Making Engine and Gearbox Mounts for The Standard Special

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Around 25 years ago I made up a new set of front engine mounts for the Series 1 using a two-pack polyurethane mixture called Devcon "Flexane". These weren't terribly successful. First, the compound was far too hard, and even though the company advertised an additive which reduced the shore hardness, it was unobtainable. Second, adhesion to the metal plates was poor, even using the special primer the company marketed for this purpose.

In more recent times, I've made some more, but this time using Sikaflex 260, a single pack polyurethane adhesive with a shore hardness of 55, about exactly the right hardness for this application. Adhesion so far is excellent, indeed better than the original vulcanised rubber product.

The diagram (on page 23) gives the dimensions. For added "security", I drilled a few small (ie 1/4") holes in the plates that the compound could ooze into. The top plate has two 5/16" BSF attachment bolts through the drilled holes as shown - the heads of these should be spot welded to the plate to prevent them rotating some time later when the mount is being bolted to the engine plate.

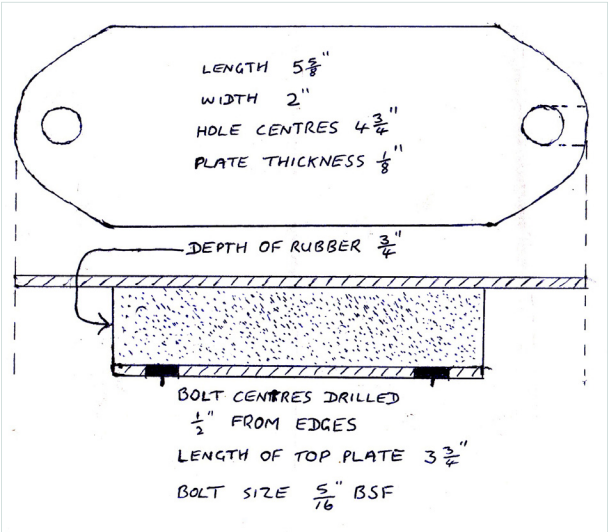
The mould for the engine mount was made of four small pieces of scrap perspex - the side lengths overlap both plates, hence are 1" wide, and two perspex thicknesses longer than the top plate. The frame sides slot into these, hence are 2" long and 3/4" wide. As the plates may be metric widths given current obtainability issues, the sides of the mould may need a little trimming.

The mould is held together with a little gaffer or insulation tape, oiled lightly on the inside and fitted and aligned on the bottom plate. The Sikaflex is pumped into the mould and the top plate inserted. In pumping in the Sikaflex, it is important to ensure the gaps are filled and the substance may need a little "persuasion" into cavities.

It will take some weeks to properly cure, so plan the project well in advance if you can (quoted curing time is 4mm every 24 hours). Allow at least two days before removing the mould. If there are any small holes on the outside of the rubber - and it is quite difficult to get them all out when pumping in the Sikaflex, simply wipe in a little surplus Sikaflex and clean off with a rag and a bit of mineral turps.

Repair of the rear gearbox mounts is similar. The remains of the old rubber will come out easily after carefully drilling a few holes down the sides - the original vulcanising process was none too good. In this case I turned up a two-piece mould out of a bar of nylon bearing stock which had been lying around to give the correct dimensions and alignment in the finished product.

The bolt and one half of the mould is fitted, Sikaflex pumped in using the nozzle and also jiggling the assembly to ensure effective filling, and finally the top part of the mould added over the shank of the bolt - it is pressed down and any surplus Sikaflex oozing out cleaned off.

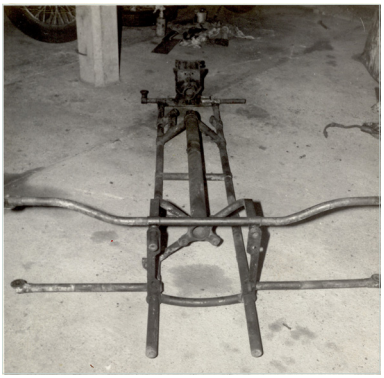


Above: Mould for front mount

Left:
Dimensions for front mount

End pieces and bolt used as mould for rear gearbox mount

Mount casing with end pieces and bolt in place for making rear gearbox mount



Photos from the Club Album: Joe Wilson's 1928 3w before restoration