

MAZDA · POWERTRAIN

P1562

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1562 · Mazda

Powertrain Control Module +B Voltage Low

P1562 on Mazda vehicles means the Powertrain Control Module (PCM) has detected that its main power supply voltage, the +B circuit, has dropped below the normal operating threshold. The PCM monitors this feed continuously and stores the code when the voltage falls low enough to risk unstable operation or memory loss.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Mazda specific	Medium	Intermediate	Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illuminated Check Engine Light, often with no other noticeable symptoms
- Intermittent rough running or stalling, especially at idle or during electrical load
- Slow or failed engine start, sometimes with a clicking sound from the starter area
- Erratic transmission shifting or harsh engagement on automatic models
- Accessory electrical glitches such as dimming lights or radio resets
- Multiple unrelated trouble codes stored in memory due to low voltage

Common causes, most likely first

- 1 Weak or failing battery that cannot hold a stable charge under load
- 2 Corroded, loose, or damaged battery terminal connections
- 3 Faulty or worn alternator not maintaining proper charging voltage
- 4 Blown or corroded main fuse or fusible link in the under-hood fuse box
- 5 Damaged power wire or ground strap between the battery, chassis, and PCM
- 6 Poor ground connection at the PCM or engine block
- 7 Internal PCM power supply fault, though this is the least common cause



How to diagnose and fix it

- 1 Perform a battery load test and check static voltage with a multimeter; replace the battery if it fails
- 2 Inspect and clean battery terminals, clamps, and the battery-to-chassis ground strap
- 3 Check charging voltage at the battery with the engine running; repair or replace the alternator if output is low
- 4 Inspect the main fuse box for blown fuses or fusible links related to the PCM +B circuit
- 5 Back-probe the PCM power connector to verify voltage at the module under load
- 6 Check and clean the PCM ground connections on the engine block and chassis
- 7 Clear the code and test-drive to confirm the fault does not return; replace the PCM only after all wiring checks pass

Low voltage codes often misdiagnosed as PCM failure

- A battery that passes a simple voltage check can still fail a proper load test, so always load-test before condemning the PCM.
- Corrosion hidden inside a battery cable under the insulation can cause voltage drops that only appear under electrical load.
- This code frequently appears alongside multiple unrelated codes because low voltage disrupts several modules at once, so fix the power supply before chasing other codes.
- Aftermarket accessories wired directly to the battery or PCM circuit can introduce parasitic draws that trigger P1562 overnight.
- A loose alternator belt or failing voltage regulator can cause intermittent low voltage that only sets the code during certain driving conditions.

Can I keep driving with P1562?

You can usually drive a short distance to a repair shop, but avoid long trips or heavy electrical loads such as rear defroster and high beams. If the engine stalls or electrical systems behave erratically, pull over safely and arrange a tow.

Tools that help

- Digital multimeter
- Battery load tester
- Socket and wrench set
- Fuse puller or test light
- Battery terminal cleaner
- OBD-II scan tool



Reading P1562

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Mazda): its meaning depends on the make.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 62** The exact fault within that area.

Often seen with

P1633 Accelerator Pedal Position Sensor 2 Signal Too Low · **P1633** ECM · **P1633** Battery Overcharge Fault · **P1633** Battery Overcharge · **P1633** Ignition Power Circuit Low Voltage · **P1633** Throttle Valve Adaptation Limp Home Position · **P0562** System Voltage Low · **P0563** System Voltage High · **P0620** Generator Control Circuit Malfunction · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Wideband Air-Fuel Sensor Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mazda-p1562/>

