



This Service Information bulletin supersedes SI B61 02 11 **dated March 2012.**

NEW designates changes to this revision

SUBJECT

Advanced Onboard Battery Diagnostics

MODEL

NEW F01, F02 produced from 9/2010

NEW F02H

NEW F10

NEW F20H

NEW F25

NEW F07 produced from 9/2010

NEW F12

NEW F13

NEW F30

NEW F30H

INFORMATION

Starting with the introduction of the F10 (5 Series), an advanced intelligent battery sensor has been used. This now makes it possible for the vehicle to monitor the condition of the battery in order to determine if the battery needs to be recharged or replaced, along with the remaining capacity of the battery. The analysis and testing of the battery's SoC (State of Charge) and SoH (State of Health) is now performed using ISTA (Integrated Service Technical Application) diagnosis.

NEW A separate test using a battery tester is no longer needed.

PROCEDURE

In order to properly test the battery, follow the procedure as outlined below.

1. Perform a vehicle test and identify any power management faults stored in the vehicle.

If the battery is faulty, one of the following fault codes will be stored in the DME:

- o 213B01 - Power Management, battery condition: Battery faulty

- 213B08 - Power Management, battery condition: Battery faulty
- 29B500 - Power Management, battery condition: Battery faulty
- **NEW** S0121- Power Management, battery condition: Battery faulty

If no faults are stored, continue to step 4.

2. Complete the test plans that are linked to the faults and follow the test plan recommendations. This includes the test plan “AT6121_FZGBATT – Battery Status” and “AT6100_END_L6 –Energy Diagnosis”. Refer to [SI B61 13 05](#) and ISTA functional description documents for additional information on energy diagnosis. If the battery needs replacement, the test plans will prompt to “Install the following component: Battery” and supply the DAIGCODE.

Note: On vehicles prior to July 2010, the IBS (Intelligent Battery Sensor) can lead to erroneous readings. The test plan “AT6121_FZGBATT – Battery Status” automatically reads the SW data from the IBS and prompts for the IBS to be replaced as needed. In this case, the battery should not be replaced unless prompted by the test plan.

3. After a battery replacement, the fault codes can only be cleared after the battery is registered. The battery registration can be completed using the test plan “AS6120_WECHSEL –Register battery replacement”. The test plan can be found under “*Service functions/Body/Power supply/Battery/Register battery change*”.
4. If the vehicle test does not identify any power management faults stored in the vehicle, the battery status can be checked by performing the test plan “AT6121_FZGBATT – Battery Status” using ISTA. The test plan can be found under “*Function structure/03 Body/Voltage supply/Battery/Battery condition*”. Follow the recommendations of the test plan, noting any DIAGCODES.

NEW WARRANTY INFORMATION

Not applicable.