



P0A1E

Starter/Generator Control Module

P0A1E indicates that the starter/generator control module has reported an internal fault or a communication failure to the powertrain control module, affecting the hybrid system's ability to crank the engine or charge the high-voltage battery. The computer detects this when the control module's self-diagnostics flag an error or when expected data messages are missing from the controller area network bus.

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

Symptoms you may notice

- Illumination of the check engine light or hybrid system warning light
- The engine may fail to crank or start, especially after an auto-stop event
- Reduced power or a limp-home mode with limited hybrid function
- The high-voltage battery may not charge properly, leading to a drained battery
- Often no symptoms besides the warning light, with the vehicle driving normally

Common causes, most likely first

- 1 Faulty starter/generator control module internal failure
- 2 Corroded, damaged, or loose wiring or connectors at the control module
- 3 Low or weak 12-volt auxiliary battery causing module undervoltage
- 4 Failed or failing starter/generator unit drawing excessive current
- 5 Software corruption or outdated calibration in the control module
- 6 Open or shorted communication bus wiring between the module and the PCM

How to diagnose and fix it

- 1 Perform a thorough visual inspection of the control module, its connectors, and related wiring for corrosion or damage
- 2 Test the 12-volt battery and charging system to rule out low voltage as the root cause
- 3 Use a scan tool to retrieve all stored codes and freeze-frame data, then check for communication with the starter/generator control module
- 4 Follow the manufacturer's diagnostic flow chart for P0A1E, which may include checking power, ground, and bus resistance
- 5 Reprogram or update the control module software if a calibration bulletin applies
- 6 Replace the starter/generator control module if internal failure is confirmed, then perform any required initialization or learning procedure



What the code does not always mean

- A low or failing 12-volt battery is a common culprit that mimics a failed control module, so always load-test the battery before condemning the module.
- Corroded ground connections at the module can cause intermittent communication faults that set P0A1E without any module damage.
- The code can be set by a communication bus issue rather than a hard failure inside the module, so check bus wiring and termination resistors.
- After replacing the control module, some vehicles require a relearn or initialization procedure that, if skipped, will immediately reset the code.
- P0A1E is often accompanied by other hybrid-specific codes, so diagnosing in isolation can lead to misreplacement of the module.

Can I keep driving with P0A1E?

If the vehicle starts and drives normally, you may drive it cautiously to a repair shop, but avoid long trips or relying on auto-stop features. If the engine fails to start or the hybrid system is disabled, do not drive and have the vehicle towed to prevent further damage.

Tools that help

- OBD-II scan tool with hybrid system capability
- Digital multimeter for voltage and resistance checks
- Battery load tester
- Manufacturer-specific diagnostic software
- Wiring diagram and service information

Reading P0A1E

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
A	Hybrid propulsion.
1E	The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A1D** Hybrid/EV Powertrain Control Module A · **P0A1F** Battery Energy Control Module A Performance · **P0A94** DC/DC Converter A Performance



See it working

Watch the animated explainer [How a Starter Motor Works: Pre-Engaged Starter](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0a1e/>

