Part 573 Safety Recall Report 19V-308

Manufacturer Name : Volvo Car USA LLC
Submission Date : APR 17, 2019
NHTSA Recall No. : 19V-308
Manufacturer Recall No. : R29936

Manufacturer Information :

Manufacturer Name : Volvo Car USA LLC
Address : 315 Sigma Drive
Summerville SC 29486
Company phone : 6177846027

Population :

Number of potentially involved : 34,006
Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2016-2016 Volvo XC90
Vehicle Type : LIGHT VEHICLES
Body Style : ALL
Power Train : GAS
Descriptive Information : Start of production XC90 Model Year 2016.
Deviating part
Bleeder hose in PA6.12 material.

Improved part
Bleeder hose in a more heat resistant material, PPS.
U.S eligible vehicle total is 34,006
Production Dates : AUG 27, 2014 - APR 24, 2016
VIN Range 1 : Begin : YV1LCA2BCG1000202 End : YV1LFBABDG1095355 ☑ Not sequential

Description of Defect :

Description of the Defect : Volvo has identified that the coolant bleeder hose (engine side) may degrade over time and crack due to heat and humidity load. This condition can create a coolant leak, and also pose a risk of coolant leaking on the catalytic converter.
FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : If the coolant leak goes unnoticed, coolant may accumulate in the catalytic converter heatshield insulation and, in a worst case scenario, over time this might result in a fire in the engine compartment area when the vehicle is stationary.
Description of the Cause : Volvo has identified that the coolant bleeder hose (engine side) may degrade over time and crack due to heat and humidity load.
Identification of Any Warning : If a leakage occurs one of the below DIM messages could be shown depending

that can Occur : on situation.

1. Low coolant level warning
2. High temperature warning from Coolant Temperature Sensor

If vehicle is left unattended, traces of leaked coolant liquid could potentially be noticed on the ground under the vehicle after the vehicle has been moved.
Risk for coolant leakage on catalyst. If the coolant leakage goes unnoticed, coolant may accumulate in catalyst heatshield insulation and, in the worst case scenario, over time this might result in a fire when the vehicle is stationary.
Volvo Cars centrally has not received any reports alleging injuries, fatalities, or crashes related to this condition.

Supplier Identification :

Component Manufacturer

Name : AD6HC, Teklas Bulgaria
Address : Industrialna Zona Jug
BG 6600, GR.KARDZHALI FOREIGN STATES
Country : Bulgaria

Chronology :

The 14th of September 2018 Volvo Car Corporation received five Vehicle reports with regards to a thermal event in the engine bay area.Preparations started by the analyse team at Volvo Cars, the team arrived in Los Angeles 19th of September. First analysis on site shown melted components but didn't reveal the reason behind it. Decision was made to ship one engine to Skövde Engine Plant (SkEP) in Sweden for further analysis.
One more thermal event vehicle report was reported in late September with similar symptoms.
Several sources for leakage were investigated. Heat sources for igniting any potential leakages was investigated, no issues was found on the concerned vehicles however an answer from Thermo department at Volvo Cars stating temperatures on the catalytic converter heat shield could reach appr 600°C. No obvious flammable liquid in the area surrounding the catalytic converter was found. Root cause focus was moved to crank shaft ventilation hoses and potential petrol leakages.
Two thermal events vehicle reports with similar symptom reported in November.The engine analysis at SkEP was finished in the beginning of November and no fault was found on the engine. Volvo Cars received three thermal events vehicle reports in December. Petrol hoses from customer cars arrived at Volvo Cars and the analysis of the hoses started in the beginning of December. The team travelled to US once more in the middle of December to perform further analysis on another vehicle displaying similar symptoms. No fault was found on the petrol hoses when the analysis was finished in the end of December and a decision was made to send the catalytic converter from SkEP to Volvo Cars for analysis.
In January 2019 additional three vehicles was reported with similar thermal events.
Root cause analysis ongoing and in the end of March it was concluded that coolant could reach the catalytic converter, due to degrading material in the coolant bleeder hose located in engine compartment.

Description of Remedy :

Description of Remedy Program :	The corrective action is to replace the engine side coolant bleeder hose. Vehicle owners will receive an owner notification letter by 06/14/19. The letter will include reimbursement information instructions if an owner has paid for this repair.
How Remedy Component Differs from Recalled Component :	Current hose in material Polyamide (PA6.12) may degrade over time and crack due to heat and humidity load. Implementation of new hose with a more heat resistant material Polyphenylene Sulfide (PPS).
Identify How/When Recall Condition was Corrected in Production :	Implementation of new hose with a more heat resistant material Polyphenylene Sulfide (PPS).

Recall Schedule :

Description of Recall Schedule :	Volvo has a target owner notification completion date of 6/14/19.
Planned Dealer Notification Date :	APR 17, 2019 - APR 17, 2019
Planned Owner Notification Date :	JUN 14, 2019 - JUN 14, 2019

* NR - Not Reported