

GENERIC · POWERTRAIN

P0D6E

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0D6E

A/C Compressor Motor Voltage A High

P0D6E indicates that the powertrain control module has detected an abnormally high voltage on the A/C compressor motor voltage supply circuit, which typically points to an open circuit, high resistance, or a faulty control module. The computer monitors the voltage on the compressor motor feed and flags this code when the signal exceeds the expected range for the operating conditions.

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

Symptoms you may notice

- The air conditioning system may blow warm air or not engage at all.
- The A/C compressor clutch may fail to engage, or the compressor may run intermittently.
- A warning light on the dashboard, often the check engine light or a dedicated A/C fault indicator.
- In some vehicles, the climate control panel may show a blinking or error message.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- An open circuit or high resistance in the A/C compressor motor voltage supply wire, such as a broken wire or corroded connector.
- A faulty A/C compressor motor or clutch assembly drawing no current, which can cause the control module to see high voltage.
- A poor ground connection for the compressor motor circuit, leading to abnormal voltage readings.
- A malfunctioning powertrain control module or A/C control module that incorrectly reports high voltage.
- Damage to the wiring harness from heat, vibration, or rodent activity, causing an open circuit.
- A blown fuse or faulty relay in the A/C compressor circuit that interrupts power and causes a high-voltage signal on the monitoring line.



How to diagnose and fix it

- 1 Perform a visual inspection of the A/C compressor wiring harness and connectors for damage, corrosion, or loose pins.
- 2 Check the fuse and relay associated with the A/C compressor motor circuit and replace any failed components.
- 3 Use a digital multimeter to measure voltage on the compressor motor voltage supply circuit at the compressor connector and compare to specifications.
- 4 Test the continuity and resistance of the ground circuit for the compressor motor to rule out a bad ground.
- 5 Inspect the compressor motor or clutch for an open winding or mechanical failure that would prevent current draw.
- 6 If the circuit and compressor test good, diagnose the control module by checking for power and ground at the module and looking for technical service bulletins.
- 7 Clear the code and perform a road test with the A/C on to verify the repair and ensure the code does not return.

Don't Replace the Compressor Yet

- A high voltage code on the compressor motor circuit often results from a simple open circuit or bad ground rather than a failed compressor, so always check wiring and connections first.
- Some vehicles use a pulse-width modulated signal to control the compressor, and a high voltage code can be set by a faulty driver in the control module even when the compressor is fine.
- The code may be stored intermittently due to vibration or heat affecting a marginal connection, so wiggle-testing the harness while monitoring live data can reveal the fault.
- A/C system pressure or refrigerant level issues can sometimes cause the control module to command the compressor in a way that triggers a voltage code, so check pressures before condemning electrical parts.
- Related codes in the A/C clutch circuit or CAN communication codes may accompany P0D6E, indicating a shared power or ground issue rather than a standalone compressor fault.

Can I keep driving with P0D6E?

You can generally continue driving with this code because it primarily affects the air conditioning system and does not compromise engine safety or drivability. Avoid using the A/C until the fault is repaired to prevent potential further damage to the compressor or control module.

Tools that help

- Digital multimeter
- Scan tool with live data capability
- Wiring diagram for the A/C compressor circuit
- Test light
- Socket set and trim removal tools



Reading P0D6E

- P** Powertrain: engine, transmission and emissions.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- D** Hybrid propulsion.
- 6E** 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 · **P0D6D** A/C Compressor Motor Voltage A Low · **P0D6F** A/C Compressor Motor Current High

See it working

Watch the animated explainer [How the EVAP System Works: Fuel Vapour and Leak Test](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0d6e/>

