

# Removal and Installation of Rear Spring

Job-No.

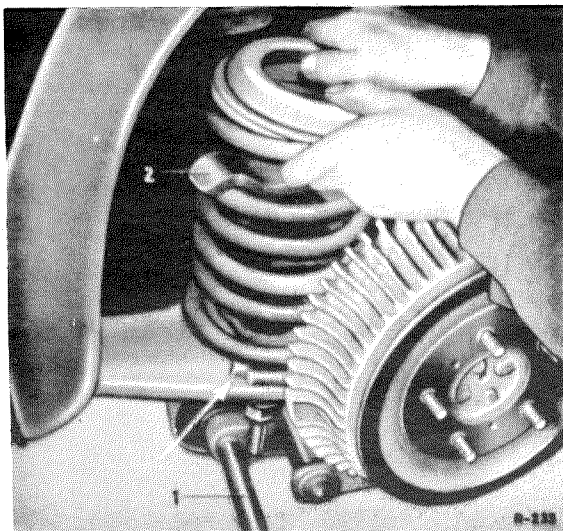
32 — 5

## Removal:

**Note:** Since the shock-absorber serves at the same time as a stop, use a jack to support the axle tube before removing the shock-absorber.

1. Remove the hub cap, unscrew the wheel nuts, jack up the car and remove the road wheel.
2. Use the jack to raise the axle tube slightly. In doing this apply the jack under the torque arm and not under the axle tube.
3. Remove the shock-absorber (see Job No. 32 — 3).
4. Insert Spring Tensioner (2) 120 589 05 31 and compress the spring by tightening the spring tensioner.

Then lower the axle tube slightly and remove the spring (Fig. 32 — 5/1).



1 Jack  
2 Spring tensioner

## Installation:

5. Check the ends of the spring for sharp edges and, if necessary, round them off.

Care must be taken to ensure that the correct spring is used.

**Caution:** Springs of different lengths are fitted in the case of the single-jointed rear axle, because of the different lengths of the axle halves.

To facilitate differentiation, in addition to the part No., the letter

L = left spring  
or R = right spring

is stamped on the end of the coil (Fig. 32 — 5/2).

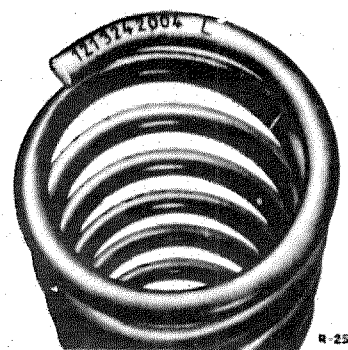


Fig. 32 — 5/2

6. Smear graphite on both sides of the lower spring plate on the contact surfaces.
7. Place the spring plate in the notch on the torque arm which corresponds to the color coding of the spring.

**Note:** To indicate the various lengths of the springs, they are marked with colored lines on the bottom coil.

Allowance is made for the various spring lengths by setting the spring plate (5) in four different notch positions (see Fig. 32 — 5/3).

When installing the shorter springs, insert an additional compensating rubber ring (9) between the spring (6) and the upper spring plate (10) (Fig. 32 — 5/3).

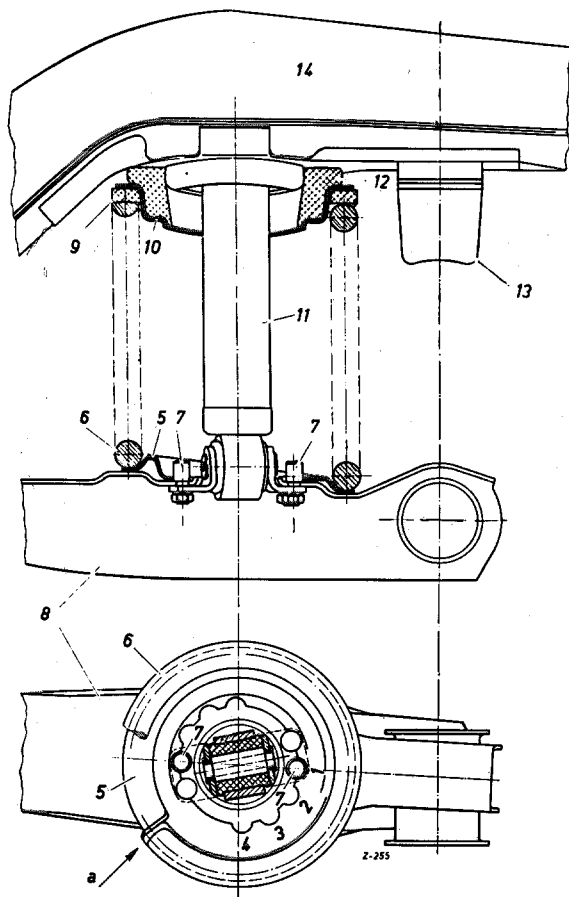


Fig. 32 — 5/3

- 1—4 Notch positions
- 5 Lower spring plate
- 6 Spring
- 7 Cheese head screw
- 8 Torque arm
- 9 Compensating ring  
180 325 00 52
- 10 Upper spring plate
- 11 Shock absorber
- 12 Rubber mounting
- 13 Rubber buffer-stop
- 14 Chassis base panel
- a = Distance from end of  
spring to heel of spring plate

8. The following table gives the appropriate notch position and allocation of compensating rubber rings for each spring length:

Spring length distinguished by colored lines		Notch position	Compensating rubber ring
White	1 line	4	with
	2 lines	3	with
	3 lines	2	with
Red	1 line	1	with
	2 lines	4	without
Blue	1 line	3	without
	2 lines	2	without
	3 lines	1	without

**Note:** Use only springs with the same color coding at the left and the right.

9. Rub talc on the rubber mounting (12) and, if necessary, on the compensating rubber ring (9) (see Fig. 32 — 5/3).
10. Use Spring Tensioner 120 589 05 31 to give the spring an initial tension and insert the spring in the lower spring plate (see Fig. 32 — 5/1).  
**See that there is a distance of 5—8 mm between the end of the spring and the heel of the spring plate** (see Fig. 32 — 5/3).
11. Place the compensating rubber ring (9) on the top end of the spring if the color coding on the spring indicates that this is necessary. Then place the upper spring plate (10) with rubber mounting (12) in position (see Fig. 32 — 5/3 and Fig. 32 — 5/1).
12. Use the jack to raise the axle tube slightly and remove the spring tensioner.
13. Install the shock-absorber (see Job No. 32 — 3).
14. Fit the road wheel and lower the car.
15. Carry out final tightening of wheel nuts and press on hub cap.
16. Check rear wheel camber (see Job No. 40 — 3).
17. Check headlight adjustment (see Job No. 82 — 2).