

GENERIC · CHASSIS

C0203

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0203

ABS Solenoid Valve Front Right Circuit

C0203 indicates that the anti-lock brake system (ABS) control module has detected an electrical fault in the circuit for the front right solenoid valve inside the hydraulic modulator assembly. The module monitors the valve's coil for expected resistance and current draw, and this code sets when the signal is out of range, open, or shorted.

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

Symptoms you may notice

- ABS warning light illuminated on the dashboard
- Traction control or stability control warning light may also be on
- Often no symptoms besides the warning light
- ABS may be disabled, leading to wheel lockup during hard braking
- Pulsation or unusual noise from the ABS hydraulic unit during activation
- In rare cases, a slight brake drag or pull if the valve sticks

Common causes, most likely first

- Damaged or corroded wiring harness or connector at the front right ABS wheel speed sensor or solenoid valve
- Faulty ABS solenoid valve coil inside the hydraulic modulator
- Open or short circuit in the solenoid valve wiring between the ABS module and the valve
- Failed ABS control module (internal driver circuit)
- Poor ground connection for the ABS pump motor or module
- Contaminated brake fluid causing valve sticking and coil overload

How to diagnose and fix it

- Inspect the front right ABS solenoid valve connector and wiring for corrosion, damage, or loose pins
- Measure resistance of the front right solenoid valve coil and compare to manufacturer specification
- Check for continuity and short-to-ground in the wiring between the ABS module and the valve
- Verify battery voltage and ground connections at the ABS module and pump motor
- Perform a bidirectional scan tool activation test of the front right solenoid valve to confirm operation
- If the valve coil is out of specification, replace the ABS hydraulic modulator assembly
- If wiring and valve are good, diagnose or replace the ABS control module



What most technicians overlook on C0203

- A weak or failing battery can cause the ABS module to set solenoid codes without any actual valve fault, so always load-test the battery first.
- Corrosion inside the connector at the ABS modulator is a common cause that is easily missed if only the wheel speed sensor circuit is checked.
- The code can be set by a sticking valve due to old contaminated brake fluid, so a fluid flush may resolve it if the coil tests good.
- Some vehicles require programming or coding of a replacement ABS module, which is often overlooked during repair.
- C0203 can be stored intermittently by a loose ground connection at the ABS pump motor, mimicking a failed solenoid.

Can I keep driving with C0203?

Because ABS may be disabled, avoid driving in conditions that require emergency braking or slippery surfaces; have the vehicle inspected promptly to restore full braking safety.

Tools that help

- OBD-II scan tool with ABS and bidirectional control capabilities
- Digital multimeter
- Wiring diagram for the ABS system
- Brake fluid tester
- Socket and wrench set

Reading C0203

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

Often seen with

C0200 ABS Solenoid Valve Front Left Circuit · **C0201** Brake Fluid Level Switch Circuit · **C0202** Brake Pedal Position Sensor · **C0205** Stop Lamp Switch Circuit



See it working

Watch the animated explainer **Four-Stroke Engine Cutaway: Intake to Exhaust** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0203/>

