


Yellow warning message for 12V battery in IC, fault code B1FCB97

Topic number	LI54.10-P-076026
Version	2
Function group	54.10 - Battery, power supply, voltage converter
Date	8/19/24
Validity	Model series 223, all
Reason for change	Validity

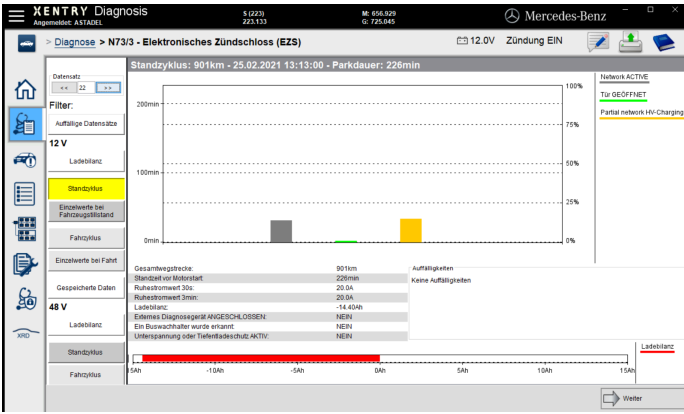
Complaint

Yellow information message in driver display (instrument cluster): "Switch on motor to charge the 12V battery"

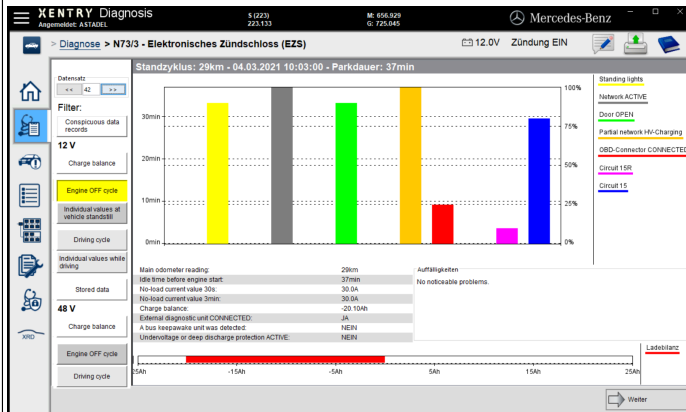
Attachments	
File	Description
12V_Meldung_223_en.jpg 	IC warning

Cause

The state of charge (SOC) of the 12V battery has dropped to 45% or less.

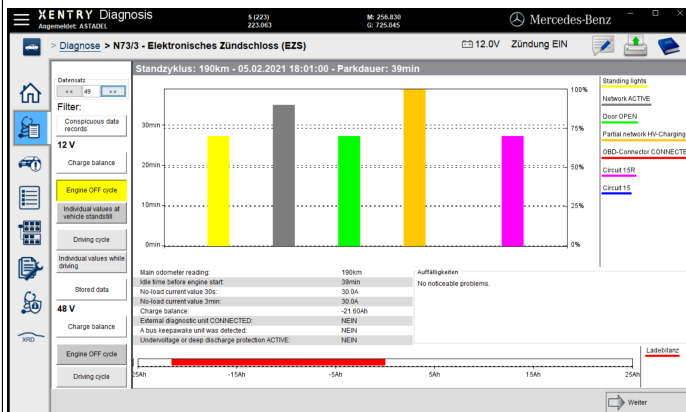
Attachments	
File	Description
1.png 	Example: Discharge due to vehicle being parked and unlocked and use of head unit (see network activity time)

2.png



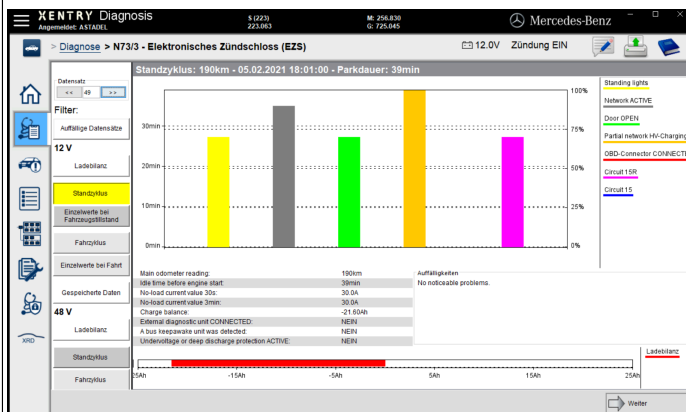
Example: Discharge during workshop operations - no charger to support on-board electrical system

