



P1844 · GM

Torque Reduction Signal Circuit Desired By TCM

P1844 on GM vehicles indicates that the transmission control module (TCM) is requesting a reduction in engine torque, but the powertrain control module (PCM) has detected a fault in the dedicated torque reduction signal circuit. The PCM monitors the circuit and sets this code when the signal voltage or continuity falls outside the expected range, preventing proper communication of the torque reduction request.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	GM specific	Medium	Professional	Transmission

Symptoms you may notice

- The check engine light or service engine soon light illuminates on the instrument cluster.
- Often no symptoms besides the warning light, especially during normal driving conditions.
- Harsh or delayed transmission shifts may be noticed because torque reduction during shifts is disabled.
- Reduced engine performance or a sudden loss of power during acceleration may occur if the PCM defaults to a reduced torque strategy.
- The transmission may enter limp mode or fail to downshift smoothly when climbing hills or passing.
- In some cases, the vehicle may exhibit a slight surge or hesitation when the accelerator pedal is pressed.

Common causes, most likely first

- 1 Damaged or chafed wiring in the torque reduction signal circuit between the TCM and PCM, often near connectors or where the harness bends.
- 2 Corroded or loose electrical connectors at the TCM or PCM, causing intermittent signal loss.
- 3 A faulty transmission control module (TCM) that fails to output the correct torque reduction signal.
- 4 A failed powertrain control module (PCM) that misinterprets or cannot read the torque reduction request.
- 5 A short to ground or short to voltage in the signal wire, often caused by moisture intrusion or road debris damage.
- 6 An open circuit in the signal wire due to a broken wire or poor terminal tension at a connector.
- 7 Aftermarket electronic accessories improperly tapped into the vehicle's wiring harness, introducing interference or a parasitic draw.



How to diagnose and fix it

- 1 Connect a scan tool and verify P1844 is current, then check for any related codes in the TCM and PCM to confirm the fault is isolated to the torque reduction circuit.
- 2 Inspect the wiring harness between the TCM and PCM for visible damage, chafing, or corrosion, paying close attention to areas near the exhaust and moving components.
- 3 Disconnect and inspect the TCM and PCM connectors for bent pins, corrosion, or loose terminals, cleaning them with electrical contact cleaner if necessary.
- 4 Perform a voltage drop test on the torque reduction signal wire while wiggling the harness to detect intermittent opens or shorts.
- 5 Check the resistance of the signal circuit against the manufacturer's specification to rule out excessive resistance or an open circuit.
- 6 If the wiring and connectors are good, substitute a known-good TCM and retest; if the code clears, replace the TCM and reprogram it as needed.
- 7 If the TCM substitution does not resolve the issue, test the PCM with a known-good unit or perform a pinpoint test to confirm the PCM is at fault before replacement.

Before you replace the TCM or PCM

- A common oversight is assuming the TCM is defective when the real problem is a chafed wire in the harness near the transmission bell housing, where heat and vibration take a toll.
- The torque reduction signal circuit is often shared with other systems, so a fault in an unrelated component on the same ground circuit can set P1844 as a secondary code.
- Intermittent P1844 codes that appear only in wet weather often point to moisture intrusion in a connector, not a failed module, so a thorough connector inspection is essential.
- Some technicians replace the TCM only to find the code returns because the PCM's internal driver for the signal circuit has failed, which requires a PCM replacement and reprogramming.
- Aftermarket remote starters or performance tuners that splice into the data bus or signal wires can disrupt the torque reduction signal, causing P1844 without any hardware failure.

Can I keep driving with P1844?

You can generally continue driving with P1844, but avoid heavy acceleration or towing until the fault is repaired, as the transmission may shift harshly and the PCM may limit engine torque unexpectedly. If the vehicle enters limp mode or shifts erratically, pull over and arrange for a professional diagnosis.



Tools that help

- OBD-II scan tool with bidirectional control and live data capability
- Digital multimeter with voltage drop and resistance measurement functions
- Electrical contact cleaner and dielectric grease
- Wire terminal pick and connector pin removal tools
- Manufacturer-specific service information for wiring diagrams and pinpoint tests
- Test light or logic probe for quick circuit integrity checks

Reading P1844

P	Powertrain: engine, transmission and emissions.
1	Manufacturer-specific code (GM): its meaning depends on the make.
8	Transmission.
44	The exact fault within that area.

Often seen with

P1843 Check DTC Memory Of Distance Control ECU · **P1843** 1-2 Shift Solenoid Circuit High Voltage · **P1845** Transmission Gear Ratio Output Circuit · **P0700** Transmission Control System Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Boxer Engine Works: Flat Engine Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/gm-p1844/>

