

SECTION M. PART II.

THE REAR SUSPENSION

THE REAR ROAD SPRINGS

DESCRIPTION

The rear road springs are of the half elliptical leaf type which have their location point with the rear axle below and forward of the springs centre point. Both the spring eyes have pressed in metal and rubber bonded bushes and the front eye of the road spring is attached to a bracket welded to the top rear face of the second outrigger body mounting bracket by a nut and bolt. The rear eye of the road spring is attached to the top end of a shackle assembly by a nut and bolt while the bottom of the shackle assembly, which has a pressed in metal and rubber bonded bush, is attached to the chassis frame by a nut and bolt.

Replacement road springs must always be fitted in pairs.

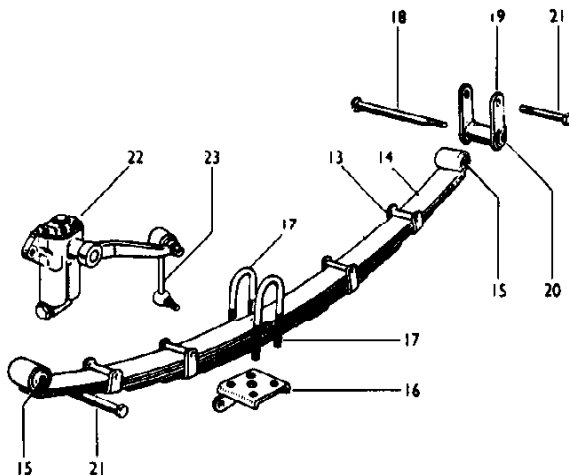


Figure M22.

Exploded view of rear suspension.

13. Chassis frame and shackle pivot bolt.
14. Rear road spring, shackle assembly.
15. Rear road spring rear eye and shackle bolt.
16. Shackle bracket metal and rubber bonded bush.
17. Rear road spring rear metal and rubber bonded bush.
18. Rear road spring eye bolt.
19. Rear road spring bottom plate.
20. Rear road spring front eye and chassis bracket bolt.
21. Rear road spring front metal and rubber bonded bush.
22. Rear road spring damper.
23. Rear road spring damper connecting link.

MAINTENANCE

FIRST 500 MILES (805 kms.)

EVERY 5,000 MILES (8,050 kms.)

Lubricate between the spring leaves.

ENSURE THAT NO OIL OR GREASE FOULS THE BRAKE DISCS.

LUBRICATING THE REAR ROAD SPRINGS

The rear road spring must be brushed clean of all road dirt and the leaves painted with penetrating oil. Exercise care to ensure that no oil fouls the metal and rubber bonded bushes in the spring eyes or the brake discs.

When it is necessary to spray the road springs instead of painting them, the contact surfaces of the brake discs must be protected and if they become contaminated with oil they must be immediately degreased.

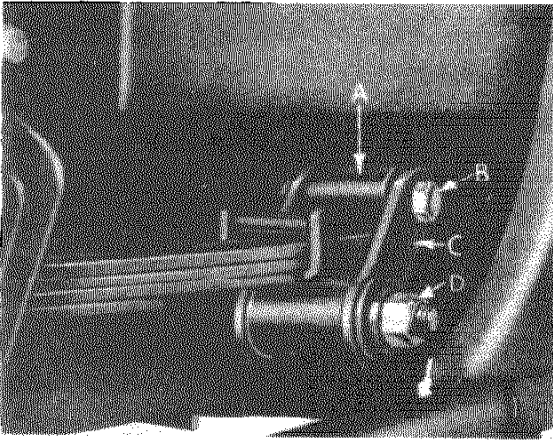


Figure M23.
Rear road spring shackle assembly.

- A. Rear road spring eye.
- B. Rear road spring eye and shackle bolt.
- C. Rear road spring shackle assembly.
- D. Chassis frame and shackle pivot bolt.

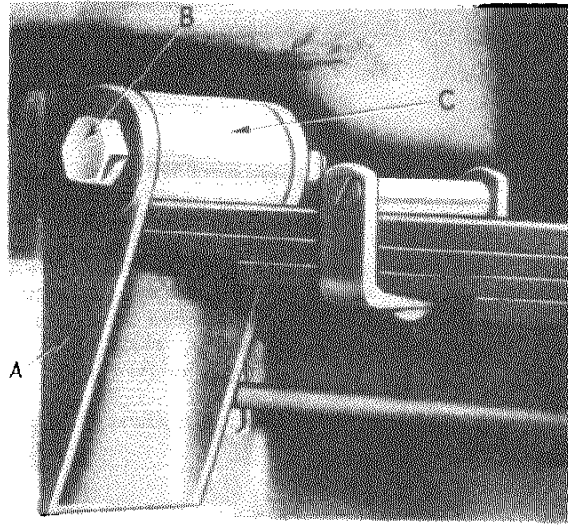


Figure M24.
Front rear road spring chassis bracket.

