

SHOCK ABSORBER AND ANTI-ROLL BAR

General

The front axle of the Porsche car is equipped with double-acting hydraulic telescopic shock absorbers which lessen road shocks and prevent rebound of the car. These shock absorbers have a progressive effect, i. e. the shock absorbing forces increase with increased wheel movement, whereas they are relatively small with minor wheel movement.

As both the compression and rebound rate of the shock absorbers correspond to the spring characteristics of the car, no attempt should be made to alter the adjustment of the shock absorbers or to install shock absorbers of different characteristics. This would result in inferior roadholding of the car. KONI shock absorbers allow a certain adjustment limited by the spring characteristics.

Inspection and Maintenance

For checking effectiveness of the shock absorbers, bounce car at front and rear end, or still better, test the car on a very uneven road. Accurate checking necessitates special test installations, which generally are not available in workshops.

A simple check of the removed shock absorber can be carried out by holding it vertically and compressing it by hand. However, this method only indicates whether the shock absorbers are working. The degree of effectiveness cannot be determined in this way.

If the effectiveness of the shock absorber is found to be insufficient, it should be replaced – if possible by one of the same manufacture. Leaking shock absorbers must also be replaced. However, if only a slight loss of fluid is noticed and the effectiveness of the shock absorber is not impaired, it is not necessary to make immediate replacement, as an adequate fluid reservoir compensates smaller losses. Refilling the shock absorbers is not possible. This explains why they require no maintenance in this respect! Maintenance is limited to checking the effectiveness of the shock absorbers, and to a periodic examination of the shock absorber mounts on the front axle tube and the suspension arm.

Removing and Installing Shock Absorber

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Removal

1. Jack up car and remove front wheel

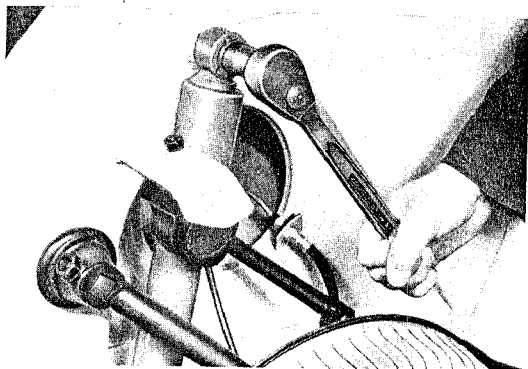


Fig. 59

2. Unlock and unscrew hex. nut on lower suspension arm link pin and retaining screw on front axle tube.
3. Take off shock absorber

Installation

When installing, proceed in reverse order, observing the following points:

1. Check shock absorber, if necessary replace – using only parts of identical manufacture –
2. Check shock absorber rubber bushings for wear, if necessary replace.
3. Check retaining screw and pin of suspension arm for wear, if nec. replace.
4. Use new lock plates.
5. Tighten nut and screw until they fit tightly against the rubber bushing sleeves, otherwise premature wear and rattling will be experienced.