

GENERIC · POWERTRAIN

P0986

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0986

Shift Solenoid 'E' Control Circuit High

P0986 means the transmission control module (TCM) has detected an abnormally high voltage on the control circuit for shift solenoid 'E', which is one of the solenoids that manages gear shifts inside the automatic transmission. The TCM commands the solenoid by grounding its circuit, so a high-voltage reading tells the module that the wire is likely shorted to power, the solenoid coil is open, or the ground path is broken.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- The check engine light or transmission warning light illuminates on the dashboard.
- The transmission may enter limp mode and stay in a single gear or a default forward gear.
- Harsh or delayed shifts, or a refusal to shift into certain gears.
- The transmission may slip or flare between shifts under acceleration.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 A short to voltage on the solenoid 'E' control wire, often from chafed insulation against a hot or moving component.
- 2 An open or burned solenoid 'E' coil inside the transmission valve body.
- 3 A poor ground connection at the solenoid or at the TCM ground point.
- 4 A faulty transmission control module (TCM) driver circuit for that solenoid.
- 5 Corroded or pushed-back pins in the solenoid or TCM connectors.
- 6 Internal transmission wiring harness damage from heat, fluid contamination, or debris.



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm P0986 is active and not a stored history code.
- 2 Inspect the solenoid 'E' connector and TCM connector for corrosion, bent pins, or loose terminals.
- 3 Measure resistance across solenoid 'E' at the transmission connector and compare it to the manufacturer's specification.
- 4 Check the control wire for a short to voltage with the key on and the TCM disconnected, using a digital multimeter.
- 5 Verify the solenoid ground circuit has less than one ohm resistance to the battery negative terminal.
- 6 If the circuit tests good, command solenoid 'E' with a scan tool and watch for a voltage drop or no response.
- 7 Replace the faulty solenoid, repair the damaged wire, or reprogram or replace the TCM only after circuit tests prove the module is at fault.

What a high-voltage solenoid code really means

- A high-voltage code on a solenoid control circuit almost always points to an open circuit or a short to power, not a failed solenoid coil, so resistance and voltage-drop tests matter more than parts swapping.
- Many technicians replace the solenoid first and later find a chafed wire in the transmission harness, so always inspect the harness routing before condemning the solenoid.
- An intermittent P0986 that sets only on cold mornings often traces to a connector pin that loses tension when the plastic shrinks, not to a failed solenoid.
- A weak or missing ground at the TCM can make several solenoid circuits read high at once, so check for companion codes before focusing on solenoid 'E' alone.
- After any solenoid or harness repair, clear the codes and perform a transmission adaptive relearn so the TCM can recalibrate shift pressures.

Can I keep driving with P0986?

You can usually drive the vehicle to a shop if the transmission still shifts, but avoid heavy acceleration and towing because limp mode can engage without warning. If the transmission is stuck in one gear or slipping badly, stop driving and arrange a tow to prevent internal damage.

Tools that help

- OBD-II scan tool with transmission module and bidirectional control capability
- Digital multimeter with resistance and voltage-drop functions
- Transmission wiring diagram and connector pinout for the vehicle
- Back-probe kit or breakout box for testing connectors without damage
- Jack and safety stands or a lift for under-vehicle access



Reading P0986

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

Often seen with

P0750 Shift Solenoid 'A' · **P0755** Shift Solenoid 'B' · **P0760** Shift Solenoid 'C' · **P0985** Shift Solenoid 'E' Control Circuit Low · **P0987** Transmission Fluid Pressure Sensor/Switch 'E' Circuit

See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0986/>

