



Section:- Front Suspension.

Subject:- Tie tube, Dismantling and Assembly.

Effective on:- Type 400, 401 and 402.

Car Publication No. 503

Service Bulletin No. 28

No. of Sheets 1 Sheet No. 1

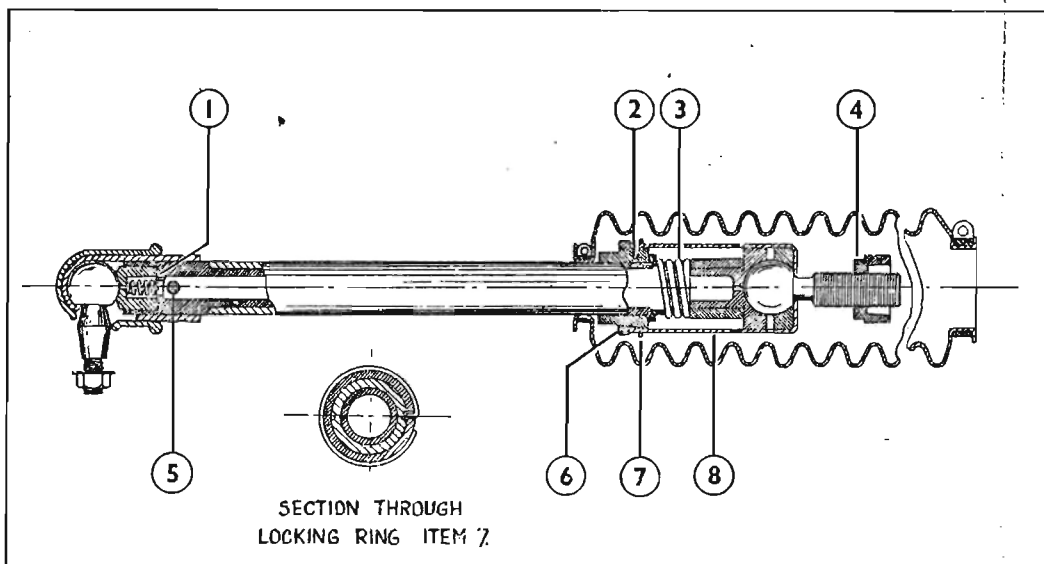
Should the outer or inner ball joint of either tie tube become dry, the following procedure is advised in order that the normal lubrication system will function correctly. This may become obvious due to a squeak developing at the front suspension during running, or turning on right or left lock.

Commence the procedure by dismantling the tie tube ball joint at the wheel end, and proceed by removing the telescopic sleeve and the tie tube at the rack end. Care should be taken at this point to note the position of the locknut on the ball bolt (Item 4). The visible threads should be counted and the locknut replaced when assembling, as previously fitted, in order to minimise subsequent errors in tracking. The toe-in must be checked after the tie tube or rack assembly have been disturbed for any purpose whatsoever.

Check the one-shot lubrication supply to steering box by disconnecting the feed pipe to the steering box. Oil should be observed coming from this feed pipe. This will prove that the oil supply to the steering box is unrestricted. Strip examinations of the affected tie tube will indicate that the inner and/or outer ball bearing cup oil holes are blocked.

Dismantle each tie tube component and clean, and ensure that each oilway is perfectly clear.

ASSEMBLY. Assembly of the outer ball joint necessitates due care in fitting the correct shims. (Item 1). Assemble ball joint without the spring, and shim so that the keep-bolt (Item 5) will just pass through the end socket and tube. Finally re-assemble the outer socket with the spring, and lubricate.



The Tie Tube and Ball Joint Assembly
with Telescopic Sleeve

P.T.O.

Compress spring (Item 3) solid, by rotating the housing (Item 8) holding the special nut (Item 2) stationary. The special nut must then be initially turned back $\frac{1}{10}$ th. of a turn (min.) and then turned back further until the locking ring (Item 7) engages in the nearest slot, i.e. setting will then be between $\frac{1}{10}$ th. of a turn back and $\frac{6}{10}$ th. of a turn back. When final adjustment is obtained, tighten up locknut (Item 6).

The tie tube should be primed with the appropriate one-shot lubrication before assembly.

Tracking adjustments should now be made following the procedure advised in Car Service Bulletin No.1 issue 2.