

GENERIC · POWERTRAIN

P2637

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2637

Torque Management Feedback Signal 'A'

P2637 indicates that the powertrain control module (PCM) has detected an implausible or missing feedback signal from the torque management system, specifically circuit 'A'. The PCM commands a torque reduction during events like gear shifts or traction control intervention, then monitors a return signal to confirm the action occurred; this code sets when the feedback voltage or message does not match expectations.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Computer and output circuits

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Harsh or delayed transmission shifts as the PCM limits torque reduction authority
- Reduced engine power or a limp-home mode in some vehicles
- Traction control or stability control warning lights illuminated simultaneously
- Slight hesitation or stumble during acceleration from a stop
- In rare cases, the engine may enter a reduced power strategy that limits RPM

Common causes, most likely first

- 1 Faulty torque management feedback sensor or switch
- 2 Damaged or corroded wiring in the feedback signal circuit 'A'
- 3 Loose or contaminated electrical connector at the sensor or PCM
- 4 Failed or failing PCM (less common but possible)
- 5 Software calibration issue in the PCM requiring a reflash
- 6 Mechanical binding in the throttle body or accelerator pedal assembly affecting torque request
- 7 Aftermarket electronic throttle controller or tuner interfering with feedback signals



How to diagnose and fix it

- 1 Connect a scan tool and record all stored codes, freeze-frame data, and live feedback signal values to confirm the fault
- 2 Inspect the torque management feedback sensor and its connector for physical damage, corrosion, or loose pins
- 3 Perform a voltage drop test on the feedback signal circuit 'A' between the sensor and PCM to check for excessive resistance
- 4 Check for technical service bulletins (TSBs) or calibration updates for the PCM that address torque management feedback faults
- 5 If wiring and sensor check out, substitute a known-good sensor and clear codes to see if the fault returns
- 6 Verify PCM operation by back-probing the feedback circuit at the PCM and comparing readings to the sensor output
- 7 As a last resort, replace and reprogram the PCM if all other components and circuits test good

What most technicians overlook with P2637

- A common misdiagnosis is replacing the throttle body or accelerator pedal assembly when the actual fault lies in the torque management feedback circuit or its connector.
- The feedback signal 'A' often refers to a dedicated circuit that may be shared with other systems, so a fault in a related module can set this code without any issue in the torque management components themselves.
- In some vehicles, this code sets after a battery replacement or PCM reset because the learned torque management values are lost and the feedback signal falls outside the expected range until relearned.
- Aftermarket performance tuners or throttle controllers frequently interfere with the feedback signal, causing P2637 even when all factory components are functioning correctly.
- A weak or failing battery or charging system can cause intermittent feedback signal faults that mimic a sensor failure, so always check battery voltage and ground connections first.

Can I keep driving with P2637?

You can generally drive with P2637, but expect reduced performance and possible harsh shifting; avoid aggressive acceleration or towing until the fault is repaired, and have it diagnosed promptly to prevent secondary transmission damage.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Wiring diagram for the specific vehicle
- Basic hand tools for connector and sensor access
- Test light or jumper wires for circuit testing



Reading P2637

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 6** Computer and output circuits.
- 37** The exact fault within that area.

Often seen with

- P0121** Throttle Position Sensor A Circuit Range/Performance · **P0700** Transmission Control System Malfunction
- **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation · **P2636** Fuel Pump 'B' Low Flow / Performance
- **P2638** Torque Management Feedback Signal 'A' Range/Performance

See it working

Watch the animated explainer [How Push-Button Start Works: Keyless Ignition](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2637/>

