



P1607 · Volkswagen

Vehicle Speed Signal Error Message From Instrument Cluster

P1607 on Volkswagen vehicles means the instrument cluster has reported a problem with the vehicle speed signal it sends to other control modules over the data bus. The engine control module (ECM) expects a valid speed message and either received implausible data or lost the signal entirely, so it logs this manufacturer-specific fault.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Volkswagen specific	Medium	Intermediate	Computer and output circuits

Symptoms you may notice

- The speedometer may read zero, jump erratically, or stay frozen while the car is moving.
- The ABS (anti-lock braking system) warning light, traction control light, or check engine light may illuminate.
- Cruise control may refuse to engage or drop out unexpectedly because it relies on vehicle speed data.
- The transmission may shift harshly or hold gears longer than normal due to missing speed input.
- The odometer may stop accumulating mileage or the trip meter may behave strangely.
- Often no symptoms besides the warning light, especially if the fault is intermittent.

Common causes, most likely first

- 1 A failing vehicle speed sensor (VSS) on the transmission or wheel speed sensor feeding the cluster.
- 2 Damaged, corroded, or chafed wiring between the speed sensor, instrument cluster, and ECM.
- 3 A faulty instrument cluster with an internal speed signal processing error.
- 4 Poor ground connection at the cluster or ECM causing signal corruption.
- 5 A weak or failing battery/charging system causing voltage drops that disrupt the CAN (controller area network) bus.
- 6 Aftermarket radio, alarm, or accessory installation that tapped into the speed signal wire.
- 7 Software glitch or outdated firmware in the instrument cluster requiring reflash.



How to diagnose and fix it

- 1 Scan all modules for stored codes and check live vehicle speed data in the ECM and cluster to confirm the signal is missing or erratic.
- 2 Inspect the speed sensor and its connector at the transmission for physical damage, corrosion, or loose pins.
- 3 Check the wiring harness between the speed sensor, cluster, and ECM for continuity, shorts to ground, and chafing.
- 4 Verify battery voltage and ground connections at the cluster and ECM, including the chassis ground points.
- 5 Test the speed sensor output with a multimeter or oscilloscope while spinning the wheels or driving.
- 6 If wiring and sensor are good, substitute a known-good instrument cluster or reflash the cluster software.
- 7 Clear codes and road-test to confirm the speed signal is stable and the code does not return.

Speed signal faults that fool good technicians

- A common misdiagnosis is replacing the instrument cluster when the real fault is a chafed speed sensor wire in the wheel well or near the transmission mount.
Aftermarket stereo or navigation installations often tap into the speed signal wire behind the dash, causing P1607 without any obvious driveability complaint.
- On some Volkswagen models, a weak battery or failing alternator can set P1607 because voltage drops corrupt CAN bus messages even though the speed sensor itself is fine.
- The code does not always mean the cluster is bad; the ECM can set it when it receives a plausible but incorrect speed value from a wheel speed sensor that is failing intermittently.
A faulty ABS wheel speed sensor can trigger P1607 indirectly because the cluster may derive its speed signal from ABS data on certain platforms.

Can I keep driving with P1607?

You can usually drive the car short distances to a repair shop, but avoid relying on cruise control or driving at high speeds because the speedometer and transmission shifting may be inaccurate. If the ABS or traction control lights are also on, drive cautiously and get it diagnosed promptly.

Tools that help

- OBD-II scan tool with manufacturer-specific software
- Digital multimeter
- Oscilloscope for signal testing
- Wiring diagram for the vehicle
- Socket set and trim removal tools



Reading P1607

- P** Powertrain: engine, transmission and emissions.
- 1** Manufacturer-specific code (Volkswagen): its meaning depends on the make.
- 6** Computer and output circuits.
- 07** The exact fault within that area.

Often seen with

P1606 Rough Road Spec Engine Torque ABS ECU Electrical Malfunction · **P1606** Chassis Accelerator Sensor Signal Circuit Fault · **P1606** ECM Control Relay Output Circuit · **P1606** Serial Communication Problem With Device 6 · **P0500** Vehicle Speed Sensor Malfunction · **P0501** Vehicle Speed Sensor Range/Performance · **P0720** Output Speed Sensor Circuit Malfunction · **U0121** Lost Communication With Anti-Lock Brake System (ABS) Control

See it working

Watch the animated explainer [How a MAP Sensor Works: Engine Vacuum and Load](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/volkswagen-p1607/>

