

GENERIC · POWERTRAIN

P0D73

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D73

A/C Compressor Control Module Internal Temperature Sensor A Circuit Low

The air conditioning (A/C) compressor control module monitors its own internal temperature sensor, and code P0D73 is set when the module detects a voltage signal from that sensor that is lower than the expected range. This low signal typically indicates a short to ground, a failed sensor, or an internal module fault, and the module may disable the compressor to protect itself from overheating.

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

Symptoms you may notice

- The A/C compressor may stop engaging, resulting in no cold air from the vents.
- The climate control panel may show a flashing or steady A/C warning light.
- The engine cooling fans may run continuously or at high speed as a precaution.
- Often no symptoms besides the warning light, especially if the fault is intermittent.
- In some vehicles, the A/C system may blow only warm or ambient-temperature air.
- The compressor clutch may cycle rapidly or not engage at all when A/C is requested.

Common causes, most likely first

- 1 A short to ground in the wiring harness between the internal temperature sensor and the control module.
- 2 A failed internal temperature sensor inside the A/C compressor control module.
- 3 Corroded, loose, or damaged electrical connector pins at the module or sensor.
- 4 Moisture intrusion into the module or connector causing a low-resistance path to ground.
- 5 An internal fault in the A/C compressor control module itself, such as a failed circuit board component.
- 6 A pinched or chafed wire behind the compressor or near hot engine components.



How to diagnose and fix it

- 1 Use a scan tool to retrieve all codes and confirm P0D73 is current or history, then clear it and test-drive to see if it returns.
- 2 Visually inspect the A/C compressor control module connector and the sensor wiring for corrosion, moisture, or physical damage.
- 3 Disconnect the module connector and measure resistance from the sensor signal circuit to ground to check for a short.
- 4 Compare the sensor signal voltage with a known-good value or use a manufacturer-specific test plan to verify the sensor reading.
- 5 If the wiring and connector are intact, replace the A/C compressor control module or the integrated sensor as required by the vehicle design.
- 6 After repair, clear codes and verify the A/C system operates correctly with no pending or stored codes.

When the sensor is not the real culprit

- A low signal code often results from a shorted wiring harness rather than a failed sensor, so always check the harness routing near hot or moving parts before replacing the module.
- Moisture inside the compressor control module connector can create a low-resistance path to ground that mimics a failed sensor, especially after car washes or rainy weather.
- Some vehicles use the same internal temperature sensor for both compressor protection and A/C request logic, so a low signal may cause the compressor to be permanently disabled even if the sensor is only intermittently faulty.
- A weak or failing battery or charging system can cause voltage drops that the module interprets as a low sensor signal, so check battery and ground connections first.
- Replacing the compressor control module without checking for a short to ground in the sensor circuit can lead to repeat failures if the underlying wiring fault remains.

Can I keep driving with P0D73?

You can usually continue driving with this code because the engine and transmission are not affected, but the A/C may not cool and the compressor may be disabled. Avoid long trips in hot weather if comfort is critical, and have the fault diagnosed soon to prevent potential compressor damage from overheating.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter with resistance and voltage measurement
- Wiring diagram or service information for the A/C compressor control module circuit
- Basic hand tools for connector and trim removal
- Contact cleaner and dielectric grease for connector repair



Reading P0D73

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

Often seen with

P0532 A/C Refrigerant Pressure Sensor 'A' Circuit Low · **P0645** A/C Clutch Relay Control Circuit · **P0D74** A/C Compressor Control Module Internal Temperature Sensor A · **P0D75** A/C Compressor Control Module Output Driver Temperature Sens · **P0D76** A/C Compressor Control Module Output Driver Temperature Sens

See it working

Watch the animated explainer [How Hydraulic Brakes Work: Pedal to Caliper](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d73/>

