Part 573 Safety Recall Report 24V-255

Manufacturer Name : Aston Martin The Americas
Submission Date : JUN 20, 2024
NHTSA Recall No. : 24V-255
Manufacturer Recall No. : RA-63-1832

Manufacturer Information :

Manufacturer Name : Aston Martin The Americas
Address : Banbury Road
Gaydon Warwick, United Kingdom 00
CV35 0DB
Company phone : 999

Population :

Number of potentially involved : 2,902
Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2021-2024 Aston Martin DBX
Vehicle Type : LIGHT VEHICLES
Body Style : SUV
Power Train : GAS
Descriptive Information : All DBX vehicles built between 7th May 2020 and 15th September 2023.
Production Dates : MAY 07, 2020 - SEP 15, 2023
VIN Range 1 : Begin : SCFVUJAW3MTV00145 End : SD7VUJBW2RTV10377 ☐ Not sequential

Description of Defect :

Description of the Defect : The battery fusebox distributes electrical power to the vehicle using cables which are attached to threaded studs using eyelets. The roles of the cables are:
1. Input feed from the power sources - Starter motor, alternator, and front jumpstart point
2. Output feed to rear cabin fusebox (200A Fuse)
3. Output feed to engine fusebox (250A Fuse)

These cables are attached to the fusebox using threaded studs and fixings. Initial build of the vehicles uses a serrated M8 nut torqued to 9 Nm. Customers have reported that a battery warning message appeared on the instrument cluster, and the vehicle may have stalled or does not start. Investigation by the dealer finds that the nuts which retain the cable eyelets on the battery fusebox are loose. In some cases, there is localised thermal damage which is contained to the plastic housing of the battery fusebox.

FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : Loose nuts could cause the cables to become loose, and (if undetected) could

Description of the Safety Risk :	cause the vehicle to lose electrical power or heat damage to the fuse box. Loss of electrical power could result in the engine stalling or loss of headlights, power assisted steering, or other vehicle functions. These could increase the risk of crash. Localised heat damage to the plastic housing of the battery fuse box could cause smoke in the boot or an unpleasant odour. Aston Martin is not aware of any injuries or road traffic accidents associated with this concern.
Description of the Cause :	A sub-assembly station is used to install the cables to the battery fusebox, and to apply torque to the nuts on the threaded studs. The assembled battery fusebox and cables are manually carried to the vehicle for assembly on the production line. The combination of a serrated nut and manual handling may result in the torque being reduced due to a 'ratcheting' action, and therefore the nuts may become loose during service of the vehicle. If the nut becomes loose, there may be insufficient surface contact between the cable eyelet and the battery fusebox. This increases the resistance in the circuit leading to overheating and damage to the plastic housing.
Identification of Any Warning that can Occur :	A warning message may illuminate on the instrument panel. The warning type can vary depending on which system is affected by loss of electrical power. The driver may be able to identify an unpleasant odour in the cabin.

Involved Components :

Component Name 1 :	Nut M8
Component Description :	Nut M8
Component Part Number :	709098

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

- 15th June 2022 – Aston Martin's Technical Review Group (TRG) convened to investigate reports of DBX battery fusebox with localised heat distortion to the fusebox caused by loose fixings to the 250A fuse, contained to the plastic housing of the battery fusebox.
- 17th January 2023 – Containment introduced to fit flat nut, spring washer and flat washer to the 250A fuse with 12Nm torque.
- 30th May 2023 - Aston Martin launched an inspection of 300 vehicles to understand whether loose fixings were present.
- 17th August 2023 – A market incident involving loose fixings is reported affecting the 400A fuse.
- 22nd September 2023 – Countermeasure introduced to fit flat nut, spring washer and flat washer to the 200A fuse and input feed fuses with 12Nm torque.
- The Company's Technical Review Group (TRG) met regularly throughout the investigation.
- The Company's Critical Concerns Review Group (CCRG) met on 27th and 28th September 2023 and recommended the matter should be reviewed by the Recall Committee.
- Further investigation and confirmation of Permanent Corrective Action (PCA) have taken place through torque audit checks.
- The Recall Committee convened on 03/04/2024 and determined that:

a) a potential defect could occur in the relevant vehicle population.
b) this defect could lead to a potential safety risk; and
c) a voluntary safety recall of all affected vehicles should be implemented.

Description of Remedy :

Description of Remedy Program :	Aston Martin will remove the three affected cables from the threaded studs and check the fuses and cable for any damage. If any damage is discovered the affected parts will be replaced. The serrated nuts will be replaced with a flat nut, a flat washer and a spring washer. The torque will be increased to 12Nm. Owners will be notified to take their vehicle to an Aston Martin Dealer. The repair procedure will take under 1 hour to complete, at no cost to the owner. It is unlikely that an owner has paid for the remedy ahead of the notification being published as the majority of cars were still within the manufacturers warranty during this time. If a customer has incurred a cost for the remedy ahead of the notification they can submit a claim for reimbursement either to an Aston martin dealer or direct to Aston martin customer services.
How Remedy Component Differs from Recalled Component :	The remedy components use a flat nut, a flat washer, and a spring washer. The torque is increased from 9Nm to 12Nm. This is to prevent the 'ratcheting' affect that may occur if the cable is moved.
Identify How/When Recall Condition was Corrected in Production :	The flat washer and increased torque was used in production from the 16th September 2023

Recall Schedule :

Description of Recall Schedule :	It is Aston Martin's intention to notify all customers listed in table in 573.6(c) (2) above. Aston Martin will provide copies of the notification schedule, including mail dates for the owner letter, when available. Aston Martin will provide a representative copy of the dealer bulletin, when available.
Planned Dealer Notification Date :	APR 05, 2024 - OCT 07, 2024
Planned Owner Notification Date :	APR 22, 2024 - NR

* NR - Not Reported