

GENERIC · POWERTRAIN

P078A

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

P078A

Shift Timing Solenoid B

P078A indicates that the transmission control module has detected an electrical or performance fault in shift timing solenoid B, which is responsible for precisely controlling hydraulic pressure during gear changes. The computer compares commanded solenoid current or response against expected values and sets the code when the circuit or solenoid does not behave as designed.

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

Symptoms you may notice

- Harsh or delayed gear shifts, especially when the transmission is cold
- Flashing or illuminated check engine light, sometimes accompanied by a transmission warning message
- Transmission stuck in a single gear or fails to downshift when accelerating
- Slipping sensation or engine flare between shifts
- Often no symptoms besides the warning light, particularly if the fault is intermittent

Common causes, most likely first

- Faulty shift timing solenoid B (open, shorted, or mechanically stuck)
- Damaged or corroded wiring harness or connector at the solenoid or transmission case
- Contaminated transmission fluid causing solenoid valve sticking or restricted passages
- Low or incorrect transmission fluid level
- Failed transmission control module or internal driver circuit
- Valve body wear or debris blocking the solenoid's hydraulic circuit

How to diagnose and fix it

- Check transmission fluid level and condition; top off or replace fluid if contaminated
- Inspect the solenoid B electrical connector and harness for corrosion, chafing, or loose pins
- Measure solenoid resistance and compare to manufacturer specification; replace if out of range
- Test the solenoid circuit for power and ground integrity using a multimeter or test light
- Remove and clean or replace the shift timing solenoid B, following the manufacturer's procedure
- Clear the code and perform a relearn or adaptation drive cycle to verify the repair
- If the code persists, diagnose the valve body and transmission control module circuits



What P078A often hides

- A dirty or degraded transmission fluid is a frequent culprit behind shift timing solenoid codes, yet many technicians replace the solenoid without addressing the contaminated fluid that caused the sticking.
- Intermittent P078A codes can be triggered by a loose ground connection at the transmission case, which is often overlooked during a visual inspection.
- The code does not always mean the solenoid itself has failed; a worn valve body or a faulty transmission control module driver can produce identical symptoms and set the same code.
- After replacing the solenoid, some vehicles require a transmission adaptation reset or a specific drive cycle before the code will clear permanently, leading to unnecessary repeat repairs if skipped.
- A failing shift timing solenoid B can sometimes cause no drivability symptoms at all, so the warning light may be the only clue that a problem exists.

Can I keep driving with P078A?

You can usually drive the vehicle short distances to a repair shop, but avoid aggressive acceleration or towing until the fault is repaired. Continued driving with harsh shifts can accelerate transmission wear and lead to more costly damage.

Tools that help

- OBD-II scan tool with transmission code capability
- Digital multimeter
- Transmission fluid level dipstick or scan tool for fluid temperature
- Socket and wrench set
- Test light
- Factory service information for solenoid resistance specifications

Reading P078A

P Powertrain: engine, transmission and emissions.

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

7 Transmission.

8A The exact fault within that area.

Often seen with

P0789 Shift/Timing Solenoid Intermittent · **P078B** Shift Timing Solenoid B Range/Performance · **P078C** Shift Timing Solenoid B Low · **P078D** Shift Timing Solenoid B High · **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/p078a/>

