

MERCEDES-BENZ · POWERTRAIN

P1613

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1613 · Mercedes-Benz

IFI Control Module N37

P1613 on Mercedes-Benz vehicles indicates that the instrument cluster control module, designated N37 in the manufacturer's wiring diagrams, has reported an internal fault or a communication failure within its own circuitry. The module continuously self-checks its memory, processors, and output drivers, and when a discrepancy is detected it stores this code and illuminates the instrument cluster warning lamp. This is a module-level fault rather than a sensor or actuator failure, so diagnosis must focus on power, ground, and CAN (Controller Area Network) integrity before condemning the cluster itself.

SYSTEM

Powertrain

CODE TYPE

**Mercedes-Benz
specific**

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

**Computer and
output circuits**

Symptoms you may notice

- Instrument cluster warning lamp illuminated, often with no other obvious driveability complaint
- Multiple gauges or indicator lamps behaving erratically or failing to illuminate
- Intermittent loss of dashboard illumination or flickering display segments
- Odometer, trip meter, or service interval display showing incorrect or frozen values
- Other control modules logging communication codes because the cluster acts as a gateway on some chassis
- Often no symptoms besides the warning light, especially if the fault is stored but not currently active

Common causes, most likely first

- 1 Internal failure of the instrument cluster control module N37, such as corrupted memory or a failed processor
- 2 Poor or corroded electrical connections at the cluster harness connectors, particularly the ground pins
- 3 Voltage supply issues to the cluster, including a weak battery or failing voltage regulator causing low-voltage resets
- 4 CAN bus communication faults between the cluster and other modules, often due to chafed wiring or a faulty transceiver
- 5 Water ingress or condensation inside the instrument cluster causing circuit board corrosion
- 6 Aftermarket radio or accessory installation that disturbed cluster wiring or introduced CAN bus interference
- 7 Software corruption in the cluster requiring reflashing or coding, sometimes after a failed battery replacement procedure



How to diagnose and fix it

- 1 Verify battery voltage and charging system output, as low voltage is a common trigger for spurious module codes
- 2 Inspect the cluster harness connectors for corrosion, loose pins, or backed-out terminals and clean or repair as needed
- 3 Perform a voltage drop test on the cluster power and ground circuits to confirm solid electrical supply
- 4 Use a Mercedes-Benz-specific scan tool to read live data from the cluster and check for other stored communication codes
- 5 Check the CAN bus for shorts or opens between the cluster and the central gateway, repairing wiring as required
- 6 If electrical checks pass, reflash or code the instrument cluster with the latest software using manufacturer procedures
- 7 Replace the instrument cluster control module N37 only after all wiring and power checks are confirmed good, then code the replacement

Before you replace the instrument cluster

- A weak battery or a recent jump-start is one of the most overlooked triggers for P1613, because the cluster logs an internal fault when supply voltage dips during cranking.
- Aftermarket audio or alarm installations frequently disturb the CAN wiring behind the dash, causing the cluster to set communication-related internal codes that mimic a failed module.
- On several Mercedes-Benz chassis the instrument cluster acts as a gateway, so a fault elsewhere on the CAN bus can cause the cluster to store P1613 even though the cluster itself is healthy.
- Water damage from a leaking windshield seal or clogged sunroof drains can corrode the cluster circuit board and set this code long before any visible symptoms appear.
- Clearing the code and driving the vehicle through several ignition cycles is a valid step to confirm whether the fault is current or historic before committing to module replacement.

Can I keep driving with P1613?

The vehicle is generally safe to drive with P1613 because the fault usually affects instrumentation rather than engine or brake control, but you should avoid long trips until the cause is confirmed. If the cluster display fails completely or other warning lamps stop working, have the vehicle inspected promptly because you may lose critical driver information.



Tools that help

- Mercedes-Benz-specific scan tool (XENTRY or equivalent)
- Digital multimeter for voltage and resistance checks
- Wiring diagram and connector pinout for the N37 cluster
- CAN bus breakout box or oscilloscope for communication testing
- Trim removal tools for accessing the instrument cluster
- Battery load tester and charging system analyzer

Reading P1613

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (Mercedes-Benz): its meaning depends on the make.
6	Computer and output circuits.
13	The exact fault within that area.

Often seen with

P1612 Engine Control Module Incorrect Coding · **P1614** MIL Call-Up Circuit Transmission Control Module Range Perfor · **P1612** IFI Control Module N37 Voltage Circuit 15 · **P1614** IFI Control Module N37 Voltage Or Fuel Metering Actuator Y23 · **P1614** MIL Request Circuit Voltage High · **P1612** Throttle Offset Malfunction · **P1612** Loss Of IPM Serial Data · **P1614** SBDS Interactive Codes · **P0562** System Voltage Low · **U0001** Loss of Bus Communication · **U0155** Lost Communication With Body Control Module

See it working

Watch the animated explainer [How a MAP Sensor Works: Engine Vacuum and Load](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mercedes-benz-p1613/>

