

GENERIC · POWERTRAIN

P078D

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P078D

Shift Timing Solenoid B High

P078D indicates that the transmission control module has detected an abnormally high current or voltage on the circuit for shift timing solenoid B, which is used to control the timing of gear shifts. The computer compares the solenoid's electrical behavior to expected values and flags the circuit as faulty when the signal exceeds the calibrated threshold.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Transmission

Symptoms you may notice

- Illumination of the check engine light or transmission warning light, often with no other noticeable symptoms
- Harsh or delayed shifts, particularly when changing between certain gears
- Transmission may enter limp mode, limiting vehicle speed and gear selection
- Slipping or flaring during shifts, where engine speed rises without corresponding acceleration
- Inconsistent shift points or failure to shift into certain gears

Common causes, most likely first

- 1 Faulty shift timing solenoid B, such as a shorted or open internal coil
- 2 Damaged or corroded wiring harness or connector at the solenoid or transmission control module
- 3 Transmission fluid contamination or degradation causing solenoid malfunction
- 4 Sticking or binding solenoid valve due to debris in the valve body
- 5 Internal transmission control module (TCM) fault, though less common
- 6 Poor electrical ground connection for the solenoid circuit

How to diagnose and fix it

- 1 Verify the code with a scan tool and check for any related transmission codes
- 2 Inspect the solenoid wiring harness and connectors for damage, corrosion, or loose pins
- 3 Measure the resistance of shift timing solenoid B and compare to the manufacturer's specification
- 4 Check transmission fluid level and condition; service if contaminated or degraded
- 5 Perform a voltage drop test on the solenoid circuit to identify excessive resistance
- 6 If electrical checks pass, remove and inspect the solenoid for sticking or debris; replace if necessary
- 7 After repair, clear codes and perform a relearn or adaptation drive cycle as required



What a high solenoid code often hides

- A high voltage or current reading on a shift solenoid circuit frequently originates from a chafed wire grounding against the transmission case rather than a failed solenoid itself.
- Debris from a failing torque converter or clutch packs can lodge in the solenoid valve, causing it to stick and draw excessive current, so replacing the solenoid without addressing the debris source leads to repeat failure.
- Some vehicles use a single solenoid for multiple shift functions, so a fault in one circuit can mimic problems with other gears and mislead diagnosis toward the wrong component.
- The code can be set intermittently by a poor connection at the transmission bulkhead connector, which often escapes notice during a quick visual inspection.
- After replacing a solenoid, failing to perform the manufacturer's adaptive relearn procedure can cause the new code to reappear or result in poor shift quality.

Can I keep driving with P078D?

If the vehicle is in limp mode or shifting harshly, avoid highway driving and seek service promptly to prevent further transmission damage. If the only symptom is the warning light and the vehicle drives normally, you can drive cautiously to a repair shop, but avoid heavy acceleration or towing.

Tools that help

- OBD-II scan tool with transmission code capability
- Digital multimeter
- Vehicle-specific service information for resistance specifications
- Socket set and basic hand tools
- Transmission fluid level gauge and drain pan

Reading P078D

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
7	Transmission.
8D	The exact fault within that area.

Often seen with

P0750 Shift Solenoid 'A' · **P078A** Shift Timing Solenoid B · **P078B** Shift Timing Solenoid B Range/Performance · **P078C** Shift Timing Solenoid B Low · **P078E** Shift Timing Solenoid B Intermittent



See it working

Watch the animated explainer [How an Automatic Transmission Works, Gear by Gear](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p078d/>

