

# Technical Journal

TITLE:

**“eCall Service Required” message, Back-up battery DTC TCAM-U210993**

|  |   |  |                                   |
|--|---|--|-----------------------------------|
| <b>REF NO:</b><br>TJ 35808.1.3             | <b>ISSUING DEPARTMENT:</b><br>Technical Service | <b>CAR MARKET:</b><br>United States and Canada |                                   |
| <b>PARTNER:</b><br>3 US 7510 Volvo Car USA |   | <b>ISSUE DATE:</b><br>2022-05-06               | <b>STATUS DATE:</b><br>2022-05-06 |
| <b>FUNC GROUP:</b><br>3943                 | <b>FUNC DESC:</b><br>Telematics                 | Page 1 of 5                                    |                                   |

**“Right first time in Time”**

## Attachment

| File Name            | File Size |
|----------------------|-----------|
| TJ35808BUB.jpg       | 0.1558 MB |
| TJ35808BUB RESET.jpg | 0.2018 MB |

Rows beginning with \* are modified

Note! If using a printed copy of this Technical Journal, first check for the latest online version.

## DESCRIPTION:

\*Added new labor op.

Vehicle types added

Alternative BUB charging method added

If there is a warning message in the DIM and CCD about “eCall service required” together with DTC TCAM-U210993 pointing out the BUB, please follow the procedure under “Service”.

DIM = Driver Information Module

CCD = Center Console Display

BUB = Backup Battery

TCAM = Telematic Connectivity Antenna Module

SOC = State Of Charge

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## CSC Customer Symptom Codes

| Code | Description  |
|------|--|
| 6K   | Mobile app Volvo Cars/Activation problems          |
| 6N   | Mobile app Volvo Cars/Other communication problems |
| JG   | Volvo On Call/Other Volvo On Call problems         |
| KY   | Volvo On Call/Does not work                        |

## DTC Diagnostic Trouble Codes

### Vehicle Type

| Type | Eng | Eng Desc | Sales | Body | Gear | Steer | Model Year | Plant | Chassis range | Struc Week Range |
|------|-----|----------|-------|------|------|-------|------------|-------|---------------|------------------|
| 235  |     |          |       |      |      |       | 2022-9999  |       | -             | 202122-999952    |
| 236  |     |          |       |      |      |       | 2022-9999  |       | -             | 202122-999952    |
| 238  |     |          |       |      |      |       | 2022-9999  |       | -             | 202122-999952    |
| 246  |     |          |       |      |      |       | 2022-9999  |       | -             | 202122-999952    |
| 536  | ED  | E400V6   |       |      |      |       | 2021-9999  |       | -             | 202037-999952    |
| 539  |     |          |       |      |      |       | 2022-2022  |       | -             | 202122-999952    |

### SERVICE:

If the message together with the DTC is confirmed, the cause may be a discharged BUB.

Do not replace the BUB, first check if it is possible to charge it.

VIDA has been updated with a new method that allows charging of the BUB.

Begin by ensuring that the vehicle software is the latest (refer to TJ 31543)

VIDA charging method:

- A 12 volt battery maintainer must be connected to the vehicle throughout the BUB charging procedure.
- Gear selector must be in P - Park.
- If BUB SoC is 1% or greater, charge the BUB using the VIDA script, see attachment *TJ35602BUB*.
- BUB will charge by ~5% SOC per hour, charge the BUB up to minimum 45% SOC. (After charging is stopped the BUB SOC may drop slightly)
- If “*eCall Service Required*” is still shown in the DIM, then go to “SW Installation” tab in VIDA, click on “Advanced test” and click on “Reset”
- Once reset has completed, Erase DTCs.

If the DTC is set again then charge the BUB to above 50% SOC.

The BUB will then be continuously charged while the vehicle is driven.

**NOTE:**

If BUB SOC is 0% (below 2 Volt) it is not possible to charge the BUB and it needs to be replaced, see VIDA instruction VCC-516696-1.

After replacement the BUB SOC must be reset by using a VIDA script, see attachment *TJ35808BUB RESET.jpg*.

