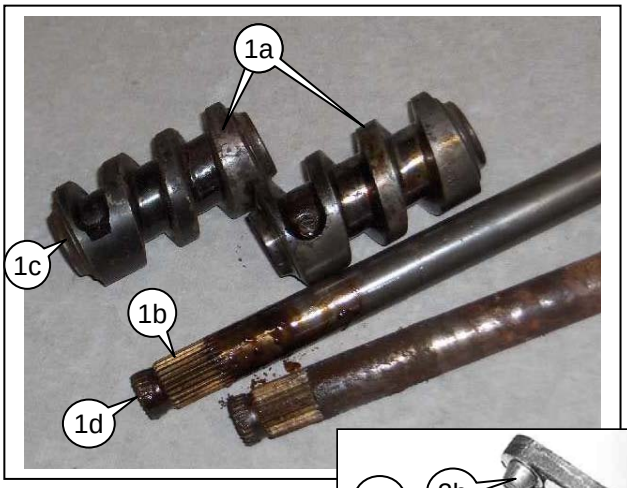
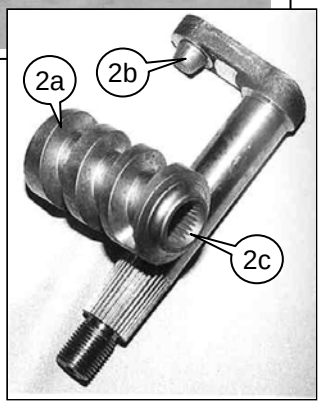
Supplemental Information & Instructions
for
667-375 or 508191X Cam or Worm, Steering
TR2-3B LHD



The original “worm & peg” steering mechanism fitted to the early Triumphs is not known for precise steering, something we take for granted with modern steering gear. If the free play in the steering exceeds the normal 2 inches, attempts to “shim out” the play generally backfire, because the steering gets so stiff that it is unmanageable at parking lot speeds. Rebuilding the worm & peg steering box can make a world of difference, but the parts are expensive and finding a mechanic with the real world experience rebuilding these units is tough. You may be tempted to tackle this yourself, but the procedure is complex and time consuming because you are solving multiple problems at the same time, and the end result is always going to be a compromise. For tasks like this, there is no substitute for experience-lots of experience. And no matter what you do, it won’t feel like rack & pinion steering when you are done.



This document is not going to walk you through the process. We are going to try and shed some light on this system so you will be fully aware of what you are up against. The worm (1a) on the steering shaft is prevented from rotating by the splines (1b) on the last 1” of the shaft. When originally pressed on, the end of the shaft protruded a bit through the end of the worm. The end of the shaft (1d) was then “swedged” with a conical bit that deformed the end of the shaft, forcing material into the chamfered area in the end of the worm (2c). The old worm is (or ought to be!) a very tight fit on the shaft. It is so difficult to remove these that people often bend the steering shaft through inattention and excess force. Removing the old worm must be done without removing any material from the end of the shaft.
Heating the worm to roughly 350 ºF and (if you are lucky) using a press will usually get the old worm off. The length of the long 1-piece steering shaft usually eliminates most presses. No press? Use a section of pipe and a big hammer. By forcing the old worm off past the original swedging, you are leaving enough material there so you can “re-swedge” the end of the shaft once the new worm is in place. If someone has ground the end of the shaft to remove the swedged material, you will probably have to resort to a tack weld to secure the new worm.

Carefully clean the inspect the splines at the end of the shaft.
Test fit the new worm.
When satisfied, heat the new worm to 350 ºF and press (or hammer) it on.
Re-swedge the end of the shaft into the chamfered area inside the nose of the new worm.
This is also called “peening”.

There is a great deal more to rebuilding the steering box, most of it being covered in the workshop manual.

Notes

*Although every effort has been made to ensure the accuracy and clarity of this information, it is by no means complete. Any suggestions that you may have that will improve the information (especially detailed installation notes) are welcome. Please use the simple email form on the **"Contact Us"** page on the Moss website: http://www.mossmotors.com/AboutMoss/ContactUs.aspx*

If you prefer, you may call our Technical Services Department at 805-681-3411. So many people call us for help that we are often not able to answer the calls as fast as we'd like, and you may be asked to leave a message. We apologize in advance for the inconvenience. We will get back to you within 2 business days.

Moss Motors, Ltd.
440 Rutherford Street, Goleta, California 93117
In the US & Canada Toll Free (800) 667-7872 FAX (805) 692-2510 (805) 681-3400
Moss Europe Ltd.
Hampton Farm Industrial Estate, Hampton Road West, Hanworth Middlesex, TW13 6DB
In the UK: 020-8867-2020 FAX:- 020-8867-2030