

## Emma's Front Wheel Bearing adjustment:

The front wheel bearings on MGB's are a little unusual insofar as they are taper roller bearings with a spacer collar/sleeve and the hub nut is torqued up.

The simple explanation for this unusual assembly method is that metal bar/rod is stronger when in tension. Using a spacer between the bearings enables the hub nuts to be torqued up which puts the stub axle under tension and hence makes it stronger.

### **Note.**

*The stub axles are quite meaty and I've certainly seen and adjusted many front wheel bearings that are not as robust, yet they do not have a spacer collar/sleeve. Remember that the MGB is a sports car and is designed to be driven with gusto! This tensioning of the stub axle increases the safety factor.*

Of course if you just tightened the nut it could result in locking the wheel bearing so various sized shims are used between the outer face of the collar/sleeve and the inner race of the outer bearing so that when the hub nut is tight the bearing still has free play.

### **Note.**

*Before starting this job it's worth buying a pack of spare shims, available from the MGB Hive for £4.95 with free postage. You will also require a 1-1/4" socket.*

If you are not used to adjusting front wheel bearings then assemble the hub with extra shims and nip up the hub nut. Now refit the wheel and put your hands on the wheel 180 degrees apart at 12 o'clock and 6 o'clock and rock the wheel; you should feel some movement/free play. The amount of free play should be barely discernible; you should just be able to feel it. If the free play is excessive then reduce the size of the shim(s). If you cannot feel any free play then add shim(s).

### **Notes.**

*If you put your hands in different positions; e.g. 9 o'clock and 3 o'clock you will get a false reading as steering ball joint play etc. will be affecting the 'feel'.*

*Worn kingpins give a similar feel. Carry out the same procedure for checking kingpins but have someone in the driver's seat with their foot hard on the brake pedal. Put your hands on the wheel at 12 o'clock and 6 o'clock and rock it; any movement now will be kingpin related.*

Once happy torque up the wheel nut, check the free play again and if correct insert a split pin\*\* and refit the hub grease cover which should be packed with grease.

### **Note.**

*\*\* If your car is fitted with wire wheels and you're the poor bugger who is going to have to remove the split pin next time it's worth cutting the legs of the split pin to an exact length and not being too heavy handed when bending the ends.*

While the front ends on the jack with the front wheels off you get better access to the kingpin grease nipples.

**Tip** - *Sometimes the gun doesn't seal on the grease nipple and a worm of grease will ooze out between gun and nipple; putting a piece of cotton rag over the nipple before applying the grease gun will often seal it sufficiently to apply the grease where it's needed. You can't over-grease the kingpins so pump plenty in to help get rid of most of the old dirty stuff.*