

In addition to incorrect wheel adjustment, defective shock absorbers can also be partly responsible for uneven tire wear. If the shock absorbers are defective, the wheels tend to bounce on rough roads. This causes increased general wear and under certain circumstances uneven tire wear along the circumference (polygonal wear).

### **b) Judgement of Tires**

If the tread of a tire is no longer clearly distinguishable along the whole of its surface, the tire is no longer safe. Depth of tread must be a minimum of 1 mm at the most worn point on the tread.

## **E. Preparation for Measurement**

a) When measurements are taken, the tire wear on the left and the right wheels should be as nearly identical as possible. It is not permissible to measure with one very worn tire and one new tire. In such cases it is advisable to use special "measuring wheels", i.e. wheels with new tires, which are used only for this measurement work.

b) The tire pressure should be checked and, if necessary, corrected.

Tire pressure front	1.7 atmospheres
rear	1.8 atmospheres

c) The play in the steering units should be checked (see Job No. 46 — 3). Worn parts should be replaced or repaired.

**Note:** If an optical axle gage is used, the check for excessive play can also be carried out with this gage.

d) If parts of the front or the rear axle assemblies (e.g. springs or axle halves) or complete assemblies are replaced before the measurement is carried out, it is essential to make a road test beforehand. This is necessary because the sudden stresses which occur whilst the vehicle is in motion cause the replaced parts to alter their position again, so that the measurements taken would be inaccurate.

e) The wheels must be able to settle into position freely whilst under load. This is best done by allowing all four wheels to stand on ball-bearing skid plates. For the front wheels, plates are required which are free to move in all directions; for the rear wheels, it is sufficient to use plates which move laterally. If such plates are not available the car can, if necessary, be measured on fixed plates. The plates used should, however, be "neutrally" positioned under the wheels. The car should also be pushed and rocked to and fro sufficiently before measurement is begun.

It is sufficient to have a level surface if measurements are taken with an optical axle gage.

## **F. Measurement Charts**

**Always record all measurements on a measurement chart, which should be kept with the car's papers.** This serves to establish whether measurements have altered, e.g. as a result of colliding with the curb when parking or because of an accident.

A measurement chart has been drawn up for use throughout all our branches and workshops and is suitable for use with all our models (see Page 40—3/23). The measurement charts can be obtained from the Central Service Department.

**On the back of the measurement chart are listed the adjustment values for all our passenger models.**