

M254 Oil pressure warning - P052400

P052497 The oil pressure is too low

Topic number	LI18.10-P-078867
Version	1
Function group	18.10 - Oil pump
Date	2/28/25
Validity	Passenger car with engine M254
Reason for change	

Complaint

Red oil pressure warning in instrument cluster

One of the below fault codes is stored in powertrain control unit N127:

P052497 The oil pressure is too low. The system function is restricted.

P052400 The oil pressure is too low

Cause

Various

Remedy

If low oil level warning present diagnose cause of this first.

-Check engine oil level and correct if necessary. Refer to vehicle specific instructions AP18.00-P-1848U

-Check for external engine oil leaks

-Measure engine oil pressure via graphical representation in MRG actual values. In one measurement capture the pressure at idle, 1000, 2000, and 3000 rpm. Hold each range for approx. 5 seconds.

-Save results as CSV file

-Create TIPS case and submit to the powertrain team, including

- Oil pressure test results CSV file
- Initial quick test
- Any additional test results or observations
- Any previous diagnosis or repairs performed

WIS-References

Document number	Title	Note
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AP18.00-P-1848U	Overview - Check engine oil level	
AR18.00-P-1250MRV	Check oil pressure	206, 254, 236
AR18.00-P-1250MRX	Check oil pressure	167
AR18.00-P-1250WEE	Check oil pressure	214

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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 lubrication/oil cooling > Function > Oil pressure too low
Power generation > Engine lubrication/oil cooling > Indicator lamp > Engine oil pressure indicator lamp > lit
Power generation > Engine lubrication/oil cooling > Display message > Oil sensor message

Control unit/fault code	
Control unit	Fault text
N127 - Control unit "Drivetrain" (PTCU) (CPC3)	P052497 - The oil pressure is too low. The system function is restricted. P052400 - The oil pressure is too low. _

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