VOLVO CAR
SERVICE AND PARTS BUSINESS

Technical Journal

TITLE:

12V Battery Test Methods

REF NO:	ISSUING DEPARTMENT:	CAR MARKET:	
TJ 26745.13.8	Technical Service	United States and Canada	
PARTNER:		ISSUE DATE:	STATUS DATE:
3 US 7510 Volvo Car USA		2020-09-11	2020-10-09
FUNC GROUP:	FUNC DESC:	Page 1 of 5	
3110	Battery		

“Right first time in Time”

Attachment

File Name	File Size
TJ 26745_ Support Battery SN.pdf	1.1381 MB
TJ 26745_Main Battery SN.pdf	1.3918 MB

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
124							2007-9999		0000001-9999999	200620-999951
134							2011-9999		0000001-9999999	201020-999951
135							2008-9999		0000001-9999999	200720-999951
136							2008-9999		0000001-9999999	200720-999951
137							2016-9999		0000001-9999999	201524-999951
138							2014-9999		0000001-9999999	201345-999951
155							2011-9999		0000001-9999999	201020-999951
156							2009-9999		0000001-9999999	200820-999951
157							2014-9999		0000001-9999999	201420-999951
224							2019-9999		0000001-9999999	201835-999951
225							2019-9999		0000001-9999999	201817-999951
234							2017-2017		0000001-9999999	201617-999951
235							2017-9999		0000001-9999999	201624-999951
236							2017-9999		0000001-9999999	201646-999951
238							2018-9999		0000001-9999999	201646-999951
246							2018-9999		0000001-9999999	201746-999951

Produced in the USA and available as an electronic document. Hard copy documents are printed in USA on recycled paper containing a minimum of 50% wastepaper and 10% post-consumer waste.
© 2020 VOLVO CAR USA, LLC

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
256							2016-9999		0000001-9999999	201505-999951
536							2019-9999		0000001-9999999	201746-999951

CSC Customer Symptom Codes

Code	Description
7B	Starting/Engine does not start/Engine does not turn/No clicking sound at start attempt
AA	Starting/Engine does not start/Engine turns
AB	Starting/Engine hard to start/cranks slowly/Unsure when/at all times
AC	Starting/Engine hard to start/cranks slowly/After use
AD	Starting/Engine hard to start/cranks slowly/Cold start
BE	Starting/Engine does not start/Engine does not turn/Unsure when/at all times
BF	Starting/Engine does not start/Engine does not turn/Clicking sound at start attempt
BJ	Starting/Engine does not start/Unsure when/at all times
LM	Battery/Dead battery
LN	Battery/Weak or low electrical power
6J	Text window and warning symbol/Low battery

VST Operation Number

VST Operation Number	Description
31122-2	Battery condition check
31102-3	Battery replace

DTC Diagnostic Trouble Codes

Rows beginning with * are modified
Note! If using a printed copy of this Technical Journal, first check for the latest online version.

DESCRIPTION:
*Testing methods updated

*Serial number requirements changed

To better reflect the features of the Battery Monitoring Sensor and related battery systems on P3, SPA (Scalable Platform Architecture) and CMA (Compact Modular Architecture), the guidelines for a battery check have changed.

As a good workshop practice and to improve customer satisfaction a battery charger/maintainer should be connected to the charging posts in engine compartment while performing a schedule maintenance event or any other service/warranty related visit.

Note: Be sure that charger is configured for the correct type of battery. Refer to the Volvo label on the top of the battery for type information. AGM (absorbent glass mat)-type batteries will have this clearly indicated. All other Volvo-labeled batteries can be considered “Regular Liquid” lead-acid batteries.

AGM-type batteries are very sensitive to charging conditions:
A charging voltage of 13.6v is preferred. Charging voltage MUST NOT exceed 14.4v.
Charge current into battery should not exceed 25 amps. Midtronics MSP-070 should never be set to 14.4v with AGM batteries.

Exceeding the recommended charging voltage or current can permanently damage the battery.

***Main Battery Testing: SPA/CMA vehicles only**

A new battery diagnostic sequence has been implemented in VIDA that can be used for any situation where the vehicle battery needs to be checked. This includes situations with a customer complaint and general maintenance check-ups.

The sequence can be found by following CSC fault tracing for *"Electrical distribution: 12V System"*

This new sequence will evaluate the battery condition based on long term data measured by the vehicle's on-board battery diagnostics. If a deeper analysis of the battery is needed or if the battery is suspected to be faulty, VIDA will guide the technician through the testing procedure and provide a warranty authorization code should the battery need to be replaced.

***Main Battery Testing: All other vehicles + Support Battery Testing, ALL Vehicles**

The handheld battery tester (9513030/BT3300) should be used for testing main batteries on all non SPA/CMA vehicles and for testing support batteries on ALL vehicles

- Before testing battery, read out the vehicle with VIDA to ensure that there are no current issues causing battery drain.

- Please follow normal CSC-based fault-tracing to determine if battery testing is needed.

Note: The hand held battery tester must be set to test the appropriate type of battery: If the Volvo label on top of the battery indicates "AGM", then the "AGM Flat-Plate" setting should be selected. All others should use the "Regular Liquid" setting.

The tester should also be set to the "EN" (European Normal) rating scale as indicated on the Volvo label.

The handheld tester must ALWAYS be connected directly to the battery terminals for testing. Connecting the negative clamp to a grounding point is not acceptable.

***Warranty Claims:**

Battery tests and replacements will be covered under the New Car Warranty (01) when the vehicle is still under Warranty, there is a demonstrable, warrantable defect and the results of the above testing determine that replacement is necessary.

Authorization codes generated by the BT3300 tester will no longer be accepted for Main Battery replacements on SPA and CMA vehicles.

The battery code retrieved must be provided in the repair text (refer to SMB 00-428 for repair text requirements).

* The serial number of the old and new batteries are also required to be included in the repair text *for all batteries*. See the attachments for reference/location of the serial numbers. If there is a serial number in both locations, use the number that is on the top of the battery.

The authorization code from the battery test must also be printed and attached to the hard copy of the repair order.

***VSTG OPERATION NUMBERS:**
31122-2 Battery condition check
31102-3 Battery replace

SERVICE:
N/A

VEHICLE REPORT:
N/A

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

VOLVO

TJ 26745

VOLVO

TJ 26745