

GENERIC · POWERTRAIN

P0A8B

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0A8B

14 Volt Power Module System Voltage

P0A8B indicates that the 14-volt power module, which supplies and regulates low-voltage power for hybrid and electric vehicle systems, has detected an abnormal voltage condition within its own circuitry. The computer sets this code when the module's internal voltage monitoring reports a value outside the expected operating range, often due to a failing module, wiring fault, or poor connection.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Professional	Hybrid propulsion

Symptoms you may notice

- Illumination of the check engine light or hybrid system warning light
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Reduced hybrid system performance or forced limp mode
- Failure of the 12-volt accessory systems if the module cannot maintain proper voltage
- Difficulty starting or restarting the vehicle after an auto-stop event
- In some cases, the vehicle may not enter 'ready' mode or may stall

Common causes, most likely first

- Faulty 14-volt power module internal failure
- Corroded, loose, or damaged wiring or connectors at the module
- Poor ground connection for the power module or battery
- Low or failing 12-volt auxiliary battery causing voltage instability
- DC-DC converter malfunction affecting the 14-volt output
- Water intrusion or physical damage to the module
- Software or calibration issue in the power module control logic



How to diagnose and fix it

- 1 Perform a thorough visual inspection of the 14-volt power module, its connectors, and wiring for corrosion, damage, or loose pins
- 2 Check and clean all ground connections related to the power module and battery
- 3 Test the 12-volt auxiliary battery state of charge and load capacity; replace if weak
- 4 Measure voltage at the power module input and output with a multimeter while the system is active, comparing to manufacturer specifications
- 5 Use a scan tool to retrieve freeze-frame data and perform any available power module self-tests or calibration procedures
- 6 If voltage supply and grounds are good, follow the manufacturer's diagnostic flow for internal module faults, which may require module replacement and programming
- 7 After repair, clear codes and verify the fault does not return during a test drive with hybrid system operation

Don't overlook the 12-volt battery

- A weak or failing 12-volt auxiliary battery is a common root cause of P0A8B because the 14-volt power module relies on a stable low-voltage supply to regulate its output.
- Intermittent P0A8B codes often stem from poor ground connections that test fine under no load but break down under vibration or current draw.
- The code can be set by a momentary voltage spike or dip during engine cranking or hybrid system initialization, so always check for a history of other voltage-related codes.
- Replacing the 14-volt power module without first verifying all power and ground circuits is a costly misdiagnosis trap.
- Some vehicles use the 14-volt power module to supply the electric power steering and other safety systems, so a fault here can cause multiple unrelated warning lights.

Can I keep driving with P0A8B?

If the only symptom is the warning light and the vehicle drives normally, you can drive cautiously to a repair shop, but avoid long trips or heavy electrical loads. If the vehicle enters limp mode, stalls, or shows multiple system warnings, stop driving and have it towed to prevent loss of power assist or other safety functions.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter
- Battery load tester
- Wiring diagram and service information for the specific vehicle
- Terminal cleaning tools and dielectric grease



Reading P0A8B

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- A** Hybrid propulsion.
- 8B** The exact fault within that area.

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0A8A** 14 Volt Power Module Current Sensor A Circuit Intermittent · **P0A8C** 14 Volt Power Module System Voltage Unstable · **P0A8D** 14 Volt Power Module System Voltage Low

See it working

Watch the animated explainer [Disc Brake Trainer: How Car Brakes Stop a Wheel](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0a8b/>

