



U350E

Control Module Cooling Fan Circuit High

U350E is a manufacturer-specific network code indicating that a control module has detected a high-voltage condition on the cooling fan circuit it monitors or controls. The module sees the fan control wire at or near battery voltage when it expects a low reference or a pulse-width-modulated signal, so it flags the circuit as shorted to power or open.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Network	Generic (all makes)	Medium	Intermediate	Network communication

Symptoms you may notice

- Cooling fan runs continuously at full speed regardless of engine temperature
- Cooling fan never runs, leading to overheating in traffic or at idle
- A/C compressor clutch may disengage or A/C performance drops because the module disables it to protect the engine
- Engine coolant temperature gauge climbs higher than normal or a high-temperature warning appears
- Often no symptoms besides the warning light, especially if the fault is intermittent or stored only

Common causes, most likely first

- 1 Fan control wire shorted to battery positive, often from chafed insulation against a bracket or heat shield
- 2 Failed cooling fan control module or integrated fan relay stuck in the closed position
- 3 Open or high-resistance ground at the fan motor or fan control module, causing the module to see a false high on the control circuit
- 4 Corroded or pushed-back pins in the fan connector or the control module connector
- 5 Failed cooling fan motor drawing excessive current and damaging the driver circuit inside the module
- 6 Water intrusion into the fan connector or module housing causing a conductive path to power
- 7 Aftermarket fan or relay wired incorrectly, feeding voltage back into the control circuit



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, record freeze-frame data, and clear codes to see if U350E returns immediately
- 2 Inspect the cooling fan harness from the control module to the fan for chafing, heat damage, and secure routing
- 3 Disconnect the fan connector and the control module connector, then measure resistance from the fan control wire to battery positive and to ground with the key off
- 4 Check the fan motor ground circuit for voltage drop under load and clean or repair any corroded ground points
- 5 Command the cooling fan on and off with a scan tool while monitoring the control circuit with a lab scope or duty-cycle meter to confirm the module output
- 6 Substitute a known-good fan control module or relay only after circuit tests pass, then retest and clear codes
- 7 Verify repair by running the engine to operating temperature with the A/C on and confirming the fan cycles correctly and U350E does not reset

Why the fan circuit sets U350E

- A high-voltage reading on the fan control circuit is often caused by a missing ground rather than a true short to power, because the module sees the floating control wire pulled up to battery voltage.
- Many vehicles use a pulse-width-modulated fan control signal, and a standard test light or cheap meter will not show the fault; a lab scope or duty-cycle meter is needed to see the signal correctly.
- The code can set from a fan motor that is beginning to seize and drawing high current, which damages the driver in the control module without blowing a fuse.
- A cooling fan that runs full speed with the key off can drain the battery overnight, so check for a stuck fan relay or shorted control wire before replacing the fan motor.
- Some modules set U350E when the fan connector is simply unplugged, so always check for a disconnected or partially seated connector before condemning the module.

Can I keep driving with U350E?

You can drive short distances with the warning light on if the engine temperature stays normal, but avoid heavy traffic, long idles, and towing because a fan that never runs will cause overheating. If the temperature gauge climbs or the fan runs continuously with the key off, park the vehicle and repair the circuit before driving further.

Tools that help

- OBD-II scan tool with bidirectional control and live data
- Digital multimeter with duty-cycle and frequency functions
- Lab scope for viewing pulse-width-modulated fan control signals
- Back-probe kit and wiring diagram for the cooling fan circuit
- Hand tools for connector and harness access



Reading U350E

- U** Network: communication between the vehicle's control modules.
- 3** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 5** Network communication.
- 0E** The exact fault within that area.

Often seen with

P0480 Cooling Fan 1 Control Circuit Malfunction · **P0481** Cooling Fan 2 Control Circuit Malfunction · **P0482** Cooling Fan 3 Control Circuit Malfunction · **P0691** Fan 1 Control Circuit Low · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Radiator Fan Relay Circuit Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/u350e/>

