

GENERIC · CHASSIS

C0900

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0900

TPMS Sensor 1 Battery

C0900 indicates that the tire pressure monitoring system (TPMS) has detected a low battery in sensor number 1, which is typically the sensor mounted in the front left wheel. The computer sets this code when the sensor's internal battery voltage drops below a threshold that prevents reliable pressure readings, often after years of service.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Low

FIX DIFFICULTY

Intermediate

AREA

Brakes, steering and suspension

Symptoms you may notice

- Tire pressure warning light illuminated on the dashboard
- TPMS warning message displayed on the driver information center
- One or more tire pressure readings missing or showing dashes on the TPMS display
- Intermittent TPMS light that comes and goes with temperature changes
- Often no symptoms besides the warning light, with no change in tire pressure or handling

Common causes, most likely first

- 1 Depleted battery inside TPMS sensor 1, which is a non-replaceable component in most sensors
- 2 Sensor 1 has reached the end of its designed service life, typically 5 to 10 years
- 3 Physical damage to sensor 1 from road debris, curb impact, or tire service
- 4 Corrosion or water intrusion into sensor 1 electronics causing battery drain
- 5 Extreme cold temperatures temporarily reducing battery voltage below the threshold
- 6 Aftermarket or incorrect sensor 1 installed that does not meet OEM specifications



How to diagnose and fix it

- 1 Use a TPMS scan tool to read sensor 1 battery status and confirm the low battery code is current
- 2 Check tire pressures with a gauge and inflate all tires to the placard specification to rule out pressure-related warnings
- 3 Inspect sensor 1 for physical damage, corrosion, or a loose valve stem, and replace if damaged
- 4 Perform a TPMS relearn procedure according to the vehicle manufacturer's instructions to ensure sensor 1 is properly registered
- 5 Replace sensor 1 with a quality sensor that matches the vehicle's frequency and protocol, then perform a relearn
- 6 Clear the code and verify the TPMS light stays off after a test drive that includes speeds above 20 mph (32 km/h)
- 7 If the code returns immediately, check the TPMS receiver or module for communication faults that may mimic a sensor battery issue

What a TPMS battery code really means

- A low battery in one sensor often means the other three sensors are close behind, so replacing all four at once can prevent repeat visits and labor costs.
- Cold weather can temporarily drop a weak battery below the threshold and trigger C0900, so a code that appears only on cold mornings may not require immediate replacement.
- Some aftermarket sensors have replaceable batteries or programmable IDs, but most OEM sensors require complete replacement when the battery dies.
- A damaged or corroded sensor 1 can drain its battery prematurely, so always inspect the sensor and wheel area before assuming the battery simply aged out.
- The TPMS light may stay on after sensor replacement until a relearn procedure is completed, which is a common misdiagnosis trap where the new sensor is blamed.

Can I keep driving with C0900?

The vehicle remains safe to drive because the TPMS is a convenience system and does not affect braking, steering, or engine operation. However, you should check tire pressures manually with a gauge until the sensor is replaced, since the system cannot warn you of a slow leak.

Tools that help

- TPMS scan tool or activation tool
- Tire pressure gauge
- Valve core removal tool
- Tire changing equipment or access to a tire shop
- Digital multimeter for checking sensor signal if equipped



Reading C0900

- C** Chassis: brakes, steering and suspension.
- 0** Generic (SAE) code: it means the same thing on every OBD-II vehicle.
- 9** Brakes, steering and suspension.
- 00** The exact fault within that area.

Often seen with

C0750 Cruise Control Brake Switch · **C0901** TPMS Sensor 1 Position Performance · **C0902** TPMS Sensor 2 Battery · **C0903** TPMS Sensor 2 Position Performance

See it working

Watch the animated explainer [Car Won't Start? Step-by-Step No-Start Diagnosis](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0900/>

