

32–110 Removal and installation of rear shock absorber



Upper shock absorber suspension

	Part no.	Height	OD	Rubber hardness °Shore
Rubber ring	upper	115 326 16 68	19	60 ± 5
	lower	115 326 17 68	25	
Initial tension of rubber rings	approx. 11.5 mm (limited by threads on piston rod or housing)			

Tightening torque

	Nm	(kpm)
Hex. bolts or hex. nuts at lower shock absorber suspension	45	(4.5)
Hex. nuts of upper shock absorber suspension	tighten up to runout of threads	

Special tools

Hexagon ratchet wrench 17 mm		000 589 32 16 00
Retaining wrench 5 mm		116 589 04 09 00

Note

The rear shock absorbers simultaneously serve as a deflection stop for the rear wheels. For this reason, loosen shock absorber suspension only when the vehicle rests on its wheels or when the semitrailing arm is supported. In the event of repairs, the shock absorbers can be **individually** exchanged, independent of make. Only the version of shock absorbers according to color code (e.g. 1 lengthwise line green or 1 crosswise line green) should be in alignment.

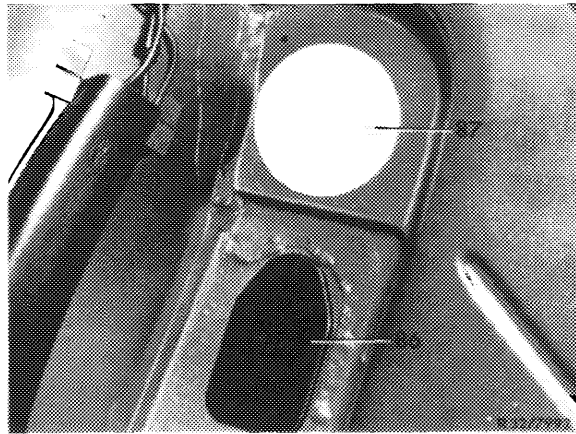
Attention!

When removing gas pressure shock absorbers with separating piston or with piston rod mounted at top, with vehicle jacked up and axle half relieved, make sure that the piston rod is not turning along when loosening upper suspension. Since in this condition the resilience stop in shock absorber rests against operating piston, the attachment of operating piston to piston rod may become loose. The gas pressure would then suddenly extend piston rod and the oil in shock absorber would flow out (risk of an accident).

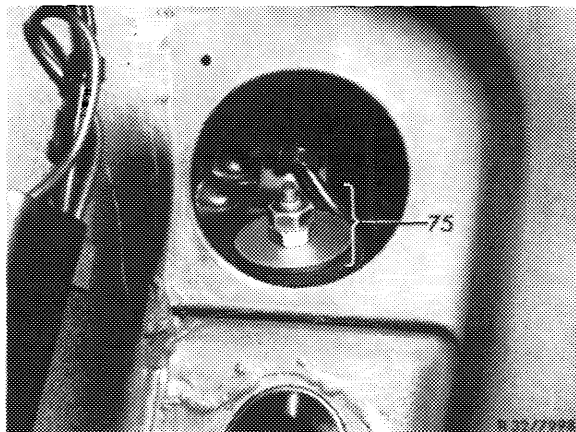
Removal

- 1 Remove rear seat and backrest.
- 2 Remove cover from rear wall.

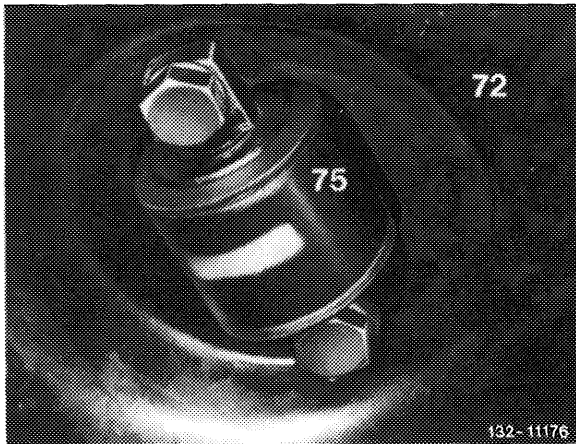
86 Cover for connection of spring strut
87 Cover for shock absorber suspension



- 3 Unscrew hex nuts of upper suspension, remove disc and rubber ring.



