

TOYOTA · POWERTRAIN

P1895

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1895 · Toyota

TCM To ECM Torque Reduction Circuit Malfunction

P1895 on Toyota vehicles indicates a malfunction in the communication line that carries a torque reduction request from the Transmission Control Module (TCM) to the Engine Control Module (ECM). The ECM expects a specific pulse-width modulated signal on this circuit, and when the voltage or signal pattern falls outside the expected range, the code is stored.

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

Symptoms you may notice

- Illumination of the Check Engine Light (CEL) or Transmission Warning Light, often with no other noticeable symptoms.
- Harsh or delayed transmission shifts, particularly during acceleration or deceleration.
- Reduced engine power or a limp-home mode triggered by the ECM limiting torque.
- Inconsistent cruise control operation or the cruise control refusing to engage.
- Slightly increased fuel consumption due to improper torque converter lockup strategy.

Common causes, most likely first

- 1 Damaged, corroded, or disconnected wiring or connector pins in the TCM-to-ECM torque reduction circuit.
- 2 Failed TCM, often due to internal circuit faults or water intrusion into the transmission control module.
- 3 Failed ECM, though this is less common and should only be suspected after all other possibilities are ruled out.
- 4 Poor ground connection shared by the TCM or ECM, causing erratic signal voltage.
- 5 Aftermarket electronic modifications, such as piggyback tuners or alarm systems, tapping into the CAN bus or signal wires.
- 6 Internal short or open in the torque reduction signal wire within the transmission harness.



How to diagnose and fix it

- 1 Inspect the TCM and ECM connectors for corrosion, loose pins, or pushed-out terminals, and clean or repair as needed.
- 2 Check the torque reduction circuit wiring for continuity, shorts to ground, and shorts to power using a digital multimeter.
- 3 Verify the TCM and ECM grounds are clean and tight, and measure voltage drop across the ground circuit under load.
- 4 Clear the code and perform a road test to see if it returns; if it does, proceed to pinpoint tests.
- 5 Back-probe the torque reduction signal wire at the ECM and observe the pulse-width modulated signal with an oscilloscope while commanding torque reduction via a scan tool.
- 6 If the signal is absent or incorrect at the ECM but present at the TCM, repair the harness; if absent at the TCM, suspect the TCM.
- 7 Substitute a known-good TCM or ECM only after confirming the wiring and grounds are fault-free, then recheck for the code.

Before you replace the TCM or ECM

- A loose or corroded ground bolt on the transmission housing can cause this code intermittently, and it is often overlooked because the connectors look fine.
- Aftermarket accessories wired into the CAN bus or signal wires can disrupt the torque reduction signal, so always check for non-factory wiring before condemning a module.
- The code can set without any drivability complaint because the ECM may default to a safe torque strategy that is barely noticeable to the driver.
- A weak battery or charging system fault can cause voltage spikes that mimic a failed TCM, so always verify battery health and charging voltage first.
- On some Toyota models, the torque reduction signal is shared with the cruise control system, so a cruise control malfunction may be the only clue to a wiring issue.

Can I keep driving with P1895?

The vehicle is generally safe to drive with P1895 because the ECM defaults to a conservative torque strategy, but you may experience harsh shifts or reduced power. Avoid heavy towing or aggressive acceleration until the fault is repaired, and have the circuit inspected promptly to prevent potential transmission damage.

Tools that help

- Digital multimeter (DMM)
- Oscilloscope
- Toyota-specific scan tool or Techstream
- Wire repair kit with terminal picks
- Electrical contact cleaner



Reading P1895

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

Often seen with

P1894 Engine Torque Signal High Voltage · **P0607** Control Module Performance · **P0700** Transmission Control System Malfunction · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [Car Relay Test Bench: Test 4-Pin and 5-Pin Relays](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/toyota-p1895/>

