OMB Control No.: 2127-0004

Part 573 Safety Recall Report

23V-188

Manufacturer Name: Volvo Car USA, LLC

Submission Date: MAR 22, 2023 NHTSA Recall No.: 23V-188 Manufacturer Recall No.: R10225



Manufacturer Information:

Manufacturer Name: Volvo Car USA, LLC

Address: 270 Three Point Drive

Ridgeville SC 29472

Company phone: 201-768-7300

Population:

Number of potentially involved: 329 Estimated percentage with defect: 100 %

Vehicle Information:

Vehicle 1: 2023-2023 Volvo S60 Vehicle Type: LIGHT VEHICLES

Body Style: 4-DOOR

Power Train: HYBRID ELECTRIC

Descriptive Information: The recall population is determined by the Introduction of a new Telematics and

Connectivity Antenna Module (TCAM) diagnostics to monitor the state of the premium audio system and its availability during an ongoing emergency assistance call which was introduced Monday, February 20th. The new Software was introduced Monday, March 20th. Recall products differ from products not included in the recall with new introduced software. This recall affects Model Year 2023 S60, V60CC, XC60,

XC90, XC40 and C40 vehicles.

Production Dates: AUG 26, 2022 - MAR 08, 2023

VIN Range 1: Begin: 7JRH60FA4PG252399 End: 7JRL12TX8PG252371 ✓ Not sequential

Vehicle 2: 2023-2023 Volvo V60CC

Vehicle Type: LIGHT VEHICLES
Body Style: STATIONWAGON
Power Train: HYBRID ELECTRIC

Descriptive Information: The recall population is determined by the Introduction of a new Telematics and

Connectivity Antenna Module (TCAM) diagnostics to monitor the state of the premium audio system and its availability during an ongoing emergency assistance call which was introduced Monday, February 20th. The new Software was introduced Monday, March 20th. Recall products differ from products not included in the recall with new introduced software. This recall affects Model Year 2023 S60, V60CC, XC60,

XC90, XC40 and C40 vehicles.

Production Dates: NOV 15, 2022 - NOV 15, 2022

VIN Range 1:Begin: YV4L12WZXP2108259 End: YV4L12WZXP2108259 ✓ Not sequential

Vehicle 3: 2023-2023 Volvo XC60

Vehicle Type: LIGHT VEHICLES

Body Style: SUV

Power Train: HYBRID ELECTRIC

Descriptive Information: The recall population is determined by the Introduction of a new Telematics and

Connectivity Antenna Module (TCAM) diagnostics to monitor the state of the premium audio system and its availability during an ongoing emergency assistance call which was introduced Monday, February 20th. The new Software was introduced Monday, March 20th. Recall products differ from products not included in the recall with new introduced software. This recall affects Model Year 2023 S60, V60CC, XC60,

XC90, XC40 and C40 vehicles.

Production Dates: JUN 07, 2022 - MAR 10, 2023

VIN Range 1: Begin: YV4H60DA9P1252724 End: YV4L12RNXP1352590 ✓ Not sequential

Vehicle 4: 2023-2023 Volvo XC90

Vehicle Type: LIGHT VEHICLES

Body Style: SUV

Power Train: HYBRID ELECTRIC

Descriptive Information: The recall population is determined by the Introduction of a new Telematics and

Connectivity Antenna Module (TCAM) diagnostics to monitor the state of the premium audio system and its availability during an ongoing emergency assistance call which was introduced Monday, February 20th. The new Software was introduced Monday, March 20th. Recall products differ from products not included in the recall with new introduced software. This recall affects Model Year 2023 S60, V60CC, XC60,

XC90, XC40 and C40 vehicles.

Production Dates: JUN 13, 2022 - MAR 10, 2023

VIN Range 1: Begin: YV4062PA3P1909327 End: YV4L12PN4P1976355 ✓ Not sequential

Vehicle 5: 2023-2023 Volvo XC40

Vehicle Type: LIGHT VEHICLES

Body Style: 4-DOOR

Power Train: HYBRID ELECTRIC

Descriptive Information: The recall population is determined by the Introduction of a new Telematics and

Connectivity Antenna Module (TCAM) diagnostics to monitor the state of the premium audio system and its availability during an ongoing emergency assistance call which was introduced Monday, February 20th. The new Software was introduced Monday, March 20th. Recall products differ from products not included in the recall with new introduced software. This recall affects Model Year 2023 S60, V60CC, XC60,

XC90, XC40 and C40 vehicles.