- 4 Loosen hex. screws of lower suspension on semi-trailing arm (72) and remove shock absorber (75) in downward direction.



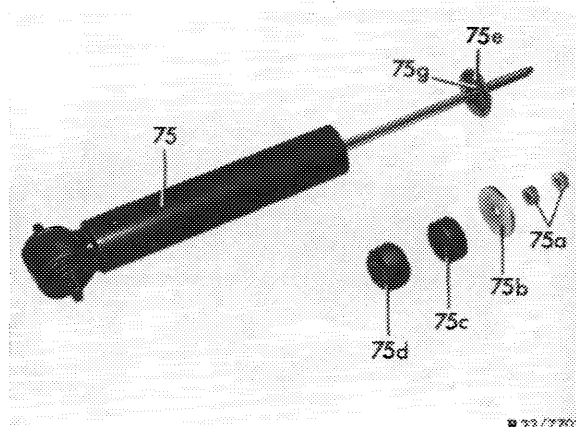
Installation

- 5 Check suspension components.

Note: The fastening clamp of lower shock absorber suspension should be firmly seated in rubber mount, the rubber mount should not be able to rotate in suspension eye.

Shock absorber with separating piston

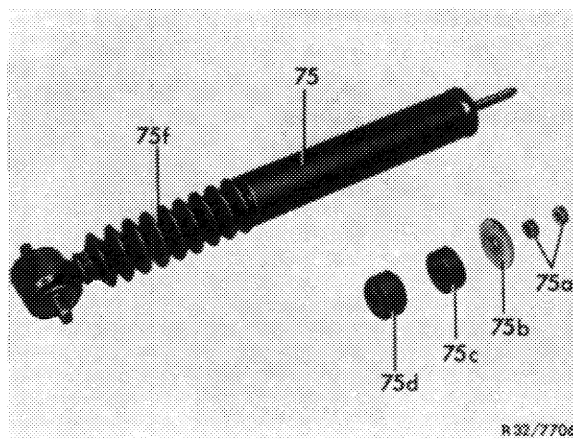
75 Shock absorber	75d Lower rubber ring
75a Hex nut	75e Cup
75b Disc	75g Locking ring
75c Upper rubber ring	



With F & S shock absorber without separating piston starting production 1975 an additional lower disk must be inserted on upper suspension, while the version installed up to now requires no lower disk.

Shock absorber without separating piston
F & S

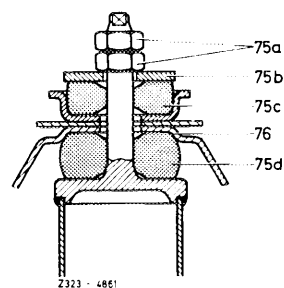
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|-------------------|-----------------------|
| 75 Shock absorber | 75c Upper rubber ring |
| 75a Hex. nuts | 75d Lower rubber ring |
| 75b Disc | 75f Dust protection |



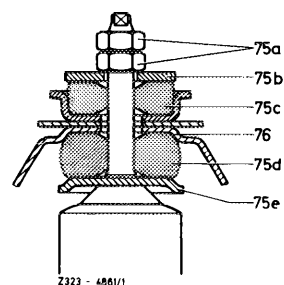
6 Insert shock absorber and mount upper suspension, making sure that the parts are correctly seated. Tighten the lower of the two hex nuts up to end of thread, then counterlock with the upper nut.

Note: The dust protection (75f) is installed only on vehicles for countries with poor road conditions.

Shock absorber without separating piston
F & S
(1st version up to 1974)

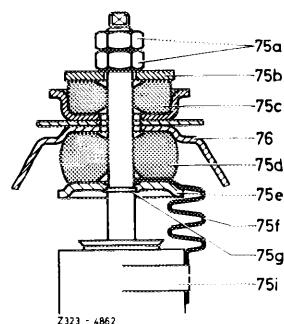


Shock absorber without separating piston
F & S
(2nd version starting 1975)