- A. Front rear road spring chassis bracket.
- B. Rear road spring front eye and chassis bracket bolt.
- C. Front rear road spring eye.

REMOVAL AND REPLACEMENT REAR ROAD SPRING Figs. M23 and M24.

1. REMOVAL

Jack up the rear of the car by positioning the jack beneath the chassis frame and remove the rear road wheel. Detach the road spring damper link from the bottom spring plate by holding the hexagon adjacent to the link with one spanner while removing the nut with a second. Withdraw the bolt from the metal and rubber bonded bush at the bottom end of the shackle assembly by removing the nut. Support the road spring with a jack and remove the bottom spring plate and the two 'U' bolts by removing four nuts. Remove the road spring from the welded bracket by withdrawing a nut and bolt and removing the supporting jack.

2. REPLACEMENT

The replacement of the road springs is the reversal of the removal sequence but particular attention must be given to the following points:-

- (i) That the tightening of all the bolts is delayed until the road spring is up in its true position, i. e., when a jack is positioned under the axle and the jack removed from beneath the chassis frame.

DISMANTLING AND ASSEMBLING REAR ROAD SPRING

1. DISMANTLING

Grip the road spring in the vice adjacent to the centre bolt and prise open the clip sufficient to withdraw the spring leaves. Remove the centre nut and bolt and replace with a rod, two or three times the length of the centre bolt. Open the jaws of the vice slowly, remove the road spring from the vice and withdraw the rod. Eject the two metal and rubber bushes from the spring eyes of the master (main) leaf.

2. ASSEMBLING

The assembling of the road spring is the reversal of the removal sequence.

RECONDITIONING REAR ROAD SPRING.

The road spring after being removed from the chassis should be cleaned of all road dirt and laid on a surface plate to be dimensionally checked. If it is discovered that the road springs are badly settled replacements must be fitted and no reliance placed on resetting. The only leaf supplied as a service replacement is the master leaf.

DIMENSIONS REAR ROAD SPRING

	<u>English</u>	<u>Metric</u>
Rate	156 lbs.	70.762 kgm.
Fitted load	480 lbs.	217.72 kgm.
Number of blades	6	6
Blade width	2"	50.8 mm.
Camber laden	0.53"	13.462 mm.
Free camber	5.57"	141.478 mm.

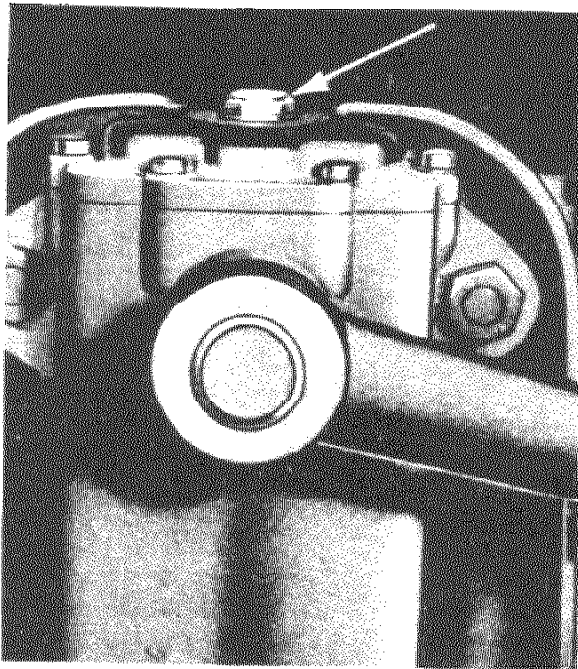
THE REAR ROAD SPRING DAMPER

DESCRIPTION

The rear road spring is of the reciprocating piston type and the body is attached to a bracket welded to the top face of the chassis frame side member. The damper is connected to the rear road spring by an arm and connecting link, the latter having two rubber mounted ball joints, one connecting it to the arm and the second to the bottom spring plate.

MAINTENANCE
EVERY 10,000 MILES (16,100 kms.).

Check fluid level.



REMOVAL AND REPLACEMENT REAR ROAD SPRING DAMPER

1. REMOVAL

Jack up the rear of the car and remove the road wheel. Detach the rear road spring damper link from the bottom spring plate by holding the hexagon with one spanner while detaching the nut with a second. Remove the damper body from the welded bracket by withdrawing two nuts and bolts, turn the unit sideways and manipulate the damper link out of the eye in the bottom spring plate and between the road spring and chassis frame.

2. REPLACEMENT

The replacement of the rear road spring damper is the reversal of the removal sequence.

Figure M25. (Left)

Location of the rear damper filler plug.

TOPPING UP REAR ROAD SPRING DAMPER WITH FLUID Fig. M25.

Securely chock the front roadwheels, jack up the rear of the car and remove the road wheels. Clean the top of the damper and remove the filler plug and top up with the recommended fluid to a level just below the bottom of the filler orifice. Replace the filler plug, roadwheels and lower the car to the ground. Remove the front roadwheel chocks.