Compensating Spring

A compensating spring can be installed in any 356 B 1600 or 1600 S car. For such a conversion the following parts are required.

① 2 ea. Torsion bar	695.333.102.00	⑨ 2 ea. Tie bolt	695.333.241.01
② 1 ea. Compensating Spring	695.333.021.00	⑩ 2 ea. Support bracket	695.333.231.00
③ 1 ea. Spring support	695.333.025.00	⑪ 2 ea. Lock pin	5 x 8 1473
④ 1 ea. Rubber mount	695.333.221.00	⑫ 2 ea. Lock washer	B 12 DIN 127
⑤ 2 ea. Elastic support	695.333.207.00	⑬ 2 ea. Cap screw	M 12 x 1.5 x 30 DIN 960
⑥ 2 ea. Centering plate	695.333.205.00	⑭ 2 ea. Castle nut	M 10 DIN 937
⑦ 2 ea. Rubber joint plate	695.333.233.00	⑮ 2 ea. Cotter key	2 x 22 DIN 94
⑧ 2 ea. Rubber joint	695.333.235.00		

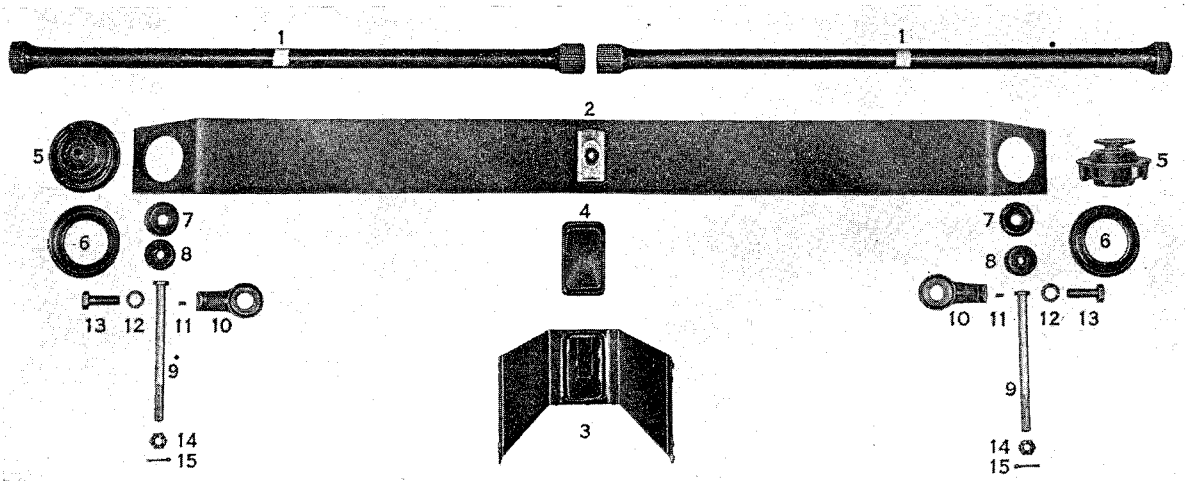

Fig. 1

In order to retain the proper suspension characteristics with the compensating spring, a softer torsion bar is required. Two 23 mm dia. torsion bars, which can be identified by a white marking (Fig. 1), replace the standard 24 mm dia. bars.

Exchanging Torsion Bars

1. Remove torsion bars (22 HA).

2. Install new 23 mm dia. torsion bars and adjust proper setting.

   The correct angle is:

Model 356 B	Coupe, Cabriolet/Hardtop	Roadster
1600, 1600 S	15° 30'	13° 30'

A difference between left and right torsion bars of not more than one degree is permissible in the event that the greater angle is on the driver's side (left or right depending on left or right hand drive).

Installing the Compensating Spring

1. Install the spring support fastening it to the two bottom studs of the transmission side covers.

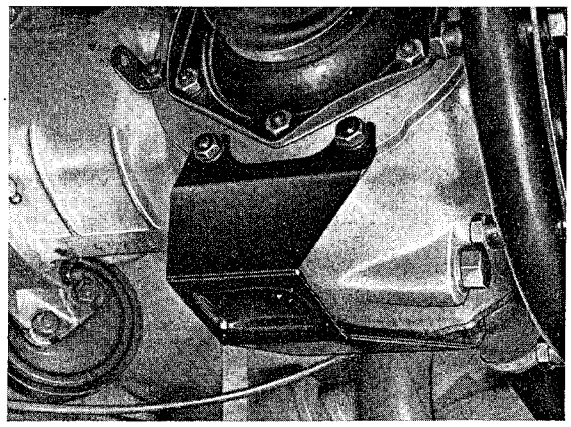

Fig. 2

2. Install lock pin in support bracket.

3. Remove nut, lock washer, and bolt. Place lock washer on bolt, insert bolt through the suspension arm and mount support bracket.

