

GENERIC · POWERTRAIN

P0793

OBD-II TROUBLE CODE

P0793

Intermediate Shaft Speed Sensor 'A' Circuit No Signal

P0793 means the transmission control module (TCM) is not receiving a usable signal from the intermediate shaft speed sensor 'A' circuit. The computer expects a pulsing voltage or digital square wave that rises and falls as the intermediate shaft turns, and it has detected no activity on that circuit for a set period.

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 gear shifts as the transmission loses a key speed reference
- Transmission stuck in a single gear or default limp mode
- Erratic shifting or failure to downshift when accelerating
- Speedometer inaccuracy or a drop to zero if the sensor shares speed data with the instrument cluster
- Reduced fuel economy from the transmission holding gears longer

Common causes, most likely first

- 1 Failed intermediate shaft speed sensor 'A' due to heat, debris, or internal electrical failure
- 2 Damaged or corroded sensor connector pins or terminals at the sensor or TCM
- 3 Broken, chafed, or shorted wiring in the sensor circuit between the sensor and the TCM
- 4 Metal debris or clutch material buildup on the sensor tip, blocking the magnetic pickup
- 5 Internal transmission mechanical damage, such as a broken tone ring or worn bearing, preventing the sensor from reading shaft rotation
- 6 Faulty TCM or a software issue causing it to misread a valid signal
- 7 Low or contaminated transmission fluid affecting sensor operation or signal consistency



How to diagnose and fix it

- 1 Scan all modules for stored and pending codes, and record freeze-frame data to confirm when P0793 set
- 2 Inspect the intermediate shaft speed sensor connector and wiring for corrosion, looseness, or physical damage
- 3 Check sensor resistance and signal output with a multimeter or oscilloscope while cranking or driving, comparing to manufacturer specifications
- 4 Remove the sensor and inspect the tip for metal shavings or debris; clean or replace as needed
- 5 Perform a voltage drop test on the sensor ground and signal circuits to rule out high resistance
- 6 Verify transmission fluid level and condition, and check for signs of internal mechanical damage
- 7 If the circuit and sensor test good, follow the manufacturer's diagnostic flow for TCM testing or reprogramming

Why a good sensor still sets P0793

- A common misdiagnosis is replacing the speed sensor when the real fault is a chafed wire hidden inside the loom near a sharp bracket or heat source.
Debris on the sensor tip from normal clutch wear can mimic a failed sensor, so cleaning the tip often restores the signal without any parts replacement.
- Some transmissions use the intermediate shaft speed sensor for shift scheduling, so a no-signal fault can cause harsh engagements that feel like a major mechanical failure.
- A weak battery or charging system can cause the TCM to log a false no-signal code during cranking, so always check system voltage before condemning the sensor.
The code does not always mean the sensor is dead; a shorted signal wire to ground or power can produce the same no-signal condition in the TCM.

Can I keep driving with P0793?

You can usually drive the vehicle to a repair shop, but avoid heavy acceleration and highway speeds because the transmission may enter limp mode or shift unpredictably. If the vehicle is already in limp mode or shifting harshly, limit driving to a short distance at low speed.

Tools that help

- OBD-II scan tool with live data and freeze-frame capability
- Digital multimeter
- Oscilloscope for signal waveform analysis
- Socket and ratchet set
- Wire terminal pick and electrical contact cleaner
- Manufacturer service information for circuit testing



Reading P0793

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

Often seen with

P0715 Input/Turbine Speed Sensor Circuit Malfunction · **P0720** Output Speed Sensor Circuit Malfunction · **P0730** Incorrect Gear Ratio · **P0791** Intermediate Shaft Speed Sensor 'A' Circuit · **P0792** Intermediate Shaft Speed Sensor 'A' Circuit Range/Performanc

See it working

Watch the animated explainer [Four-Stroke Engine Notebook: The Otto Cycle Explained](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p0793/>

