The majority of these tips have appeared in club newsletters over the years. Please note that you use them at your own risk as neither the Bristol Austin 7 Club nor the authors can be responsible for the results of trying to follow the instructions given.

Kingpin alignment - a method for checking - Dan Cole

The Austin Seven Companion (or “Green book” as it is often known) produced some years back by the 750 MC and still in print today contains all sorts of useful and interesting info. As with any such compilation many sections reflect individual views or opinions but all the same I have always found it a great resource.

On page 175, within the chapter on front axle overhaul, the subject of checking king-pin alignment is covered. The reader is encouraged to check that as well as being a good fit, both king-pins should sit vertically in the axle eye when viewed from the front and the side. When I was rebuilding the front axle on the Ruby last year I went through this process but found it awkward using plumb lines, large squares etc. Like many enthusiasts with a small garage I don’t have a really good reference surface of this scale.

A solution sprang to mind that proved easy and effective. At work when setting up structural tests we sometimes use digital inclinometers which can be obtained for under £20.

So, a couple of kingpins (preferably new or at least in good condition) are inserted into the axle eyes with most of the pin poking out the top. At this stage the protruding pin should show up any major misalignment with some careful ‘eyeballing’ – long lengths of ½” silver steel bar would help with visual checking but are not essential. If the axle beam is held firmly in the vice the digital inclinometer can be used to compare the alignment of the 2 king-pin eyes in both axes. Simply position the device carefully on the pin in the correct orientation and zero the reading before moving it across to the other pin, position in the same orientation and check how the readings compare. These inclinometers are usually magnetic which helps. The exercise can then be repeated for the other axis. Because the inclinometer can be readily zeroed it is not necessary to have the beam perfectly horizontal since relative angles in each axis can be checked

between the two positions.

Hopefully you will find that your axle is perfectly true and you can get on with the rebuild. If it isn’t you will have to judge how close is close enough and decide how to proceed. Either way at least you will know. I don’t have photos to hand for the set up but hopefully the above description is of some help and illustrations may follow in a future edition.