

### How do I set Tappet Preload?

To be able to set the tappet pre-load, the tappets must be empty of oil. If you are using new tappets they will not have any oil in them, or, if you have used tappets, you can squeeze the oil out of them.

Please note that if you are fitting a new cam shaft, new tappets should always be used.

The allowed tolerance for tappet pre-load is 40 - 60 thou. This is the measured gap between the top of the tappet's piston and the retaining circlip. Each one needs checking individually, with the tappet on the heel of the camshaft lobe. (So that the lifter has no lift from the camshaft.)



There are currently no tools available for measuring this gap. However, we have found that the best item to use is a length of welding rod with one end bent at 90 degrees. You will need a measuring device, such as the vernier shown, to select/create 2 welding rods; one that measures at 40 thou., and the other that measures 60 thou. in diameter. This will give you an idea as to what shims you need to fit under the pedestals to set the pre-load.

Once you have ascertained the measure of the tappets, pre-load adjustment is achieved by fitting special pre-load shims under the pedestals. But beware, the rocker ratio is 1.6 that of the clearance that needs correcting, so a 16 thou. shim will make approx 25 thou. difference.

You MUST find an average shim size, and fix it to EVERY pedestal on that bank. So, for example, if you find that you have 4 tappets at 70 thou. and 4 at 80 thou. you would put 15 thou. shims on all the pedestals. Making the 70 thou. tappets 46 thou. and the 80 thou. ones 56, thus all the pre-loads are within, or closest possible to, the allowed tolerance.



To insert the shims, you need to slacken all 8 of the 14mm bolts that hold the rocker pedestals in place.

Then, one bolt at a time, nearly remove them so you can slide the shim underneath, and then slightly tighten the bolt so nothing slips or slides. Do this for all 8 pedestals.

Then, to tighten the bolts, start with one bolt and tighten by a couple of turns of the spanner, then go onto the next one. Keep going round till all the bolts are tight. The eventual torque setting for the bolts is 35 Lb/ft.