

FORD · POWERTRAIN

P1039

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1039 · Ford

Vehicle Speed Signal Missing or Improper

P1039 on Ford vehicles means the powertrain control module (PCM) is not receiving a valid vehicle speed signal from the speed sensor circuit, so it cannot confirm road speed. The PCM sets this code when the signal is missing, intermittent, or implausible compared with other inputs such as engine rpm and throttle position.

SYSTEM

Powertrain

CODE TYPE

Ford specific

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Fuel and air metering and auxiliary emission controls

Symptoms you may notice

- The speedometer may read zero, bounce erratically, or stop working entirely while driving.
- The transmission may shift harshly, late, or fail to shift out of first gear because the PCM lacks speed data.
- The anti-lock brake (ABS) warning light and traction control light may illuminate alongside the check engine light.
- Cruise control may stop engaging or disengage on its own during a drive.
- Often no symptoms besides the warning light, especially if the fault is intermittent or only affects a secondary speed signal path.

Common causes, most likely first

- 1 A failed or contaminated vehicle speed sensor (VSS) on the transmission or differential.
- 2 Damaged, chafed, or corroded wiring between the speed sensor and the PCM, including connector pins that have backed out.
- 3 A faulty speedometer head or instrument cluster that corrupts the speed signal before it reaches the PCM on models that route the signal through the cluster.
- 4 A missing or damaged tone ring or reluctor wheel inside the transmission or differential that the sensor reads.
- 5 A PCM that has lost its speed signal input circuit internally, though this is less common than sensor and wiring faults.
- 6 Aftermarket electronics, such as a tap into the speed signal wire for a navigation or cruise system, that load or short the circuit.



How to diagnose and fix it

- 1 Scan all modules for codes and record freeze-frame data to see whether the speed signal was missing at the time the code set.
- 2 Inspect the speed sensor and its connector at the transmission or differential for physical damage, corrosion, and secure engagement.
- 3 Check the sensor's resistance and AC voltage output while spinning the wheels or driving on a lift, comparing to Ford service specifications.
- 4 Perform a voltage drop and continuity test on each wire from the sensor connector to the PCM, wiggling the harness to reveal intermittent opens.
- 5 Inspect the tone ring or reluctor wheel through the sensor hole for cracks, missing teeth, or debris buildup.
- 6 If the sensor and wiring pass, substitute a known-good speed sensor and clear the code to see whether it returns.
- 7 As a last step, verify the PCM speed input with a scan tool live data stream and check for a faulty instrument cluster or PCM only after all other tests pass.

Speed signal faults that fool good technicians

- A common miss is a speed signal that tests fine at the sensor but drops out only when the harness is flexed by engine movement, so always wiggle-test the wiring while watching live data.
- On many Ford models the speed signal passes through the instrument cluster before reaching the PCM, so a cluster fault can set P1039 even when the sensor and wiring are perfect.
- Aftermarket cruise control, navigation, or fleet tracking devices tapped into the speed signal wire frequently load the circuit enough to cause an intermittent missing signal.
- A missing or damaged tone ring inside the transmission can mimic a failed sensor, and replacing the sensor alone will not fix the code if the ring is the real problem.
- P1039 does not always mean the speed sensor is dead; a poor ground at the PCM or a low battery can cause the PCM to misread a valid signal as missing.

Can I keep driving with P1039?

You can usually drive short distances to a repair shop, but avoid highway speeds and heavy traffic because the transmission may shift unpredictably and the speedometer may be inaccurate. If the transmission is stuck in limp mode or the ABS light is on, limit driving to a slow, direct route.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with min/max recording
- Wiring diagram for the specific Ford model and year
- Jack and jack stands or a vehicle lift to spin the wheels
- Test light or jumper wires for circuit testing



Reading P1039

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Ford): its meaning depends on the make.
- 0** Fuel and air metering and auxiliary emission controls.
- 39** The exact fault within that area.

Often seen with

P0500 Vehicle Speed Sensor Malfunction · **P0501** Vehicle Speed Sensor Range/Performance · **P0720** Output Speed Sensor Circuit Malfunction · **P0721** Output Speed Sensor Range/Performance · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How Airbags Work: A 50 km/h Crash in Slow Motion](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1039/>

