Measurement of radial throw and run-out

When control measurements have been carried out on wheels which have been returned to us as the subject of claims due to excessively great radial throw or run-out, we have found that many of the wheels are actually within the stipulated tolerances. In order to avoid claims based on faulty measuring methods we recommend the following system to determine the radial throw and run-out on a wheel.

1. Remove one of the front wheels.
2. Check that the bearing is correctly adjusted.
3. Clean the contact surfaces between the wheel to be measured and the hub and brake drum respectively.
4. Fit the wheel again and tighten the wheel nuts evenly to the correct torque.
5. Use a dial indicator and a stand to measure the radial throw at "A" (see illustration) and the run-out at "B" after these surfaces have been cleaned. For cars and vans the permissible limit for throw or run-out is 2.5 mm (0.10") and for trucks 3.5 mm (0.14").

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