Front Suspension - Easy King Pin Removal Tool

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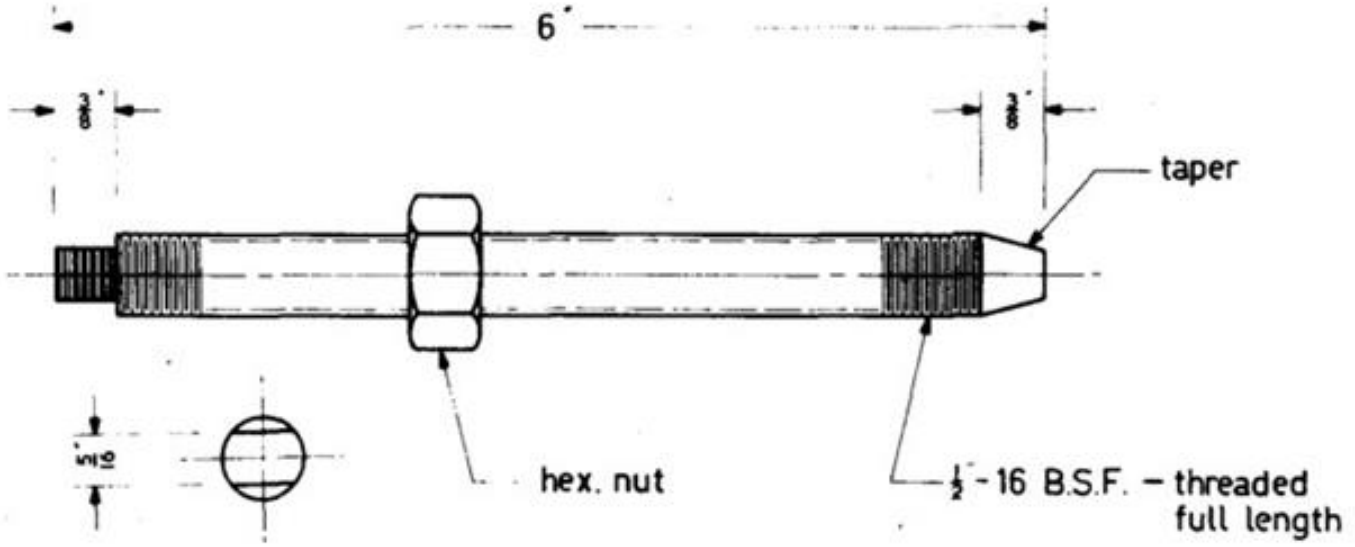
A jack, several bricks, large pieces of timber, flying springs and fraid tempers. Does this remind you of something? Maybe the last time you tackled the job of Morgan king pin replacement?

You can be rid of this joy for good with the aid of one simple length of threaded rod and a nut. The following procedure applies to all Morgans other than series 1 4/4 's -prior to 1951 -but a similar method could be adopted by the ingenious ones to suit even these cars.

First, obtain a 6 inch length of 1/2" B.S.F. threaded rod and a nut to suit. A set screw with the head removed is probably the easiest way of obtaining the rod. Next, file two flats on one end of the rod to accept a standard open ended spanner and grind a taper on the other end for about 3/8". With this piece of fine equipment in hand, the job can now be started.
(Webmaster note: On later cars the thread is ½" UNF)



After removing all the ancillary gear such as shocks, etc., remove the top king pin retaining bolt and replace with the threaded rod, taper downwards, to a depth about the same as the original. Screw the nut down to the surface of the upper support and lock king pin securely in place. Remove the two screws fastening the rebound spring retaining plate to the lower support and then proceed to unwind the nut on the threaded rod while restraining the rod from turning. The king pin will now drop by virtue of the spring pressure acting on it and can be removed after the stub axle comes to rest on the lower support.

The reassembly of the unit is done by the reverse procedure. The taper will assist in aligning the threads of the rod and king pin.

To assist in removing and replacing the suspension assembly, it is recommended that the thin outer section of the lower casting be removed to form a "U" shape hole. This section is included to aid machining of the hole, and provides no structural strength. With this section removed, the suspension unit can be withdrawn or replaced, already assembled.

Always use H.T. bolts and flat washers, either side of the joints to secure the lower spring plate, and tension to manufacturer's specification.

The following photograph was supplied by John Mott. It shows the above tool (two different lengths) plus kingpin and bronze bushes. It also shows steering bearings which various suppliers are now making available. The Morgan factory also make and fit steering bearings on the cars now. These can be fitted to older cars but do require shorter springs.