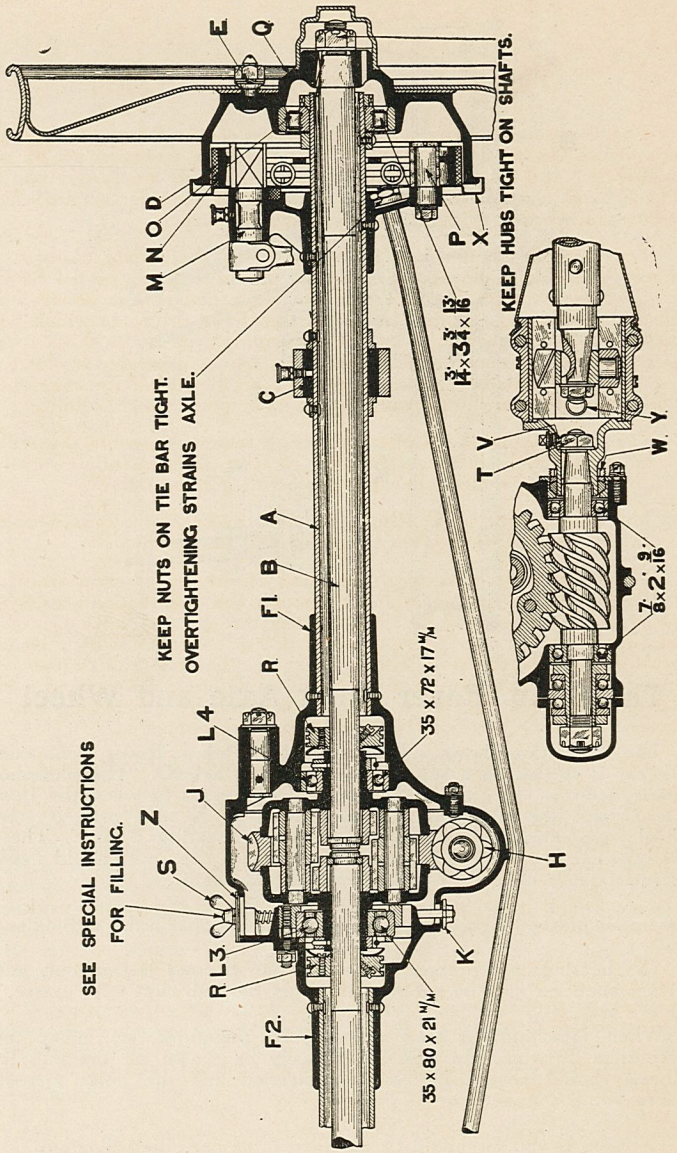


The 8 h.p. Rover Rear Axle

The illustration shows a sectional view of the 8-h.p. Rover back axle, from which it will be seen that the axle is made up of two castings F1 and F2, carrying steel tubes A, which are forced into F1 and F2 and rivetted in position. This system provides a particularly strong construction without undue weight or size.

The weight of the car is received by these axle casings, or tubes A, through the spring caps C; the tube is supported by the road wheels through the ball race O. This ball race is received by the hub casting Q, which also forms the brake drum, in which both brakes N act. Each pair of internal-expanding type brake shoes covers half the circumference of the brake drum, being suspended on fulcrum pin P and expanded by means of the cam on the end of the spindle M. The brake shoes are lined with Ferodo D or other suitable lining.

The nuts and spring washers E, when removed, enable the wheel to be immediately detached in case of tyre trouble, and lubrication can be effected by filling the hub caps with grease.

The spring ends at C should be oiled every few hundred miles, as unless these are kept free springing will be upset.

