

REAR WHEEL SUSPENSION 356 C

Torsion bars of different specifications are installed in the following cars, beginning with chassis serial numbers as indicated:

Coupe 126 001 and 215 001, respectively
Cabriolet 159 001 (except Carrera 356 C/2000 GS and 356 C/2000 GS/GT).

General Characteristics

The utilization of torsion bars of different specifications resulted in improved driving comfort and road holding qualities. In comparison, the new suspension is softer than that in Type 356 B. Attached to each axle tube suspension flange and radius arm is a progressively acting rubber buffer which absorbs axle shock in the upper part of axle deflection.

A compensating spring may be installed upon request, whereby it is no longer necessary to replace the torsion bars, requiring only a readjustment to proper specifications.

Torsion Bars

The torsion bars have a length of 552 mm (21.73 in.), as compared with the previously used length of 627 mm (24.69 in.); the diameter is 22 mm (.866 in.) as compared with 24 mm (.945 in.) and 23 mm (.906 in.) bars previously used.

Note:

The torsion bars are pre-stressed during manufacture. Therefore, right and left torsion bars are not interchangeable. To provide means for positive identification, the right and left torsion bars are marked with an "R" and "L", respectively.

Removing and Installing Torsion Bars

Removal

1. Place car on stands in level position, remove rear wheels.
2. Preload radius arm with compressing tool (P 53a) so that the load is off the shock absorber.
3. Remove shock absorber.
4. Pry open sheetmetal brake hose retainer and remove brake hose clamp from axle tube.
5. Remove the three hex bolts which hold axle tube suspension flange. Move rubber buffer and support flange to rear and let hang on hand brake cable.
6. Push axle tube rearward, away from the radius arm.
7. Remove compressing tool (P 53a).
8. Remove radius arm cover retaining bolts and withdraw cover.

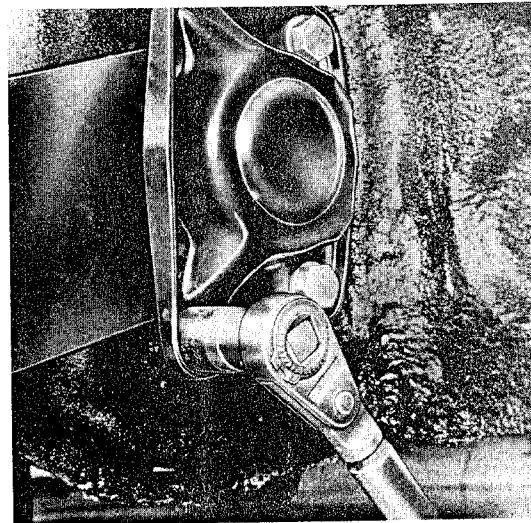


Fig. 1

9. Withdraw rubber bushing.
10. Remove radius arm and inner rubber bushing.
11. Remove torsion bar through hole provided in the body.

Note:

In instances where the torsion bar has sheared off, the remaining stub can be forced out of its splined seat by first removing the torsion bar on the opposite side and then pushing through with a steel rod.

Installation

Reassembly is accomplished in reversed order of the above, by noting the following points:

1. Check the torsion bar for damaged splines, chipped paint finish, and especially rust spots; replace if necessary.
2. Lubricate torsion bar splines.
3. Insert the torsion bar and radius arm, making certain that the proper bar is being installed ("R" and "L" markings), and adjust (see page SR 33).
4. Apply flaked graphite to rubber bushing and install.
5. Raise radius arm with compressing tool (P 53) until the lower edge of arm is above the lower stop. Drive radius arm into place with a copper mallet.
6. Install outer rubber bushing. Make sure that the four protruding ribs fit properly into the depressions within the radius arm cover.

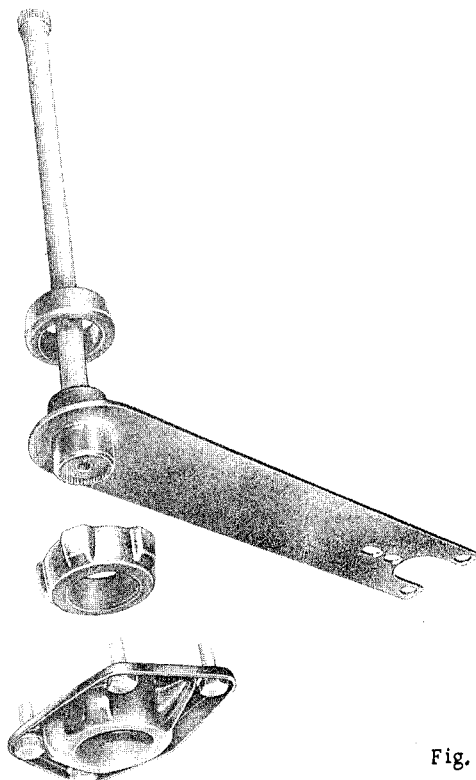


Fig. 2

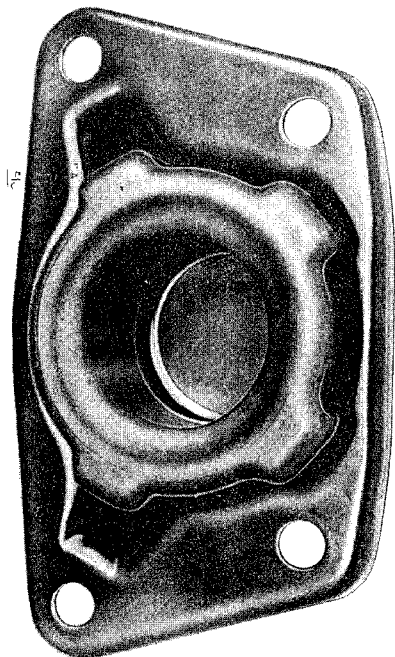


Fig. 3

7. Tighten cover retaining bolts.