

GENERIC · POWERTRAIN

P0A34

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0A34

Drive Motor B Temperature Sensor Circuit Intermittent

P0A34 means the hybrid or electric vehicle control module has detected an intermittent electrical fault in the temperature sensor circuit for drive motor B, which is the second traction motor in a multi-motor hybrid system. The circuit briefly drops out or sends erratic voltage readings, so the computer cannot trust the motor temperature signal at all times.

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 with no other symptoms besides the warning light
- Reduced power or a limp-home mode triggered when the motor temperature reading becomes unreliable
- Intermittent activation of the engine cooling fan or hybrid cooling pump at unexpected times
- A message on the dash indicating hybrid system overheating or service required
- Momentary loss of hybrid drive or rough operation during acceleration if the fault occurs under load

Common causes, most likely first

- 1 A loose, corroded, or partially backed-out terminal in the motor temperature sensor connector
- 2 Chafed or internally broken wiring in the sensor harness where it flexes near the motor housing
- 3 A failing temperature sensor that goes open or shorted only when hot or vibrating
- 4 Water or oil intrusion into the sensor connector causing intermittent resistance changes
- 5 A poor ground connection for the sensor return circuit at the motor or chassis
- 6 A fault inside the hybrid control module or its internal signal conditioning circuit, though this is less common



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data for P0A34 to see the exact conditions when the intermittent fault set
- 2 Visually inspect the drive motor B temperature sensor connector and harness for corrosion, chafing, or loose pins, wiggling the harness while watching live sensor data
- 3 Measure the sensor resistance with a multimeter at the sensor connector and compare it to the manufacturer's temperature-resistance chart, checking for an open or short when the sensor is warmed or tapped
- 4 Backprobe the sensor signal and return wires at the hybrid control module connector to check for voltage drops or intermittent opens while flexing the harness
- 5 Check the sensor ground circuit for excessive resistance to the motor housing and chassis ground points
- 6 If wiring and connectors pass, replace the drive motor B temperature sensor and clear the codes to verify the repair
- 7 If the fault persists with a known-good sensor and verified wiring, follow the manufacturer's diagnostic flow for the hybrid control module before condemning it

Intermittent faults hide in connectors and harnesses

- A temperature sensor circuit can test perfectly on a cold engine and still set P0A34 only after the motor heats up, so always perform resistance checks both cold and at operating temperature.
- Many technicians replace the sensor first, but a partially seated terminal in the connector is a far more common cause of an intermittent code than a failed sensor.
- The hybrid control module may substitute a default motor temperature value when the signal is lost, which can mask drivability symptoms and make the fault appear harmless until the motor actually overheats.
- Harness routing near sharp brackets or hot exhaust components often creates an intermittent short that only appears during certain driving conditions, so a wiggle test with live data is essential.
- P0A34 can be set by a low 12-volt battery or poor chassis grounds that disturb the reference voltage, so check the vehicle's charging system before chasing the sensor circuit.

Can I keep driving with P0A34?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration, sustained high speeds, or towing until the fault is repaired. If the hybrid system warning light comes on or the vehicle enters limp mode, stop driving and have it towed to prevent motor overheating damage.

Tools that help

- OBD-II scan tool with hybrid module capability and live data graphing
- Digital multimeter with temperature probe
- Backprobe pins and test leads
- Manufacturer service information with wiring diagrams and resistance charts
- Insulated hand tools and terminal pick set



Reading P0A34

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

Often seen with

P0A33 Drive Motor B Temperature Sensor Circuit High · **P0A35** Drive Motor B Over Temperature · **P0A37** Generator Temperature Sensor Circuit Range/Performance · **P0A3F** Drive Motor A Position Sensor Circuit · **P0A45** Drive Motor B Position Sensor Circuit

See it working

Watch the animated explainer [How Regenerative Braking Works in Electric Cars](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0a34/>

