Better safety for better cars

The brake system is probably the vehicle system subject to the strongest and most frequent strain. In order to satisfy the expectations of safety and comfort, it requires good quality diagnostic and adjustment facilities. As well as the assessment of all components requiring diagnostics, the classic efficiency test is an essential part of professional brake diagnostics. This is more than a mere indication of the maximum braking force, involving an assessment of the wheel bearings, assessment of the noise around the wheel brake and a special test of the electromechanical parking brake.

Brake systems on BMW Group vehicles

- Electromechanical parking brakes are being fitted with increasing frequency
BMW Group specification for brake test stands

The test stand must enable the following diagnostics and tests to be carried out:
- Brake force deviations under different brake pedal forces
- Ease of movement of the wheel brakes
- Ease of movement of the wheel bearings
- Noise detection
- Electromechanical parking brake test in accordance with repair instructions

The test stand must enable the conditioning of the wheel brakes to be carried out:
- Bedding in the service brakes
- Bedding in the parking brake (not electromechanical parking brake)

Risks from using inappropriate brake test stands

| Electromechanical parking brake testing | Testing the electromechanical parking brake is not possible on a static dynamometer (for E65, E70, E71/72, F01 and subsequent models) |
| Variations in brake force | Variations in brake force are inadequately diagnosed in road tests |
| Stiff brakes | Stiff brakes can only be detected on a roller |
| Stiff wheel bearings | Stiff wheel bearings can only be detected on a roller |
| Additional expenditure on road tests | Additional expenditure is needed on road tests for conditioning the brakes |

Brake test stand