

CHECKING WHEEL AND TYRE RUN-OUT

Radial run out (eccentric or lift) or lateral run out (wobble) can cause irregular tyre wear. Run out should be checked, using an indicator gauge, at the points shown at "A" and "B" Fig. 3 by revolving the wheel on a true hub mounting. At these points the indicator reading should not exceed .050 in. (1.2 mm.) at either point. When checking with a tyre fitted, similar points can be checked on the outside of the wheel rim but, these will not be as accurate due to variations in paint thickness.

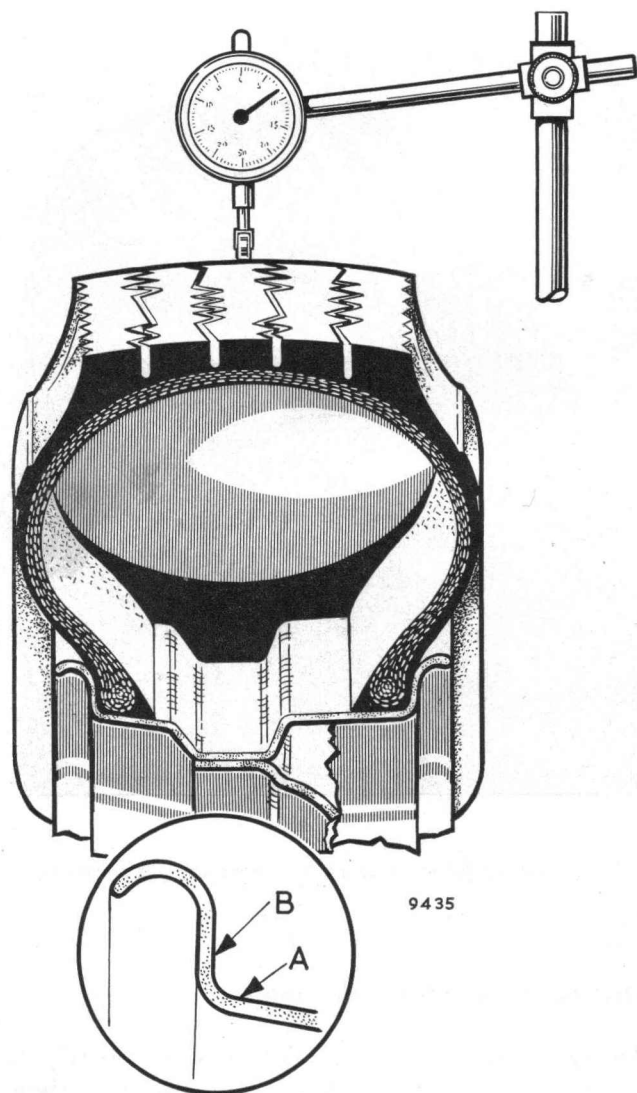


Fig. 3. Checking wheel and tyre run-out. "A" and "B" indicate the points to be checked for wheel "lift" and "wobble".

Checking a tyre on a wheel can be carried out providing, the car is driven a short distance so that "flat-spotting" of the tyre (from being parked) does not affect the run

out measurement and, the tyre is not showing abnormal wear.

By using a roller pick up on an indicator gauge, set to revolve round the centre rib of the tyre as shown in Fig. 3, the total radial run out should not exceed .065 in. (1.64 mm.) maximum.

To measure the lateral run out, set the indicator gauge on to the side wall of the tyre. This measurement should not exceed .065 in. (1.65 mm.).

If a figure in excess of this is recorded an improvement may be possible by revolving the tyre on the wheel.

Any run out rectifications carried out may necessitate re-balancing the wheel assembly.

NYLON TYRES

Nylon tyres may develop temporary flattening after standing for some time and cooling off, following a long run during which high temperatures have been reached.

These flat spots can be run out quite quickly but it may be necessary to approach the speeds and temperatures which have led to the flattening. For example, flats on tyres which have developed after a long fast run may be difficult to remove if the car is then used for local "pottering" especially if the weather has become colder and wetter.

Before balancing nylon tyres it is desirable to ensure that these flats have been fully run out, otherwise a false balance may be obtained.

TYRE AND WHEEL BALANCE

In the interests of smooth riding, precise steering and high stability, all tyres are balance checked to pre-determined limits. Coloured spots may be found on one bead indicating the lightest part of the tyre, which should be fitted near to the valve.

Where balance weights have been fitted to the wheel rims, it is advisable to detach them before tyre removal to avoid the possibility of their inadvertently falling inside the tyre. If the same tyre is to be refitted, the positions and amounts of these balance weights as well as the position of the tyre on the wheel should be marked with chalk on the rim, so that the subsequent replacement may restore the original balance as far as possible.