



# BOSCH

Invented for life

## Service and repair tips from Bosch: Brake pads

As a strong partner with extensive expertise in brakes, we offer your workshop everything you need for the efficient maintenance and repair of brake systems: first-class products, reliable service offerings and efficient diagnostic technology.



### Identifying and solving the most **common** problems with brake pads:

There are many causes of vibration and noise during braking. These are not always the result of worn brake pads. You should therefore always check the brake pads regularly to better identify the actual causes of braking problems.

#### Wear on one side only



**Cause:**

- ▶ Brake caliper and/or brake caliper piston is blocked
- ▶ Guiding of the caliper does not work properly

**Effect:**

- ▶ Vehicle pulls to one side during braking
- ▶ Faster and/or uneven brake pad wear

**Recommendation:**

- ▶ Check the brake caliper and replace if necessary
- ▶ Replace the brake pads

#### Conical wear – vertical or horizontal



**Cause:**

- ▶ Worn brake caliper seals and/or spring
- ▶ Excessive operating clearance of the caliper

**Effect:**

- ▶ Premature brake pad wear
- ▶ Braking noise

**Recommendation:**

- ▶ Check the brake caliper and replace if necessary
- ▶ Replace the brake pads

#### Grooves and scoring in the friction material



**Cause:**

- ▶ Dust or metal particles on the contact surface of the brake pad or brake disc
- ▶ Scratches on the surface of the brake disc

**Effect:**

- ▶ Braking noise
- ▶ Vibration during braking
- ▶ Affected braking efficiency

**Recommendation:**

- ▶ Check the brake disc and replace if necessary
- ▶ Replace the brake pads

#### Cracks or broken edges in the friction material



**Cause:**

- ▶ Extreme heat buildup due to constant contact between the brake pad and brake disc
- ▶ Bending of the brake pad backing plate
- ▶ Brake caliper or brake caliper piston is blocked

**Effect:**

- ▶ Braking noise
- ▶ Vehicle pulls to one side during braking
- ▶ Overheating on one wheel
- ▶ Uneven brake pad wear

**Recommendation:**

- ▶ Check the brake caliper and replace if necessary
- ▶ Replace the brake pads

### Count on Bosch:

- ▶ High market coverage: over 95%
- ▶ Matching solutions for all current vehicles
- ▶ Comprehensive OEM expertise
- ▶ Precise fit and easy assembly
- ▶ Reliable and fast delivery service

For more information, visit:  
[www.bosch.com](http://www.bosch.com)



To see the disc brake installation video: