

Upper Shock Absorber Suspension (Figs. 6, 7, 8)

Rubber rings above and below	Part No.	Height	Outer dia.	Rubber hardness ° Shore
	180 326 01 68	19	40	57 ± 5
Protective tube1)	Part No.	Height of Support		Length
	* 115 323 04 38	4.0		240
Initial tension of the rubber rings	approx. 8mm (limited by the thread on the piston rod or housing)			

1) Only in the case of Bilstein shock absorbers.

Tightening Torque

	Nm	(kpm)
Hexagonal nuts of lower shock absorber suspension	M 8	25 (2.5)

Special Tools

Bracket for installation and removal of the shock absorber	115 589 11 61 00
Wrench for attachment of shock absorber	107 589 00 09 00

Note

The front shock absorbers also serve as a deflection stop for the front wheels. For this reason, only detach the shock absorber suspension when the vehicle is standing on its own wheels or the lower control arm is supported.

A safety stop is provided between the upper control arm and the front axle carrier.

Removal

1 Unscrew the hexagonal nuts on the upper shock absorber suspension and remove disc and rubber ring (Figs. 1, 2).

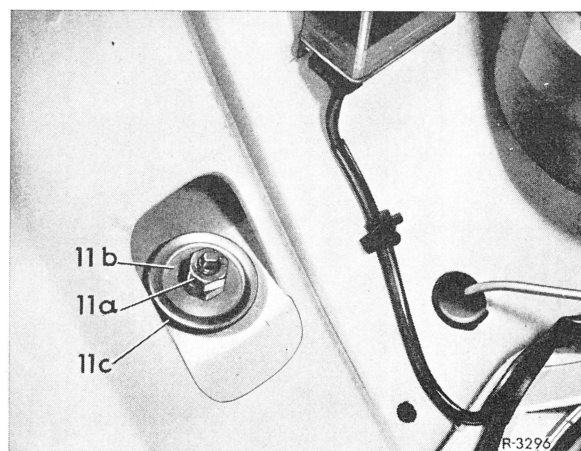


Fig. 1

11a Hexagonal nuts
11b Disc

11c Rubber ring

32.1 Removal and Installation of Front Shock Absorber

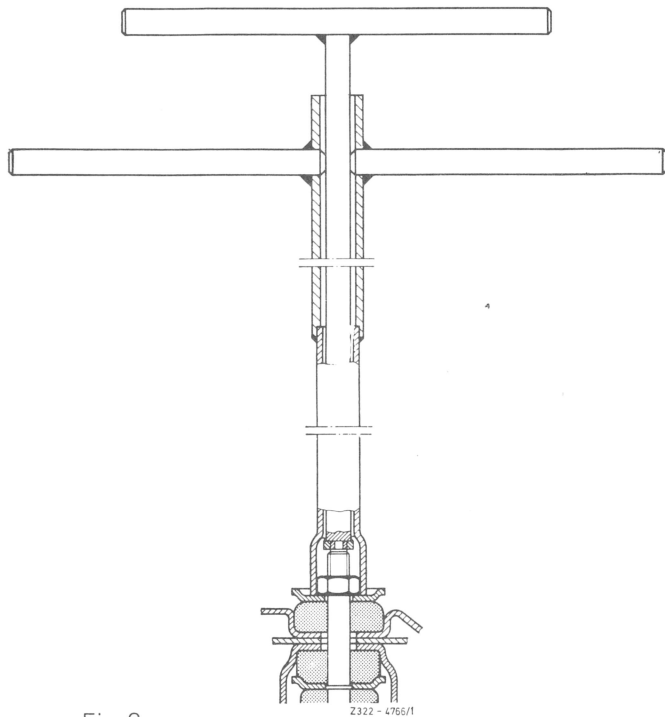


Fig. 2

Note: When removing the right front shock absorber on type 107, first unscrew the coolant expansion tank (Fig. 3).