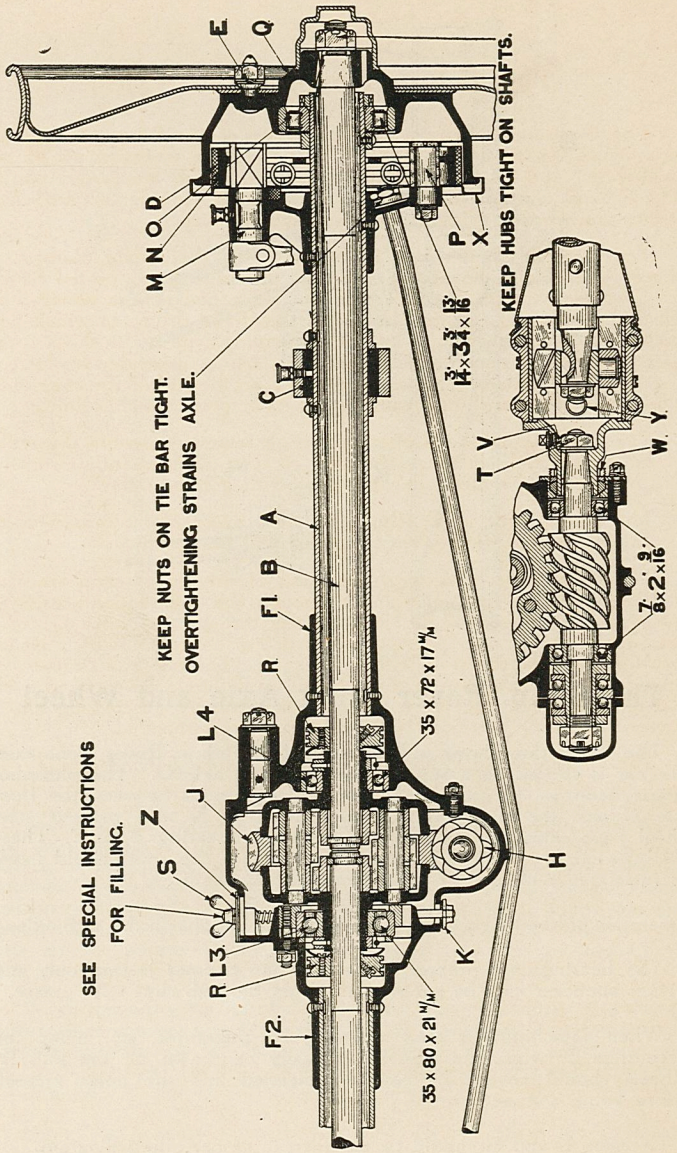
The main drive is through the worm H driving a worm wheel J, and the power is then distributed through the differential gearing to the shafts B, thence to the road wheels through the hubs Q. Ball bearings of ample dimensions are provided at L3 and 4, which accommodate any side thrust in either direction. Oil retaining screws are provided in the axle case at R. The oil level should be checked every 200 miles (after a run, when the axle is warm) by unscrewing nut S. Rover No. 10 oil (warmed) is the lubricant recommended.

The oil cap or lid Z should be opened every 200 miles, and axle filled up if necessary. The long stud round which the cap swivels should be pressed down after unscrewing wing nut S about a quarter of an inch; this opens the overflow valve K, which is set at the correct level and to this level it should be filled—screwing up the wing nut S tight will close valve again.

A surplus of oil in the axle should be avoided, as it may work out on to the brake drums.

At V is shown a small locking screw for locking nut T, which holds the flange of the universal joint of the worm shaft. The plug Y should be removed and the universal joint lubricated as per oiling diagram and instructions.

W shows the adjusting gland for curing oil leaks from the front end of the worm shaft.



The 8 h.p. Rover Rear Axle

The illustration shows a sectional view of the 8-h.p. Rover back axle, from which it will be seen that the axle is made up of two castings F1 and F2, carrying steel tubes A, which are forced into F1 and F2 and rivetted in position. This system provides a particularly strong construction without undue weight or size.

The weight of the car is received by these axle casings, or tubes A, through the spring caps C; the tube is supported by the road wheels through the ball race O. This ball race is received by the hub casting Q, which also forms the brake drum, in which both brakes N act. Each pair of internal-expanding type brake shoes covers half the circumference of the brake drum, being suspended on fulcrum pin P and expanded by means of the cam on the end of the spindle M. The brake shoes are lined with Ferodo D or other suitable lining.

The nuts and spring washers E, when removed, enable the wheel to be immediately detached in case of tyre trouble, and lubrication can be effected by filling the hub caps with grease.

