

Reassembling

Make certain that the outer race of both bearings is fitted hard against the register in the hub bore, and that the bearing faces marked 'Thrust' face one another.

Refit the inner races and bearing spacer, at the same time repacking the bearings with grease to Ref. C. Fit a new grease-retaining seal in the hub bore if the old seal was damaged during removal.

Refitting

When refitting the hub and bearing assembly to the stub shaft care must be taken to ensure that the bearing spacer is lifted over the shoulder on the stub shaft before pressure is applied to push the assembly onto the shaft.

Place the thrust washer on the end of the stub shaft with the chamfered bore towards the bearing, refit the slotted nut, tighten up, and secure with the split cotter pin.

Section H.6

SUSPENSION STRUTS

From Car Nos. MA2S4 34099 and AA2S7 44722 the trim height of the vehicle has been raised to give an increased ground clearance by the fitting of circular-section washers between the body of the suspension strut and the shoulder of the knuckle end. When removing a defective strut fitted with one of these washers make certain that a washer is also fitted to the new strut. It is important that only one washer is fitted to each of the four struts.

Later vehicles with cast-type struts do not require washers.

Section H.7

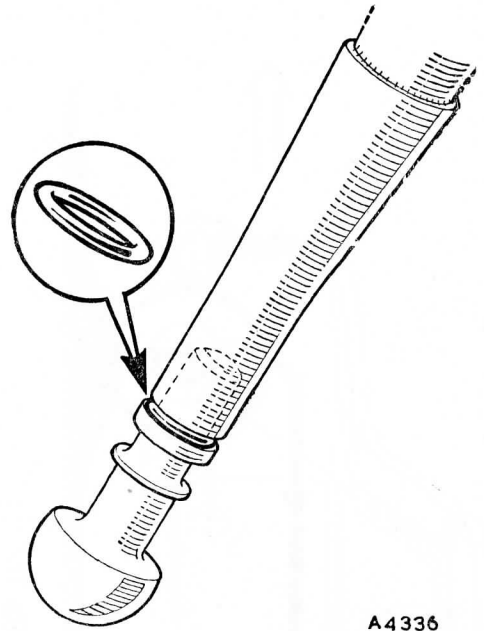
HYDROLASTIC SUSPENSION

The system consists of two front and two rear displacer units intercoupled longitudinally. Each is made of sheet steel and rubber and consists of a piston, a diaphragm, a lower and upper chamber housing, and a conical spring of compressed rubber.

Contact of the front wheels with a road irregularity forces the piston to push the diaphragm up; increased pressure displaces some of the fluid from the bottom chamber to the top chamber. The rubber springs deflect due to the pressure increase and fluid displacement, and the resultant pressure increase causes fluid to discharge through the interconnecting pipe into the rear displacer unit.

The fluid entering the rear displacer forces the diaphragm to react against the piston, resulting in the car height at the rear being raised. These events are virtually simultaneous and the car therefore rides an obstruction without pitch motion of the body. The action of the suspension is similar when the rear wheels negotiate the irregularity.

The fluid used in the system is a mixture of water and alcohol into which an anti-corrosive agent has been introduced.



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Fig. H.5

A suspension strut, showing the special circular-section washer fitted between the strut body and the knuckle shoulder

The front suspension also comprises upper and lower arms of unequal length located in the side-members of the front sub-frame with their outer ends attached by ball joints to the swivel hubs.

The rear suspension, in addition to the Hydrolastic units, consists of independent trailing arms with auxiliary coil springs.

Section H.8

DEPRESSURIZING, EVACUATING, AND PRESSURIZING THE HYDROLASTIC SYSTEM

Before any major work can be carried out on the suspension and its components the Hydrolastic system must be depressurized and in some cases evacuated. For this operation Service equipment Part No. 18G 703 or 18G 682 must be connected to the pressure valves on the rear sub-frame.

Before using Service equipment 18G 703 check that the pressure/vacuum tank is filled to the level indicated at the rear of the unit. The vacuum and pressure valves are identified by colour only; vacuum (yellow) and pressure (black).

Early service equipment (18G 682) has separate fillers for the pressure and vacuum tanks and are filled to the level shown on the dipstick. One side of the dipstick shows the level in the pressure tank and the other side the level in the vacuum tank.

Top up to the correct levels with Hydrolastic Fluid, BMC Part No. 97H 2801.

The vacuum and pressure valves are identified by number or colour; vacuum (1) yellow, and pressure (2) black.