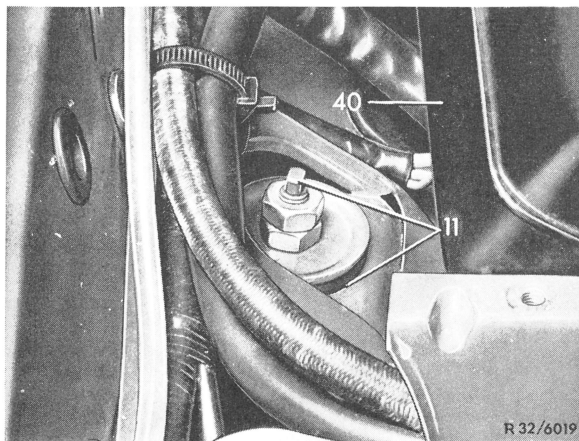


Fig. 3

11 Upper shock absorber suspension
40 Coolant expansion tank

2 Detach lower shock absorber suspension by unscrewing the hexagonal nuts on the lower control arm (Fig. 4).

3 Press in the shock absorber piston rod, attach bracket (40) and remove shock absorber (Fig. 5).

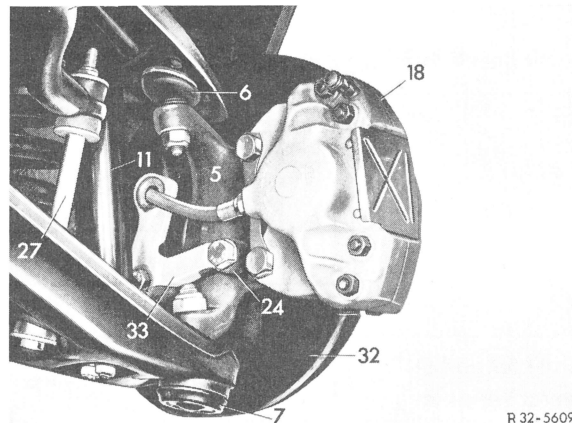


Fig. 4

5 Steering knuckle
6 Follower joint
7 Load carrying joint
11 Shock absorber
18 Brake caliper
24 Steering knuckle arm
27 Torsion bar connecting linkage
32 Cover plate for front wheel brake
33 Brake hose holder

4 Remove suspension parts:

a) Bilstein shock absorbers: remove protective tube (11f), remove lower rubber ring (11d), lower disc (11e) and additional rubber spring (buffer stop) (11h) (Fig. 6).

b) F & S shock absorbers: Remove lower rubber ring (Fig. 7).

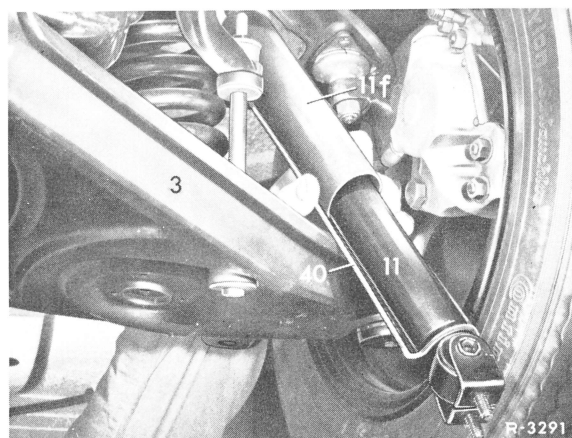
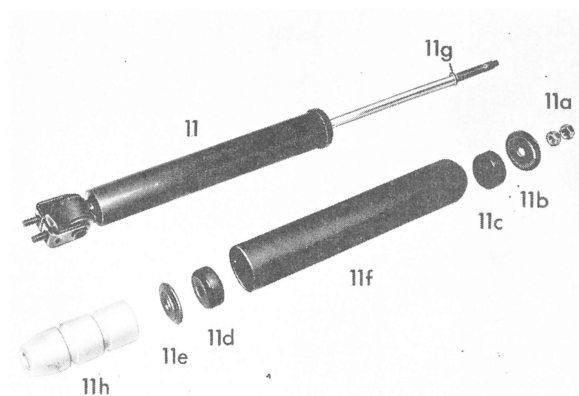


Fig. 5

3 Lower control arm
11 Shock absorber
11f Protective tube
40 Bracket

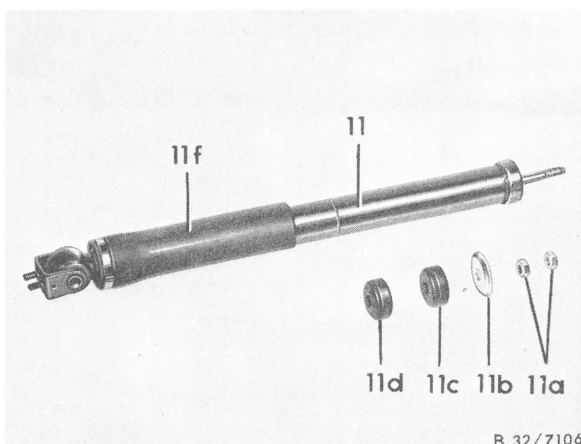


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Fig. 6

Bilstein shock absorber

- | | | | |
|-----|-------------------|-----|--|
| 11 | Shock absorber | 11e | Lower disc |
| 11a | Hexagonal nuts | 11f | Protective tube |
| 11b | Upper disc | 11g | Locking ring |
| 11c | Upper rubber ring | 11h | Additional rubber spring (buffer stop) |
| 11d | Lower rubber ring | | |



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Fig. 7

F & S shock absorber

- | | | | |
|-----|----------------|-----|-------------------|
| 11 | Shock absorber | 11c | Upper rubber ring |
| 11a | Hexagonal nuts | 11d | Lower rubber ring |
| 11b | Upper disc | 11f | Protective tube |

Note: The additional rubber springs (buffer stops 11h) are inside the protective tube on the piston rod.

