

can distort the wheel-mounting flange and, if followed by rapid cooling, can crack the previously discussed radial stiffening webs.

A simple but effective puller for bolt-on rear hubs can be made from a piece of flame-cut, mild steel plate (say 6in square by $\frac{1}{2}$ in thick, drilled with four equi-spaced $\frac{1}{2}$ in diameter holes on a 4in PCD) used in conjunction with $\frac{7}{16}$ in diameter by 3in long setscrews or bolts, once the wheel studs have been temporarily removed.

The best way to remove a knock-on hub is by applying the necessary axial force, radially through its integral spinner threads.

There are several ways this can be achieved, one being by using an internally threaded thick-wall tube, fitted at one end with a centrally drilled and tapped closing plate through which passes a substantial (say minimum $\frac{3}{8}$ in diameter) set or cap screw. In this instance, load is transmitted by the screw directly on to the shaft end, through the extractor, which, of course, is attached to the hub. A variation on this theme is to drill and tap an old wheel spinner, the centre of which has first been suitably reinforced to give strength and sufficient thread depth.

As a further alternative, it is possible to exert load on the shaft end (always protected by its loosened, but not removed Nyloc nut) with