Upper suspension
Shock absorber with separating piston

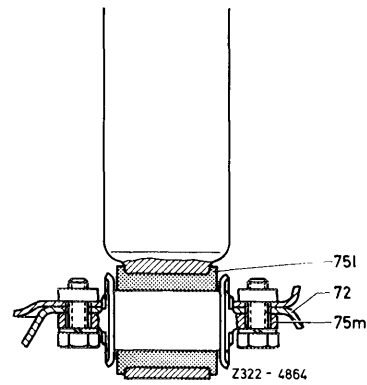
- | | |
|------------------------|------------------------|
| 75a Hex. nuts | 75e Disk |
| 75b Washer | 75f Dust protection |
| 75c Upper rubber ring | 75g Locking ring |
| 75d Lower rubber ring | 75i Clamping strap |
| 75f Dust protection | 76 Dome on frame floor |
| 75g Locking ring | |
| 75i Clamping strap | |
| 76 Dome on frame floor | |



7 Mount lower suspension to semitrailing arm. If vehicle is resting on its own wheels, jack up vehicle at the rear until semitrailing arm is at level of fastening bracket on shock absorber.

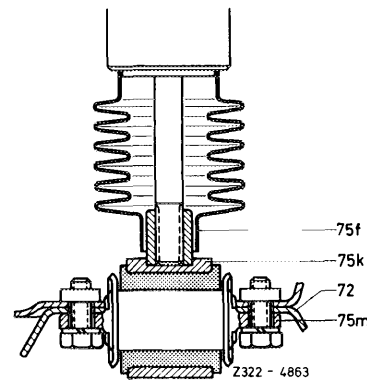
Lower suspension
Shock absorber with separating piston

- 72 Semitrailing arm
- 75l Rubber mount
- 75m Fastening clamp



Lower suspension
Shock absorber without separating piston

- 72 Semitrailing arm
- 75f Dust protection
- 75k Suspension eye
- 75m Fastening clamp

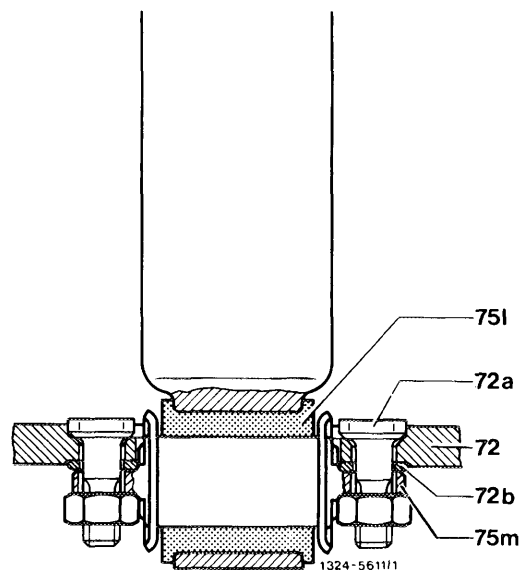


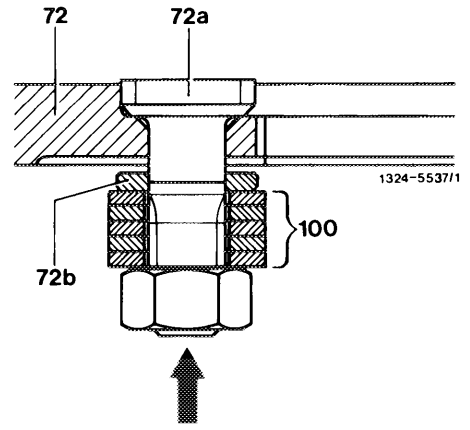
Note: On lower shock absorber suspension with diagonal swing axle, two hex. screws are screwed into semitrailing arm.

On diagonal swing axle with starting torque compensation, two special screws are inserted into semitrailing control arm from above, which are held in place by one pressed-on locating washer each.

If required: Renew special screws of lower shock absorber suspension in semitrailing control arm. For this purpose, with shock absorber removed, knock out screws with a suitable mandrel in upward direction.

After inserting new special screws into bores of semitrailing control arm, push locating disks on shaft of special screws. For this purpose, add approx. 5 washers, with an ID of 10.5 mm for locating disk, and push locating disk on shank of special screw by tightening hex. nut.





- 72 Semitrailing control arm
- 72a Special bolt
- 72b Locating disk
- 100 Washers ID 10.5

8 Insert cover into rear wall, mount backrest and rear seat.