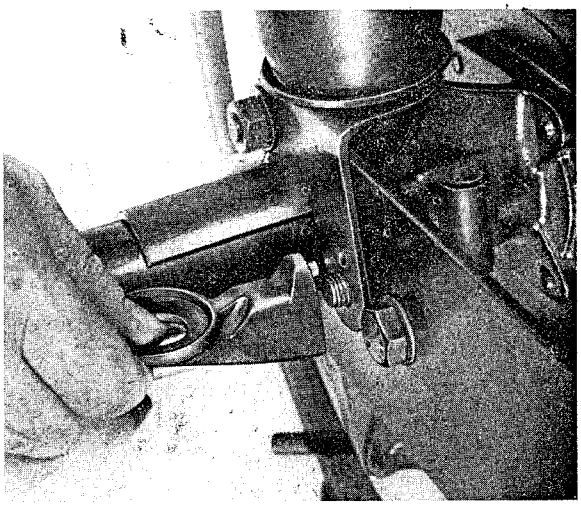

Fig. 3

In the event that there is no hole provided for the lock pin, a hole must be bored as shown in the following sketch.

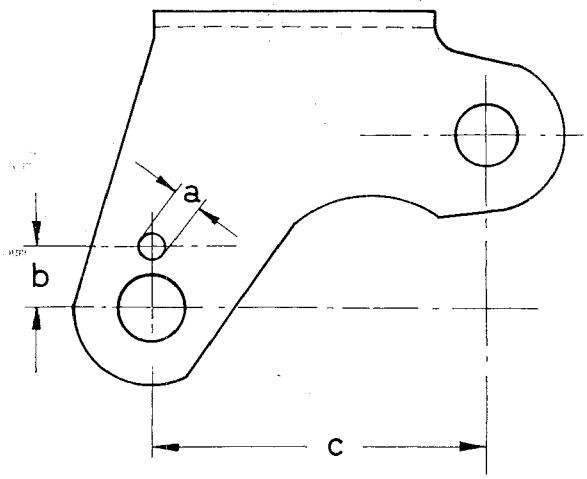

Fig. 4

a = 5.1 mm dia.