**Information:** A low or depleted 12v battery can cause the BuB to be discharged.

**\*Alternative method to charge the BuB using an external battery charger:**

- It is possible to charge the BuB outside the vehicle using a universal battery charger similar to ones used to charge radio-controlled device batteries. The charger should be suitable for a 1-cell lithium-ion (Li-ion) battery and supply 4V max and 1A, max. The charger should also have temperature control as the battery temperature must not exceed 60°C / 140°F during charging.

- To make an adapter harness to connect a charger to the BuB, the following parts are needed:

31450330 RECEPTACLE HOUSING (1x)

30656678 REPAIR TERMINAL (2x)

Connect the terminals as follows:

Pin 1 - Positive

Pin 4 - Negative

**Warranty claim info:**

To get warranty claim accepted for a job described in this TJ, please use following data:

VST OP number: 36050-2, 39753-2.

**VST Operation Number**

| VST Operation Number | Description                                |
|----------------------|--|
| 09805                | Recharging Backup Battery acc. to TJ 35808 |

**VEHICLE REPORT:**

Yes, please submit a Vehicle Report if the service solution described in this TJ has no effect. Use concern area “Vehicle Report” and sub concern area “Support not needed”, use function group 3943.

**To view TJ attachments continue to next page. This TJ has two attachments.**

# Technical Journal 35808.1.3



VIN: YV1XZEDVEM2494206

Customer Name:

Model/Year/Cha...: XC40, 2021, 494206

| Lists                      | Documents   | Diagnostic Sequences |
|----------------------------|---|----------------------|
| <b>Planning</b>            | <b>Diagnostic Sequences</b>   |                      |
| Customer Symptom Codes     | 12 V power overview   |                      |
| Claim Types                | Activate the telematics function in VCM                               |                      |
| Technical Journals         | Battery diagnostic information  |                      |
| Service Programs           | Calibration of Forward Looking Camera (FLC2)                          |                      |
| Operations and Packages    | Calibration of Forward Looking Radar (FLR)                            |                      |
| Parts                      | Charging the TCAM backup battery <b>2</b>                             |                      |
| Software                   | Clear Stand Still Manager from Factory Mode                           |                      |
| <b>Diagnostics</b>         | High voltage system, overview   |                      |
| Network                    | Infotainment Head Unit (IHU) private locking pin code reset           |                      |
| Fault Tracing              | Normal mode and vehicle speed limitation                              |                      |
| Components                 | Parking brake service position  |                      |
| Service Functions <b>1</b> | Program the service conditions in the Driver Information Module (DIM) |                      |
|                            | Read-out distance, time and engine time since last service            |                      |

**TJ-35808**

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VIN: YV1XZEDVEM2494206

Customer Name:

Model/Year/Cha...: XC40, 2021, 494206

|                            |   |                      |
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| <b>Lists</b>               | Documents   | Diagnostic Sequences |
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| Customer Symptom Codes     | Battery diagnostic information  |                      |
| Claim Types                | Calibration of Forward Looking Camera (FLC2)                          |                      |
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| Service Programs           | Charging the TCAM backup battery                                      |                      |
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| <b>Diagnostics</b>         | Normal mode and vehicle speed limitation                              |                      |
| Network                    | Parking brake service position  |                      |
| Fault Tracing              | Program the service conditions in the Driver Information Module (DIM) |                      |
| Components                 | Read-out distance, time and engine time since last service            |                      |
| Service Functions <b>1</b> | Read-out of the service conditions                                    |                      |
|                            | Reset DTCs in Steering Column Lock (SCL)                              |                      |
|                            | Reset iTPMS calibration data and relevant DTCs                        |                      |
|                            | Reset the Infotainment Head Unit (IHU) to factory settings            |                      |
|                            | Reset the service reminder indicator (SRI)                            |                      |
|                            | Resetting of long term wheel angle compensation                       |                      |
|                            | Resetting software after TCAM backup battery change <b>2</b>          | <b>TJ-35808</b>      |