OMB Control No.: 2127-0004

Part 573 Safety Recall Report

18V-229

Manufacturer Name: Volkswagen Group of America, Inc.

Submission Date: DEC 12, 2018 **NHTSA Recall No.:** 18V-229 **Manufacturer Recall No.:** 1902/19N4



Manufacturer Information:

Manufacturer Name: Volkswagen Group of America, Inc.

Address: 3800 Hamlin Road

Auburn Hills MI 48326

Company phone: 1-800-893-5298

Population:

Number of potentially involved: 342,867 Estimated percentage with defect: 100 %

Vehicle Information:

Vehicle 1: 2013-2016 Audi Audi A4 Sedan with 2,0l TFSI engine

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: Only vehicles equipped with a certain version of the 2.0T engine (EA888 Evo2) are

equipped with the affected coolant pump.

Production Dates: FEB 20, 2012 - DEC 08, 2015

VIN Range 1: Begin: WAUEFAFL8DN001124 End: WAUFFAFL1GN019005 ✓ Not sequential

Vehicle 2: 2013-2017 Audi A5 Cabriolet with 2,0l TFSI engine

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: Only vehicles equipped with a certain version of the 2.0T engine (EA888 Evo2) are

equipped with the affected coolant pump.

Production Dates: MAR 09, 2012 - DEC 16, 2016

VIN Range 1: Begin: WAUVFAFH9DN000124 End: WAUD2AFH0HN004639 ✓ Not sequential

Vehicle 3: 2013-2017 Audi A5 with 2,0l TFSI engine

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: Only vehicles equipped with a certain version of the 2.0T engine (EA888 Evo2) are

equipped with the affected coolant pump.

Production Dates: MAR 08, 2012 - NOV 19, 2016

VIN Range 1: Begin: WAULFAFR1DA000321 End: WAUD2AFR5HA001817 ✓ Not sequential

Vehicle 4: 2012-2015 Audi A6 with 2,0l TFSI engine

Vehicle Type:

Body Style:

Power Train: NR

Descriptive Information: Only vehicles equipped with a certain version of the 2.0T engine (EA888 Evo2) are

equipped with the affected coolant pump.

Production Dates: APR 04, 2011 - DEC 22, 2014

VIN Range 1: Begin: WAUAFAFC1CN002290 End: WAUGFAFC2FN050394 ✓ Not sequential

Vehicle 5: 2013-2017 Audi Q5 with 2,0l TFSI engine

Vehicle Type :
Body Style :

Power Train: NR

Descriptive Information: Only vehicles equipped with a certain version of the 2.0T engine (EA888 Evo2) are

equipped with the affected coolant pump.

Production Dates: JUL 04, 2012 - DEC 20, 2016

VIN Range 1: Begin: WA1LFAFP4DA001703 End: WA1M2AFP6HA095315 ✓ Not sequential

Vehicle 6: 2013-2016 Audi A4 allroad with 2,0l TFSI engine

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: Only vehicles equipped with a certain version of the 2.0T engine (EA888 Evo2) are

equipped with the affected coolant pump.

Production Dates: MAR 12, 2012 - APR 01, 2016

VIN Range 1: Begin: WA1UFAFL8DA028484 End: WA1UFAFL8GA018283 ✓ Not sequential

Description of Defect:

Description of the Defect: In certain vehicles equipped with a 2.0L TFSI engine, the electric coolant pump

may experience a short-circuit and/or overheat.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: A short circuit or overheating within the electric coolant pump may lead to a

vehicle fire.

Description of the Cause: According to our latest findings, there are 2 different possible error patterns:

1. The pump may become blocked by debris and subsequently may overheat.

2. Moisture within the pump may lead to a short-circuit.

Identification of Any Warning Depending on the engine control unit software an error within the electric

that can Occur: coolant pump may be detected and the customer could be warned by the EPC

indicator light.

Supplier Identification:

Component Manufacturer

Name: Buehler Motor GmbH Address: Anne-Frank-Str. 33-35

Nuremberg FOREIGN STATES 90459

Country: Germany

Chronology:

December 23, 2016: The Audi Product Safety Committee decided to conduct a recall (Audi code 19M1/NHTSA 17V002) and update the engine control unit software on the affected vehicles. The new software switches off the coolant pump if it becomes blocked and notifies the customer through the illumination of the EPC indicator light.

