

GENERIC · POWERTRAIN

P0562

OBD-II TROUBLE CODE

## P0562

### System Voltage Low

P0562 means the engine control module (ECM) has detected that the vehicle's main electrical system voltage has dropped below the manufacturer's specified threshold for a calibrated amount of time. In plain English, the computer sees the battery and charging system operating at too low a voltage while the engine is running, which can starve electronic modules of the power they need to function correctly.

|            |                     |          |                |                                                  |
|------------|---------------------|----------|----------------|--------------------------------------------------|
| SYSTEM     | CODE TYPE           | SEVERITY | FIX DIFFICULTY | AREA                                             |
| Powertrain | Generic (all makes) | Medium   | Intermediate   | Vehicle speed, idle control and auxiliary inputs |

### Symptoms you may notice

- The check engine light or battery/charging warning light illuminates on the dashboard.
- The engine may crank slowly or hesitate to start, especially after sitting overnight.
- Interior and exterior lights dim or flicker, particularly at idle when alternator output is lowest.
- Electronic accessories such as the radio, power windows, or climate control may behave erratically or reset.
- The transmission may shift harshly or enter limp mode because solenoids and the transmission control module need stable voltage.
- Often no symptoms besides the warning light, especially if the voltage drop is brief or intermittent.

### Common causes, most likely first

- A failing or worn-out battery that cannot hold a charge under load.
- A weak or failing alternator that is not producing enough current at idle or under electrical load.
- Corroded, loose, or damaged battery cables and terminals creating high resistance in the charging circuit.
- A slipping or worn serpentine belt that drives the alternator inconsistently.
- Poor ground connections between the engine, chassis, and battery that raise resistance in the return path.
- A parasitic draw that drains the battery overnight, leaving system voltage low on startup.
- A faulty voltage regulator inside the alternator or a damaged sense wire causing incorrect charging output.



## How to diagnose and fix it

- 1 Perform a visual inspection of the battery terminals, cables, and grounds for corrosion, looseness, or damage, and clean or tighten as needed.
- 2 Measure battery voltage at rest with a digital multimeter; a healthy fully charged battery should read about 12.6 volts.
- 3 Check charging voltage at the battery with the engine running and accessories off; it should be roughly 13.5 to 14.5 volts.
- 4 Load-test the battery with a conductance tester or carbon pile to confirm it can supply cranking current without dropping excessively.
- 5 Inspect the serpentine belt and tensioner for wear, glazing, or slippage that would reduce alternator output.
- 6 Perform a voltage drop test on the positive and ground circuits between the alternator, battery, and chassis to find hidden resistance.
- 7 If voltage output is low and all connections are good, remove the alternator for bench testing or replacement.

## Why a New Battery Does Not Fix P0562

- A common misdiagnosis is replacing the battery when the real problem is a corroded ground strap between the engine block and chassis, which raises resistance and lowers measured system voltage.
- P0562 can be set by a brief voltage dip during cranking if the battery is marginal, so the code may appear only on cold mornings and clear itself after the engine runs.
- Some vehicles set P0562 when the alternator's internal voltage regulator fails intermittently, producing normal voltage at idle but dropping under load when the engine bay heats up.
- A parasitic draw from a stuck relay or aftermarket accessory can drain the battery overnight and trigger P0562 on the first start of the day even though the charging system tests fine.
- The ECM itself can cause a false P0562 if its power or ground feeds are compromised, so check the module's own supply circuits before condemning the alternator.

## Can I keep driving with P0562?

You can usually drive a short distance to a repair shop, but avoid long trips, heavy electrical loads such as rear defroster and headlights together, and night driving where a voltage collapse could kill the engine or lights. If the battery warning light is on and voltage is dropping, stop driving and arrange a jump start or tow to prevent being stranded.



### Tools that help

- Digital multimeter
- Battery conductance tester or load tester
- Serpentine belt tension gauge
- Socket and wrench set
- Wire brush and terminal cleaner
- Scan tool with live data capability

### Reading P0562

|           |                                                                      |
|-----------|----------------------------------------------------------------------|
| <b>P</b>  | Powertrain: engine, transmission and emissions.                      |
| <b>0</b>  | Generic (SAE) code: it means the same thing on every OBD-II vehicle. |
| <b>5</b>  | Vehicle speed, idle control and auxiliary inputs.                    |
| <b>62</b> | The exact fault within that area.                                    |

### Often seen with

**P0560** System Voltage Malfunction · **P0563** System Voltage High · **P0620** Generator Control Circuit Malfunction · **P0621** Generator Lamp/L Terminal Circuit · **P0622** Generator Field F Terminal Circuit

### See it working

Watch the animated explainer [How a Helicopter Flies: Rotor and Tail in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0562/>

