Transaction No.: 2012892/6

Release date: 27-Apr-2010



Connection offline

#### **Technical product information**

ESP warning light sporadically on

# Customer statement / workshop findings

ESP warning light sporadically on

The following points are included in the diagnosis protocol:

- The entry "53255 control unit for battery monitoring, read memory" is logged in the engine control unit (address 01)
- The entry "09783 engine torque signal A (sporadic)" is logged in the automatic gearbox (address 02)
- The entry "18265 load signal complaint message from engine control unit (sporadic)" is logged in the ABS/ESP (address 03).

## Technical background

Missing or incorrect load signal from battery energy manager (BEM) because of :

- 1. Software complaint in the BEM.
- 2. Voltage regulator/alternator incorrect.
- 3. Bit-synchronous interface between alternator and BEM incorrect.
- 4. Communication complaint to the BEM through incorrect CAN transceiver.
- 5. Current sensor in the BEM supplies incorrect values.

## Production change

- 1. Corrected software with software version from 0490
- 2. Optimised production process
- 3. Optimised production process
- 4. Improved CAN transceiver
- 5 ---

#### Measure

1. Check the software version of the BEM, update if necessary. Also observe TPI 2006741.

A6: Software version at least 0490.

A8: software version at least 0510. Note: Software versions to 0240 (A8: up to and including model year 2004) are not affected..

Q7: not affected

2. In the BEM (address 61) the message " 2252 - alternator " is logged. The following entries point to an alternator or wiring complaint: " 2479 - consumer cut-off partly active " or " 992 - consumer cut-off active."

Perform an alternator test through guided fault finding, if necessary replace voltage regulator or alternator.

- In the BEM (address 61) the message "2254 interface to the alternator: " is logged:
  Check wiring-specific contacts between alternator and BEM, it may be advisable to route a
  provisional cable for the check. Repair damaged cables or replace contacts.
- 4. If there is no entry in the diagnosis protocol for the BEM, but there are communication complaints for the BEM in other control units:

Reset terminal 30 on the BEM (disrupt the power supply at terminal 30). If this does not fix the complaint, replace the BEM. Please note that the complaint must be present for at least 10 minutes till the ESP warning light is switched on.

Note: Communication complaints are also logged with flat battery (low voltage). Make sure that the battery was not flat at the time of the complaint.

5. If there is no entry in the diagnosis protocol for the BEM and there are **no** communication complaints to the BEM in other control units:

Reset terminal 30 on the BEM (disrupt the power supply at terminal 30). Replacing the BEM does not fix the problem. Please note that the complaint must be present for at least 10 minutes till the ESP warning light is switched on.

# Warranty accounting instructions

Service number/damage code/manufacturer:

- 1. 27 08 / 0039 ...
- 2. 27 50 / 0040 ... , 27 22 /0040 ...
- 3. 97 35 ... ...
- 4. 27 08 / 0039 ...
- 5. 27 08 / 0039 ...

### **Customer information**

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