

GENERIC · POWERTRAIN

P0DF6

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0DF6

Generator Inverter Temperature Sensor B Circuit High

P0DF6 means the generator inverter's temperature sensor B circuit is reporting a voltage higher than the manufacturer's expected range, which the control module interprets as an open circuit or a sensor reading that is out of bounds. The inverter manages power flow between the high-voltage battery and the generator, and sensor B is one of the temperature monitors protecting those components from overheating.

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

Symptoms you may notice

- Illuminated check engine light or hybrid system warning light, often with no other noticeable symptoms
- Reduced or disabled generator output, leading to a weak or dead 12-volt battery over time
- Hybrid system may enter a fail-safe mode with reduced power or limited electric drive
- Battery warning light or message on the dash indicating a charging system fault
- In rare cases, the vehicle may refuse to start or shift into gear if the inverter is disabled

Common causes, most likely first

- 1 Open or damaged wire in the sensor B signal circuit, often from chafing or a broken connector pin
- 2 Failed temperature sensor B inside the generator inverter, reading open or out of range
- 3 Corroded or loose electrical connector at the inverter or sensor harness
- 4 Faulty inverter control module or internal circuit board issue affecting sensor readings
- 5 High resistance in the sensor ground circuit, causing the signal voltage to float high
- 6 Heat damage or coolant leak affecting the inverter assembly and its sensors

How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, then record freeze-frame data to see when the fault set
- 2 Visually inspect the inverter harness and connectors for chafing, corrosion, or loose pins
- 3 Measure resistance across sensor B and compare to the manufacturer's temperature-resistance chart
- 4 Check the signal circuit for an open or short to voltage using a multimeter and wiring diagram
- 5 Verify the sensor ground circuit has low resistance back to the control module
- 6 If wiring and sensor test good, follow the manufacturer's diagnostic flow for the inverter control module
- 7 Clear codes and perform a road test with live data to confirm the repair



What the inverter temperature sensor really does

- A high voltage reading on a temperature sensor circuit almost always means an open circuit, not a hot inverter, so chasing overheating first wastes time.
- The sensor B circuit often shares a ground with other sensors, so a bad ground can set this code along with unrelated temperature codes.
- Inverter coolant leaks or low coolant level can damage sensor wiring over time, so check the cooling system before replacing the inverter.
- Some vehicles set this code intermittently from a loose connector that only acts up when the engine bay is hot or vibrating.
- The code does not always mean the inverter is failing; a simple chafed wire near a bracket is a common root cause.

Can I keep driving with P0DF6?

You can usually drive short distances to a repair shop, but avoid long trips or heavy electrical loads because the generator may be disabled and the 12-volt battery will drain. If the hybrid system warning is on or the car enters fail-safe mode, stop driving and have it towed.

Tools that help

- OBD-II scan tool with live data and hybrid module access
- Digital multimeter with resistance and voltage measurement
- Manufacturer wiring diagram and sensor resistance chart
- Insulated hand tools and terminal pick set
- Battery load tester or charging system tester

Reading P0DF6

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
D	Hybrid propulsion.
F6	The exact fault within that area.

Often seen with

P0A0D High Voltage System Interlock Circuit A High · **P0A1F** Battery Energy Control Module A Performance · **P0C73** Hybrid Battery Pack Cooling Pump Performance · **P0DF5** Generator Inverter Temperature Sensor B Circuit Low · **P0DF7** Generator Inverter Temperature Sensor C Circuit Range/Perfor



See it working

Watch the animated explainer [How a MAF Sensor Works: Hot-Wire Airflow Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0df6/>

