

Removal and Installation of Front Spring

Job-No.

32 -- 4

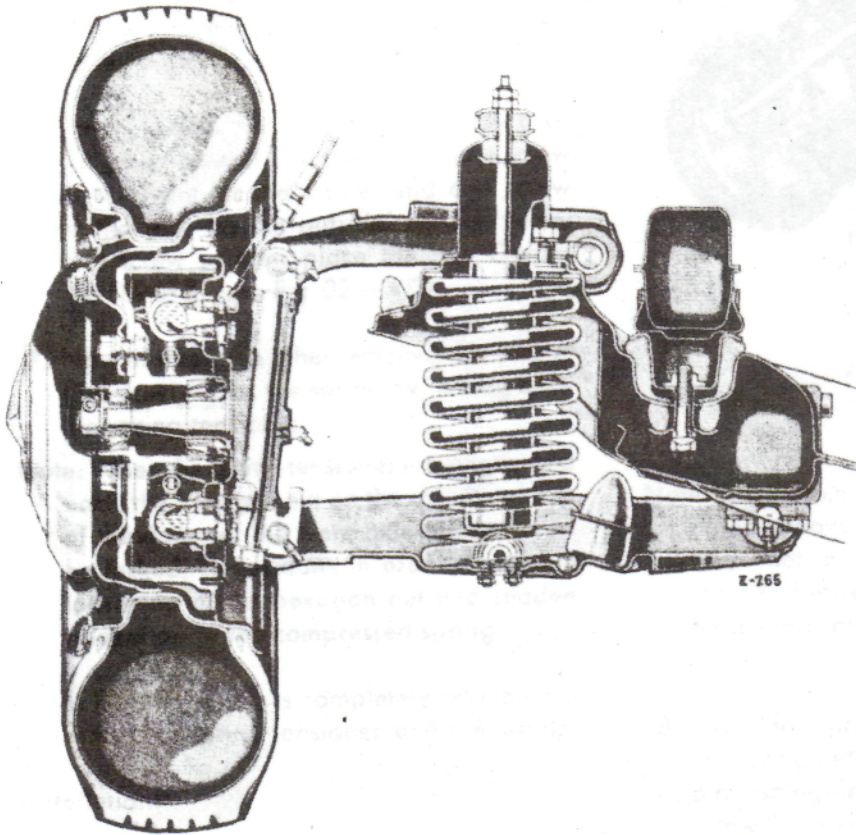


Fig. 32 — 4/1

Removal:

1. Remove the hub cap, unscrew the wheel nuts, jack up the car and take off the road wheel.
2. Unscrew the shock-absorber mounting at the lower control arm (1) and at the top (2) on the dome of the front axle support and remove the shock-absorber downward (Fig. 32 — 4/2).
3. Unscrew the two hexagon nuts (3) of the torsion bar fixing screw and pull out the hexagon screw. Do not lose the cup washers, the rubber buffers and the spacer sleeve (see Fig. 32 — 4/2).
4. Insert Spring Tensioner 120 589 0131 from underneath through the control arm, the spring and the dome of the front axle support (see Fig. 32 — 4/3).

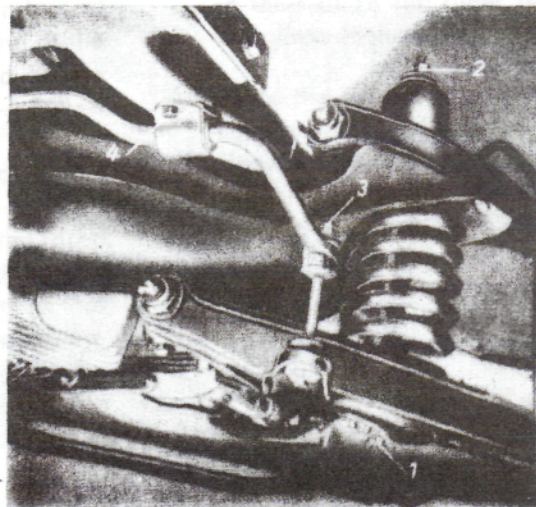


Fig. 32 — 4/2

- 1 Shock-absorber mounting at lower control arm
- 2 Upper shock-absorber mounting on the top of the dome of the front axle support
- 3 Hexagon nut
- 4 Hexagon screw

Then screw a nut onto the spindle of the spring tensioner and lock it in position with a lock nut.

