of affected Altima 3.5 vehicles is under investigation and will be supplemented.

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

Unknown

5. Description of the Defect:

Nissan has determined that certain Model Year 2016 Maxima and Altima 3.5 (equipped with a V6 engine) vehicles might contain fuel tanks with an out-of-specification dimension at the opening for the fuel sending unit. As a result, if this condition is present, the H-seal between the sending unit and fuel tank can possibly displace during a severe frontal crash. This can increase the potential risk of a fuel leak in the event of a crash, increasing the risk of injury to vehicle occupants.

6. Chronology of Principal Events:

July 10, 2015 – NHTSA performed an NCAP test on a MY 2016 Nissan Maxima. After the crash test was conducted, NHTSA observed a fuel leak after the vehicle was statically rotated 90 degrees. NHTSA informed Nissan of the results of the test and Nissan immediately began an investigation into the issue.

July 14, 2015 – While Nissan had not determined that other Maxima vehicles were similarly affected, out of an abundance of caution, Nissan initiated a dealer quality hold on Model Year 2016 Maxima vehicles to prevent outflow pending the results of the investigation.

July 16, 2015 – Nissan visited MGA to inspect the post-test NCAP vehicle. This included a visual inspection of the vehicle and fuel system, as well as pressure test of the fuel system. As a result of the pressure test and visual inspection, Nissan found that a fuel leak occurred at the seal between the fuel tank and fuel sending unit. Specifically, Nissan found an H-seal was displaced from its initial position, resulting in a loss of seal between the fuel tank and sending unit.

July 17, 2015 - Nissan began analyzing several fuel tanks to determine the potential cause of the H-seal displacement and fuel leak. Nissan hypothesized that the H-seal displacement may have been a result of an assembly or parts quality issue. As a result of this initial hypothesis, Nissan initiated an audit of the supplier manufacturing process as well as an inspection of additional fuel tanks.

July 20, 2015 – The initial supplier audit and parts inspection showed some deviation in the fuel tank “wall” height at the point of the fuel tank connection to the fuel sending unit. Nissan hypothesized that the reduced “wall” height could make it difficult for the operator to correctly position the H-seal during assembly, which may create a condition that could cause the H-seal to move out of position when loaded during a crash event; resulting in loss of seal. Nissan decided to conduct a series of vehicle crash tests

and sled tests to confirm the effect of the wall height and mis-positioned H-seal on vehicle performance.

Nissan engineers remained on site at the tank supplier, investigating the supplier assembly processes and tank production records from July 20 until July 27. Separately, Nissan visited the H-seal component supplier on July 23 and also the E-ring supplier on July 27, as part of the investigation.

July 21, 2015 – Nissan conducted a crash test with correct “wall” height fuel tanks and found no leaks. The H-seal was in the correct position after the test.

July 23, 2015 – Nissan conducted a teleconference with NHTSA to brief the agency on the status of the investigation and additional activities that were under way.

July 27, 2015 through July 28, 2015 – Nissan conducted a series of sled tests, trying to replicate the results of the July 10 NCAP test. However, the results were unable to be duplicated. Separately, Nissan conducted a vehicle crash test with a tank that contained a wall height consistent with the NHTSA Maxima NCAP test vehicle and an incorrect H-seal position. Nissan partially replicated the results of the July 10 NCAP test, as a small amount of fuel leaked during the crash test sequence; though no fuel leaked after the vehicle was statically rotated.

July 28, 2015 – Nissan determined that the subject vehicles contained a safety-related defect and that a safety recall campaign would be conducted.

July 29, 2015 – Nissan conducted a vehicle crash test with a tank that contained a wall height consistent with the NHTSA Maxima NCAP test vehicle and a correct H-seal position. The vehicle exhibited a fuel leak during the FMVSS 301 static rollover, which was consistent with the NHTSA Maxima NCAP test result.

July 29, 2015 – Nissan submitted a Part 573 Defect Information Report and issued a “stop sale” notice to dealers.

July 30, 2015 – Nissan conducted a detailed inspection on the July 10 NCAP test vehicle and fuel tank. The fuel tank was removed and measured at the crash test facility and returned to Nissan for further analysis.

August 4, 2015 – Nissan created a field fix concept (retainer ring that locks onto the fuel tank and keeps the H-seal in the groove area during impact).

August 13, 2015 – Nissan conducted a vehicle crash test to determine the “wall” height threshold for fuel leakage. This vehicle test achieved FMVSS

301 criteria; there was no fuel leak during or after the static vehicle rollover.

August 13, 2015 – Nissan conducted an Altima V6 engine vehicle crash test with a post June 2, 2015 fuel tank and a correct H-seal position. This vehicle test achieved FMVSS 301 criteria; there was no fuel leak during or after the static vehicle rollover.

August 14, 2015 – Nissan conducted a second vehicle crash test to determine the “wall” height threshold for fuel leakage. This vehicle test achieved FMVSS 301 criteria; there was no fuel leak during or after the static vehicle rollover.

August 17, 2015 – Nissan completed the design of the retainer ring field fix.

August 21, 2015 – Nissan conducted an Altima I4 engine vehicle crash test with a post June 2, 2015 fuel tank and a correct H-seal position. This vehicle test achieved FMVSS 301 criteria; there was no fuel leak during or after the static vehicle rollover.

August 26, 2015 - Nissan sourced the retainer ring and kicked off tooling.

August 31, 2015 – Nissan conducted an Altima I4 engine vehicle crash test with a tank that contained a wall height consistent with the NHTSA Maxima NCAP test vehicle and a correct H-seal position. This vehicle test achieved FMVSS 301 criteria; there was no fuel leak during or after the static vehicle rollover.

September 1, 2015 – The supplier completed the retainer ring tooling and created validation parts.

September 3, 2015 - Nissan conducted an Altima V6 engine vehicle crash test with a tank that contained wall height consistent with the NHTSA Maxima NCAP test vehicle and a correct H-seal position. This vehicle test did not achieve FMVSS 301 criteria; there was fuel leak during the static vehicle rollover.

September 4, 2015 - Nissan conducted a MY 2016 Maxima vehicle crash test to confirm the retainer ring field repair effectiveness. The vehicle was tested with a tank that contained “wall” height consistent with the NHTSA Maxima NCAP test vehicle, a correct H-seal position and Retainer Ring. This vehicle test achieved FMVSS 301 criteria; there was no fuel leak during or after the static vehicle rollover.

September 10, 2015 – Nissan decided that certain Altima 3.5 vehicles should be added to the recall. The population of affected vehicles is still under investigation.

7. Description of Corrective Action:

Nissan will begin remediating the subject vehicles by installing a retainer ring in the sending unit/tank interface to help the H-seal to seat properly between the fuel tank and the fuel sending unit. This will prevent potential H-seal movement in a crash.

For Model Year 2016 Maxima vehicles, Nissan will issue Owner Notifications within 60 days of the July 29, 2015 Part 573 notification date.

For Altima 3.5 vehicles, Nissan will issue Owner Notifications within 60 days of the September 17, 2015 Part 573 amendment date.

8. Copy of Notices:

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