

Malfunction of additional battery in IC and fault code B11C11B in CBC (SAM) N10

Topic number	LI54.10-P-064158
Version	5
Design group	54.10 Battery, power supply, voltage converter
Date	01-10-2017
Validity	Model series 176, 246, 242, 166 with facelift and not code 4U7 Model series 117, 156 with production date later than August 2014
Reason for change	Remedy updated
Reason for block	

Complaint:

Combination message: Malfunction in additional battery in instrument cluster

Warning message in white

- If fault code B11C11B in the CBC (SAM) N10 is Current and Stored, please work through the guided tests for the fault code.

- If fault code B11C11B in the CBC (SAM) N10 is only Stored, please request the following information listed in Cause section:

Cause:

How frequently was/is the fault message shown?

Does the fault occur after an extended idle period?

Does the fault also occur during brief stops (refueling stop...)?

At which temperatures does this fault occur?

Which driving profile does the customer have (short routes, long routes, city, intercity)?

Please perform following tests:

- Fully charge additional battery
- Open resistance measurement in Xentry G1/13
- Start engine
- Wait until diagnosis has determined internal resistance value
- Make screenshot of Xentry screen

XENTRY TIPS

- Measure 10 times (incl. engine start)

Perform the following tests for the line resistance (an accurate measuring instrument is important):

Using the wiring diagram PE15.00-P-2103IAA

- Check resistance from F34 connector P1 pin 13 via the Z-sleeve Z105/1z1 to connector B2 pin 11 and connector B2 pin 42 of the CBC (SAM) N10.

- Also check the line from the additional battery G1/13 to S9/ F34.

Attachments	
File	Description
Stg Variante.JPG	Control unit variant

Remedy:

There are various remedies for this fault profile:

1st option: additional battery

In all 10 tests the additional battery has an internal resistance greater than 100 mohm.

Damage code 54027_73

2nd option: Increased line resistance of SAM test line

In all 10 tests the additional battery has an internal resistance between 50 mohm and 80 mohm.

The test of the line resistance returns a value greater than 40 mohm.

Determine the cause of the increased resistance in the wiring harness and repair using the wiring harness repair methods - see WIS document AR00.19-P-0100A.

Damage code 51080_74

3rd option: Test current fault of CBC (SAM) N10

- Note: Exclusively affects vehicles with control unit variant "CBC_Rel30" - see attachment "Control unit version".

In all 10 tests, the additional battery has an internal resistance between 20 mohm and 35 mohm.

CBC (SAM) N10 should be replaced. OK parts not available until March 1, 2017 onwards.

Damage code 5452E_FR

Symptoms
Overall vehicle / Power supply / Battery/On-board electrical system / Battery/on-board electrical system display message / Backup battery fault