

Section H9

Rear shock dampers

**Introduction**

The shock dampers are sealed units therefore no servicing is required. In the event of a damper becoming faulty, it should be discarded and a new damper fitted.

**Each damper contains nitrogen gas under pressure and under no circumstances should it be subjected to undue force. Do not clamp the damper in a vice.**

On all cars prior to car serial number 50 001, except Corniche Convertibles, the rear dampers are situated through the centre of the road springs. The upper end of each damper is secured to the connector tube of the height control rams. The lower end of each damper is attached to a plate secured to the trailing arm spring support.

On Corniche Convertible cars, prior to car serial number 50 001, the rear dampers are situated in front of the road spring.

The upper end of each damper is secured in a hole situated on each of the rear squab frame stiffeners. The lower end of each damper is secured to a bracket on the trailing arms (see Fig. H36).

For cars from serial number 50 001 reference should be made to Chapter G Section G14m.

**Shock damper - To remove**

**All cars prior to car serial number 50 001 except Corniche Convertible**

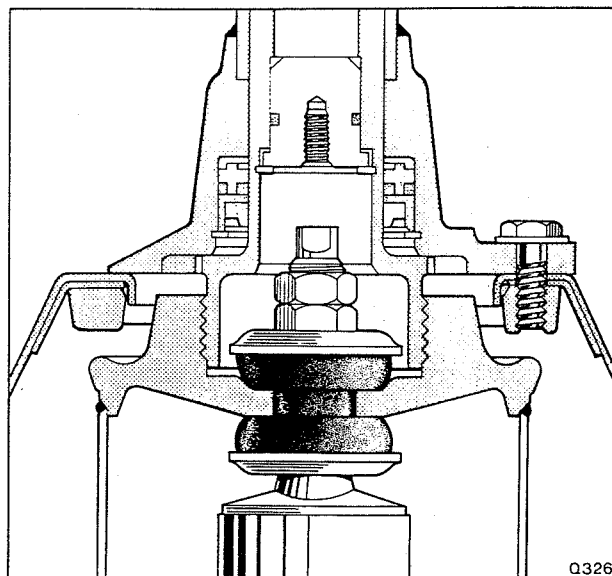
To gain access to the top mount of the damper the height control ram must be removed. The ram is secured to the top of the rear spring housing and is situated at the front of the luggage compartment.

1. Drive the car onto a ramp and chock the road wheels.
2. Depressurize the hydraulic system as described in Chapter G.
3. Attach bleed tubes to the height control ram bleed screws. Open the bleed screws and allow any remaining fluid to drain into a clean container.
4. Remove the trim from the front of the luggage compartment to expose the height control rams.

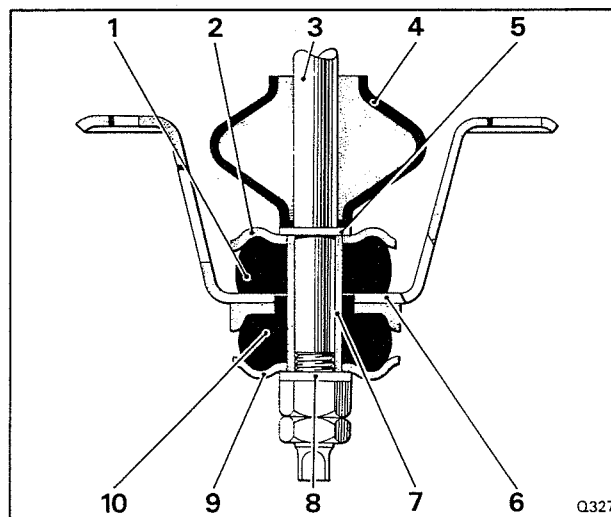
On cars conforming to a North American specification it will be necessary to remove the fuel tank to gain access to the height control rams. Refer to Chapter K for details.