3.png



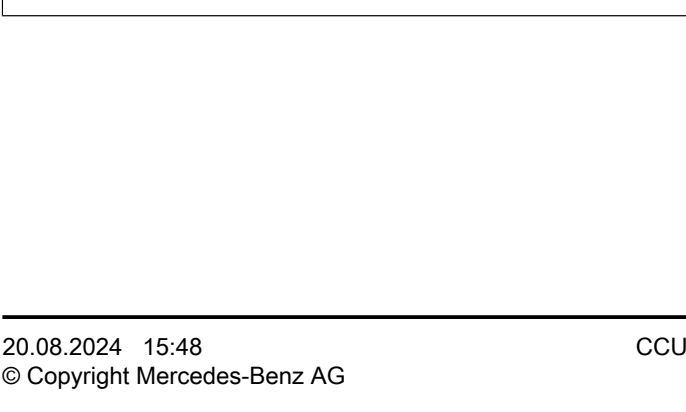
Example: Discharge due to vehicle being parked and unlocked and use of head unit (see network activity time)

4.png

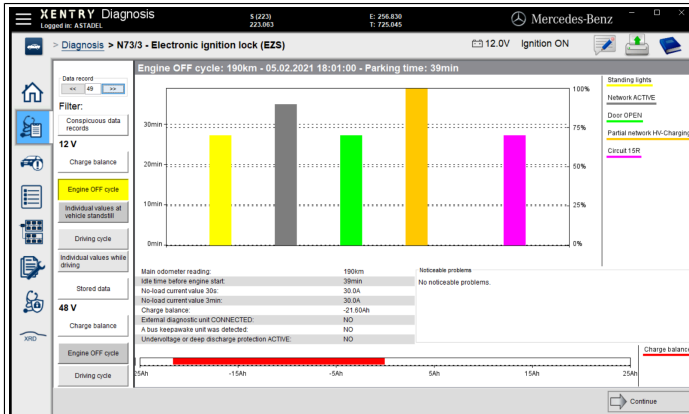


Example: Discharge due to active terminal 15 while stationary

5.png

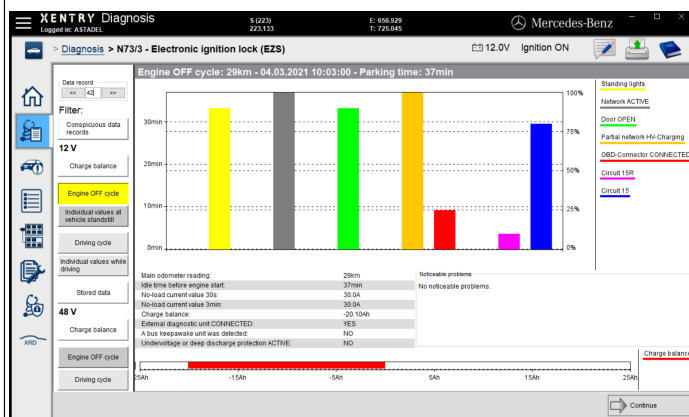


Example: Discharge due to active terminal 15 while parked



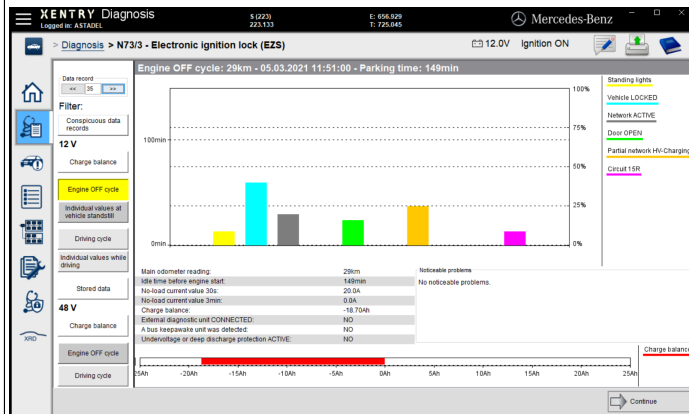
6.png

Example: Discharge due to no support of battery during workshop time



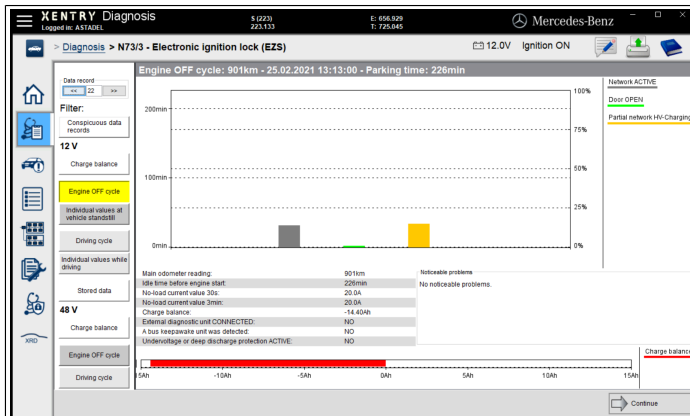
8.png

Example: Discharge due to long parking times with open vehicle and use of head unit (network activity time)



