



# Technical Journal

TITLE:

**12V Battery Test Methods**

<b>REF NO:</b> TJ 26745.13.5	<b>ISSUING DEPARTMENT:</b> Technical Service	<b>CAR MARKET:</b> United States and Canada	
<b>PARTNER:</b> 3 US 7510 Volvo Car USA		<b>ISSUE DATE:</b> 2020-05-06	<b>STATUS DATE:</b> 2020-06-22
<b>FUNC GROUP:</b> 3110	<b>FUNC DESC:</b> Battery	Page 1 of 5	

“Right first time in Time”

## Attachment

File Name	File Size
Serial Number.jpg	0.1417 MB
Serial Number 2.jpg	1.2810 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



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.

## Text

### DESCRIPTION:

\*Removed check for state of charge, added new guidelines for all service visits, **added new procedures for warranty replacements**

\*Removed VIDA test; VIDA test is currently under review.

\*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 AGM (absorbent glass mat)-type batteries. 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.

\*The hand held battery tester 9513030 (BT3300) should be reserved for situations with customer complaints related to the battery only.

### **Battery check on SPA/CMA/P3 vehicle without a battery-related customer complaint:**

The Battery Monitoring Sensor and related battery systems on P3, SPA, and CMA vehicles are sufficient to monitor for pending battery faults, therefore no battery testing with VIDA or battery tester 9513030 (BT3300) is needed unless a warning message on the Drivers Information Module (DIM) is displayed.

### **Battery test on vehicles with a battery-related complaint (e.g. start-stop inop, 12v battery warning messages)**

\*Before testing battery, read out 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.

\*Complaint 12V batteries may be tested using hand held battery tester 9513030 (BT3300).

Note: The hand held battery tester must be set to “AGM Flat-Plate” and connected directly to the battery terminals when installed in the vehicle.

**\*Connection to the charging posts is not acceptable.**

**\*For battery replacements under warranty,** the code generated by the tool used must be manually copied into the repair order text.

\*Serial number of the old and new batteries must be included in the repair order text.

\*Vehicle must be read out with VIDA prior to battery replacement.

\*Battery code 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.**



