Part 573 Safety Recall Report 19V-855

Manufacturer Name : Subaru of America, Inc.
Submission Date : DEC 02, 2019
NHTSA Recall No. : 19V-855
Manufacturer Recall No. : WUV-07

NHTSA
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

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 : 76,842
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2019-2019 Subaru Ascent
Vehicle Type : LIGHT VEHICLES
Body Style : SUV
Power Train : GAS
Descriptive Information : -Description of the issue: The transmission hydraulic sensor may incorrectly measure the hydraulic fluid pressure. If the fluid pressure is measured higher than its actual value, the hydraulic pressure will be reduced. If this occurs, the drive chain may not have the proper tension.

-The basis for how the recall population was determined: Potentially affected vehicles were identified using vehicle production records.

-How the recalled products differ from products that were not included in the recall: Vehicles equipped with updated TCU control programming are not affected.

The recall population includes certain 2019 model year Ascent vehicles. The number of potentially affected Ascent vehicles is 76,842.

Production Dates : FEB 22, 2018 - MAY 07, 2019
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Description of Defect :

Description of the Defect : The transmission hydraulic sensor may incorrectly measure the hydraulic fluid pressure. If the fluid pressure is measured higher than its actual value, the hydraulic pressure will be reduced. If this occurs, the drive chain may not have the proper tension.
FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : Occupants may be able to recognize this condition from irregular noise,

Description of the Safety Risk :	vibration while driving, and/or warning lamp illumination. Continuing to operate a vehicle experiencing this condition may ultimately result in loss of motive power, increasing the risk of a crash.
Description of the Cause :	A mid-joint of the transmission hydraulic sensor harness was made with dissimilar materials (tinplate and copper) which may cause an oxide film to form. If an oxide film forms, the electrical resistance may increase, potentially causing an incorrect measurement of the hydraulic pressure. If the fluid pressure is measured higher than its actual value, the TCU programming was not robust enough to compensate for variation and would instruct the valve to lower the hydraulic pressure, thus potentially reducing the tension on the drive chain.
Identification of Any Warning that can Occur :	Occupants may experience irregular noise, vibration while driving, and/or warning lamp illumination.

Supplier Identification :

Component Manufacturer

Name :	NR
Address :	NR
	NR
Country :	NR

Chronology :

October 17, 2018 - Subaru received the first technical report from the Canadian market alleging hesitation during acceleration. Parts were collected and it was observed that the drive chain may have slipped. Subaru noticed that metal powder was present, however, the cause of the metal powder was not determined. Subaru continued to monitor the field for additional data.

November 8, 2018 - Subaru received the first technical report from the factory in the U.S. The vehicle had an irregular noise while driving and the operator experienced juddering when turning the steering wheel. The symptoms were estimated to be due to a control valve malfunction. The transmission assembly was replaced and the issue was resolved.

December, 2018 - By December 2018, Subaru had received 30 field reports and 0 VOQ with allegations including warning lamp illumination, irregular noise, and/or vibration while driving. No reports indicated loss of motive power, crash, or injury. Subaru opened a technical investigation into the condition.

May 7, 2019 - From the updated results of the investigation, it was observed that the hydraulic sensor had been unable to properly measure the hydraulic pressure due to an increase in electrical resistance. The root cause for the increase in electrical resistance remained unidentified. In order to compensate for variation in measured hydraulic fluid pressure, an updated TCU program was implemented on the production line.

November 22, 2019 –Subaru is aware of 241 unique dealer and non-dealer field reports, and 14 VOQs. Subaru is not aware of any cases involving crash or injury as a result of this condition. Although the early warning symptoms appear to be detectable by the vehicle occupants prior to complete performance degradation, out of an abundance of caution, Subaru decided to conduct a voluntary safety recall.

Description of Remedy :

Description of Remedy Program :	For all of the potentially affected vehicles, Subaru dealers will reprogram the TCU. Following the TCU reprogramming, DTC codes will be inspected after a drive test, and if certain DTCs are present, the hydraulic sensor harness will be replaced with an updated part. If vehicles are confirmed to have experienced, or are currently experiencing low drive chain tension, the transmission assembly will be replaced. For each potentially affected vehicle, all remedy repairs necessary will be completed at no cost.
How Remedy Component Differs from Recalled Component :	The TCU software will be updated with a new version. For vehicles requiring a replacement hydraulic sensor harness, the new harness mid-joint is equipped with similar materials (tinplate only). Name: UNIT-AT CONTROL Description: Transmission Control Unit (TCU) Part Number: 30919AF98A, 30919AF98B, 30919AF99A, 30919AF99B Name: HARNESS-TRANSMISSION Description: Hydraulic Sensor Harness Part Number: 24031AA850
Identify How/When Recall Condition was Corrected in Production :	An updated version of the TCU programming was implemented on the manufacturing line beginning May 7, 2019.

Recall Schedule :

Description of Recall Schedule :	Owner notification will occur within 60 days. Dealer notification is scheduled to begin on or about November 26, 2019.
Planned Dealer Notification Date :	DEC 03, 2019 - DEC 03, 2019
Planned Owner Notification Date :	JAN 24, 2020 - JAN 24, 2020

* NR - Not Reported