

SECTION I

THE REAR SUSPENSION

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GENERAL DESCRIPTION

Rear suspension is by coil springs, radius arms, telescopic hydraulic dampers and an anti-sway bar. The axle is bolted to the rear ends of the two radius arms and mounted on rubber. At the forward end the radius arms are pivoted near the centre of the car, the pivot being rubber bushed.

A spring locator just forward of the axle on each radius arm carries the lower end of the coil spring, the upper end being located in a seating on the frame

side-member. Dampers pass through the springs and are rubber mounted at top and bottom.

The rubber mounted anti-sway bar extends from the left-hand side of the frame to the end of the right-hand radius arm.

MAINTENANCE

Normal maintenance is confined to removal and checking of the dampers every 12,000 miles (20000 km.).

It is advisable to examine rubber mountings whenever any dismantling is carried out and to replace those showing signs of wear or damage.

Section I.1

REMOVING A REAR SPRING

Jack up the car and place blocks or stands under the chassis frame side-members ; place a jack under the radius arm.

Remove the wheel.

Unscrew the locknut and nut securing the lower end of the damper to the radius arm ; remove the large plain washer and rubber.

Lower the jack under the radius arm until the spring is no longer compressed ; close the damper and remove the spring.

Replacement is a reversal of this procedure.

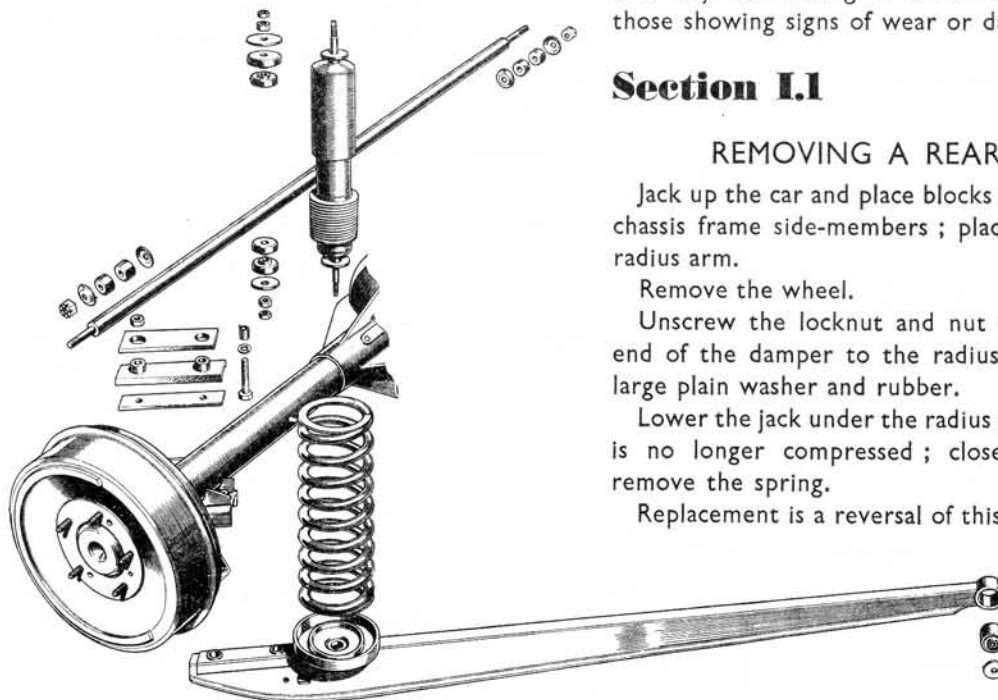


Fig. I.1.

A rear spring, radius arm, damper, anti-sway bar and spring mounting.

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Section I.2

REMOVING A RADIUS ARM

Jack up and support the chassis frame ; also support the rear axle on a jack or stand, and place another jack below the radius arm to be removed.

Remove the wheel.

Disconnect the hand brake cable and pull it through the hole in the radius arm.

Unscrew and remove the two bolts securing the axle to the radius arm.

Unscrew and remove the nut washer and rubber from the lower end of the damper.

Lower the jack below the radius arm to release the spring compression ; remove the spring.

Unscrew the nut from the pivot bolt at the inner end of the radius arm and press out the bolt ; the arm can now be removed.

Reassembly is a reversal of the above procedure.

Section I.3

REMOVING AND REPLACING THE ANTI-SWAY BAR

Jack up and support the chassis frame.

Withdraw the split pin and unscrew the nut at each end of the anti-sway bar ; remove the rubbers and washers.

Remove the nuts and set screws securing the axle to the radius arms and move the axle to the right to free the right-hand end of the anti-sway bar.

Take care not to damage the hand brake cables ; it may be advisable in some cases to disconnect them at the back-plates.

Section I.4

REMOVING THE REAR SPRINGS (LATER MODELS)

Raise the rear of the car and block up the frame forward of the rear springs. Support the axle on a suitable stand.

Remove the nut and plain washer from the damper lower mounting.

Remove the nuts from the 'U' bolts securing the axle to the spring; remove the 'U' bolts.

Remove the damper mounting plate.

Remove the shackle bolts (see special tool Part No. I8G312), and withdraw the spring.

Section I.5

DISMANTLING AND REASSEMBLING THE SPRINGS (LATER MODELS)

Straighten the bent-over spring clip tags and remove the spring clips and rubber packings.

Release the locknut and nut from the spring centre bolt and remove the distance-piece and bolt.

The leaves may now be separated, releasing the interleaf rubber pads.

Inspection

Clean each leaf, and examine for cracks and breakage. Check the centre bolt for wear or distortion (this bolt forms the location for the spring on its axle pad and should be in good condition).

Important.—When fitting new leaves it is important that they should be of the correct length, and thickness, and have the same curvature as the remaining leaves.

It is advisable, even when no leaves are broken, to fit replacement springs when the originals have lost their camber due to settling.

Reassembling

The springs should be assembled clean, dry and free from any lubricant unless they are liberally coated with Shell Ensis 260 fluid.

Place the leaves together in their correct order, locating them with the centre bolt and positioning the interleaf rubber packings between the ends of the leaves before the bolt is tightened. Each spring leaf is symmetrical about the centre bolt and clips are fitted to the third and sixth leaf only.

The dowel head of the bolt must be on top of the spring.

Replace the spring clip rubber packings and spring clips. Examine the ends of the clips and fit new clips if the old ones show signs of fracture.

Before replacing the shackle bolts, bushes and shackle plates they must be inspected for wear and, if necessary, replaced by new components. Examine also the front end bracket plate and bush and the head of the front shackle pin.

Section I.6

REMOVING AND REPLACING DAMPERS (LATER MODELS)

Unscrew and remove the upper and lower mounting nuts. Remove the washers and withdraw the damper end ferrules from the mounting bolts.

Examine the rubber bushes and renew as necessary. Replace by reversing the dismantling procedure.