

GENERIC · POWERTRAIN

P2549

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P2549

Torque Management Request Input Signal 'B' Range/Performance

P2549 means the powertrain control module (PCM) has detected an out-of-range or erratic signal on the torque management request input circuit designated as 'B'. The PCM uses this input to coordinate torque reduction requests from systems such as the transmission controller or stability control, and it sets the code when the signal voltage or message does not match expected values for the current operating conditions.

SYSTEM

Powertrain

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

Vehicle speed, idle control and auxiliary inputs

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Harsh or delayed transmission shifts as torque management intervention is disabled
- Reduced engine power or a limp-home mode in some vehicles
- Inconsistent throttle response or surging during acceleration
- Traction control or stability control warning light illuminated alongside the check engine light

Common causes, most likely first

- 1 Faulty torque management request input sensor or switch
- 2 Damaged, chafed, or corroded wiring in the torque management request circuit
- 3 Poor electrical connection at the sensor or PCM connector
- 4 Failed or failing PCM (least common but possible)
- 5 Software calibration issue in the PCM requiring reflash
- 6 Aftermarket electronic throttle controller or piggyback tuner interfering with the signal



How to diagnose and fix it

- 1 Connect a scan tool and record all stored and pending codes plus freeze-frame data to confirm P2549 is the primary fault
- 2 Inspect the torque management request input sensor and its connector for physical damage, corrosion, or loose pins
- 3 Perform a voltage drop and continuity test on the signal circuit between the sensor and the PCM
- 4 Check for technical service bulletins (TSBs) or calibration updates related to the torque management system for the specific vehicle
- 5 If wiring and sensor check out, substitute a known-good sensor and clear codes to see if the fault returns
- 6 Verify PCM connector integrity and check for water intrusion or terminal fretting at the PCM
- 7 As a last resort, reprogram or replace the PCM only after all other circuits and components are verified good

Why torque management codes mislead

- A loose or corroded ground connection shared by the torque management sensor and another system can set P2549 without any fault in the sensor itself.
- Aftermarket throttle controllers or performance tuners that intercept pedal signals frequently trigger this code because the PCM sees an unexpected torque request input.
- The code can be stored intermittently by a momentary voltage spike from a failing alternator or a weak battery, so always check charging system health first.
- On some vehicles, a transmission control module (TCM) software glitch causes a false torque request signal that mimics a bad sensor, and a TCM reflash resolves it.
- P2549 does not always mean the torque management system is broken; it can be a reaction to another system, such as ABS or stability control, sending an invalid request over the CAN bus.

Can I keep driving with P2549?

You can usually drive the vehicle short distances to a repair shop, but avoid heavy acceleration or towing because torque management is disabled and the transmission may shift harshly. If the engine enters limp mode or the stability control warning is also on, limit driving to a safe parking location and arrange a tow.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter with back-probing pins
- Wiring diagram for the specific vehicle
- Socket set and trim removal tools
- Contact cleaner and dielectric grease



Reading P2549

- P** Powertrain: engine, transmission and emissions.
- 2** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 5** Vehicle speed, idle control and auxiliary inputs.
- 49** The exact fault within that area.

Often seen with

P0700 Transmission Control System Malfunction · **P2138** Throttle/Pedal Position Sensor D/E Voltage Correlation · **P2548** Torque Management Request Input Signal 'B' · **P2550** Torque Management Request Input Signal 'B' Low · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [Helicopter Simulator: Take Off, Hover and Land](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2549/>

