

Reassembling

Press the fixed length collar onto the outer end of the pivot shaft until the flat face of the collar is flush with the stepped face of the shaft. Fit the mounting bracket with the nut and spring washer, care being taken that the mounting bracket does not interfere with the position of the collar on the shaft.

Press the bearing cups into the radius arm with a suitable mandrel. Pack the bearings with molybdenized grease and fit the bearings into the radius arm. Fit the dust shield into position flush with the outer end face of the radius arm.

Slide the pivot shaft through the bearings from the outer end and fit a spacer from the range available. It is suggested that the spacer originally fitted be used, if available, or a spacer of .301 in. (7.6 mm.) thickness. Fit a suitable distance piece on the inner end of the shaft, ensuring that it butts against the stepped face of the pivot shaft. Fit and lightly tighten the nuts and spring washers and check to ensure that the spacer is not too thick as this would subject the bearings to undue strain if the nuts were fully tightened.

Having ensured that the spacer is of the approximate thickness required, tighten the nuts.

Check the torque required to rotate the shaft: this should be in the range of 5 to 10 lb. in. (.058 to .115 kg. m.). If the torque is greater a thinner spacer is required, and if less a thicker spacer should be fitted. For guidance, a spacer thickness change of .003 in. (.076 mm.) (difference between consecutive spacers in the range) will give a torque change of 5 lb. in. (.058 kg. m.). Nine spacers of different thicknesses are available.

NOTE.—Care must be taken to ensure that the bearings are rotated whilst the variable-width spacer is being fitted. It is essential to ensure that the bearing inner race assembly is rotating with the shaft (and not on it) whilst the preload is measured.

Refitting

Reverse the removal procedure.

Ensure that the displacer unit strut foot is correctly located in the radius arm and the thrust washer is fitted with the relieved face towards the bearing.

Bleed the brakes.

Pressurize the suspension system.

Section H.5

DISPLACER UNITS

Removing—front

Raise the car with a jack under the transmission casing, placing a piece of wood between the jack and the casing until the load is taken off the suspension.

Depressurize the system.

Disconnect the displacer unit hose from the union on the engine bulkhead.

Unscrew the nut and remove the outer end of the upper suspension arm from the knuckle.

Unscrew the nut and withdraw the upper arm pivot bolt. Remove the upper arm complete with the displacer strut foot.

Withdraw the displacer.

Dismantling the upper arm

When dismantling, remove the bearing cups, using the Service tool.

Reassembling the upper arm

Press the bearing outer cups into the upper support arm with a suitably shaped mandrel.

Pack both bearings with molybdenized grease and assemble the bearings into the upper support arm, care being taken to prevent damage to the oil seals.

Press the fixed-length distance washer onto the pivot tube, ensuring that the flat face of the washer is flush and square with the end of the pivot tube. Slide the pivot tube through the bearings from the front face of the upper support arm and fit a spacer from the range available. It is suggested that the spacer originally fitted be used, if available, or a spacer of .301 in. (7.6 mm.) thickness. Fit the upper arm pivot pin, ensuring that the flat washers butt against the end face of the pivot tube and the fixed-length distance piece and variable spacer are flush with the end of the pivot tube. Fit and lightly tighten the nut and spring washer, and check to ensure that the spacer is not too thick as this would subject the bearings to undue strain if the nuts were fully tightened.

Having ensured that the spacer is of the approximate thickness required, tighten the nut.

Check the torque required to rotate the shaft: this should be in the range of 5 to 10 lb. in. (.058 to .115 kg. m.). If the torque is greater a thinner spacer is required, and if less a thicker spacer should be fitted. For guidance, a spacer thickness change of .003 in. (.076 mm.) (difference between consecutive spacers in the range) will give a torque change of 5 lb. in. (.058 kg. m.). Nine spacers of different thicknesses are available.

NOTE.—Care must be taken to ensure that the bearings are rotated whilst the variable-width spacer is being fitted. It is essential to ensure that the bearing inner race assembly is rotating with the shaft (and not on it) whilst the preload is measured.

Refitting—front

Reverse the removal procedure.

Ensure the correct location of the displacer strut foot and displacer unit when pressurizing.

Removing and refitting—rear

See Section H.4.

Section H.6

SUB-FRAME MOUNTINGS

Front

Support the weight of the engine and transmission assembly as close as possible to the mounting that is to be changed. If more than one is to be changed at the same time the body must also be supported on the sling.