5. Disconnect the hydraulic pipes from the top of the height control ram. Fit blanks to the pipe ends and ram ports.

6. Unscrew the three ram retaining setscrews equal amounts, to allow the road spring connector tube to lift under spring pressure. When the tube abuts the underside of the spring housing remove the setscrews completely.



**Fig. H34** Height control ram and damper mounting (all cars except Corniche Convertible)



**Fig. H35** Damper lower mount (all cars except Corniche Convertible)

- 1 Rubber bush
- 2 Upper seating washer
- 3 Damper spindle
- 4 Convoluted seal
- 5 Upper washer - Distance tube
- 6 Damper bracket assembly
- 7 Distance tube
- 8 Lower washer - Distance tube
- 9 Lower seating washer
- 10 Spigot rubber

## H9 - 2

7. Ease the ram housing upwards to gain access to the ram piston slots. Using hook wrench (RH8051) unscrew the ram piston from the connector tube. Carefully remove the ram from the car.
8. Remove the nuts, cup washers, and rubber mount from the top of the damper.

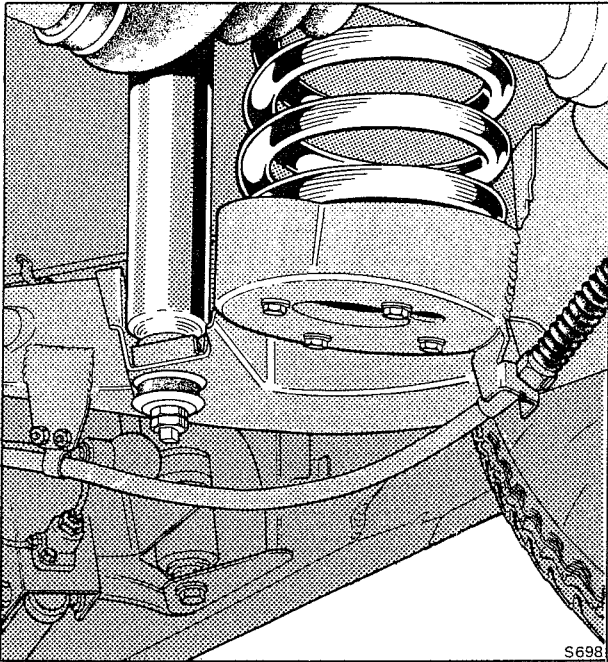


Fig. H36 Damper location (Corniche Convertible)

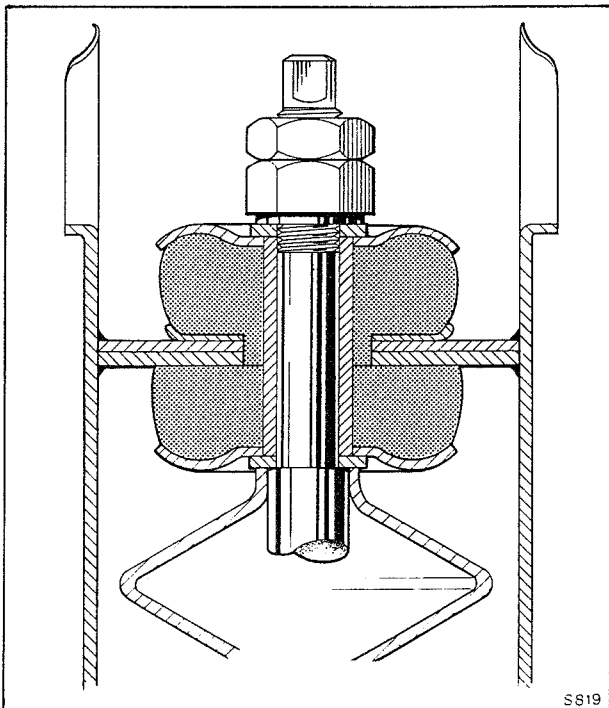


Fig. H37 Damper upper mount (Corniche Convertible)

9. Support the damper lower mounting bracket and remove the four setscrews securing it to the trailing arm.
10. Carefully withdraw the damper from the centre of the spring.
11. If a new damper is to be fitted remove the nuts, cup washer, and rubber then remove the lower mounting bracket.

