Testing the thickness difference of a brake disc

General information
When carrying out troubleshooting on the brake system, test procedures may be required, such as checking the thickness difference (varying disc thickness) of the brake disc. The thickness difference can only be tested using a suitable measuring tool. A micrometer screw provides sufficient measuring accuracy of ± 0.001 mm. The maximum permissible thickness difference is 0.015 mm. This test should only be carried out on brake discs that have been normally worn or are like new.

Tests
The following procedure is recommended.

1. Prepare the brake disc for testing. If necessary, disassemble the brake caliper and brake caliper carrier for this.
2. Clean the friction surfaces of the brake disc.
3. Determine the thickness of the brake disc at various measuring points around the brake disc, approx. 10 – 15 mm beneath the external friction radius.
4. Note the measured values and compare.

The difference between the smallest and greatest measured value is the thickness difference.

Repair note
Depending on the vehicle type, a thickness difference of as little as 0.015 mm can lead to brake judder. Please observe the specifications in the maintenance and repair notes provided by the respective vehicle manufacturer.