January 31, 2017: Start of campaign

March 2017 to August 2017: Single reports of overheating pumps after campaign completion. Cases were investigated, however, results were inconclusive at that point. Additional parts were requested from the field for further analysis.

September/October 2017: Increase in reports of overheating pumps after campaign completion. October 2017 - March 2018: Intensified field testing and laboratory analysis to identify potential root cause, influential factors and error patterns. Testing showed that not just debris but also moisture was a factor. April 4, 2018: The Audi Product Safety Committee made a determination of defect and decided that the coolant pumps on the affected vehicles need to be replaced in addition to the software update. Especially it was identified that moisture is the main factor leading to a possible overheating by debris. However, a blocked pump may develop more moisture and is therefore at a higher risk of overheating.

September 14, 2018: Audi releases Safety Recall 19N4. This interim repair is intended to remove the safety defect in affected vehicles until replacement electric (after run) coolant pumps become available. The repair under Safety Recall 19N4 is to remove the fire risk due to the defect by disconnecting power to the electric (after run) coolant pump. At a later date, Audi plans to conduct a service action to install a new electric (after run) coolant pump. Audi anticipates new pumps will be available by the end of December, 2018. Please see manufacturer comments field below for remainder of chronology.

Description of Remedy:

Description of Remedy Program: Due to the (temporarily) limited supply of replacement electric (after run) coolant pumps, all vehicles that our records show as unrepaired under Safety Recall 19N4 will also be identified with Safety Recall 1902. Each affected vehicle will receive one of two possible recall repairs (Safety Recall 19N4 or Safety Recall 1902) free of charge, depending on parts availability:

- Safety Recall 1902: If a replacement electric (after run) coolant pump for the vehicle is available on the day an affected vehicle is presented at an authorized Audi dealer for repair, the pump will be replaced with a new one under Safety Recall code 1902. A software update to the ECM will also be performed, if necessary. Repair under Safety Recall 1902 removes the safety defect from the vehicle.
- Safety Recall 19N4: If a replacement pump is not available for the vehicle on the day it is presented for repair at an authorized Audi dealer, power to the existing electric (after run) coolant pump will be disconnected to remove the safety defect. A software update to the ECM will also be performed, if necessary.
- At a future date, when sufficient stock of replacement pumps becomes available, Audi will notify owners and invite them to return under a service campaign have a new pump installed free of charge.
- Additionally, all vehicles that have received repair under Safety Recall code 19N4 will be provided with extended warranty coverage for the turbocharger. A separate letter detailing the extended warranty coverage will be provided to these owners once the Safety Recall 19N4 repair has been completed.
- Once replacement electric (after run) coolant pumps are available in quantities necessary to support pump replacement on all vehicles, Audi will discontinue the power disconnect repair under Safety Recall 19N4 and begin exclusively installing new pumps under Safety Recall 1904. This is expected to occur sometime in Q1, 2019.

from Recalled Component:

How Remedy Component Differs Part number of the recalled pump: 059 121 012 B

Besides other improvements, the new pump is equipped with a pressure compensation element to avoid moisture accumulation.

Identify How/When Recall Condition A4/A5 B8 vehicles: The specific engine version (EA888 Evo2) with the was Corrected in Production: affected pumps was used only in facelift vehicles until end of production. With the introduction of the B9 vehicles another engine version with a different pump was used.

> Q5 B8 vehicles: The specific engine version (EA888 Evo2) with the affected pumps was used only in facelift vehicles until end of production. With the introduction of the Q5 B9 another engine version with a different pump was used.

A6 vehicles: The specific engine version (EA888 Evo2) with the affected pumps was used from start of production until SOP of the facelift vehicles when another engine version with a different pump was used.

Recall Schedule:

Description of Recall Schedule: Dealer notification: planned for December 12, 2018

Owner notification: planned on or about January 23, 2019

Planned Dealer Notification Date : DEC 12, 2018 - DEC 12, 2018 Planned Owner Notification Date : JAN 23, 2019 - JAN 23, 2019

* NR - Not Reported