Production Dates: DEC 22, 2022 - MAR 09, 2023

VIN Range 1: Begin: YV4K92HK5P2916796 End: YV4L12UX2P2937683 ✓ Not sequential

Vehicle 6: 2023-2023 Volvo C40 Vehicle Type: LIGHT VEHICLES

Body Style: 4-DOOR

Power Train: HYBRID ELECTRIC

Descriptive Information: The recall population is determined by the Introduction of a new Telematics and

Connectivity Antenna Module (TCAM) diagnostics to monitor the state of the premium audio system and its availability during an ongoing emergency assistance call which was introduced Monday, February 20th. The new Software was introduced Monday, March 20th. Recall products differ from products not included in the recall with new introduced software. This recall affects Model Year 2023 S60, V60CC, XC60,

XC90, XC40 and C40 vehicles.

Production Dates: JAN 12, 2023 - MAR 08, 2023

VIN Range 1: Begin: YV4ED3GM6P2050689 End: YV4ED3GM6P2050689 ✓ Not sequential

Description of Defect:

Description of the Defect: Falsely set (misdetection) Diagnostic Trouble Codes (DTC), no actual loss of

expected functions. If there is an actual issue in the e-call system, the driver will not get any extra warning other than the already displayed message.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: If there is an actual issue in the e-Call system, the driver will not get any extra

warning other than the already displayed false message, increasing the risk of

no emergency response.

Description of the Cause: During a software download on the Telematics and Connectivity Antenna

Module (TCAM), the TCAM mis-detects a communication failure towards the Infotainment Head Unit (IHU), and sets a Diagnostic Trouble Code (DTC), and "e-call service required" on the Driver Information Module (DIM). The IHU DTC evaluation may fail due to diagnostic error, a DTC is set and "e-call service

required" on DIM.

Identification of Any Warning Driver Information Module (DIM) message stating "eCall service required."

that can Occur:

Involved Components:

Component Name 1: Software in the TCAM

Component Description: Telematics and Connectivity Antenna Module (TCAM)

Component Part Number: NR

Supplier Identification:

Component Manufacturer

Name: Volvo Car Corporration Address: Gunnar Engellaus Väg 8

Gothenburg Foreign States 418 78

Country: Sweden

Chronology:

Considered as a critical concern by Critical Concern Management Team 2023.03.17; Field Service Action decision confirmed by Volvo Car Corporation 2023.03.20; Condition detected by Market; Number of Vehicle Reports with the condition, reported to Volvo Cars from National Sales Company 1; Total number of cars included in Vehicle Reports concerning the condition 1; Implementation date of Field Service Action 2023.03.21. Extended Chronology: 11th of March Volvo cars received the first report indicating issues with a DIM message related to the e-Call system. An investigation was immediately initiated to review the customer symptom and a possible root cause. The investigation was escalated to the Critical Concern Action Process (CCAP). The issue was concluded as potentially critical and the Critical Concern Management Team (CCMT) initiated a technical investigation to conclude customer symptom, risk assessment, testing, root cause etc. On the 17th of March the technical investigation was completed, the CCMT team took the decision to start preparation for a recall as it was judged as an increased risk towards motor vehicle safety.

Description of Remedy:

Description of Remedy Program: To remedy concerned vehicles Volvo Cars will update the vehicle's

software with a new logic in the TCAM.

How Remedy Component Differs Software update for TCAM. The diagnostic test case logic has been updated

from Recalled Component: so it will not display the fault message.

Identify How/When Recall Condition New Software was introduced on March 20th, 2023.

was Corrected in Production:

Recall Schedule:

Description of Recall Schedule: Remedy Notices

Planned Dealer Notification Date: MAR 22, 2023 - MAR 22, 2023 Planned Owner Notification Date: MAY 16, 2023 - MAY 16, 2023

* NR - Not Reported