

GENERIC · CHASSIS

C0644

OBD-II DIAGNOSTIC TROUBLE CODE (DTC)

C0644

Brake Pressure Sensor K Range/Performance

C0644 indicates that the antilock braking system (ABS) control module has detected an out-of-range or erratic signal from the brake pressure sensor designated as 'K'. The computer expects a specific voltage or pressure reading within a calibrated window, and the sensor's output has fallen outside that window or is not behaving as expected during self-tests or normal braking.

SYSTEM

Chassis

CODE TYPE

Generic (all makes)

SEVERITY

Medium

FIX DIFFICULTY

Intermediate

AREA

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
- Reduced or disabled ABS function during hard braking
- Brake pedal may feel different or require more effort in some cases
- Intermittent warning light that comes and goes with temperature or vibration

Common causes, most likely first

- 1 Faulty brake pressure sensor K
- 2 Damaged or corroded wiring or connector at the sensor
- 3 Contaminated or degraded brake fluid affecting pressure readings
- 4 Air trapped in the hydraulic system near the sensor
- 5 Failed ABS control module (internal fault in the sensor circuit)
- 6 Mechanical issue with the brake master cylinder or hydraulic proportioning valve

How to diagnose and fix it

- 1 Use a scan tool to read live data from brake pressure sensor K and compare to actual pedal pressure
- 2 Inspect the sensor connector and wiring for corrosion, chafing, or loose pins
- 3 Check brake fluid level and condition; bleed the brakes if air or contamination is suspected
- 4 Test the sensor's resistance and voltage output according to the manufacturer's procedure
- 5 Replace the brake pressure sensor K if it fails electrical or pressure-response tests
- 6 Clear the code and perform a road test to verify the repair
- 7 If the code persists, diagnose the ABS control module and its internal circuits



What most technicians overlook on C0644

- A low brake fluid level or recent brake job that introduced air can set this code without any sensor fault.
- Corroded pins in the sensor connector often mimic a failed sensor, so always inspect the harness before replacing parts.
- Some vehicles use the brake pressure sensor for hill-start assist and stability control, so a fault can disable multiple systems.
- The ABS module may store C0644 intermittently due to voltage drops from a weak battery or charging system.
- After replacing the sensor, a calibration or learn procedure may be required on some models to clear the code permanently.

Can I keep driving with C0644?

The vehicle remains drivable in most cases, but ABS and stability control may be disabled, increasing stopping distances in emergency situations. Avoid hard braking and slippery conditions until the fault is repaired.

Tools that help

- OBD-II scan tool with ABS live data capability
- Digital multimeter
- Brake pressure gauge
- Socket and wrench set
- Brake bleeding kit

Reading C0644

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

Often seen with

C0640 Brake Pressure Sensor J Range/Performance · **C0641** Brake Pressure Sensor K Circuit/Open · **C0642** Brake Pressure Sensor K Circuit High · **C0643** Brake Pressure Sensor K Circuit Low · **C0645** Brake Pressure Sensor L Circuit/Open



See it working

Watch the animated explainer [How ABS Works: Anti-Lock Brakes in X-Ray](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/c0644/>

