## Wheel balancing

Winter is time to look after the car and prepare for next summer's touring. Wheel balancing is, perhaps, less important than with modern fast cars with their smaller wheels, but properly balanced wheels can improve the ride and reduce wear in the suspension and steering. A good method of statically balancing, using the minimum of heavy washers, was published some time ago in the RROC magazine Silver Lady, and is worth repeating here.



1) Fill all the spindles with light washers, Fig 1.

2) Replace the required number of light washers on B with heavy washers, so that the nearest-to-top weights, A, go to the top, Fig 2.

3) Finally load A with heavy washers until the wheel is balanced. This uses the minimum of heavy washers.

The rear wheels should be balanced by temporarily moving them to the front. This is a nuisance, but provides an opportunity to clean and grease the splines, which should be done every 2,000 miles, anyway! Tthe light weights were made of bakelite, and heavy weights of lead. They are easily cut from sheets of plastic and builders' sheet lead respectively. 20hp cars were not supplied with covers for their weights – covers appeared some time after the introduction of the 20/25.

I had one wheel which was very out of balance, and it needed extra lead wrapped round two of the piles of weights. A better method can be used when the time comes to change the tyre: ie to check whether the out of balance was due to the tyre or the wheel. Rolling the bare (tyre-less) wheel on a hard flat horizontal surface (eg the kitchen floor) showed that it was the wheel itself which was grossly out of balance. It needed a huge 170 gram (6 ounces) weight on the rim to bring it back to true. The wheel appeared rust-free and I carefully checked to confirm that it was perfectly round with the hubs central; strangely there seemed to be no reason for the unbalance. My wheels are well-base, so I balanced the tyre-less wheel by cutting a 170 gram strip of builders' lead and fixing it in the bottom of the well, under the rubber band, using good quality silicone sealant, see Figure. When the new Firestone 21" tyre and inner tube were fitted, the wheel was still perfectly balanced, and needed no lead discs.

