

Section:- 1, Chassis

Subject:- Tracking adjustments

Effective on:- Types 400, 401 and 402.



Car Publication No. 503

Service Bulletin No. 1 (Issue

No. of Sheets 2 Sheet No. 1

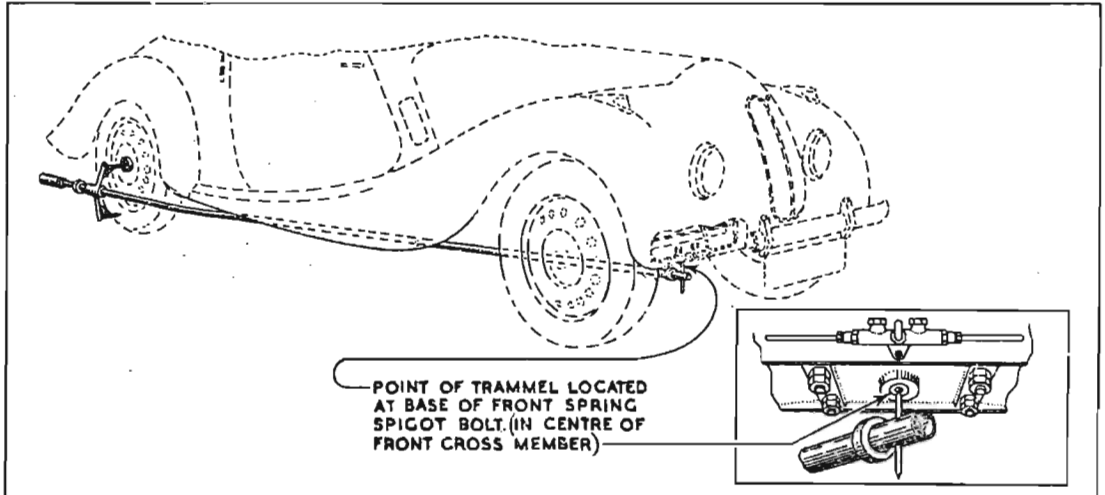


Fig. 1.

TRACKING ADJUSTMENTS

Alignment of rear Axle and Wheels to Chassis

1. Remove both rear embellisher caps.
2. Using trammels - T.F.N. 5033 - check the distance from the centre of the front spring spigot bolt to the centre of each rear half shaft at its outer end. (see fig. 1).
3. If the measurement from the centre of the spigot bolt to the centre of the right-hand half shaft is within $1/32$ in. of the corresponding measurement to the centre of the left-hand rear half shaft, no action need be taken, but if this limit is exceeded, the following procedure should be adopted to rectify the wheel adjustment:-
4. Bend back the tabs of the lockwashers and remove the nuts and lockwashers from each suspension arm shaft. Using the special extractor - T.F.N. 5005 - break the taper. (see inset to fig.1 of Service Bulletin No. 2.).
5. Using an open-ended spanner, turn the suspension arm shaft clockwise or anticlockwise to adjust the wheel.

NOTE:- The adjustment to either shaft must not exceed one full turn anticlockwise or one-half turn clockwise. If the setting as described cannot be obtained by these adjustments, the suspension arm shaft must be re-set, following the instructions given below in para. 6 to 9.

P.T.O.

