Part 573 Safety Recall Report 23V-040

Manufacturer Name : Volkswagen Group of America, Inc.
Submission Date : FEB 01, 2023
NHTSA Recall No. : 23V-040
Manufacturer Recall No. : 97ZZ

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 : 20,904
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2021-2021 VOLKSWAGEN ID4
Vehicle Type :
Body Style :
Power Train : NR
Descriptive Information : The recall population was determined by production records.
The recalled products differ from products that were not included in the recall because of a different software version in the high voltage (HV) battery management control module and pulse inverter control module. Vehicles not included in the recall have an improved software.
ID.4: 20904
Production Dates : MAY 26, 2020 - JAN 20, 2022
VIN Range 1 : Begin : WVGFMPE24MP000559 End : WVGUNPE27MP066592 ☑ Not sequential

Description of Defect :

Description of the Defect : The high voltage (HV) battery management control module may reset or, in rare events, the pulse inverter may be deactivated while driving.
FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : If the HV battery management control module resets while driving, the vehicle's electric motor will not be supplied with power for the duration of the reset. In rare cases, the pulse inverter may be deactivated while driving. Each of these conditions may lead to a loss of propulsion without pre-warning and may increase the risk of a crash.
Description of the Cause : Battery management control unit software: The self-diagnosis software of the HV battery management system is too sensitive in certain situations. This may lead to an unnecessary reset of the control unit.
Pulse inverter: A software failure may lead to incorrect evaluation of internal measurement values. If this is detected, the pulse inverter may be deactivated.

Identification of Any Warning that can Occur :	When this situation occurs, the driver receives an immediate warning in the instrument cluster.

Involved Components :

Component Name 1 :	HV Battery management software
Component Description :	Software for HV battery management control unit
Component Part Number :	Versions 920, 850

Component Name 2 :	Pulse inverter software
Component Description :	Software for pulse inverter control unit
Component Part Number :	Versions 6034, 6035, 6043

Supplier Identification :

Component Manufacturer

Name :	Valeo Powertrain Electrified Mobility (P
Address :	14, avenue des Beguines, Immeuble le DEL BP 68532 Cergy Pontoise Foreign States 95 892
Country :	France

Chronology :

July 2021: Reports from Europe received regarding potential software issue in HV battery management system. Analysis started.
September 2021: Testing of potential consequence conducted and risk assessment initiated. Risk assessment indicated no unreasonable risk for motor vehicle safety.
September 2021 – August 2022: Ongoing data monitoring for this HV battery control unit issue, based on limited number of fault entries observed in data received from the field and the fact that no crash or injury allegation were observed related to this topic
January 2022: The supplier reported an issue with the pulse inverter software that could potentially lead to the deactivation of the pulse inverter. Analysis started.
August - September 2022: VOQ's were analyzed for the ID.4 alleging potential stalling events. Some reports from the US market indicated that the battery management software issue could have led to stalling allegations at ID.4 vehicles. These reports were discussed with ODI during a Quarterly Meeting. Further investigations and analysis were initiated.

October 12, 2022: Topic was presented in Volkswagen Product Safety Committee. No unreasonable risk to motor vehicle safety determined since steering and braking functions are not affected. Vehicle remains fully controllable. After restart vehicle will operate normal. Decision to address this issue as a service campaign
January 25, 2023: Topic was presented in Volkswagen Product Safety Committee. An update of potential field data from the US market was presented. Based on this information a recall was decided. The recall decision is based on identified fault entries in US vehicles which indicate that the recall condition could have been present: HV battery CU 384/pulse inverter 32

Description of Remedy :

Description of Remedy Program :	The software of the HV battery management control unit and the pulse inverter control unit will be updated. Volkswagen will not offer a reimbursement plan under this recall.
How Remedy Component Differs from Recalled Component :	The recall remedy component can be distinguished from the recalled component because the software is improved. HV battery control unit: version 930 Pulse inverter control unit: version 6044
Identify How/When Recall Condition was Corrected in Production :	CW 49/2021: Introduction of improved software level in vehicle series production for the battery management control unit CW20/2022: Introduction of improved software level in vehicle series production for the pulse inverter.

Recall Schedule :

Description of Recall Schedule :	Dealers/Owners: On or before March 31, 2023
Planned Dealer Notification Date :	MAR 31, 2023 - MAR 31, 2023
Planned Owner Notification Date :	MAR 31, 2023 - MAR 31, 2023

* NR - Not Reported