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The main drive is through the worm H driving a worm wheel J, and the power is then distributed through the differential gearing to the shafts B, thence to the road wheels through the hubs Q. Ball bearings of ample dimensions are provided at L3 and 4, which accommodate any side thrust in either direction. Oil retaining screws are provided in the axle case at R. The oil level should be checked every 200 miles (after a run, when the axle is warm) by unscrewing nut S. Rover No. 10 oil (warmed) is the lubricant recommended.

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At V is shown a small locking screw for locking nut T, which holds the flange of the universal joint of the worm shaft. The plug Y should be removed and the universal joint lubricated as per oiling diagram and instructions.

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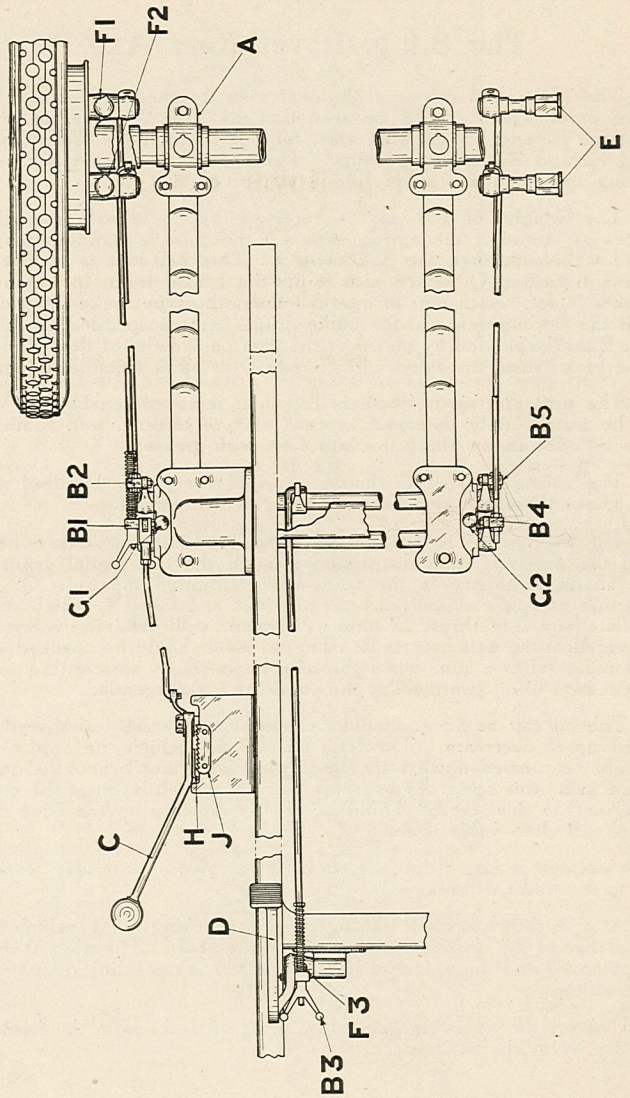

The 8 h.p. Rover Brakes.

The illustration shows the fixing of the road springs to the back axle. With our system of quarter-elliptic springing the rear spring ends, as shown at A, are the only points needing attention, and should be lubricated every few hundred miles.

At B1, 2, 4, and 5, the method of adjusting the brakes is illustrated, the front nuts being for adjusting the brakes and the back one for locking the adjustment when made. C is the brake lever and D the brake pedal. Both operate, through the rods shown, to Ferodo lined shoes in the brake drums on back wheels, and both operate on the same drums, each occupying half the circumference.

The adjustments B1 and B4 are for the hand brake, while B2 and B5 are for the foot brake. When adjusting these side rods it is advisable to jack up both rear wheels and adjust so that with the brake lever held in a certain position the turning effort required on each wheel, when tried by hand, is equal.

In the case of the foot brake a further adjustment, B3, is provided, with which one may adjust the footbrakes together, without the necessity for balancing the two sides as described above; it is, however, advisable occasionally to check over the balance.

Lubricators are provided at F1, 2 and 3, and should be attended to frequently. Greasers G1 and G2 should be screwed up at the same time. The small ends of all the levers should also be oiled wherever there is a bearing.

It is as well every day when starting out to test both hand and foot brakes immediately on leaving the garage to ensure that they are in order when required.