

"MAD METRICS"

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NOTES ON FITTING COTTER PINS

These Cotter pins have been made to the original pattern with a large removable head which is necessary, in conjunction with the corresponding large headed bolt screwed into the back of the steering knuckle, to limit the full-lock movement of the front wheels. They are made of soft steel and are designed to be filed to fit.

FITTING

Line up the flat on the king-pin with the cotter-pin hole (there should be a large slot at the top end: use a very large screwdriver to twist it). Remove the 1/4" BSF nut, and insert the cotter, head to the REAR, lightly tapping it in. Then remove it, but NOT by hitting the 1/4" thread! If a screwdriver twisted between the large head and the axle eye does not do the trick, unscrew the head, put on several flat washers with a 3/8" or 10mm hole, and screw the head back on. Examine the flat on the cotter: where it came up against the much harder king-pin, there will be a small mark. File the flat until the mark has gone, put the cotter back in, and repeat the process until there is a 20-thou (0.5mm) gap between head and axle. Only at this point, hammer the cotter pin fully home and put on the 1/4" lock washer and nut. If you file off a bit too much, just back off the head before hammering home.

Never, repeat NEVER, try to remove a cotter by hitting the 1/4" end, even if you think it is not tight!

STEERING LOCK

On most cars, the combination of cotter pin head and large headed bolt in the steering knuckle, will be sufficient to prevent the tyres rubbing on the chassis on full lock with the bolt screwed fully in. It originally had a special tab washer to stop it coming loose if it has to be unscrewed to limit the lock, but a spring lock washer, or two, would do the job better. However, this is rarely necessary.