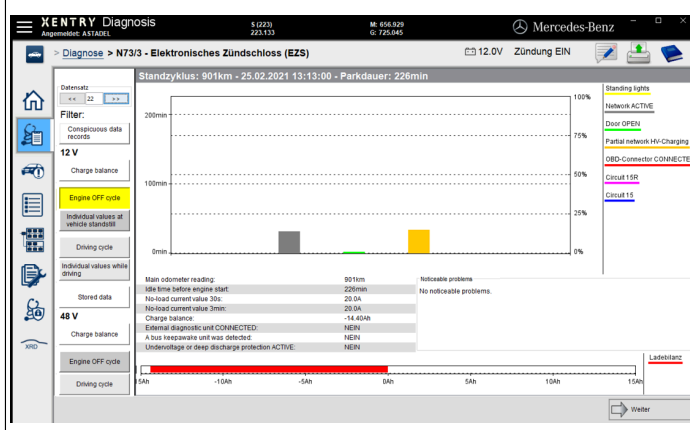
7.png

Example: Discharge due to long parking times with open vehicle and use of head unit (network activity time)



1 - Copy.png

sdf



Remedy

This warning message appears as soon as the state of charge (SOC) of the 12V primary battery drops below 45%. This message is displayed to safeguard the vehicle's starting ability.

At the same time as the display appears in the instrument cluster, customers with a linked Mercedes me connect account also receive a push notification via the app/by email (if this function is activated).

The battery must be charged to a state of charge (SOC) of at least 50%. To do this, an external charger can be connected (please comply with AR54.10-P-1133S) or the vehicle can be driven (by the customer) for 30 to 60 minutes.

Please make customers aware of how the vehicle behaves:

- If the vehicle is used for short journeys, the battery state of charge may slowly drop to less than 45% – a negative charge balance
- A negative charge balance will also occur if the vehicle is used while stationary without running the engine, e.g. if the head unit is used, the ignition is switched on, or other comfort & convenience power consumers, e.g. seat heating/seat ventilation, are active.
- An unlocked vehicle may increase consumption, because certain vehicle functions are actively kept ready for the customer. In combination with Keyless-Go or flush-mounted door handles, the vehicle may be woken up if the vehicle key is detected in the vicinity of the vehicle.

The cause of the discharge can be identified with the aid of the onboard electrical system data in the EZS using XENTRY Diagnosis. See attached examples for identifying typical customer situations (e.g. operation with ignition on, operation of head unit while stationary or vehicle unlocked while parked).

XENTRY Tips

Vehicles with code B01+801: When charging while stationary, the 48V battery must have a state of charge (SOC) of 70% before the 12V primary battery, or the secondary battery in the case of code 503, can be charged.

To ensure optimum battery care, please also comply with the existing Service Information documents regarding the handling of stock vehicles (SI54.10-P-0024A) and on remaining in transport mode (SI54.00-P-0004A) until immediately before handover to end customers.

Special note: Do not replace any parts, if the message has occurred due to battery discharge as a result of the driving profile or the ignition being switched on (see attached examples); in such cases separate warranty and goodwill invoicing is not possible, as this is a normal on-board electrical system protection function. Likewise battery care and recharging do not qualify as a W&G case. Please advise customers accordingly regarding the above-mentioned issues relating to vehicle use.

Symptoms
Overall vehicle > Power supply > Battery/On-board electrical system > Battery/on-board electrical system display message > Low voltage Switch off consumers
Overall vehicle > Power supply > Battery/On-board electrical system > Battery/on-board electrical system display message > Low voltage Charge battery
Overall vehicle > Power supply > Battery/On-board electrical system > Battery/on-board electrical system display message > Charging

Control unit/fault code	
Control unit	Fault text
N73/3 - Electronic ignition lock (EZS) (EZS223)	B1FCB97 - The starter battery has a malfunction. The system function is restricted.

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