

GENERIC · CHASSIS

C05B7

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C05B7

Brake Booster Temperature Sensor C Circuit Intermittent/Erratic

C05B7 indicates that the brake booster temperature sensor on circuit C is sending an intermittent or erratic signal to the anti-lock brake system (ABS) control module. The computer detects this when the sensor voltage momentarily drops out or jumps outside the expected range, often due to a loose connection or failing sensor.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Chassis	Generic (all makes)	Medium	Intermediate	Brakes, steering and suspension

Symptoms you may notice

- Illumination of the ABS warning light, often accompanied by the traction control and stability control lights
- Intermittent or no operation of the brake assist feature, leading to a harder brake pedal feel
- A stored code in the ABS module with no other obvious driving symptoms
- Occasional false activation of the stability control system or unintended braking
- Reduced brake performance in extreme cold or after extended driving when the sensor signal becomes erratic

Common causes, most likely first

- 1 Corroded, loose, or damaged electrical connector at the brake booster temperature sensor
- 2 Chafed or broken wires in the sensor circuit C harness, often near the booster or firewall
- 3 Failing brake booster temperature sensor itself, producing intermittent resistance values
- 4 Poor ground connection for the sensor or ABS module
- 5 Internal fault in the ABS control module affecting sensor signal processing
- 6 Heat damage to the sensor or wiring from proximity to the exhaust or turbocharger

How to diagnose and fix it

- 1 Inspect the sensor connector and wiring for corrosion, looseness, or physical damage, and clean or repair as needed
- 2 Perform a wiggle test on the harness while monitoring live sensor data to identify intermittent opens or shorts
- 3 Measure the sensor resistance and compare to specifications, replacing the sensor if out of range or erratic when heated
- 4 Check circuit continuity and voltage drop on the sensor ground and signal wires to rule out high resistance
- 5 Verify the ABS module software is up to date and reflash if a known calibration issue exists
- 6 Replace the brake booster temperature sensor if all wiring and connectors test good
- 7 If the fault persists, diagnose the ABS control module for internal faults and replace if necessary



Intermittent sensor faults that fool technicians

- A common oversight is replacing the sensor without checking the connector pins, which often spread or corrode and cause the intermittent signal.
- The code can be set by a momentary voltage spike from a failing alternator or a weak battery, so always check charging system health before condemning the sensor.
- Heat from the exhaust or turbocharger can degrade the sensor's internal wiring, causing erratic readings only when the engine bay is hot, so test the sensor both cold and at operating temperature.
- On some vehicles, the brake booster temperature sensor shares a ground with other sensors, and a bad ground can set multiple codes including C05B7.
- A stored C05B7 does not always mean the sensor is faulty; a loose ABS module connector or a chafed wire in the wheel well can produce the same intermittent signal.

Can I keep driving with C05B7?

The vehicle remains safe to drive under normal conditions because the base brakes are unaffected, but you should avoid heavy braking or towing until the fault is repaired, as brake assist may be reduced. If the ABS or stability control warning lights are on steadily, schedule service soon.

Tools that help

- OBD-II scan tool with ABS live data capability
- Digital multimeter
- Wire piercing probes or back-probe kit
- Heat gun (for thermal testing of the sensor)
- Vehicle-specific service information for circuit testing

Reading C05B7

C	Chassis: brakes, steering and suspension.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
5	Brakes, steering and suspension.
B7	The exact fault within that area.

Often seen with

C0051 Front Left ABS Solenoid 1 Circuit Malfunction · **C0110** ABS Pump Motor Circuit Malfunction · **C05B5** Brake Booster Temperature Sensor C Circuit/Open · **C05B6** Brake Booster Temperature Sensor C Circuit Range/Performance · **C05B8** Brake Booster Motor A Position Sensor Supply Circuit/Open



See it working

Watch the animated explainer **Turbocharger Trainer: Boost, Wastegate and Intercooler** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c05b7/>

