SECTION L

THE HYDRAULIC DAMPERS

Section

General description

Maintenance

Dampers

Front L.1

Rear L.2

GENERAL DESCRIPTION

The hydraulic dampers are of the double-acting piston type. All the working parts are submerged in oil. They are carefully set before dispatch and cannot be adjusted without special equipment. Any attempt to dismantle them will seriously affect their operation and performance. Should adjustment or repair be necessary, they must be returned to their makers.

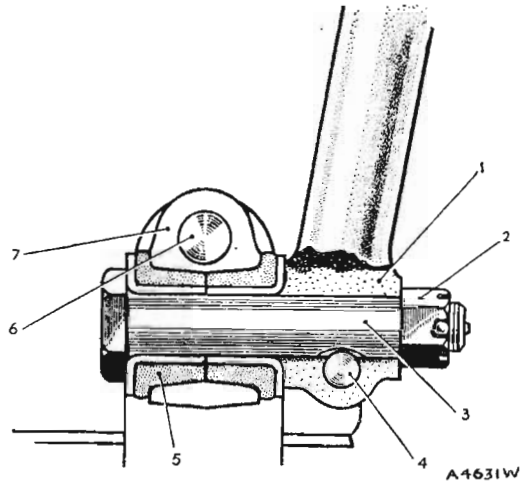


Fig. L.1

Trunnion link/damper arm assembly

1. Damper arm.
2. Castellated nut.
3. Fulcrum pin.
4. Clamp bolt.
5. Rubber bush (bearing).
6. Swivel axle pin.
7. Trunnion link.

MAINTENANCE

The maintenance of the hydraulic dampers should include a periodical examination of their anchorages to the body frame. The fixing bolts must be tightened as necessary (25 to 30 lb. ft. or 3·47 to 4·15 kg. m.).

The cheese-headed screws securing the cover-plates must be kept fully tightened to prevent leakage of the fluid.

When checking the fluid level every 6,000 miles (9600 km.) all road dirt must be carefully cleared away from the vicinity of the filler plugs before the plugs are removed. This is most important as it is absolutely vital that no dirt or foreign matter should enter the operating chamber.

The correct fluid level is just below the filler plug threads.

The use of Armstrong Super (Thin) Damper Oil is recommended. When this is not available any good-quality mineral oil to Specification S.A.E. 20/20W is acceptable. This alternative is not suitable for low-temperature operation and is deficient in various other ways.

Section L.1

FRONT DAMPERS

Removing

Jack up the car and place stands under the body in safe positions. Remove the road wheel, place a jack beneath the outer end of the lower wishbone arm, and raise it until the damper is clear of its rebound rubber.

Remove the damper arm clamp bolt and its shakeproof washer. Remove the Nyloc (self-locking) nut on the fulcrum pin. Withdraw the fulcrum pin and retrieve the trunnion link rubber bushes. On removal of the assembly securing bolts the damper can be removed from the car.

NOTE.—The jack must be left in position under the suspension wishbone while the top link remains disconnected in order to keep the coil spring securely in position and to avoid straining the steering connections.

Refitting

Refitting is the reverse of the removal procedure.

NOTE.—The fulcrum pin bushes must be renewed if softening of the rubber or side-movement is evident. New Nyloc nuts must be used to secure the inner fulcrum pins upon reassembly.

Section L.2

REAR DAMPERS

Removing

Remove the nut and spring washer that secures the damper lever to the link arm. Withdraw the fixing bolts from the damper body and body frame and remove the damper assembly by threading the lever over the link arm bolt.

Refitting

The damper assembly may be refitted by simply reversing the removal procedure. However, when handling dampers that have been removed from their mountings, it is important to keep the assemblies upright as far as possible, otherwise air may enter the working chamber and cause erratic resistance.

NOTE.—The rubber bushes integral with both ends of the damper to axle connecting links cannot be renewed. When these bushes are worn renew the arm.

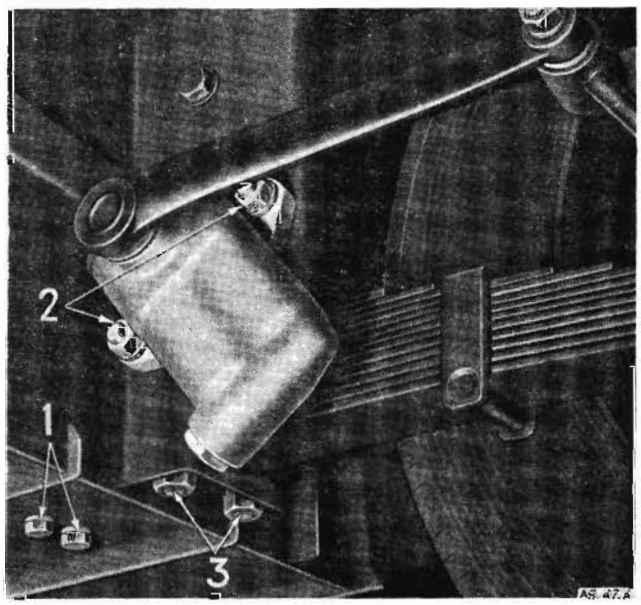


Fig. L.2

Rear spring mounting

1. Spring securing set bolts.
2. Damper nuts.
3. 'U' bolt nuts.