Direct starting/ ECO start/stop inoperative and fault code B21059A current and stored in CBC (front SAM)

Topic number LI54.10-P-065994

Version 4

Function group 54.10 Battery, power supply, voltage converter

Date 09-18-2017

Validity BR246, 176, 117 and 156 with code 806 and 807 from

production period 09/2015 to 08/2016

Reason for change Code 807 added

Reason for block

Complaint:

Direct starting/ ECO start/stop inoperative and fault code B21059A - "The capacity of the starter battery is too low. The operating conditions for the component or the system are not satisfied", current and stored in N10 (SAM).

Note:

Only affects vehicles with EFB wet batteries - object number A 001 982 5508, 70 Ah and A 001 982 5608, 80 Ah.

Cause:

Charge level of starter battery constantly between 55-65% SOC due to insufficient battery power, driving style and battery management.

Note:

A battery age detection function is implemented in the on-board electrical system management.

Due to inadequate battery care prior to delivery of the vehicle and certain driving profiles, premature aging of the installed EFB battery can occur.

Remedy:

Replace starter battery.

- 1) Replace EFB wet battery with AGM (fleece) battery technology See AR54.10-P-0005NKB
- 2) In VeDoc, delete the FO code 110 "EFB battery installed" and document the new object number.
- 3) Perform SCN coding of N10 (SAM) again; this is necessary for adjusting the charging characteristic.
- 4) Reset battery counter See SI54.10-P-0046A

Note:

1) AR54.10-P-0005NKB - Observe step 3.1

XENTRY TIPS

- 2) SI54.10-P-0046A Resetting the starter battery charge throughput counter.
- 3) In this special case, the Midtronics test must NOT be performed because the Midtronics test result cannot indicate the cause of the fault. This case is an absolute special case with these specific vehicles and is only to be handled with this fault code with regard to the Midtronics test; it is not applicable to other damage profiles or other vehicles. The WMR/EWMR article 04-02-020 continues to apply for all other damage types and vehicles.

The initial quick test log with corresponding fault code is to be filed in a tamperproof manner, and the fault code must be noted in the message field of the warranty claim.

Symptoms

Overall vehicle / Power supply / Battery/On-board electrical system / Battery function / Battery cannot be charged

| Control unit/fault code | | | | |
|------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------|--|--|
| Control unit | Fault code | Fault text | | |
| N10 - Signal acquisition and actuation module (SAM) (CBC-BOLERO) | B21059A | The capacity of the starter battery is too low. The operating conditions for the component or the system are not satisfied. | | |

| Parts | | | | | | |
|-----------------|-----|-----|---------------------------|----------|------|-----|
| Part number | ES1 | ES2 | Designation | Quantity | Note | EPC |
| A 001 982 80 08 | | | AGM starter battery 70 Ah | 1 | | Х |
| A 001 982 81 08 | | | AGM starter battery 80 Ah | 1 | | Х |

| Operation numbers/damage codes | | | | | | |
|--------------------------------|----------------|------|-------------|------|--|--|
| Op. no. | Operation text | Time | Damage code | Note | | |
| | | | 54001 53 | | | |

| WIS-References | | | | | | |
|-------------------|---------------------------------------------------------|---------------------|------------|--|--|--|
| Document number | Title | Note | Allocation | | | |
| AR54.10-P-0005NKB | Remove/install battery | Observe step 3.1. | Remedy | | | |
| | Resetting the starter battery charge throughput counter | Service Information | Remedy | | | |