

# Repairing stripped front wheel spindle threads to right hand fork unit –

by Keith Partington

I carelessly stripped the threaded section on the right hand fork resulting in the wheel spindle not pulling up into the fork when tightened.

Finding thread repair devices for 18mm x 1.5 left hand thread was impossible in the UK. However, I found components that can be adapted to form a secure repair job and should be readily available from auto component suppliers.

Both solutions require a 22mm diameter metal cutting drill. Solution #1 requires welding, and solution #2 requires metal removal, such as a lathe or grinding equipment.

Solution #2 is the more robust as the component is integral and not made up from two parts.

## **Solution #1:**



Threaded insert for welding up to rods/tubes has 18 x 1.5mm LH thread. Outside diameter is 22mm. Zinc coated carbon steel.

Drill out existing threaded section in fork with 22mm diameter drill. I removed the fork unit to do this but it could be done with the fork in situ.

I left a small lip of metal at the end of the drilled hole to stop the insert sliding right through, although this is not critical

Buy a 22mm threaded hex nut. Go for carbon steel rather than stainless as drilling stainless is heavy work if you don't have a good engineer's drill.

Drill all the threads out of the nut except for a single thread at the end.

Mount the nut onto one end of the insert and gently force it onto the insert. A socket and hammer will do this, so that it is held on the sleeve.

Push it on sufficiently so that some of the insert protrudes past by a couple of mm.

Get the nut welded around the side of the insert protruding through. If you don't have access to welding facilities, the protruding end can be slotted around its circumference and hammered over with a ball-pein hammer to keep it from coming off.

Clean up the weld and threads, check spindle screws in easily

The length of insert outside the fork is taken up with a flat washer and spring lock washer which will keep the insert from unscrewing.

**Solution #2:**



Female track rod end. Comes in 18 x 1.5mm internal LH thread. Zinc coated exterior carbon steel. Has two flat sides on shoulder section to allow holding with a spanner.

Drill out threaded section of right hand fork as for component #1.

Cut off the ball section from the track rod end.

The outside diameter of the sleeve is 25mm and will require reducing to 22mm so that it fits into the drilled hole. I had this work done on a lathe.

Cut insert section to required length to accommodate any washers.

Clean out threads and check that spindle screws in easily.