

CHRYSLER · POWERTRAIN

P1535

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1535 · Chrysler

A/C High Side Temperature Sensor Circuit

P1535 on Chrysler vehicles indicates the powertrain control module (PCM) has detected an abnormal signal from the air conditioning (A/C) high side temperature sensor circuit. This sensor monitors the refrigerant temperature on the high-pressure side of the A/C system, and the PCM uses that data to protect the compressor from overheating and to optimize cooling performance. The code sets when the sensor signal falls outside the expected voltage range or is inconsistent with other system inputs.

SYSTEM

Powertrain

CODE TYPE

Chrysler specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- The air conditioning may blow warm air or fail to cool the cabin effectively.
- The A/C compressor clutch may disengage prematurely or not engage at all.
- The warning light on the dashboard illuminates, often accompanied by a chime.
- In some cases, the driver may notice no symptoms besides the warning light.
- The A/C system may exhibit erratic operation, cycling on and off rapidly.
- Underhood temperatures may rise if the A/C system is disabled, affecting engine cooling.

Common causes, most likely first

- 1 A faulty A/C high side temperature sensor sending an incorrect signal.
- 2 Damaged or corroded wiring or connectors in the sensor circuit.
- 3 An open or short circuit in the sensor wiring harness.
- 4 Poor electrical connection at the PCM or sensor ground.
- 5 A malfunctioning PCM that misinterprets the sensor signal.
- 6 Refrigerant system issues such as low charge or overcharge affecting sensor readings.
- 7 Physical damage to the sensor from heat or debris.



How to diagnose and fix it

- 1 Use a scan tool to retrieve the code and view live data for the A/C high side temperature sensor to confirm the fault.
- 2 Visually inspect the sensor and its wiring for obvious damage, corrosion, or loose connections.
- 3 Check the sensor's resistance or voltage output against Chrysler specifications using a multimeter.
- 4 Test the wiring harness for continuity and shorts between the sensor and PCM.
- 5 Replace the A/C high side temperature sensor if it fails the electrical tests.
- 6 Clear the code and verify the repair by running the A/C system and monitoring live data.
- 7 If the code persists, diagnose the PCM and its connections or consult a Chrysler specialist.

Don't Overlook the A/C High Side Sensor Circuit

- A common mistake is replacing the A/C compressor when the real issue is a faulty high side temperature sensor or its wiring, which is far cheaper to fix.
- The sensor's signal can be skewed by low refrigerant charge, so always check system pressures before condemning the sensor.
- Corrosion inside the connector pins often causes intermittent P1535 codes that don't appear during a quick inspection.
- On some Chrysler models, the A/C high side temperature sensor shares a ground with other sensors, so a bad ground can set multiple codes.
- The PCM may disable the A/C compressor to protect it when this code sets, leading to a no-cooling complaint even though the sensor is the only fault.

Can I keep driving with P1535?

You can generally continue driving with this code because it primarily affects A/C performance and does not compromise engine safety. However, avoid using the A/C system until the fault is repaired to prevent potential compressor damage, and address the issue promptly to maintain cabin comfort and system longevity.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Chrysler service information for wiring diagrams and sensor specs
- Basic hand tools for trim and connector access
- Refrigerant pressure gauge set



Reading P1535

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Chrysler): its meaning depends on the make.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 35** The exact fault within that area.

Often seen with

P1598 A/C Pressure Sensor Voltage Too High · **P1599** Engine Stall Detected · **P1598** A/C Pressure Sensor Voltage Too High · **P1599** A/C Pressure Sensor Voltage Too Low · **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

See it working

Watch the animated explainer [Helicopter Flight Simulator: Learn the Three Controls](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/chrysler-p1535/>

