

Engine does not start with fault code P30083C in MRD1 (CDI)

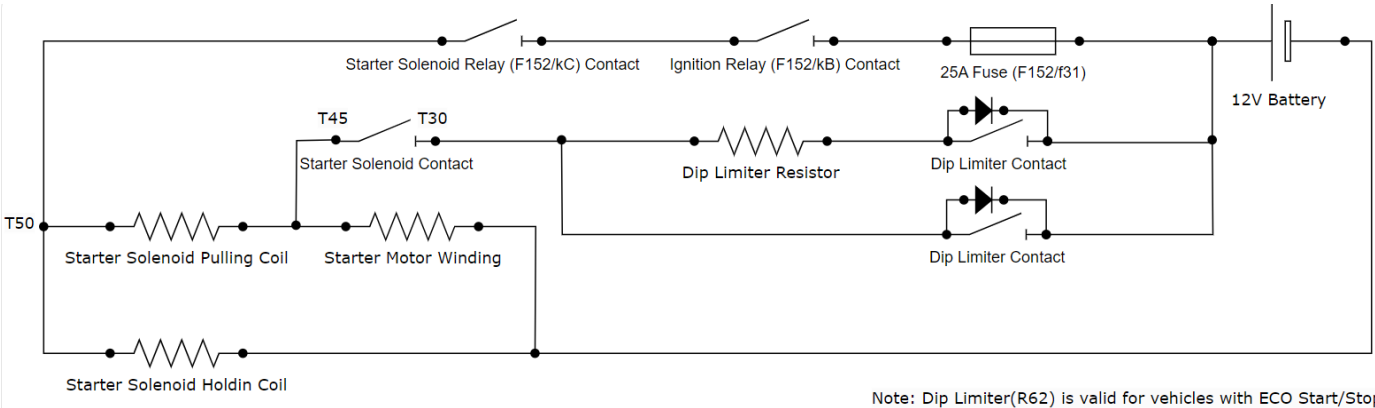
Topic number	LI15.30-N-078528
Version	1
Function group	15.30 - Starter
Date	11/12/24
Validity	Sprinter 907 with OM654 Engine
Reason for change	

Complaint

The engine is not cranking over, and the fuse F152/F31 (25A) has blown.

Cause

- The diagram below illustrates that if there is a problem with either the 'Dip limiter contact' or the 'Starter solenoid contact' closing, the starter will fail to crank the engine.
- When the engine start button (S2/2) is pressed continuously, the starter solenoid's 'Pulling coil' will remain activated until the engine ECU deactivates the starter solenoid relay (F152/kC). This should occur within a maximum of 60 seconds.
- Due to the continuous high current draw from the starter solenoid's pulling coil, the 25A fuse (F152/f31) may blow.



Attachments	
File	Description
wiring.png	

Remedy

- 1. We recommend replacing the 25A fuse with a 30A fuse for F152/F31.
- 2. Do not press the engine start button (S2/2) continuously, as this may cause the starter solenoid coil to overheat and become permanently damaged.
- 3. If the engine does not crank or start, please advise the customer to refer to the procedure outlined in the owner's manual.
- 4. If the engine does not crank or start, instruct the customer to avoid pressing the engine start button (S2/2) continuously or frequently.

Disclaimer

NOTE: The information contained in this document is intended for use by trained, professional technicians with the knowledge to properly and safely perform diagnosis and repairs on Mercedes-Benz vehicles, using Mercedes-Benz approved tools and equipment. It informs service technicians about conditions that could occur in certain vehicles and provides information that could assist in proper vehicle diagnosis, service, or repair. It does not indicate that a defect is present in any vehicle referenced in this document nor does it imply warranty coverage. DO NOT assume that a symptom or condition, or a described cause of a symptom or condition, affects any particular vehicle or groups of vehicles, or that a described repair applies to any particular vehicle or groups of vehicles. There can be multiple causes resulting in the same or similar symptoms or conditions described in this document, and trained professional service technicians must use their diagnostic skills to make evaluations on a case-by-case basis. The information contained in this document does not guarantee warranty coverage nor does it extend the vehicle's warranty in any way.

Symptoms				
Power generation > Engine management > Engine start/stop > Does not start				
Control unit/fault code				
Control unit			Fault text	
N3/40 - Motor electronics 'MRD1' for combustion engine 'OM654' (CDI) (MRD1NFZ)			P30083C - The starter of the combustion engine has a malfunction.	
Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note