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.

Nuts and bolts - seized, rusted or stuck

Any enthusiast of old vehicles who is keen on doing some maintenance for themselves will from time to time come across seized or rusted nuts and bolts which need to be loosened for some essential work to take place. It is a familiar problem and a variety of approaches can be used to deal with troublesome fasteners. You may already be familiar with this method but if you are not aware of it then you may find it useful. Often the lengthy soaking of said fasteners in trusty WD40, 'Duck Oil' or similar will do the trick but failing that heat is often required and varying degrees of violence. Most of us have a butane blowlamp in the garage for such occasions and they can certainly help but it can take a long time to thoroughly heat larger fasteners. An Oxycetalene set speeds things up a great deal but the high cost and safety issues involved mean it is not practical for everyone to have this sort of kit to hand. However many Austin Seven owners do own MiG welding sets which are very useful for bodywork repairs and restoration work. If you can safely reach the seized fastener in question with your Mig welding torch (i.e make sure it is a safe distance from flammable material, fuel tanks etc.) wonders can be performed.

In the case of a seized nut, as long as 2 or 4 flats of the hexagon are preserved in order to allow purchase with a spanner or stilsons (heaven forbid), building up parent metal on the other 2 or 4 flats will get sufficient heat into the nut to cause significant expansion and allow the nut to be loosened quite easily. Sometimes welding on just 1 flat is enough or on the side face of larger nuts. Depending on how careful you are this can make a bit of a mess of the nut but at least you can remove it, complete the job in hand and fit a new nut later. In the case of non-standard or tricky to replace fasteners, with careful grinding the original shape can be recovered.

This technique works just as well with bolts, since the expansion of the bolts causes relative movement between the threads and 'breaks' the corrosion giving

a good chance of unscrewing the bolt without recourse to violence and swearing.

Recently I needed to un-seize a very tight and damaged flywheel nut on an agricultural engine. It was not possible to get a spanner in place firmly so I welded a couple of 2’ lengths of ½” steel bar to 2 apposing flats of the nut and tacked the ends together forming a very elongated triangle. The heating effect of this meant that I could slacken the nut easily.

I’ve used this method lots of times, I have an Oxycetalene set but in some cases this trick is just as quick and generally gives more localised heating without an unwieldy flame wafting around the workshop. A modest 120 amp welder will do the job nicely although on large fasteners a 180 - 200 amp set will speed things up. As with any ‘hot work’ of course you must make sure you take care to not start a workshop fire!

One tricky problem is the nut behind the steering wheel , I find the best way to deal with this is to change the driver!