

Steering arm shims explained.

Some cars have shims between the steering arm lower bolt, and the BACK of the calliper.

There is much confusion about where they are fitted. Some believe they are for adjusting the calliper for centralising with the rotor, WRONG.

They are fitted, IF YOUR CAR HAS THEM, to compensate for machining tolerances of the vertical strut and steering arm mating faces.

AS I said, NOT ALL CARS HAVE THEM, and sometimes they are on ONE side and NOT the other.

When removing the caliper, the lower bolt contains the caliper and the steering arm, AND the shim, if fitted. Watch for that shim, but mostly you will miss it, as there is so much going on at the time.

If you already have the caliper off, then you will need to refit following the steps below.

- 1) Refit the arm with the TOP bolt only, #17 in the parts drawing below, and leave it loose.
- 2) Refit the caliper, with the middle (caliper only) bolt, #18 in the parts drawing below, and the lower bolt, #19 in the parts drawing below, which includes the steering arm.
FORGET ABOUT THE SHIM FOR NOW, READ ON.
- 3) Tighten the middle, caliper only bolt, to spec. Item #18 in the parts drawing below.
- 4) Tighten the TOP bolt to spec. Item #17 in the parts drawing below.
- 5) Look down at the gap between the steering arm and the BACK of the caliper. Get a feeler gauge set and measure that gap. If there is NO gap available for a 0.001" feeler

strip to enter, tighten the lower bolt, #19 in the parts drawing below, to spec, you are DONE.

If there is a measurable gap, measure it and write it down. The shims from Jaguar come in 2 thickness's, 0.004 and 0.001 inches. Most cars I have dealt with have one shim, maybe 2, not many shims.

6) Select the shim/s needed, remove that lower bolt, and “fiddle” the shims into place, and tighten that lower bolt to spec.

That's as simple as it is.

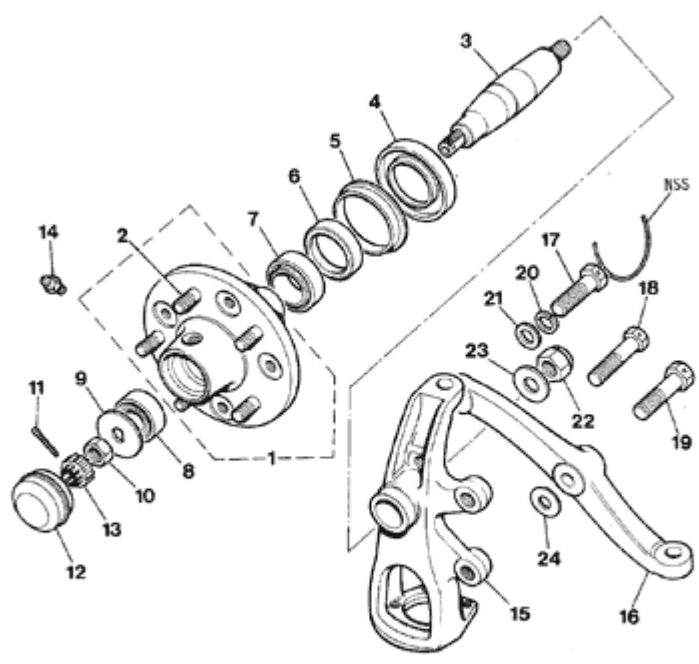
Some have tightened the 2 steering arm bolts not aware of shims, and being older cars now, many hands have played before you, so missing items is a given.

No apparent damage has been reported with the tightening of the lower bolt without shims (if there is a gap), and no reports of cracked or broken steering arms that I know of.

I just know they are there are shims in 90% of cars, and 99% of those cars have shims on both sides, so I take the time to do it the Original way.

I do not use lockwire. I use a couple of drops of Loctite Thread Lock, once all the measurements etc are sorted, and that's it, never had a bolt loosen.

This parts drawing shows the shims I talk of as item #24.



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