

GENERIC · POWERTRAIN

P0D79

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D79

A/C Compressor Control Module Output Driver Temperature Sensor Circuit Intermittent/Erratic

P0D79 indicates that the air conditioning (A/C) compressor control module has detected an intermittent or erratic signal from its internal output driver temperature sensor. The module uses this sensor to protect the compressor driver from overheating, and when the signal jumps or drops out, the module sets this code and may disable the A/C compressor to prevent damage.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Hybrid propulsion

Symptoms you may notice

- The A/C may stop cooling intermittently or not engage at all.
- The climate control panel may show a flashing or steady A/C warning light.
- The compressor clutch may cycle rapidly or fail to engage when demanded.
- Often no symptoms besides the warning light, especially if the fault is intermittent.
- In some vehicles, the A/C system may default to a reduced performance mode.
- The engine cooling fan may run continuously as a failsafe.

Common causes, most likely first

- 1 Faulty output driver temperature sensor inside the A/C compressor control module.
- 2 Damaged or chafed wiring between the sensor and the control module.
- 3 Corroded or loose electrical connector at the compressor control module.
- 4 Internal circuit board fault in the A/C compressor control module.
- 5 Poor ground connection for the compressor control module.
- 6 Heat damage or thermal stress affecting the sensor or module electronics.
- 7 Voltage supply issues or electrical interference affecting the sensor signal.



How to diagnose and fix it

- 1 Scan all modules for stored codes and record freeze-frame data to understand when the fault occurs.
- 2 Visually inspect the compressor control module, its connectors, and wiring for damage, corrosion, or loose pins.
- 3 Check the module's ground and power supply circuits for voltage drops and integrity.
- 4 Use a scan tool to monitor the output driver temperature sensor live data while wiggling wiring and connectors to catch intermittent signals.
- 5 If live data is erratic, test the sensor signal circuit with a multimeter or oscilloscope to isolate whether the sensor or module is at fault.
- 6 Replace the A/C compressor control module if the sensor is internal and not serviceable separately.
- 7 Clear codes and verify the repair by running the A/C system under load and confirming the code does not return.

Intermittent sensor faults hide in plain sight

- The output driver temperature sensor is often integrated into the compressor control module, so a sensor fault frequently means replacing the entire module rather than a separate sensor.
- Intermittent codes like P0D79 can be caused by vibration or heat cycling that only appears under specific conditions, making live data monitoring essential during diagnosis.
- A poor ground at the module can mimic a sensor failure by causing voltage fluctuations that the module interprets as erratic temperature readings.
- Some vehicles will disable the A/C compressor entirely when this code is set, even if the sensor signal is only momentarily erratic, to protect the driver circuit.
- Aftermarket electrical accessories or poor previous repairs near the A/C wiring can introduce interference that triggers this code without any faulty component.

Can I keep driving with P0D79?

You can usually drive the vehicle safely with this code because the A/C system may simply be disabled, but avoid using the A/C until the fault is repaired to prevent potential compressor damage. If the A/C is essential for defogging, address the issue promptly for safety and comfort.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope for signal analysis
- Wire terminal removal tools
- Service information for wiring diagrams and module testing



Reading P0D79

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

Often seen with

P0532 A/C Refrigerant Pressure Sensor 'A' Circuit Low · **P0533** A/C Refrigerant Pressure Sensor 'A' Circuit High
 · **P0645** A/C Clutch Relay Control Circuit · **P0D78** A/C Compressor Control Module Output Driver Temperature Sens
 · **P0D7A** A/C Compressor Motor Phase U Current Low

See it working

Watch the animated explainer [How a Coolant Temperature Sensor Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d79/>

