

NISSAN · POWERTRAIN

P1298

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1298 · Nissan

Electrical Load Detector Circuit High Voltage

P1298 on Nissan vehicles means the engine control module (ECM) has detected an abnormally high voltage on the electrical load detector (ELD) circuit, which is part of the intelligent power distribution module (IPDM) or battery current sensor. The ELD monitors current draw from the battery to help the ECM manage charging and electrical load, and a high voltage signal indicates a fault in that sensing circuit rather than a charging system failure.

SYSTEM

Powertrain

CODE TYPE

Nissan specific

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering (injector circuits)

Symptoms you may notice

- Illumination of the check engine light (malfunction indicator lamp) with no other noticeable symptoms
- Battery warning light may also illuminate on some models
- Intermittent electrical accessories such as radio or lights flickering
- Reduced fuel economy due to incorrect load signal to the ECM
- Possible engine idle fluctuations or stalling in rare cases
- No drivability issues in most instances

Common causes, most likely first

- 1 Faulty electrical load detector (ELD) sensor or current sensor integrated into the battery cable
- 2 Damaged or corroded wiring harness between the ELD and the ECM
- 3 Poor ground connection at the ELD or battery negative terminal
- 4 Failed intelligent power distribution module (IPDM) internal circuit
- 5 ECM software glitch or internal fault causing false high voltage reading
- 6 Water intrusion or corrosion in the ELD connector
- 7 Aftermarket electrical accessories improperly wired causing excessive current draw



How to diagnose and fix it

- 1 Inspect the battery terminals and ELD connector for corrosion, tightness, and water damage; clean and secure as needed
- 2 Check the ELD circuit wiring for continuity and shorts to voltage using a multimeter and factory wiring diagram
- 3 Measure the ELD signal voltage at the ECM connector and compare to specifications; replace ELD sensor if out of range
- 4 Perform a voltage drop test on the ground circuit from the ELD to the battery negative post
- 5 Substitute a known-good ELD sensor or IPDM to see if the code clears
- 6 Reprogram or update the ECM software if a technical service bulletin applies
- 7 Replace the ECM only after all other tests confirm it is faulty

Don't replace the battery for P1298

- A high voltage on the ELD circuit often results from a poor ground at the battery negative terminal, not a defective sensor, so cleaning the ground point frequently resolves the code.
The ELD is sometimes integrated into the negative battery cable assembly, and a loose or corroded connection at that cable can set P1298 without any charging system problem.
- Aftermarket accessories such as stereo amplifiers or auxiliary lights tapped into the battery negative post can skew the ELD signal and trigger this code.
- On some Nissan models, the ELD signal is used by the ECM to control alternator output, so a high voltage reading may cause the charging system to undercharge the battery over time.
P1298 can be set by a momentary voltage spike during jump-starting or battery replacement if the ignition is left on, so always clear the code and verify it does not return before replacing parts.

Can I keep driving with P1298?

You can generally continue driving with P1298 because it rarely affects engine operation or safety, but avoid jump-starting the vehicle or adding electrical loads until the fault is repaired. Have the circuit inspected soon to prevent potential battery undercharging or misdiagnosis of other electrical issues.

Tools that help

- Digital multimeter
- Factory service manual or wiring diagram
- OBD-II scan tool
- Battery terminal cleaner
- Electrical contact cleaner
- Socket set



Reading P1298

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Nissan): its meaning depends on the make.
- 2** Fuel and air metering (injector circuits).
- 98** The exact fault within that area.

Often seen with

P1297 ELD Circuit Low Input · **P1297** No Charge In MAP From Start To Run · **P1297** ELD Circuit Low Input · **P1297** No Change In MAP From Start To Run · **P1299** Vacuum Leak Found IAC Fully Seated · **P1297** Injector High Sides Shorted Together · **P1299** Cylinder Head Temperature Sensor Detected Engine Overheating · **P1297** No Change In MAP From Start To Run · **P1299** Vacuum Leak Found (IAC Fully Seated) · **P0562** System Voltage Low · **P0563** System Voltage High · **P0620** Generator Control Circuit Malfunction

See it working

Watch the animated explainer [How a Manual Transmission Works: Four-Speed Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/nissan-p1298/>

