

GENERIC · POWERTRAIN

P0D85

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D85

Battery Charging Output Voltage Too High

P0D85 indicates that the engine control module has detected the battery charging output voltage exceeding the manufacturer's specified maximum, typically above 15.5 volts. This means the charging system is overcharging the battery, which can damage electrical components and the battery itself.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	High	Intermediate	Hybrid propulsion

Symptoms you may notice

- Battery warning light or charging system warning light illuminated on the dashboard
- Headlights and interior lights may appear unusually bright or burn out prematurely
- Battery may overheat, smell like rotten eggs, or leak electrolyte
- Electrical accessories such as radio, power windows, or climate control may malfunction
- Often no symptoms besides the warning light, especially if the overvoltage is mild

Common causes, most likely first

- Faulty voltage regulator inside the alternator, causing uncontrolled output
- Defective alternator assembly with internal short or failed regulation
- Corroded, loose, or damaged battery cables or ground connections causing voltage sensing errors
- Poor connection or damaged wiring between the alternator and the engine control module
- Failed engine control module incorrectly commanding the alternator to overcharge
- Battery with an internal short or aged battery that no longer accepts charge properly

How to diagnose and fix it

- Perform a visual inspection of the battery, alternator, and all charging system wiring for corrosion, looseness, or damage
- Use a digital multimeter to measure battery voltage at rest and while the engine is running; compare to manufacturer specifications
- Check the voltage regulator operation by testing alternator output under load and at varying engine speeds
- Inspect and clean all ground connections between the engine, chassis, and battery
- Test the battery with a conductance tester to rule out internal faults causing voltage spikes
- If voltage regulator is internal to the alternator, replace the alternator; if external, test and replace the regulator
- Clear the diagnostic trouble code and verify the charging voltage returns to normal under all operating conditions



Overvoltage codes often misdiagnosed

- A loose or corroded battery ground can cause the voltage regulator to sense a lower voltage than actual, leading to overcharging and setting P0D85.
- Some vehicles use a smart charging system controlled by the engine control module; a software glitch or failed module can command excessive alternator output without any alternator fault.
- A battery that is nearing the end of its life can have high internal resistance, causing the charging system to spike voltage; always load-test the battery before replacing the alternator.
- This code can be set intermittently by a faulty voltage sense wire that only loses connection during certain driving conditions, such as vibration or temperature changes.
- Overcharging can damage sensitive electronics like the engine control module, so address P0D85 promptly even if the vehicle seems to run normally.

Can I keep driving with P0D85?

Do not continue driving with this code active, as overcharging can destroy the battery and damage expensive electronic modules. If you must move the vehicle, keep electrical loads minimal and drive directly to a repair facility.

Tools that help

- Digital multimeter
- Battery conductance tester
- Scan tool with live data capability
- Basic hand tools (wrenches, sockets, screwdrivers)
- Wire brush and contact cleaner for battery terminals

Reading P0D85

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
85	The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0A1F** Battery Energy Control Module A Performance · **P0D84** Battery Charger Input Circuit Intermittent/Erratic · **P0D86** Battery Charger Coupler Status Indicator Control Circuit A/O



See it working

Watch the animated explainer [How a Padlock Works: Pin Tumbler Lock in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d85/>

