

Xentry Battery Tester results disagree with workshop assessment

Topic number	LI54.10-P-071499
Version	3
Function group	54.10 - Battery, power supply, voltage converter
Date	3/2/23
Validity	118, 177, 247, 167, 205, 213, 217, 222, 238, 253, 257, 206, 223, 232, 243, 247, 295, 297, 463 except code U98 (LITHIUM-IONEN-STARTERBATTERIE (LISB))
Reason for change	Li now encompasses Star 3 vehicles and Midtronics test was removed from the Remedy

Complaint

The result from the XENTRY battery test does not match the current state of the battery.

Cause

The XENTRY battery tester uses the stored on-board electrical system data in the SAM module to access the health of the 12 volt battery. The XENTRY battery test may not take into account a single discharge event because the SAM or EZS cannot record the data if the battery is discharged.

Note: A discharged battery does not necessarily need to be replaced. A discharged battery may be recovered with no permanent damage.

Remedy

1) If the battery is discharged, charge the battery. Review WS54.00-P-0037B for minimum charger specifications.

- Note the amperage difference between trickle (maintainer) chargers of at least 16A and quick chargers of at least 30A.
- Review AP54.10-P-5449U. Note when battery is sufficiently charged the charger current is less 5A.

2) While charging the battery, analyze the vehicle data to determine root cause of discharge using the following data points:

For Star 2 vehicles:

-Review FSAM on-board electrical data conspicuous records

- NOTE: For guidance on use of the on-board electrical data please review the AKUBIS video titled "New on-board electrical system diagnosis shown on BR 166". The video can be accessed through WIS by following the path WSM--> content by model series --> passenger cars --> ML-Class --> Model 166 --> group 54 --> New on-board electrical system diagnosis.
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XENTRY TIPS

For Star 3 vehicles:

-Review N73/3 EZS on-board electrical data conspicuous records

- NOTE: This data can be found via EZS N73/3 -> Actual Values -> On-board electrical system -> On-board electrical system data

3) Determine if root cause is due to:

- vehicle technical issue?
- customer behavior?

NOTE: Recommend using battery analysis sheet found in XiW -> Local Contents -> Diagnostic info -> Battery Discharge Worksheet

4) If battery still does not accept charge, create a TIPS case.

-Must include with the case:

- Amperage setting of charger and time battery was on charger
- Xentry Battery Tester results
- Voltage of battery taken with multimeter: Do not connect charger while taking measurements
- N10/6 FSAM and N73/3 EZS CUL
- Workshop analysis of conspicuous data
- Root cause analysis for battery discharge based on the above documents (technical, customer, etc.)

- NOTE: For expedited results when creating a case write customer complaint as "Xentry Battery Tester implausible".

Symptoms
Overall vehicle > Power supply > Battery/On-board electrical system > Battery function > Battery discharges

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note