



P0A35

Drive Motor B Over Temperature

P0A35 indicates that the hybrid or electric vehicle's control module has detected an excessive temperature in drive motor B, which is the electric traction motor that assists or drives the wheels. The computer sets this code when the motor's temperature sensor reports a value above the calibrated safe limit, typically to protect the motor windings and magnets from heat damage.

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, often with no other noticeable symptoms.
- Reduced power output or a limp-home mode as the vehicle limits current to the overheated motor.
- A message on the dashboard indicating the hybrid system is overheating or that performance is limited.
- Unusual noises or vibration from the motor area if the overheating is caused by a mechanical or electrical fault.
- In rare cases, the vehicle may refuse to start or shift into gear if the motor temperature is critically high.

Common causes, most likely first

- 1 Low or contaminated coolant in the drive motor cooling circuit, leading to poor heat dissipation.
- 2 A faulty temperature sensor inside drive motor B that sends an inaccurate high reading to the control module.
- 3 A stuck or failed coolant pump that prevents proper circulation through the motor cooling loop.
- 4 Restricted coolant passages or a clogged radiator dedicated to the motor cooling system.
- 5 A short circuit or damaged wiring in the motor temperature sensor circuit, causing a false high signal.
- 6 Excessive load or prolonged high-speed driving that exceeds the motor's continuous thermal capacity, especially in hot ambient conditions.
- 7 Internal motor damage, such as failing bearings or insulation breakdown, that generates abnormal heat.



How to diagnose and fix it

- 1 Check the coolant level and condition in the drive motor cooling reservoir; top up or flush if contaminated.
- 2 Inspect the motor cooling pump for proper operation by commanding it on with a scan tool and listening for activation.
- 3 Use a scan tool to read live data from the motor temperature sensor and compare it with actual motor temperature after a short drive.
- 4 Perform a visual inspection of the motor temperature sensor wiring and connector for corrosion, chafing, or loose pins.
- 5 Test the temperature sensor resistance with a multimeter and compare it to the manufacturer's specification for the current temperature.
- 6 If the sensor is faulty, replace it according to service information; if the pump or coolant passages are blocked, repair or replace as needed.
- 7 Clear the code and perform a road test to verify the repair, monitoring motor temperature to ensure it stays within normal range.

Overheating motor B: often a cooling system fault

- A common misdiagnosis is to replace drive motor B when the actual fault is a failed coolant pump or a low coolant level that is easy to overlook.
- The temperature sensor circuit can set a false high reading due to a poor ground connection, so always check grounds before condemning the motor.
- In some hybrids, drive motor B is used mainly for regeneration and may overheat only during aggressive driving or long downhill descents, so the code may not reappear in normal commuting.
- Ambient temperature and driving conditions play a big role; a vehicle that sets P0A35 only in summer may have a marginal cooling system that works fine in cooler weather.
- The code does not always mean the motor is damaged; it can be a protective strategy that limits power to prevent damage, and the motor may be perfectly healthy once cooling is restored.

Can I keep driving with P0A35?

Do not continue driving with this code active, as continued operation can overheat and permanently damage the drive motor or power electronics. Stop safely, allow the system to cool, and have the vehicle towed to a qualified repair facility if the warning persists.

Tools that help

- OBD-II scan tool with hybrid/EV capability
- Digital multimeter
- Coolant refractometer or tester
- Infrared thermometer
- Service information for the specific vehicle



Reading P0A35

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

Often seen with

P0A34 Drive Motor B Temperature Sensor Circuit Intermittent · **P0A36** Generator Temperature Sensor Circuit · **P0A37** Generator Temperature Sensor Circuit Range/Performance · **P0A3F** Drive Motor A Position Sensor Circuit · **P0A78** Drive Motor A Inverter Performance

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/p0a35/>

