

Part 573 Safety Recall Report

16V-856

Manufacturer Name : Maserati North America, Inc.**Submission Date :** NOV 22, 2016**NHTSA Recall No. :** 16V-856**Manufacturer Recall No. :** 328**Manufacturer Information :**

Manufacturer Name : Maserati North America, Inc.

Address : 270 Sylvan Avenue

Englewood Cliffs NJ 07632

Company phone : 201-816-2638

Population :

Number of potentially involved : 326

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2017-2017 MASERATI QUATTROPORTE & GHIBLI

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : GAS

Descriptive Information : Maserati S.p.A. and MNA have determined that the above described vehicles were manufactured with a rear differential unit pinion nut that was not torqued correctly. The function of the pinion nut is to provide the axial force required for proper location of the pinion within the differential unit bearing assemblies. A loose pinion nut will result in a reduction or total loss of axial force, as well as, insufficient orientation of the pinion itself. A loose pinion nut will potentially have an adverse effect on noise, vibration and harshness (NVH) performance, reduced gear, and bearing life, and can cause a differential fluid leak at the pinion seal. In the most severe cases of a loose pinion nut, axial loads could force the pinion into a differential gear binding condition, which can result in blocking the rotation of the ring gear, and potentially locking the rear wheels, thereby increasing the risk of a vehicle crash.

Production Dates : JUL 01, 2016 - OCT 12, 2016

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

Description of the Defect : Maserati S.p.A. and MNA have determined that the above described vehicles were manufactured with a rear differential unit pinion nut that was not torqued correctly. The function of the pinion nut is to provide the axial force required for proper location of the pinion within the differential unit bearing assemblies. A loose pinion nut will result in a reduction or total loss of axial force, as well as, insufficient orientation of the pinion itself. A loose pinion nut will potentially have an adverse effect on noise, vibration and harshness (NVH) performance, reduced gear, and bearing life, and can cause a differential fluid leak at the pinion seal. In the most severe cases of a loose pinion nut, axial

loads could force the pinion into a differential gear binding condition, which can result in blocking the rotation of the ring gear, and potentially locking the rear wheels, thereby increasing the risk of a vehicle crash.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : A loose pinion nut will result in a reduction or total loss of axial force, as well as, insufficient orientation of the pinion itself. A loose pinion nut will potentially have an adverse effect on noise, vibration and harshness (NVH) performance, reduced gear, and bearing life, and can cause a differential fluid leak at the pinion seal. In the most severe cases of a loose pinion nut, axial loads could force the pinion into a differential gear binding condition, which can result in blocking the rotation of the ring gear, and potentially locking the rear wheels, thereby increasing the risk of a vehicle crash.

Description of the Cause : The above described vehicles were manufactured with a rear differential unit pinion nut that was not torqued correctly.

Identification of Any Warning that can Occur : Noise, vibration and harshness (NVH).

Supplier Identification :

Component Manufacturer

Name : GKN North America Services, Inc.

Address : 2200 N. Opdyke Road

Auburn Hills MICHIGAN 48326

Country : United States

Chronology :

Please note the following chronology of events:

- a. On September 1, 2016, the Maserati production plant in Grugliasco, Italy experienced a rear differential unit noise issue on two vehicles during standard on- road testing before delivery. All components were disassembled, and delivered to the supplier, GKN, for their second level inspection and analysis.
- b. On September 20, 2016, GKN received the defective parts in the US, and commenced their inspection and analysis. .
- c. On October 4, 2016, GKN completed their second level analysis, and communicated to Maserati that the root cause of the defect was incorrect torque of both pinion flange nuts, due to incorrect assembly of the component in its plant. GKN identified a potential defective batch involving approximately 1,179 parts manufactured between February 1, 2016 and July 1, 2016, and then corrected the assembly in production line. Only 948 parts were shipped to Maserati and assembled on vehicles. The Risk assessment performed by GKN on all stock parts identified a 10% failure rate within the suspected batch.
- d. On October 5, 2016, Maserati placed vehicle delivery on hold (at the factory) and identified 6 vehicles that were still at the factory yard, and 942 shipped to the dealer network.
- e. On October 13, 2016, Maserati established a clean point in production with a known satisfactory (certified) rear differential unit provided by GKN.
- f. From October 6, 2016 through November 15, 2016, it was defined and validated a proper in-vehicle check cycle to ensure known good components from faulty components.
- g. Once validated, Maserati decided to launch a safety recall on November 15, 2016.

Description of Remedy :

Description of Remedy Program :	The proposed remedy is a check of the rear differential unit pinion nut torque and, if necessary, the replacement of the rear differential unit. The remedy will be performed free of charge to the vehicle owner.
How Remedy Component Differs from Recalled Component :	New Part Number.
Identify How/When Recall Condition was Corrected in Production :	On October 13, 2016, Maserati established a clean point in production with a known satisfactory (certified) rear differential unit provided by GKN. From October 6, 2016 through November 15, 2016, it was defined and validated a proper in-vehicle check cycle to ensure known good components from faulty components.

Recall Schedule :

Description of Recall Schedule : Maserati anticipates having the parts available for implementation in December, 2016. Customer notification letters will be sent to all affected customers within 30 days. All customers for whom this remedy is required, and our dealers, will receive notification of the remedy campaign. MNA intends to send customer notification letters to each owner of an affected vehicle by first-class mail to inform the customer of the problem, and advise the customer to contact their local Authorized Maserati Dealer to schedule an appointment to repair the affected vehicle.

Planned Dealer Notification Date : DEC 12, 2016 - DEC 12, 2016

Planned Owner Notification Date : DEC 12, 2016 - DEC 12, 2016

* NR - Not Reported