5. Use the spring tensioner to compress the spring until the upper control arm is lifted off the upper rubber buffer.
6. Then unscrew two of the fixing screws for the lower control arm pivot pins (one screw at the front on the inside, and one screw at the rear on the outside, or vice versa) and screw in their place the two Guides 120 589 01 31 (see Fig. 32 — 4/3).
7. Now unscrew the other two pivot pin screws and slowly relax the spring by turning back the spring tensioner.

Note: When the spring tensioner is being turned back, the hexagon nut on the spindle on top of the dome of the front axle support must be locked. This is done in order to prevent loosening of the hexagon nut and sudden relaxation of the compressed spring.

8. When the spring is completely relaxed, remove the spring tensioner and the spring.

Installation:

9. Round off any sharp edges on the ends of the spring.

Note: Care must be taken to ensure that springs with identical color coding and part numbers are installed at the left and at the right. The part number is stamped on the last coil of the spring (see Fig. 32 — 5/2).

10. Rub washer (rubber ring) with talc.
11. Place the washer (rubber ring) on the faced end of the spring and insert the spring into the dome of the front axle support so that the washer points upward. Then press upward the lower control arm and whilst doing this, slide the control arm pivot pin into the two guides previously screwed into the front axle support (Fig. 32 — 4/3).
12. Insert Spring Tensioner 120 589 01 31 from underneath through the control arm, the spring and the dome of the front axle support (see Fig. 32 — 4/3). Then screw a nut onto the spindle of the spring tensioner and lock it in position with the lock nut.

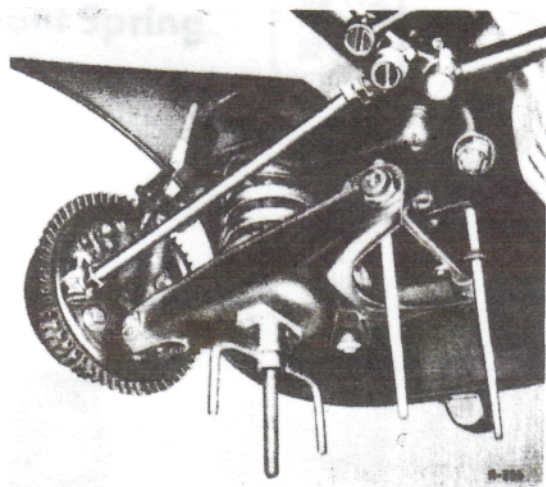


Fig. 32 — 4/3

Note: The bottom spring coil must be positioned in the groove in the control arm in such a way that a distance of approx. 5 mm remains between the end of the groove in the control arm and the end of the spring coil.

13. Use the spring tensioner to compress the spring until the lower control arm pivot pin rests against the front axle support. Then screw in and tighten up two of the four fixing screws with lock washers.
14. Unscrew the two guide bolts and screw in in their place the other two fixing screws with lock washers and tighten them up.
15. Place the torsion bar hexagon screw with cup washers, rubber buffers and spacer sleeve in position in the control arm and the torsion bar. Then install and tighten up the two hexagon nuts.
16. Release and remove the spring tensioner.
17. Install the shock-absorber (see Job No. 32 — 2).
18. Fit the road wheel, lower the car, tighten up the wheel nuts and press the hub cap on.
19. Check and, if necessary, correct the front axle camber and toe-in (see Job No. 40 — 3).
20. Check the headlight adjustment (see Job No. 82 — 2).