Shock Absorbers

SHOCK ABSORBERS

FRONT SHOCK ABSORBERS

Description

The front shock absorbers are telescopic type, mounted at their lower end, on a plate secured under the road spring U-bolts, and at their upper end, on a bracket bolted to the chassis frame.

To Remove

Remove the locknut, nut, washers and two rubbers from the upper and lower ends of the shock absorber.

Compress the shock absorber to clear the mounting brackets, and withdraw it from the vehicle.

Inspection

The shock absorbers are sealed units which cannot be dismantled, and therefore no adjustment or overhaul is possible. In the event of a shock absorber being faulty, a replacement unit must be fitted.

Some indication of the condition of a shock absorber can be obtained by carrying out the following check:

Secure the shock absorber in an upright position in a vice, holding it by the fixing stud only — do not grip the body of the shock absorber.

Work the shock absorber up and down through its

complete stroke several times to expel any air from the pressure chamber. When the air has been expelled, a uniform resistance should be felt throughout the compression stroke, and a uniform resistance, although not necessarily a resistance equal to that of the compression stroke, should also be felt throughout the rebound stroke.

However, if the resistance is erratic, and free movement of the piston can be felt, the shock absorber must be replaced.

It must be emphasised that although failure of a suspect shock absorber to meet the requirements of this test will confirm that it is faulty, the fact that a shock absorber might appear to perform satisfactorily during this hand testing does not necessarily prove that it is functioning correctly on the vehicle. For conclusive results, the shock absorber must be tested under realistic loadings on a shock absorber testing rig.

Check the condition of the rubber mountings. Renew if necessary.

To Refit

Reverse the removal procedure, ensuring that the locating spigot of each rubber mounting faces into the hole of each mounting bracket.

Note: The rubbers, and the steel washers are interchangeable, betweeen the upper and lower mountings.

REAR SHOCK ABSORBERS

REAR SHOCK ABSORBERS

Description

Early vehicles are fitted with a lever type shock absorber, chassis mounted, with links connecting the damper arm to the axle casing.

Later vehicles are fitted with telescopic shock absorbers mounted at their lower end to a short lug welded to the rear axle, and at their upper end on a bracket bolted to the chassis frame.

LEVER TYPE SHOCK ABSORBERS

To Remove

Remove nut securing shock absorber link to the mounting lug on axle. Using a suitable extractor, release the taper pin of the link from the lug.

Remove two nuts and setscrews securing the shock absorber to the bracket on the chassis side member.

Remove link from shock absorber, if required.



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Shock Absorbers

Inspection

Although the rear shock absorbers can be dismantled, no provision is made for adjustment or overhaul, other than by the manufacturers. In the event of a shock absorber being faulty, a replacement unit must be fitted. Some indication of the condition of the shock absorber can be obtained by carrying out the check described for front shock absorbers. If the resistance of the shock absorber is erratic, and free movement of the lever arm can be felt, this may indicate lack of fluid, in which case the unit should be topped up as follows.

- 1. Thoroughly clean the exterior of the shock absorber in the vicinity of the filler plug. This is important, as it is essential that no dirt or foreign matter enters the shock absorber.
- 2. Top up with the recommended shock absorber fluid. See Data. Whilst adding the fluid, the lever arm should be worked slowly through its full stroke to expel air from the operating chamber. Fill the shock absorber with fluid to within 3,0 mm (0.125 in) of the bottom of the filler hole boss.

If the action of the shock absorber is still unsatisfactory after topping up with fluid, a new shock absorber should be fitted.

To Refit

Reverse the removal procedure.

TELESCOPIC SHOCK ABSORBERS

To Remove

Remove the nut and bolt securing the bottom of the shock absorber to the rear axle lug. Collect the two washers.

Remove the locknut, nut, washers and two rubber mountings from the upper end of the shock absorber. Remove shock absorber.

Inspection

Check the shock absorber condition by carrying out the check as detailed in 'Inspection — Front shock absorber'.

Check the condition of the upper rubber mountings and lower rubber bush. Renew if necessary.

To Refit

Reverse the removal procedure, ensuring that the locating spigot of each rubber mounting faces into the hole of the upper mounting bracket.