

MAZDA · POWERTRAIN

P1719

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P1719 · Mazda

Engine Torque Signal

P1719 on Mazda vehicles indicates that the powertrain control module (PCM) has detected an implausible or missing engine torque signal from the transmission control module (TCM) or a related controller over the controller area network (CAN) bus. The PCM relies on this signal to coordinate shift quality, torque converter lockup, and engine output during gear changes, so when the signal is absent or out of range, the PCM stores this code and may default to a reduced-performance strategy.

SYSTEM

Powertrain

CODE TYPE

Mazda specific

SEVERITY

Medium

FIX DIFFICULTY

Professional

AREA

Transmission

Symptoms you may notice

- Illumination of the check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed automatic transmission shifts, particularly during acceleration or deceleration
- The transmission may enter limp mode, holding a single gear and limiting engine speed
- Reduced engine power or sluggish acceleration due to torque management intervention
- Poor fuel economy or inconsistent idle quality in some cases
- Occasional stalling or rough running when the torque signal is lost intermittently

Common causes, most likely first

- 1 Faulty or contaminated mass airflow (MAF) sensor sending incorrect load data to the PCM
- 2 Wiring damage or corrosion in the CAN bus circuits between the PCM and TCM
- 3 Failed transmission control module (TCM) or internal communication fault
- 4 Software calibration issue in the PCM or TCM requiring a reflash or update
- 5 Poor electrical connections at the PCM or TCM harness connectors
- 6 Throttle position sensor (TPS) or accelerator pedal position (APP) sensor malfunction affecting torque calculations
- 7 Low battery voltage or charging system issues causing communication glitches



How to diagnose and fix it

- 1 Perform a thorough visual inspection of the engine bay and transmission wiring for chafed, corroded, or disconnected harnesses
- 2 Use a scan tool to check for stored codes in both the PCM and TCM, and verify live data for the engine torque signal
- 3 Test the MAF sensor and throttle position sensor for proper voltage and signal integrity according to Mazda service information
- 4 Check battery voltage and charging system output to rule out low-voltage communication faults
- 5 Inspect and clean the PCM and TCM connectors, applying dielectric grease if recommended
- 6 If wiring and sensors are good, reprogram the PCM and TCM with the latest Mazda calibration updates
- 7 Replace the TCM or PCM only after confirming a confirmed internal communication failure with a oscilloscope or dealer-level diagnostic tool

Torque signal faults often misdiagnosed

- A dirty or failing mass airflow sensor is a frequent culprit because the PCM calculates engine torque partly from airflow readings, and a skewed signal can trigger P1719 without setting a MAF code.
- The code can be set by a weak battery or poor ground connection that causes momentary CAN bus communication errors, so always check voltage and grounds before replacing modules.
- On some Mazda models, a software bug in the TCM can cause false torque signal errors that are fixed by a simple reflash, not a hardware replacement.
- P1719 does not always mean the transmission is failing; it often points to an engine sensor or wiring issue that affects torque reporting, so avoid condemning the transmission prematurely.
- Intermittent faults may only appear during cold starts or under heavy load, so a road test with a scan tool recording live data is essential for accurate diagnosis.

Can I keep driving with P1719?

You can usually drive the vehicle to a repair shop if the check engine light is on and the car drives normally, but avoid heavy acceleration or towing because the transmission may be in a default strategy that can cause harsh shifts. If the transmission is stuck in limp mode or the engine power is severely reduced, stop driving and have the vehicle towed to prevent further damage.

Tools that help

- OBD-II scan tool with live data and CAN bus capabilities
- Digital multimeter for voltage and resistance checks
- Oscilloscope for analyzing CAN bus signals
- Mazda-specific diagnostic software or dealer-level tool for module reprogramming
- Electrical contact cleaner and dielectric grease
- Factory service information for wiring diagrams and torque specifications



Reading P1719

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

Often seen with

P0101 Mass/Volume Air Flow Circuit Range/Performance · **P0700** Transmission Control System Malfunction · **P0715** Input/Turbine Speed Sensor Circuit Malfunction · **P0720** Output Speed Sensor Circuit Malfunction · **U0100** Lost Communication With ECM/PCM A

See it working

Watch the animated explainer [How a Supercharger Works: Roots Blower in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/mazda-p1719/>