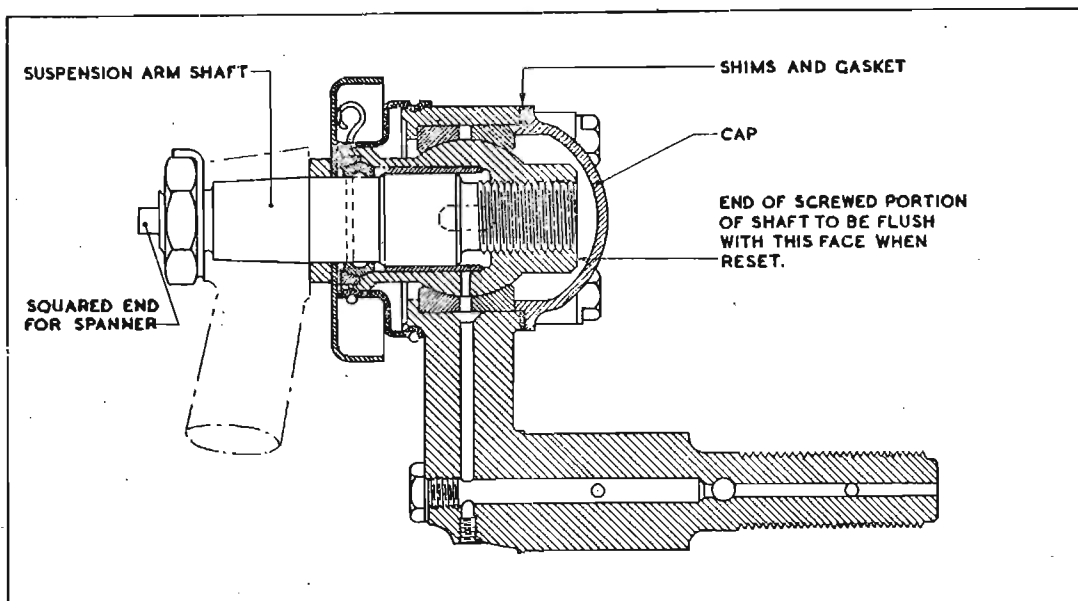


Fig. 2.

6. Detach the cap from each suspension arm by bending back the tabs of the lockwashers and removing the four $\frac{1}{4}$ in. B.S.F. bolts. Care must be taken to ensure that all the shims, together with the gasket, are removed.

7. Re-set each suspension arm shaft by turning the shaft until the end of the threaded portion is flush with the face of the ball sleeve, (see fig. 2).

8. Replace the cap on each suspension arm, ensuring that the lockwashers are positioned under the bolt heads, and that all the shims together with the gasket are replaced. Lock the bolts by bending up the lockwashers.

9. The procedure for checking and adjusting the alignment of the rear axle and wheels to the chassis, must now be carried out as previously described in para. 1 to 5.

10. When the distance from each rear half shaft to the centre spigot bolt is within the specified limit, i.e. $\frac{1}{32}$ in., replace the lockwasher and tighten each nut on the suspension arm shaft, finally locking the nuts by bending up the tabs of the lockwashers.

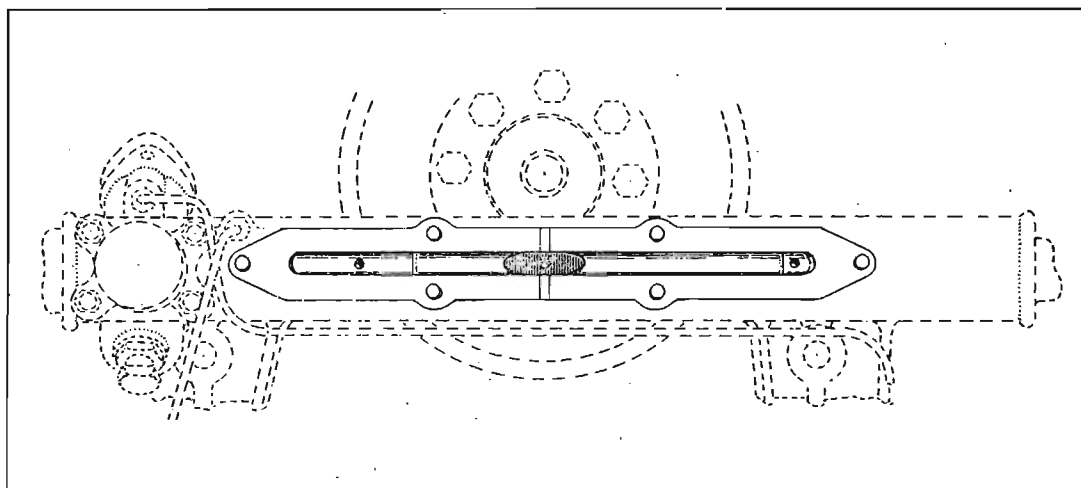


Fig. 3.



Section:- Continued from Sheet
Subject:- No.1.

Effective on:- Types 400, 401 and 402.

Car Publication No. 503

Service Bulletin No.1 (Issue 2)