b = 12 ± 0.1 mm

c = 66 ± 0.2 mm

4. Install tie bolts with rubber joints and rubber joint plates in the support brackets.

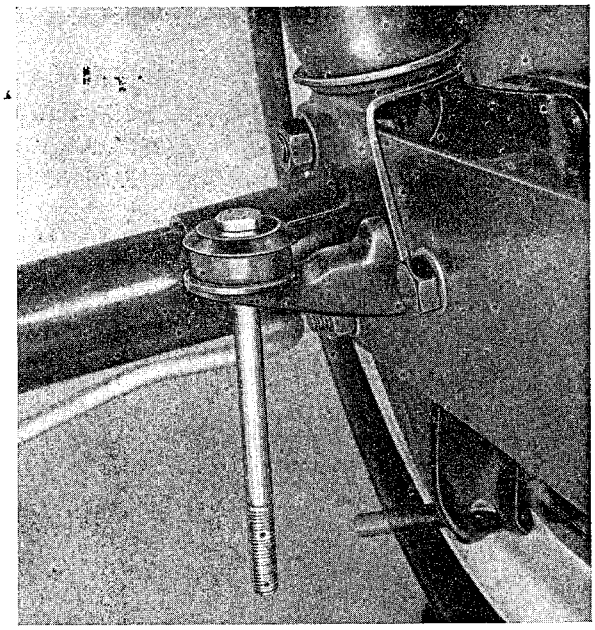

Fig. 5

5. Place rubber mount on center block of compensating spring.

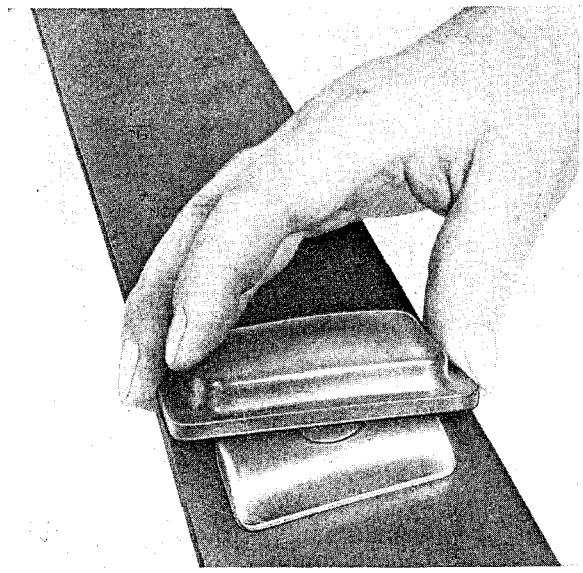

Fig. 6

6. Place the centering plate on the rubber support and install on tie bolt with a castle nut.

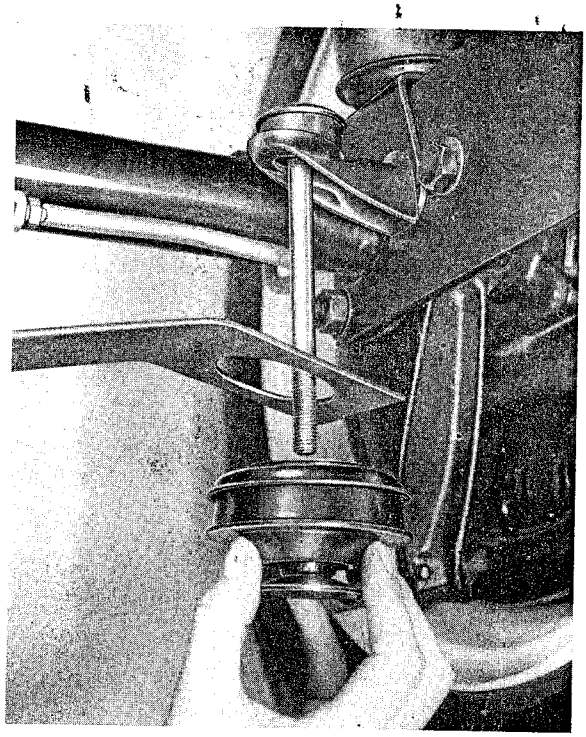

Fig. 7

7. Engage the rubber pad of the center block into the spring support and fasten the end of the compensating spring with centering plate, rubber mount and castle nut.

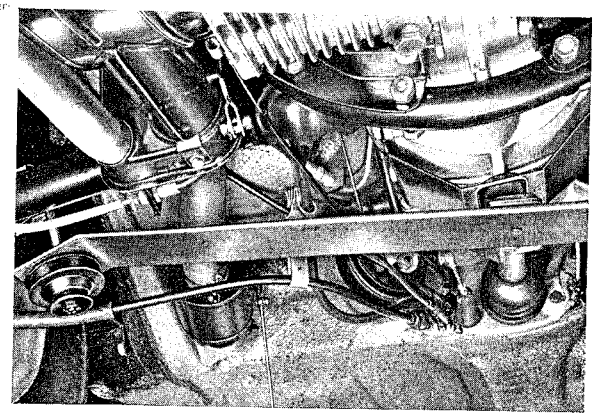

Fig. 8

Adjustment

1. For all models 1600, 1600 S, 1600 S-90 as well as Carrera having a dry weight of less than 900 kg (1980 lb.) the castel nut is positioned so that the lower cotter key bore is used.

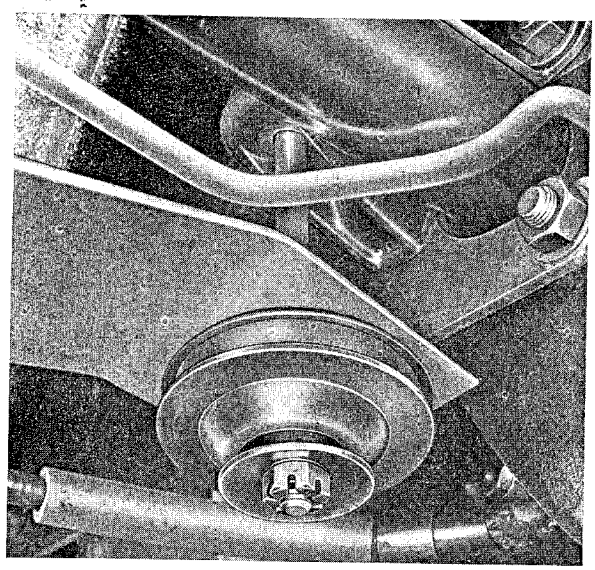

Fig. 9

2. For models over 900 kg (1980 lb.) such as Carrera de Luxe, the castle nut is positioned so that the upper cotter key bore is used.

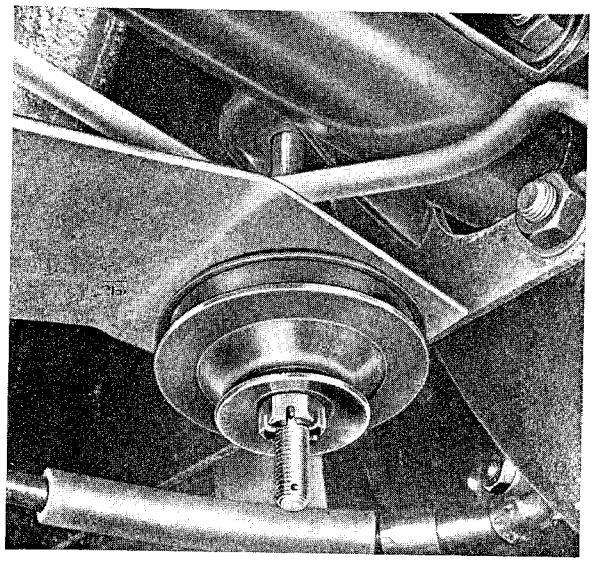

Fig. 10

Note

These compensating spring adjustments are to be observed when any rear axle work is performed. After making adjustments a new cotter key must be installed.