

GENERIC · POWERTRAIN

P0A88

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0A88

14 Volt Power Module Current Sensor A Circuit Low

P0A88 indicates that the 14-volt power module's current sensor A circuit is reporting a voltage below the expected range, meaning the module cannot accurately measure current flow on that channel. The powertrain control module (PCM) or hybrid control module sets this code when the sensor signal wire shows a low-voltage condition, which may be caused by a wiring fault, a failed sensor, or an internal module issue.

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 service vehicle soon message
- Often no symptoms besides the warning light, especially if the fault is intermittent
- Reduced or disabled 14-volt power module output, leading to electrical accessories not functioning
- Battery warning light or charging system malfunction indicator
- Possible stalling or no-start condition if the module supplies critical power
- In hybrid vehicles, a transition to reduced power mode or limited electrical assist

Common causes, most likely first

- 1 Damaged or corroded wiring harness or connector at the current sensor or power module
- 2 Failed current sensor A internal to the 14-volt power module
- 3 Open or short to ground in the sensor signal circuit
- 4 Poor ground connection for the power module or sensor
- 5 Internal fault in the 14-volt power module itself
- 6 Faulty PCM or hybrid control module (less common)
- 7 Aftermarket accessories improperly wired into the sensor circuit



How to diagnose and fix it

- 1 Inspect the current sensor and power module connectors for corrosion, loose pins, or damage; clean and reseal as needed
- 2 Check the sensor signal circuit for continuity and short to ground using a digital multimeter; repair any wiring faults
- 3 Verify the power module ground circuit is clean and tight; measure voltage drop under load
- 4 Test the current sensor output with a scan tool or oscilloscope; compare to manufacturer specifications
- 5 If the sensor is integral to the power module, follow the manufacturer's diagnostic flow to confirm module failure before replacement
- 6 Replace the 14-volt power module or current sensor as required, then clear codes and verify the repair
- 7 Perform a charging system test and check for related codes in other modules to ensure no secondary faults

Current Sensor A Circuit Low: Hidden Causes

- A loose or corroded ground connection at the power module can mimic a failed current sensor, so always perform a voltage drop test before condemning parts.
- In many hybrid vehicles, the 14-volt power module is part of the hybrid system and may require high-voltage safety precautions during diagnosis.
- The code can be set by a momentary glitch in the sensor signal, so check for stored freeze-frame data and intermittent wiring issues before replacing the module.
- Aftermarket electrical accessories tapped into the sensor circuit can cause a low-voltage signal and set this code without any component failure.
- Some vehicles use the current sensor signal for load management; a fault may disable the 14-volt outlet or other power features even if the engine runs normally.

Can I keep driving with P0A88?

If the vehicle drives normally and only the warning light is on, you can drive short distances to a repair shop, but avoid relying on the 14-volt power module for critical accessories. If the vehicle enters reduced power mode or the charging system fails, stop driving and seek professional assistance.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope (for sensor signal analysis)
- Wire repair kit and terminal cleaning tools
- Manufacturer service information for circuit diagrams and test procedures



Reading P0A88

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

Often seen with

P0562 System Voltage Low · **P0563** System Voltage High · **P0A87** 14 Volt Power Module Current Sensor A Circuit Range/Performance · **P0A89** 14 Volt Power Module Current Sensor A Circuit High · **P0A8A** 14 Volt Power Module Current Sensor A Circuit Intermittent

See it working

Watch the animated explainer [How Misfire Detection Works: Crankshaft Speed](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0a88/>

