

Battery sensor (as of 6-01-06)

Battery sensor (B95) (as of 6-01-06)

Function/location

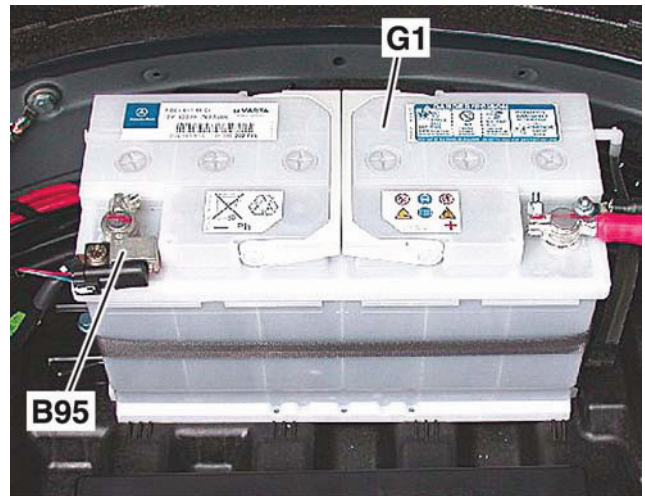
As of 6-1-06, the battery sensor (B95) together with the rear SAM control module with fuse and relay module (N10/2) manages the on-board electrical system, thus replacing the previous battery control module (N82).

Installed directly at the negative terminal of the battery, the battery sensor (B95) measures the voltage, current and battery.

Over a LIN interface the battery sensor (B95) forwards the measured values, which are used to manage the on-board electrical system, to the rear SAM control module with fuse and relay module (N10/2).

The following measures can be initiated to stabilize the on-board electrical system:

- Shutoff of consumer groups 1 and 2 (now not until 10.5 V and both simultaneously [previously emergency stage 3], no display in instrument cluster [AI])
- Shutoff of the electrical accessory socket
- Idle speed increase on shutoff of consumer group 2



B95 Battery sensor
G1 Battery



Battery sensor (as of 6-01-06)

Function/design

The battery sensor (B95) is integrated in the negative connector of the ground line at the battery (G1) itself. The measurement electronics (circuit board) in the battery sensor (B95) is mounted directly on a shunt (defined resistance). It has an extremely large measuring range (from mA values up to over 1000 A) at a high resolution. This means that it is possible to monitor rest current.

If a rest current greater than 75 mA is measured 75 mins. after the vehicle is locked, the battery sensor (B95) wakes the rear SAM control module (N10/2) and a data record is created.

This data record stores information about the magnitude of the rest current (min./max. value), the battery voltage (start/end of the event), duration (mins.) and mileage reading of the rest current event in a non-volatile memory (EEPROM), e.g. the data are preserved even if a voltage reset is carried out.

A total of 5 data records with information about the rest current event can be stored in the rear SAM control module (N10/2) and read out using DAS (accessed via "Control modules", "Body", "On-board electrical system", "Actual values").

In addition, these data records also indicate the active/inactive status for consumers such as the low beam, etc. This makes fault diagnosis easier.

