OMB Control No.: 2127-0004

Part 573 Safety Recall Report

20V-766

Manufacturer Name: Subaru of America, Inc.

Submission Date: DEC 10, 2020 NHTSA Recall No.: 20V-766 Manufacturer Recall No.: WRH-20



Manufacturer Information:

Manufacturer Name: Subaru of America, Inc.

Address: One Subaru Drive

Camden NJ 08103

Company phone: 844-373-6614

Population:

Number of potentially involved: 7,741 Estimated percentage with defect: 100 %

Vehicle Information:

Vehicle 1: 2020-2020 Subaru Legacy

Vehicle Type: LIGHT VEHICLES

Body Style: 4-DOOR Power Train: GAS

Descriptive Information: -Description of the issue: Between the period of August 17, 2020 and August 21, 2020, a firmware-over-the-air ("FOTA") update was made available for certain vehicles equipped with Multimedia Navigation ("High" Grade) and Multimedia Plus ("Mid" Grade). If the software download was initiated and if there was a delay in the data writing speed of the flash memory, the installation process could timeout. A timeout failure during the data writing sequence could cause the data to become corrupted, and if corrupted, may result in the Center Information Display ("CID") going blank.

> -The basis for how the recall population was determined: Potentially affected vehicles were identified using software download records with VIN-level traceability from the vendor. The identified VIN list was compared to repair records, and vehicles with a Cockpit Control Module ("CCM") replacement after software download were removed from the population.

-How the recalled products differ from products that were not included in the recall: Vehicles not included in this campaign did not attempt to download the described FOTA update to the currently equipped CCM.

The recall population includes certain 2020 model year Legacy vehicles. The number of potentially affected Legacy vehicles is 973.

Production Dates: JUL 31, 2019 - JUN 07, 2020

NR VIN Range 1 : Begin : End: NR ☐ Not sequential Vehicle 2: 2020-2020 Subaru Outback

Vehicle Type: LIGHT VEHICLES

Body Style: SUV Power Train: GAS

Descriptive Information: -Description of the issue: Between the period of August 17, 2020 and August 21, 2020, a firmware-over-the-air ("FOTA") update was made available for certain vehicles equipped with Multimedia Navigation ("High" Grade) and Multimedia Plus ("Mid" Grade). If the software download was initiated and if there was a delay in the data writing speed of the flash memory, the installation process could timeout. A timeout failure during the data writing sequence could cause the data to become corrupted, and if corrupted, may result in the Center Information Display ("CID") going blank.

> -The basis for how the recall population was determined: Potentially affected vehicles were identified using software download records with VIN-level traceability from the vendor. The identified VIN list was compared to repair records, and vehicles with a Cockpit Control Module ("CCM") replacement after software download were removed from the population.

-How the recalled products differ from products that were not included in the recall: Vehicles not included in this campaign did not attempt to download the described FOTA update to the currently equipped CCM.

The recall population includes certain 2020 model year Outback vehicles. The number of potentially affected Outback vehicles is 6,768.

Production Dates: JUL 31, 2019 - JUN 30, 2020

VIN Range 1 : Begin : NR End: NR Not sequential

Description of Noncompliance:

Description of the Between the period of August 17, 2020 and August 21, 2020, a FOTA update Noncompliance: was made available for certain vehicles. If the software download was initiated and if there was a delay in the data writing speed of the flash memory, the installation process could timeout. A timeout failure during the data writing sequence could cause the data to be corrupted, and if corrupted, may result in the CID going blank. In this blank condition, the backup camera and display will continue to function with the shift selector in Reverse, however, the CCM may continuously reboot approximately every three (3) minutes. If a reboot occurs while the vehicle is reversing, the rearview display may disappear during the reboot process, which takes approximately six (6) seconds to complete.

FMVSS 1: 111 - Rear visibility

FMVSS 2: NR

Description of the Safety Risk: The failure to display the rearview image in the timing specified and/or

Description of the Safety Risk: periodic loss of rearview image creates a noncompliance with the

requirements of FMVSS 111 - Rear Visibility, increasing the risk of a crash.

Description of the Cause: After the FOTA operation is initiated, the installation could timeout, potentially

causing an interruption in the process.

Identification of Any Warning N/A

that can Occur:

Involved Components:

Component Name 1: RADIO ASSY CHASSIS

Component Description: Cockpit Control Module (20MY "Mid" Grade)

Component Part Number: 86201AN65A

Component Name 2: NAVI ASSY CHASSIS

Component Description: Cockpit Control Module (20MY "High" Grade)

Component Part Number: 86271AN60A

Supplier Identification:

Component Manufacturer

Name: Denso International America, Inc.

Address: 24777 Denso Drive

Southfield Michigan 48033

Country: United States

Chronology:

August 17, 2020 – The offering of FOTA service began.

August 21, 2020 – At this point Subaru had received 278 contacts of DTC through telematics. The offering of FOTA service stopped.

August – November 2020 – Subaru investigated the condition with the supplier. Initially, as described, it was determined that the condition may result in the CID going blank. However, in this blank condition, the backup camera and rear image display will continue to function with the shift selector in Reverse. However, later in the investigation, it was discovered that the CCM will continuously reboot approximately every three (3) minutes. If a reboot occurs while the vehicle is reversing, the rear image display may disappear during the reboot process, which takes approximately six (6) seconds to complete.

December 3, 2020 – Subaru completed the investigation and it was determined that FMVSS 111 non-compliance may occur by FOTA and decided to conduct a recall. There are no known accidents or injuries related to this condition.

Description of Remedy:

Description of Remedy Program: Subaru dealers will reprogram the CCM software on the affected vehicles

for free. If the CID is not properly displaying, the CCM will be replaced

with an improved part for free.

How Remedy Component Differs The timeout function has been removed from the CCM software to allow

from Recalled Component: compensation for the variation in data-write timing.

Identify How/When Recall Condition The vehicle assembly plant began using CCM with the improved software

was Corrected in Production: beginning November 16, 2020.

Recall Schedule:

Description of Recall Schedule: Owner notification will occur within 60 days. Dealer notification is

scheduled to begin on or about December 11, 2020.

Planned Dealer Notification Date: DEC 11, 2020 - DEC 11, 2020

Planned Owner Notification Date: JAN 22, 2021 - JAN 22, 2021

* NR - Not Reported