



P1245 · Ford

Alternator Load Input Failed Low

P1245 on Ford vehicles means the Powertrain Control Module (PCM) has detected that the alternator load input signal circuit is stuck low or reporting an abnormally low load condition. The PCM uses this signal to monitor the electrical load the alternator is placing on the engine, and a low reading can affect idle stability and charging system strategy.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Fuel and air metering (injector circuits)

Symptoms you may notice

- Battery warning light illuminated on the instrument cluster
- Dimming or flickering headlights and interior lights
- Battery repeatedly going dead or needing jumps
- Rough or fluctuating idle, especially when electrical accessories are turned on
- Often no symptoms besides the warning light

Common causes, most likely first

- 1 Faulty alternator load input sensor or internal alternator regulator
- 2 Damaged or corroded wiring in the alternator load input circuit
- 3 Loose or dirty ground connection at the alternator or engine block
- 4 Failed Powertrain Control Module (PCM) driver circuit
- 5 Blown fuse or fusible link in the charging system circuit
- 6 Aftermarket electrical accessories improperly wired into the load signal circuit

How to diagnose and fix it

- 1 Inspect and clean the battery terminals and alternator ground connections
- 2 Check the charging system fuse and fusible link for continuity
- 3 Perform a voltage drop test on the alternator load input circuit wiring
- 4 Disconnect the alternator connector and check for reference voltage and ground at the PCM side
- 5 Test the alternator load input sensor signal with a scan tool while turning on electrical loads
- 6 Replace the alternator if the internal load sensor or regulator is faulty
- 7 Repair or replace damaged wiring between the alternator and PCM, then clear codes and verify



What Ford Techs Check Before Swapping Alternators

- A low alternator load input signal often traces to a poor ground rather than a failed alternator, so always perform a voltage drop test on the ground circuit first.
- Aftermarket stereos, alarms, or lighting wired into the load signal wire can pull the voltage low and set P1245 without any alternator fault.
- The PCM may set this code intermittently if the battery is weak or the charging system voltage is low at startup, so load-test the battery before condemning the alternator.
- On some Ford models, a corroded connector at the alternator can cause a low signal even when the alternator itself tests good on a bench.
- P1245 can be stored alongside charging system codes like P0620 or P0562, so always check for related codes before diagnosing the load input circuit in isolation.

Can I keep driving with P1245?

You can usually drive a short distance to a repair shop, but avoid long trips and heavy electrical loads because the battery may not charge properly and the engine could stall. If the battery light is on and the engine runs rough, stop driving and have the charging system checked immediately.

Tools that help

- Digital multimeter
- Scan tool with live data capability
- Voltage drop tester
- Basic hand tools
- Battery load tester

Reading P1245

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



Often seen with

P1246 Needle Lift Sensor Circuit Range Performance · **P1247** Needle Lift Sensor Circuit Open/Short To B+ · **P1248** Injection Start Control Deviation · **P1246** Accelerator Position Sensor 1 Circuit Malfunction · **P1247** Accelerator Position Sensor 2 Circuit Malfunction · **P1248** Accelerator Position Sensors 1 & 2 Improper Correlation · **P1248** Turbo Boost Pressure Not Detected · **P1246** Crank Signal High Input · **P1246** Accelerator Position Sensor 1 Circuit Malfunction · **P1247** Accelerator Position Sensor 2 Circuit Malfunction · **P1248** Accelerator Position Sensors 1 & 2 Improper Correlation · **P1246** Alternator Load Input Failed · **P1247** Turbo Boost Pressure Low · **P1248** Turbo Boost Pressure Not Detected · **P0562** System Voltage Low · **P0620** Generator Control Circuit Malfunction

See it working

Watch the animated explainer [How a Turbocharger Works, Step by Step](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1245/>

