

MERCEDES-BENZ · POWERTRAIN

P1480

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1480 · Mercedes-Benz

Preglow Control

P1480 on Mercedes-Benz vehicles indicates a fault in the preglow control system, which manages the glow plugs used to warm the combustion chambers during a cold start. The engine control module (ECM) monitors the glow plug circuit and has detected an abnormality, such as an open circuit, short circuit, or a glow plug that is not drawing the expected current.

SYSTEM

Powertrain

CODE TYPE

Mercedes-Benz
specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Auxiliary emission
controls

Symptoms you may notice

- Illumination of the glow plug warning light or check engine light on the dashboard
- Hard starting or extended cranking when the engine is cold
- Rough idle or misfire immediately after a cold start
- White smoke from the exhaust during cold running
- Often no symptoms besides the warning light, especially in mild weather

Common causes, most likely first

- 1 Failed glow plug (most common, especially on higher-mileage engines)
- 2 Damaged or corroded glow plug wiring harness or connector
- 3 Faulty glow plug control module (also called preglow control unit)
- 4 Blown fuse or relay in the preglow circuit
- 5 Poor electrical connection at the glow plug or control module
- 6 Engine control module (ECM) software issue or internal fault (rare)



How to diagnose and fix it

- 1 Scan all modules for stored codes and freeze-frame data to confirm P1480 and check for related glow plug codes.
- 2 Inspect the glow plug wiring harness and connectors for damage, corrosion, or loose connections.
- 3 Test each glow plug's resistance with a multimeter and compare to specification; replace any that are out of range.
- 4 Check the preglow control module for power and ground, and verify it is commanding the glow plugs on during a cold start.
- 5 Test the glow plug relay and fuse, replacing if faulty.
- 6 If all electrical components test good, check for technical service bulletins (TSBs) or software updates for the ECM.
- 7 Clear codes and perform a cold-start test to verify the repair.

Glow plug faults that fool even seasoned techs

- A single failed glow plug can set P1480 on some Mercedes-Benz models because the control module monitors the total current draw of the circuit.
- Corrosion inside the glow plug connector boot often causes intermittent faults that don't appear during a simple resistance test.
- The glow plug control module can fail in a way that still allows the plugs to heat but sets a code due to incorrect current feedback.
- P1480 is sometimes stored alongside glow plug-specific codes like P0670 or P0380, which can help pinpoint the faulty cylinder.
- On certain models, a weak battery or charging system issue can cause low voltage during preglow, triggering P1480 without any glow plug fault.

Can I keep driving with P1480?

You can generally drive the vehicle, but cold starting may be difficult and prolonged driving with a faulty preglow system can lead to excessive white smoke and carbon buildup. Avoid heavy acceleration until the engine is fully warmed up, and address the fault promptly to prevent further issues.

Tools that help

- OBD-II scanner with Mercedes-Benz-specific software
- Digital multimeter
- Glow plug removal tool (deep socket and extension)
- Torque wrench
- Electrical contact cleaner
- Factory service information or wiring diagrams



Reading P1480

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Mercedes-Benz): its meaning depends on the make.
- 4** Auxiliary emission controls.
- 80** The exact fault within that area.

Often seen with

P0380 Glow Plug/Heater Circuit A Malfunction · **P0670** Glow Plug Module Control Circuit · **P0671** Cylinder 1 Glow Plug Circuit · **P0672** Cylinder 2 Glow Plug Circuit · **P0673** Cylinder 3 Glow Plug Circuit

See it working

Watch the animated explainer [Fuel Trims Explained: Short-Term and Long-Term](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mercedes-benz-p1480/>