On Bilstein shock absorbers they are located between the housing and the upper suspension, on F & S shock absorbers between the housing and the lower suspension.

Installation

5 Check suspension components. Clean lower control arm on supporting surface of fastening bracket of lower shock absorber suspension.

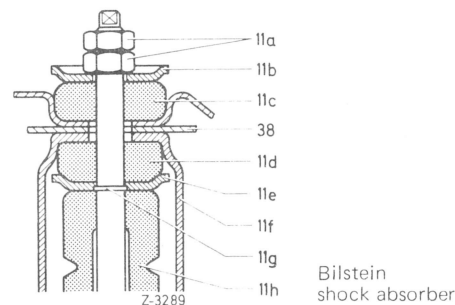
Note: The fastening bracket of the lower shock absorber suspension must be tightly seated in the rubber mount, which must not be turnable within the suspension eye.

6 Slide suspension components on to piston rod (for Bilstein shock absorbers: 11h, 11e, 11d and 11f (Fig. 6) for F & S shock absorbers 11d (Fig. 7).

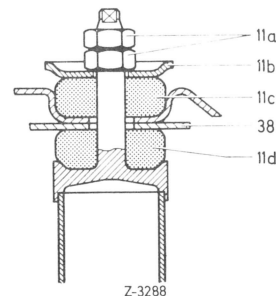
Attention! In the case of Bilstein shock absorbers on no account interchange the lower disc (11e) and the upper disc (11b), otherwise the disc can push itself over the locking ring (11g) during operation (Fig. 6).

7 Insert shock absorber into lower control arm, remove bracket and introduce shock absorber into dome on frame floor (Fig. 5).

8 Mount upper and lower suspension (Figs. 8 and 9).



Bilstein shock absorber



F & S shock absorber

Fig. 8

Upper suspension

- | | | | |
|-----|-------------------|-----|---|
| 11a | Hexagonal nuts | 11f | Protective tube |
| 11b | Upper disc | 11g | Locking ring |
| 11c | Upper rubber ring | 11h | Supplementary rubber spring (buffer stop) |
| 11d | Lower rubber ring | 38 | Dome on frame floor |
| 11e | Lower disc | | |

32.1 Removal and Installation of Front Shock Absorber

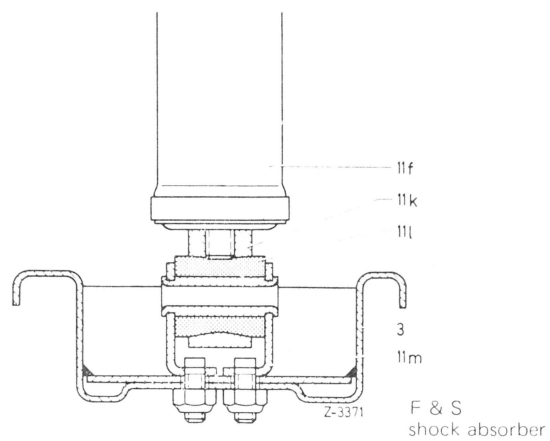
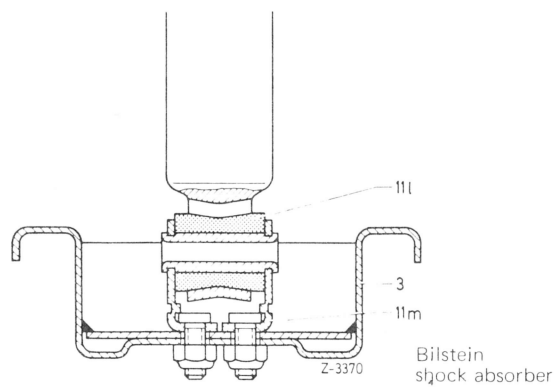


Fig. 9

Lower suspension

- | | | | |
|-----|-------------------|-----|-------------------|
| 3 | Lower control arm | 11l | Rubber mount |
| 11f | Protective tube | 11m | Fastening bracket |
| 11k | Suspension eye | | |