



P1135 · Ford

Pedal Position Sensor A Circuit Intermittent

P1135 on Ford vehicles means the powertrain control module (PCM) has detected an intermittent signal from the accelerator pedal position sensor A circuit, which is the primary input for driver demand. The PCM sets this code when the voltage from that sensor briefly drops out or jumps outside the expected range while the pedal is being pressed or released, even if the fault clears itself.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Ford specific	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- The warning light may be the only thing you notice, because the fault is intermittent and often does not repeat during a short drive.
- The engine may hesitate or stumble momentarily when you press or release the accelerator pedal.
- The idle may flare or dip unexpectedly when the pedal is first touched.
- The transmission may shift harshly or delay a downshift because the PCM briefly loses a clean pedal signal.
- In some cases the engine may enter limp mode or limit throttle response until the key is cycled.
- A stored P1135 may appear with no drivability complaint at all if the glitch happened once and never returned.

Common causes, most likely first

- 1 Worn or contaminated accelerator pedal position sensor tracks inside the pedal assembly.
- 2 Loose, corroded or backed-out terminals in the pedal sensor connector or the PCM connector.
- 3 Chafed or intermittently shorted wiring between the pedal sensor and the PCM, often near the pedal bracket or under the dash.
- 4 A failing pedal position sensor that tests fine when cold but breaks down with heat or vibration.
- 5 Poor ground connection shared by the pedal sensor and other dash-mounted electronics.
- 6 Water intrusion or debris in the pedal assembly or connector from a leaking windshield or cowl seal.
- 7 A PCM with an intermittent internal fault on the pedal input circuit, which is rare but possible after other causes are ruled out.



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data for P1135, then clear the code and road test while watching live pedal position voltage on a scan tool to see if the glitch repeats.
- 2 Inspect the accelerator pedal connector and the PCM connector for corrosion, loose pins or pushed-back terminals, and repair any damaged terminals before replacing parts.
- 3 Wiggle-test the pedal sensor harness while watching live data to catch an intermittent open or short that only shows up with vibration.
- 4 Check the pedal sensor ground circuit for excessive voltage drop under load, and clean or repair the ground point if resistance is high.
- 5 Measure the pedal position sensor signal voltage through its full travel with a multimeter or oscilloscope, looking for dropouts or jumps that a scan tool might smooth over.
- 6 Replace the accelerator pedal assembly only after the wiring and connectors have passed testing, then clear the code and verify the repair with a road test.
- 7 If the fault persists with a known-good pedal and verified wiring, perform a pinpoint test on the PCM input circuit and consider PCM replacement only as a last step.

Why an intermittent pedal code fools shops

- A P1135 that will not repeat in the bay is often caused by a connector terminal that loses contact only when the pedal is moved through a certain arc, so static voltage checks at idle can look perfect.
- Technicians sometimes replace the accelerator pedal assembly first, but a chafed wire near the pedal bracket or a poor ground can produce the same intermittent signal and the new pedal will not fix it.
- The code can be set by a brief glitch that lasts less than a second, so freeze-frame data may show normal pedal voltage even though the PCM caught a dropout.
- On some Ford models the pedal position sensor shares a reference or ground with other sensors, so a fault elsewhere on that circuit can pull the pedal signal out of range and set P1135.
- A weak battery or poor charging system can cause low voltage at the pedal sensor during cranking, which may log an intermittent pedal code that disappears once the engine is running.

Can I keep driving with P1135?

You can usually drive the vehicle to a shop because the fault is intermittent, but avoid heavy acceleration and be ready for a sudden hesitation or limp mode. If the pedal stops responding or the engine repeatedly enters reduced power mode, stop driving and have the vehicle towed.



Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter
- Oscilloscope for capturing intermittent sensor signals
- Terminal pick and electrical contact cleaner
- Vehicle-specific wiring diagram

Reading P1135

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

Often seen with

P1125 Long Term Fuel Trim Add Air Bank 2 System Too Rich · **P1121** Oxygen Sensor Heater Circuit Bank 2 Sensor 2 Short To Ground · **P1124** Long Term Fuel Trim Add Air Bank 1 System Too Lean · **P1120** Oxygen Sensor Heater Circuit Bank 2 Sensor 1 Open · **P1121** Accelerator Pedal Position Sensor Range Performance Problem · **P1125** Throttle Control Motor Circuit · **P1120** Accelerator Pedal Position Sensor Circuit · **P1120** Starter Switch High Input · **P1124** TCS Signal Circuit High Input · **P1121** Neutral Position Switch Circuit Low Input AT Vehicles · **P1120** Secondary Throttle Position Sensor Circuit Fault · **P1125** Tandem Throttle Position Sensor Circuit Fault · **P1121** Throttle Position Lower Than Expected · **P1120** Throttle Position Sensor Out Of Range Low · **P1124** Throttle Position Sensor Signal Out Of Self Test Range · **P1125** Throttle Position Sensor Signal Intermittent · **P1121** Throttle Position Sensor Signal Not Consistent With Mass Air · **P1124** Long Term Fuel Trim Adaptive Air System High · **P1121** Pedal Position Sensor A Circuit Range Performance · **P1121** Throttle Position Lower Than Expected · **P1121** Throttle Position Sensor Out of Range · **P1120** Throttle Position Sensor 1 Circuit · **P1125** Accelerator Pedal Position Sensor Fault · **P1124** Throttle Position Sensor Out of Self-Test Range · **P1121** Throttle Position Sensor Inconsistent with Mass Air Flow Sen · **P1120** Throttle Position Sensor Out of Range · **P1125** Throttle Position Sensor Intermittent · **P1120** Throttle Position (TP) Sensor 1 Circuit · **P1125** Accelerator Pedal Position (APP) System · **P1121** TP Sensor Circuit Intermittent High Voltage · **P1121** Pedal Position Sensor 1 Range Performance Problem · **P1120** Pedal Position Sensor Circuit · **P2135** Throttle/Pedal Position Sensor A/B Voltage Correlation

See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/ford-p1135/>