No. of Sheets 2 Sheet No. 2

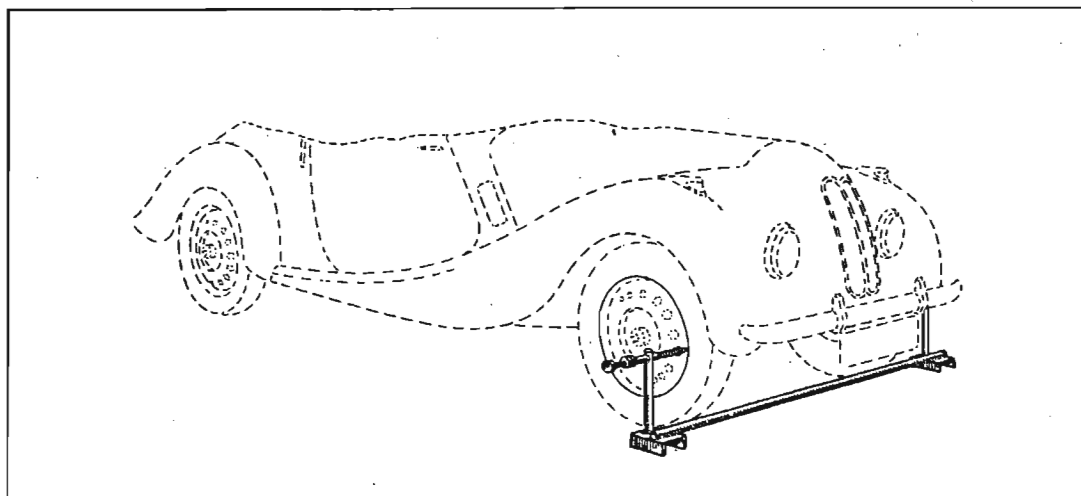


Fig. 4.

Front wheel tracking

11. Detach the steering box cover by removing the six nuts and spring washers and ensure that the locating bolt is centralised in the guide slot, (see fig. 3).
12. An alternative method of centralizing the rack is to align the machined end of the steering box casting with the shoulder on the rack at the end remote from the steering column, (see Illustration to Bulletin No.8).
13. Rotate the wheels and check the measurements in three positions on

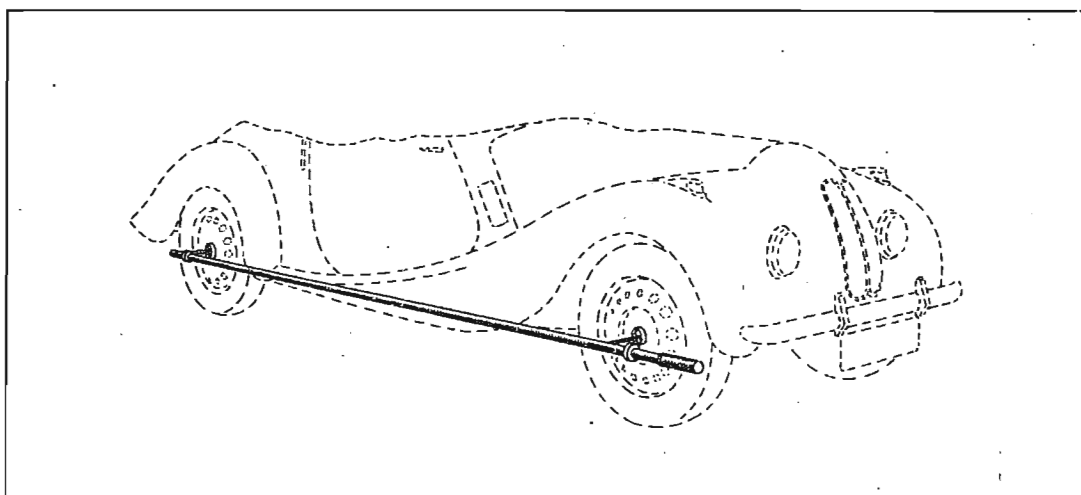


Fig. 5.

P. T. O.

the front and rear edge of the rims, using tracking bar, T.F.N. 5002, (see fig. 4).

14. The wheels must be adjusted so that they are parallel with each other. To adjust, detach the rubber telescopic sleeves from the ends of the steering rods on each side, slacken the locking nut and turn the ball bolt connecting the rod to the steering rack, care being taken to ensure that sufficient thread is left screwed into the ends of the steering rack.

NOTE:- The ball bolts must not be unscrewed so that the threads clear the inspection holes at each end of the steering rack.

15. When the wheels have been adjusted to the parallel condition, check that the locating bolt of the steering box is in the central position, and/or that the shoulder on the rack is aligned with the machined face on the steering box casting, before tightening the locking nuts. Tolerance on mean distance must not exceed $1/32$ in.

Alignment of front wheels and wheelbase check

16. Remove both front embellisher caps together with the two dust caps, and using trammels T.F.N.5033, check the distance between the centres of the hubs, (see fig. 5). This dimension must be the same on each side. If adjustment is required, both ball bolts must be adjusted in the same direction, (i.e. - one being screwed in while the other is unscrewed), care being taken to ensure that both bolts are adjusted an equal amount, and also that the rack is in the central position while these adjustments are made. When the correct setting has been determined, tighten the locking nuts.

17. Replace the two dust caps, the four embellisher caps, the steering box cover and the telescopic rubber sleeves.

| | |
|-------------------|-------|
| Nominal Wheelbase | 114" |
| " Track-Front | 51'6" |
| " Track-Rear | 54" |