



P2162

Vehicle Speed Sensor 'A' / 'B' Correlation

P2162 indicates that the powertrain control module (PCM) has detected a disagreement between two vehicle speed signals, typically the anti-lock brake system (ABS) wheel speed sensors and the transmission output shaft speed sensor. The computer compares these signals to ensure they correlate within an expected range, and when the difference exceeds a calibrated threshold for a set time, it stores this code and illuminates the warning light.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Illumination of the anti-lock brake system (ABS) warning light or traction control light
- Erratic or inaccurate speedometer readings
- Harsh or delayed transmission shifts due to incorrect speed data
- Cruise control may become inoperative or disengage unexpectedly
- The transmission may enter limp mode, limiting vehicle speed

Common causes, most likely first

- 1 Faulty wheel speed sensor or damaged sensor wiring at one or more wheels
- 2 Malfunctioning transmission output shaft speed sensor
- 3 Corroded, chafed, or shorted wiring in the speed sensor circuits
- 4 Damaged or missing tone ring (reluctor wheel) on a wheel hub or transmission output shaft
- 5 Poor electrical connection at the ABS module or PCM connectors
- 6 Internal fault in the ABS module or PCM affecting signal processing

How to diagnose and fix it

- 1 Perform a visual inspection of all wheel speed sensors and their wiring for damage, corrosion, or debris
- 2 Use a scan tool to read live data from both speed signals and compare them while driving
- 3 Check the condition of the tone rings for cracks, missing teeth, or excessive rust
- 4 Measure resistance and continuity of the speed sensor circuits to rule out opens or shorts
- 5 Inspect and clean the electrical connectors at the ABS module and PCM, applying dielectric grease if needed
- 6 Replace the faulty speed sensor or repair damaged wiring as identified
- 7 Clear the code and perform a road test to verify the repair and ensure the code does not return



Speed Sensor Correlation Traps to Avoid

- A common misdiagnosis is replacing the transmission output speed sensor when the real problem is a dirty or damaged wheel speed sensor tone ring, which can mimic a sensor failure.
- Aftermarket wheels or tires of incorrect size can cause a correlation error because the ABS and transmission speed signals are calibrated for the original rolling circumference.
- The code can be set by a weak battery or charging system issue that causes voltage spikes, so always check battery health and ground connections before replacing parts.
- On some vehicles, the ABS module must be reprogrammed or recalibrated after sensor replacement, and skipping this step will cause the code to return immediately.
- A failing ignition switch or poor ground can intermittently drop speed sensor signals, leading to a false correlation code that disappears when the fault is not present.

Can I keep driving with P2162?

You can usually continue driving to a repair shop, but avoid sustained high speeds and be aware that the transmission may shift harshly or enter limp mode. If the speedometer is erratic or the ABS light is on, exercise extra caution, especially in wet or slippery conditions.

Tools that help

- OBD-II scan tool with live data capability
- Digital multimeter
- Jack and jack stands or a lift
- Wheel chocks
- Basic hand tools (socket set, screwdrivers)
- Electrical contact cleaner and dielectric grease

Reading P2162

P	Powertrain: engine, transmission and emissions.
2	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
1	Fuel and air metering.
62	The exact fault within that area.

Often seen with

C0035 Left Front Wheel Speed Sensor Circuit Range/Performance · **P0500** Vehicle Speed Sensor Malfunction · **P0501** Vehicle Speed Sensor Range/Performance · **P0720** Output Speed Sensor Circuit Malfunction · **P0721** Output Speed Sensor Range/Performance



See it working

Watch the animated explainer [How an Elevator Works: Traction Lift in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p2162/>

