



## Volvo Car USA LLC

## Technical Journal

Technical Journal Title ICUP Vehicles, 12V battery drain - Upgrade Software to V2.9 or later		Ref. No. TJ 36189.2.2	
Issuer (Dept.) Technical Service		Issue Date 5/17/23	Status Date 5/24/23
Car Market United States and Canada	Partner 3 US 7510 Volvo Car USA	Function Group 3111	
Function Description Battery, complete		Page Page 1 of 3	

Rows beginning with \* are modified

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

### DESCRIPTION:

If the customer experiences any of the following symptoms, please see advice under “Service”.

- Vehicle intermittently cannot start.
- Vehicle intermittently cannot unlock.
- The vehicle’s engine “Start/Stop” function does not work (engine runs continuously while stopped).
- Vehicle has DIM message stating “Battery Low Warning”
- The vehicle has a depleted battery and/or extended Quiscent current has been determined.

DIM = Driver information Module

BEV = Battery Electric Vehicle

CSC = Customer Symptom Code

### CSC Customer Symptom Codes

Code	Description
71	Starting/Vehicle start-up is not possible
7B	Starting/Engine does not start/Engine does not turn/No clicking sound at start attempt
LM	12 V main battery/Dead battery
LN	12 V main battery/Weak or low electrical power

### DTC Diagnostic Trouble Codes

#### Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
234							2022-9999		-	202122-999952
236							2022-9999		-	202122-999952
238							2022-9999		-	202122-999952
246							2022-9999		-	202122-999952
256							2022-9999		-	202122-999952
536							2022-9999		-	202122-999952
539							2022-9999		-	202139-999952

**SERVICE:**

**\*Make sure that the vehicle is on V2.9 Software or later, which is available in VIDA beginning 2023w20d1, and charge the battery if needed.**

**Attention: Do not disconnect the 12V battery prior to fault tracing. Perform analysis swiftly upon battery drainage, as symptom may disappear over time.**

- If the vehicle has been unlocked at any time during the last 48hrs and has a quiescent current of ~30-50mA, this can be considered normal.
- Measure quiescent current using the method located in VIDA with a clamp-type amp meter ~10 minutes after locking the vehicle. (NOTE: BEV vehicles wake up once every hour to charge the 12v battery. This is normal behavior)
- Use the “Quiescent current in control modules” method in VIDA to identify a fuse or a circuit with a high quiescent current. To locate the “Quiescent current in control modules” method in VIDA do the following:
  1. After vehicle Read out completes, use CSC Fault tracing for CSC LM: “12 V main battery, Dead battery” and Function “Electrical distribution: 12V system”
    - Add the CSC to a Work List and then select Guidance to take you to guided fault tracing
  2. In the Component and Actions list, locate “Quiescent current in control modules” and follow the procedure outlined in there.

When the fuse/circuit has been identified, please note the “Current” value. Submit the value in a Vehicle Report outlining the complete fault tracing that has been performed. Use guidelines under Vehicle Report to create the report.

**NOTE: This TJ is for information collection/reporting only. Do not replace any components. If technical assistance is required, contact Retailer Technical Support following the guidelines under “Vehicle Report.”**

**Warranty claim info:**

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

VST OP number: 09806, use CSC LM

**A TIE Vehicle Report number is required. See below for instructions.**

**VST** Operation Number

VST Operation Number	Description
09806	Diag according to TJ 36189 (1.2hr)

**VEHICLE REPORT:**

If additional fault tracing support is NOT required:

Please submit a Vehicle Report if the quiescent current is above 50mA. Use concern area "Vehicle Report" and sub concern area "Support **not** needed", use function group 3111. Reference "*TJ36189*" in the title. Include the information collected above.

If additional fault tracing support is needed:

Please submit a Vehicle Report including all diagnostic information collected. Use concern area "Vehicle Report" and sub concern area "Support needed", use function group 3111.