#### Shock damper - To fit

##### All cars prior to car serial number 50 001 except Corniche Convertible

Fit the damper by reversing the procedure given for removal, noting the following.

1. Ensure that the rubber mounts, cupwashers, and distance tube are in a serviceable condition.
2. When fitting the damper care should be taken to ensure that the piston rod is not damaged.
3. Fit the rubber mounts, distance piece and washers to the piston rod end as shown in figure H34. Torque tighten the full nut and secure with a locknut.

Fit the rubber mounts and washers to the opposite end of the damper as shown in figure H35.

Fit and tighten the full nut and lock-nut so that the top of the lock-nut is level with the end of the damper stem thread.

4. Carefully locate the height control ram on the spring connector tube. Using hook wrench (RH8051) torque tighten the ram onto the connector tube to the figure quoted in Chapter P.
5. Align the height control ram to the spring housing using alignment screws (RH7858 and RH7859). Fit the ram securing setscrews and tighten them progressively. Finally torque tighten them to the figure quoted in Chapter P.
6. Bleed the hydraulic system as described in Chapter G. Check the ram pipe connections for leaks prior to fitting the luggage compartments trims.

#### Shock damper - To remove

##### Corniche Convertible cars prior to car serial number 50 001

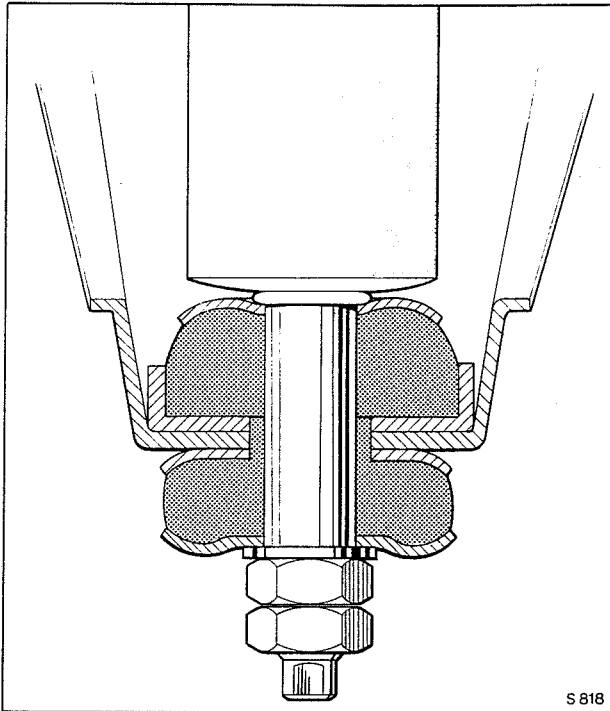
1. Drive the car onto a ramp and chock the road wheels.
2. Remove the rear seat squab to gain access to the upper mount of the damper.
3. Remove the lock-nut, full nut, cup washer, rubber mount, and distance tube from the top of the damper.
4. Remove the lock-nut, full nut, cup washer and rubber mount from the lower end of the damper.
5. Lift the damper from the trailing arm bracket and carefully lower it from beneath the car.

#### Shock damper - To fit

##### Corniche Convertible cars, prior to car serial number 50 001

Fit the damper by reversing the procedure given for removal, noting the following.

1. Ensure that the rubber mounts, cup washers, and distance tube are in a serviceable condition.
2. Ensure that the rubber mounts and washers are



**Fig. H38 Damper lower mount (Corniche Convertible)**

fitted in their correct position (see Figs. H37 and H38).

3. Torque tighten the full nut on the piston rod end of the damper and secure with a lock-nut.

On the lower end of the damper, tighten the full nut and lock-nut so that the top of the lock-nut is level with the end of the damper stem thread.