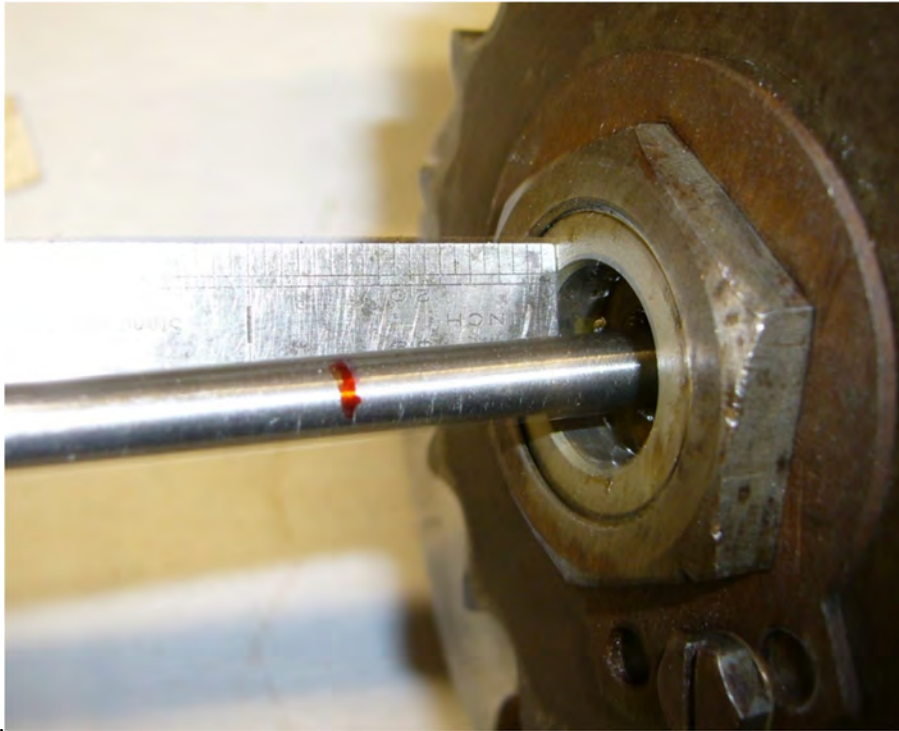


### Fitting Instructions for Clutch Thrust Rod

The Thrust Rod kit consists of the knob, factory number 713, and a length of  $\frac{1}{4}$  " dia silver steel, or you may have bought just the knob and obtained your own rod material. In either case, you will need to cut the silver steel to the correct length. This is the process:

1. Fully assemble the clutch onto the mainshaft with all plates, springs, spacers, keys and the K/S ratchet pinion. The final drive sprocket can be left in place.
2. Insert the rod into the mainshaft until it engages with the clutch outer plate, or the thrust key on a single plate clutch. Mark the rod at  $\frac{3}{4}$ " from the end of the final drive gear that carries the sprocket, and cut it.  
Remove any burrs.



3. Temporarily push the knob onto the cut end of the rod and re-insert it into the mainshaft. The knob is a light push fit onto the rod.
4. Set the adjuster sleeve on the clutch bridge so that roughly  $\frac{1}{4}$  " protrudes from the lock nut.
5. Assemble the bridge onto its pillars so that the push-rod is in contact both with the balls in the bridge and the clutch outer plate, making sure that the thrust race in the bridge is as far back as it will go. There will be a gap between the shoulders of the pillars and the face of the bridge.



6. Measure this gap, take the push-rod out of the mainshaft and pull off the knob. Remove from the previously cut end of the rod the same amount of material as the gap measurement. Remove any burrs as this is the end that will finally go in the knob.
7. Harden and temper the end of the rod that engages with the clutch plate. This is the **chamfered** end. Hardening can be done with silver steel by heating to cherry-red heat, or until it will not hold a magnet, and plunging into cold water, stirring the water with the rod. Clean the hardened end with fine emery. To temper the rod, put it in your oven at 200-220°C (gas mark 6!) for 1 hour. Do ensure that the rod is free of oil, and that the lady of the house is not in!
8. Apply a small amount of Loctite Retainer 641 to the unhardened end of the rod and push on the knob. Don't put the Loctite into the bore of the knob, or you won't be able to assemble it due to the hydraulic lock formed. NOTE: it is **essential** that the rod and the bore of the knob are thoroughly cleaned and degreased before assembly.
9. Allow 24 hours for the Loctite to cure, then reassemble the push-rod into the mainshaft, and fit the clutch bridge.
10. Set the push-rod rod clearance in the manner described in the handbook.

If you have any queries about the process, please contact Paul Hutton or Vic Youel.