Part 573 Safety Recall Report 16V-885

Manufacturer Name : Porsche Cars North America, Inc.
Submission Date : DEC 07, 2016
NHTSA Recall No. : 16V-885
Manufacturer Recall No. : AG09

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Manufacturer Information :

Manufacturer Name : Porsche Cars North America, Inc.
Address : One Porsche Drive
Atlanta GA 30354
Company phone : 1-800-767-7243

Population :

Number of potentially involved : 306
Estimated percentage with defect : NR

Vehicle Information :

Vehicle 1 : 2015-2015 Porsche 918 Spyder
Vehicle Type : LIGHT VEHICLES
Body Style : 2-DOOR
Power Train : HYBRID ELECTRIC
Descriptive Information : Intensive analysis resulting from a single observation on one vehicle in the field revealed that the lower control arms of the front axle contain a manufacturing error at the ball joint. For this reason the long-term durability of these components as installed in the affected vehicles cannot be assured.
Production Dates : NOV 06, 2013 - JUL 27, 2015
VIN Range 1 : Begin : WP0CA2A1XFS800024 End : WP0CA2A14FS800925 ☐ Not sequential

Description of Defect :

Description of the Defect : Intensive analysis resulting from a single observation on one vehicle in the field revealed that the lower control arms of the front axle contain a manufacturing error at the ball joint. For this reason the long-term durability of these components as installed in the affected vehicles cannot be assured.
FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : If the forward control arms develop any cracking, the vehicle's handling maybe impaired in severe use (such as on a race track), increasing the risk of a crash.
Description of the Cause : Due to variations of the surface coating processes of these components, some of the underlying material may have been left unprotected, potentially leading to cathodic stress corrosion cracking (SCC).
Identification of Any Warning that can Occur : None.

Supplier Identification :

Component Manufacturer

Name : Hirschmann GmbH

Address : Kirchentannenstrasse 9
Fluorn-Winzeln FOREIGN STATES 78737

Country : Germany

Chronology :

May 26, 2016:
Information from a vehicle in the field was received. The vehicle had been taken to a dealer workshop for a normal inspection. After removing the right front wheel, it was noted that a lower suspension control arm had broken at the point between the threads and taper during the removal of the passenger front wheel at the workshop.

May 30 to June 14, 2016:
The failed parts were requested from the field and forwarded to Porsche's Research and Development center for analysis.
It was determined that Porsche's recall campaign AF01 had been performed on the vehicle in question, and that the parts exhibited a new issue.

June 15 to November 18, 2016:
The failed parts were analyzed in Porsche's Research and Development center. It was determined that the failure of the parts was due to cathodic stress corrosion cracking (SCC). All of Porsche's internal fleet 918 Spyder vehicles were checked to determine if any parts showed the same defects. None were found.

Although initially regarded as a unique occurrence, intensive exclusion procedure analysis was used to determine the root cause of the SCC. It was determined that there had been variations in the coating processes the parts had received, and that therefore the material of the affected parts might have been left unprotected, potentially leading to cathodic stress corrosion cracking (SCC). It also was determined that even vehicles that were repaired in recall AF01 might be affected.

The influence of the failure on drivability was tested on the Porsche test track. It was observed that the vehicle handling could be impaired during severe, race track type, use only.

The topic was reviewed by the Porsche product safety committee in November 2016 and it was decided on November 30, 2016, to conduct a voluntary recall.

Description of Remedy :

Description of Remedy Program :	The affected components from every Porsche 918 Spyder vehicle will be replaced. To prevent any negative influence due to variations of the coating processes, the replacement components will be made of a more robust material (42CrMoS4). The affected vehicles are safe to drive normally, but Porsche will recommend to customers that the vehicles not be driven on race tracks until the recall remedy has been completed. The affected vehicles all are still covered under warranty. There are no plans for customer reimbursement.
How Remedy Component Differs from Recalled Component :	The material of the recalled component is made of 'X3NiCoMoTi18-9-5'. The remedy component will be made of a more robust material (42CrMoS4).
Identify How/When Recall Condition was Corrected in Production :	Not applicable. Production of the 918 ended in 2015.

Recall Schedule :

Description of Recall Schedule :	To be determined.
Planned Dealer Notification Date :	NR - NR
Planned Owner Notification Date :	NR - NR

* NR - Not Reported