

Brake Disc and Pad Damage **Part 1**

The consequences of choosing the wrong or low-grade brake parts can be dramatic. Meyle recommends to only use the brake components specified for the given vehicle application. It is important to adhere to the vehicle or brake manufacturer's specifications at all times.

When installing new brake components, observe the following:

- Always replace brake pads along with brake discs.
- Always replace all brake discs and pads per axle.
- Be careful to bed in new brake discs and pads properly.
- Avoid unnecessary heavy braking on the first 200 kilometres.
- Brake performance may be lower on the first 200 driven kilometres.

Check for functional reliability after installation:

- Pump brake pedal gently until it becomes stiff.
- Pedal travel must not vary at constant pedal load after pedal has been depressed several times.
- Check wheels for free rotation.
- Check brake fluid level in expansion tank and top up, if required.
- Perform check stops.

Overheating of the mating friction surfaces



Brake pad fails to disengage and rubs against the disc. This can cause the brake system to overheat.

Causes

- Brake pad seized
- Brake piston stuck in calliper
- Driving with depressed brake pedal, e.g. when going downhill

Possible consequences

- Reduced brake performance due to vitrification of the brake pad surface
- Unpleasant noise
- Brake disc deformation resulting in brake wobble and brake judder
- In the worst case, the brake disc friction surface may peel off

MEYLE's advice

Use mounting paste and ensure all parts move freely during installation. Avoid unnecessary disc brake drag.

Scoring and grooving marks on brake discs



Score and groove marks on disc brakes

Causes

- Foreign objects between brake disc and pad (dirt, road salt, etc.)
- Corrosion
- Overly soft brake discs
- Overly soft or poor quality brake disc material
- Low-grade brake brake pad material
- Excessive strain on brake system

Possible consequences

- Limited/reduced braking power
- Unpleasant noise

MEYLE's advice

Ensure brake system is free of foreign objects during installation. Use high-quality brake components. Replace brake pads along with brake discs.

Corrosion



Severe rust formation on brake discs and pads.

Causes

- Climatic effects (e.g. road salt, moisture)
- Extended periods of downtime with parking brake engaged
- Brake piston stuck in calliper
- Brake piston not fully returned to retracted position

Possible consequences

- Vibration and brake judder caused by brake disc deposits
- Noise generation
- Reduced braking power
- Overheating of brake discs and pads caused by rust spots

MEYLE's advice

Avoid extended periods of vehicle downtime with parking brake continually engaged. Ensure all components are free-moving. After extended periods of downtime cautiously apply the brakes to unlock the brake system and ensure rust spots have been removed.

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