

## **"M" Group Models**

**FITTED WITH GIRDER TYPE FORKS**

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## **ADJUSTMENTS TO STEERING HEAD AND FRONT FORKS**

### **STEERING HEAD.**

In order to feel any play in the steering head the front wheel must be clear of the ground, so that a box of suitable dimensions should be placed under the engine. Loosen the head yoke clip nut (just below the handlebars) and tighten the sleeve nut on top of the steering column until there is no perceptible shake in the head.

Do not adjust too tightly, otherwise the ballrace will be damaged and the steering will become stiff. Lastly, tighten the clip nut.

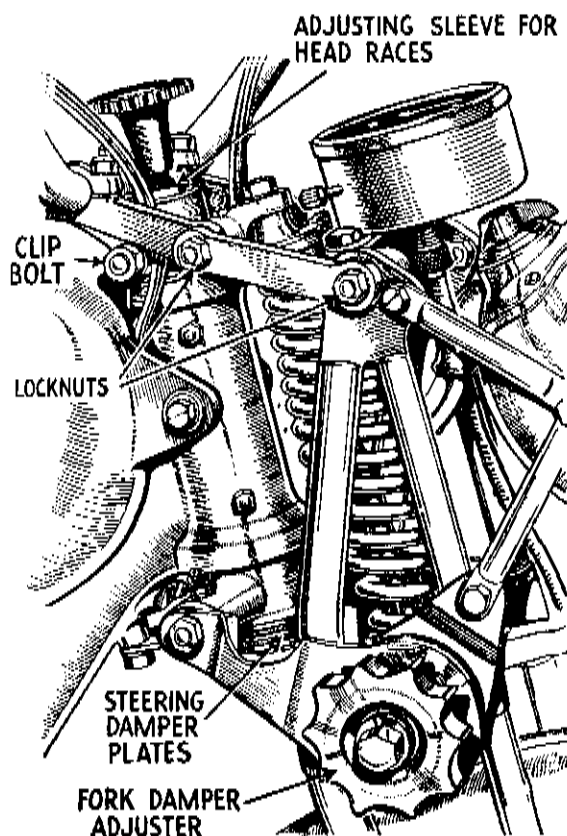
If a steering damper is fitted it is necessary to remove the knob before the adjusting sleeve is tightened.

### **FORK LINKS (Fig. M42).**

The link bolts must be just tight enough to prevent side play. First, slacken off the shock absorber on the lower fork link, then release the locknuts on the offside of the links, screw up the bolts from the nearside and retighten the nuts.

### **FORK DAMPER.**

This must, of course, be adjusted by the rider to suit road conditions, and the thumb wheel can be reached from the saddle.



*Fig. M42* Fork links and steering head.

REMOVAL, DISMANTLING and RE-ASSEMBLY of FRONT FORKS and STEERING HEAD

There is no necessity to disturb the electrical system as a whole, when removing the forks. The instrument panel on the back of the headlamp is retained by three screws, and if these are removed, the panel is released and the wiring can be withdrawn through the aperture after releasing the four connections (see Fig. M43). Place a box under the engine so that the front wheel is clear of the ground.

Remove the nut from the fork spring top scroll, then remove both top fork links and prise scroll downwards until the bolt is free from headlug. Headlamp wiring should now be drawn out at the side of the forks.

To take off the fork spring it is only necessary to unwind the spring from its bottom scroll. If difficulty is experienced place a piece of rod against end of spring and give a sharp blow with a hammer.

Disconnect the front brake cable, remove the two lower fork links, and the whole front fork assembly can be taken off complete with speedometer, headlamp and front wheel.

Dismantling the steering column is quite straightforward. Take off the steering damper knob (if fitted) and slacken the head yoke clip nut (just below the handlebars). Remove the sleeve nut on top of the column and uncouple the steering damper plates at the frame lug.

The steering stem can now be driven out (downwards) with a lead hammer to prevent damage to the threads. The stem will bring with it the lower ballrace cone, leaving the cups in position at the top and bottom of the steering head. A simple extractor shown in Fig. M44 is used for removal of

inserted from the opposite end of the head lug, and the extractor and ballrace driven out together.

If the ballrace cups and cones are pitted, to even a slight degree, they must be replaced, otherwise steering will be uncomfortable. Note that this pitting is almost invariably due to "hammering" of the balls in their tracks, due to slack adjustment in the first place.

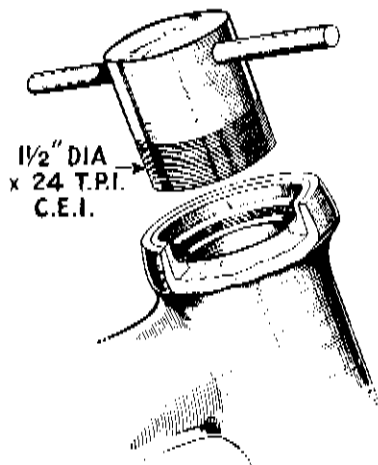


Fig. M44. Steering head ballrace extractor 61-1919.

RE-ASSEMBLY.

When fitting new ballrace cups make sure they are driven in squarely and that they are pressed well home. Replace the steering stem and if any difficulty is experienced in making the balls (of which there are 20 top and 20 bottom—all  $\frac{1}{16}$  in.) stay in position, the tracks should be heavily smeared with grease.

Refit the dust cover and steering head yoke, followed by the top sleeve nut. The latter may now be tightened, until there is no trace of play in the head. On the other hand, do not tighten excessively.

Replace the steering damper rod, complete with plates, from below and tighten the damper plate securely to the frame. The lower end of the steering damper rod is slotted to take the fork link bolt, and care must be taken to see that the rod is fitted so that the link bolt can slide through.

The fork spring should be carefully inspected. If it is suspected of having become weak through prolonged use over bad roads, or shows signs of collapse, a new one should be fitted. Attach the spring to its bottom scroll, and replace the bottom two fork links loosely in position. Refit the top scroll in position, draw the wiring to the headlamp forward to its normal position, and assemble the top fork links. Adjustment of the links should be such that there is no side play present. The headlamp connections are shown in Fig. M43.

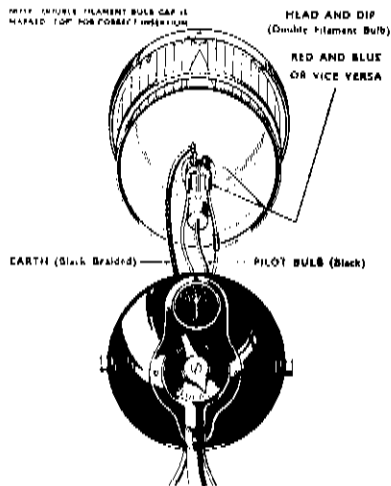


Fig. M43. Headlamp connections.

these cups. They are threaded to take the extractor, which should be screwed well home, since it engages with a few threads only. A bar is then