

GENERIC · POWERTRAIN

P0608

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P0608

Control Module VSS Output 'A'

P0608 indicates that the powertrain control module (PCM) has detected an internal fault in its vehicle speed sensor (VSS) output signal circuit, specifically the 'A' output. The PCM monitors the VSS output it generates for other modules and sets this code when the signal voltage or current is outside the expected range, pointing to a problem inside the PCM or its output driver.

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

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Erratic or non-functional speedometer, especially if the VSS signal is shared with the instrument cluster
- Transmission shift quality issues or failure to shift due to missing vehicle speed data
- Cruise control or speed-limiting features may become inoperative
- Anti-lock brake (ABS) or traction control warning lights may illuminate if those systems rely on the VSS output

Common causes, most likely first

- 1 Internal failure of the powertrain control module (PCM) output driver for the VSS signal
- 2 Short to ground or short to voltage on the VSS output circuit wiring
- 3 Open circuit or high resistance in the VSS output wiring between the PCM and other modules
- 4 Corroded or damaged connector pins at the PCM or intermediate connectors
- 5 Aftermarket electronic accessories improperly tapped into the VSS signal wire
- 6 Water intrusion into the PCM connector or case causing internal damage

How to diagnose and fix it

- 1 Inspect the VSS output circuit wiring for chafing, pinching, or corrosion, and repair any damage found
- 2 Disconnect the PCM and check for shorts to ground or voltage on the VSS output wire; repair as needed
- 3 Verify connector pin tension and cleanliness at the PCM and any inline connectors; clean or replace terminals
- 4 Check for aftermarket accessories wired into the VSS circuit and remove or correct improper connections
- 5 If wiring and connections are good, test the VSS output signal with an oscilloscope to confirm the PCM is not producing a valid waveform
- 6 Substitute a known-good PCM and recheck for the code; if it clears, replace and reprogram the PCM
- 7 Clear codes and perform a road test to verify the repair and ensure no other codes return



When the PCM itself is the culprit

- A failed PCM is a common cause of P0608, but technicians often replace the PCM only to find the code returns because a shorted VSS wire damaged the new unit's output driver.
- The VSS output 'A' circuit may feed multiple modules, so a fault in any connected module can back-feed and set this code even if the PCM is healthy.
- Some vehicles use the VSS output for both the speedometer and the transmission controller; a missing signal can cause harsh shifting that misleads diagnosis toward the transmission.
- Aftermarket remote starters or navigation units tapped into the VSS wire are a frequent hidden cause, so always check for non-factory wiring before condemning the PCM.
- P0608 can be stored intermittently due to a loose PCM ground or poor battery connection, so verify ground integrity before any module replacement.

Can I keep driving with P0608?

The vehicle may remain driveable, but you should avoid relying on the speedometer, cruise control, or advanced driver aids until the fault is repaired. If the transmission shifts erratically or the engine stumbles, limit driving to reach a repair shop safely.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Oscilloscope
- Wiring diagram for the specific vehicle
- Terminal pick and electrical contact cleaner
- PCM reprogramming tool (if replacement is required)

Reading P0608

P Powertrain: engine, transmission and emissions.

0 Generic (SAE) code: it means the same thing on every OBD-II vehicle.

6 Computer and output circuits.

08 The exact fault within that area.

Often seen with

P0500 Vehicle Speed Sensor Malfunction · **P0600** Serial Communication Link Malfunction · **P0601** Internal Control Module Memory Checksum Error · **P0602** Control Module Programming Error · **P0720** Output Speed Sensor Circuit Malfunction



See it working

Watch the animated explainer [How a Six-Speed Manual Gearbox Works](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0608/>

