SECTION D.

REAR SUSPENSION.

Section	Description	Page No.
D.1	Rear Hubs	Page 2
D.2	Lower Link	Page 3
D.3	Rear Hub Bearing Spacers	Page 6

Section Updated: 10/25/2007 11:36 AM at http://www.lotus-europa.com

D.1 . - REAR HUBS.

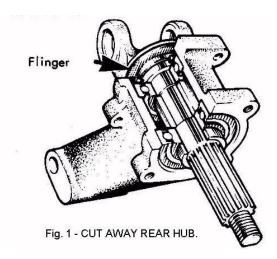
No adjustment is provided, or indeed required on the rear hub bearings. Maintenance is therefore limited to replacement. To gain access to the bearings it is necessary to remove the bearing housing from its mounting in the radius arm. The following procedure is recommended: -

- 1. Raise the car, support with suitable stands and remove the road wheel and brake drum.
- 2. Straighten the locking washer securing the rear hub retaining nut, release the nut and remove nut, washer and rear hub.
- 3. Disconnect the handbrake cable at the brake backplate lever. Release the brake hydraulic pipe at the brake backplate. Insert a suitable plug into the brake pipe to avoid the ingress of foreign matter.
- 4. Remove the bolts securing the brake backplate to the radius arm assembly. Remove backplate as an assembly. There is no necessity to disturb the brake shoes.
- 5. Release the bolt which secures both the lower link and the damper assembly to the bearing housing.
- 6. Release but do not remove the bolt securing the forward end of the radius arm to the chassis. With a suitable drift, remove the tension pin pair (one solid pin inside an open-ended pin) securing the inboard drive shaft to the transmission output drive shaft. While easing out the forward end of the radius arm, pull the inboard drive shaft coupling from the output drive shaft.
- 7. Temporarily replace the hub securing nut on the end of the outboard drive shaft (to protect the threads) and knock the drive shaft from its bearings in the bearing housing. Note that the bearing lubrication return flinger is not misplaced during this operation.
- 8. The bolts securing the bearing housing to the radius arm can now be released and the housing withdrawn from its location.
- 9. To facilitate removal of the bearings, first immerse the bearing housing in hot water for a few minutes. Using a drift against the outer ring of the bearing, knock out the bearing after pushing the bearing spacer to one side. Repeat the operation for the other bearing. Note that an oil seal (which should come out with the bearing) is on the inner bearing.

Replacement of the bearings is a reversal of the removal procedure, but the following points must be observed: -

- 1. When refitting the inboard drive shaft coupling to the output drive shaft, ensure that the shims are still in place. It is suggested that after removal of the coupling a suitable retainer (such as a bolt with a nut) is inserted through the tension pin hole to secure the shims.
- 2. BEFORE fitting the rear hubs and to ensure a positive fit between the hubs and the outboard drive shaft, ensure that both the hub and drive shaft are free from grease and dirt. Spray the mating surfaces with Locquic primer grade 'T' and allow to dry. Apply Loctlte 'High Strength Retaining Compound Type 35'.

Assemble the hub to its drive shaft and secure with lock washer and nut. Torque load the nut to the figure given in TECHNICAL DATA. When assembled, allow a MINIMUM period of 6 hours for the compound to cure.



D.2. - LOWER LINK.

To remove the lower link, the following procedure is recommended: -

- 1. Raise the car, support with suitable stands and remove the road wheel. The rear of the car should be raised high enough to allow the suspension unit to assume its fully extended position.
- 2. Release the bolt, which secures the lower link and the damper assembly to the bearing housing.

3. Release the bolt, which secures the inner end of the lower link to the bracket on the transmission housing. Ease the link from its location. Note there is no necessity to disturb the bracket when removing the link.

When replacing the new lower link, the securing bolts MUST only be finally tightened with the car in its normal ride position. Tighten the bolts to the torque loading given in TECHNICAL DATA.

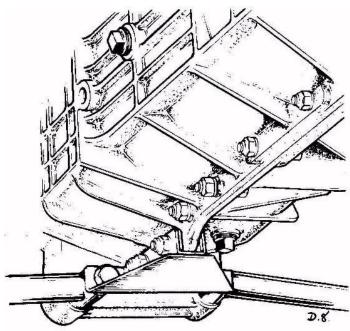


Fig. 2 - LOWER LINK BRACKET (Early Cars)

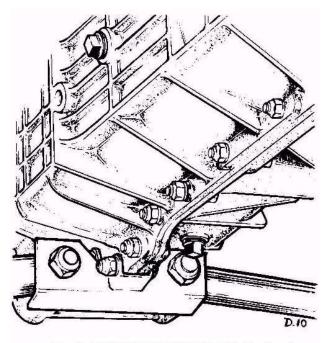
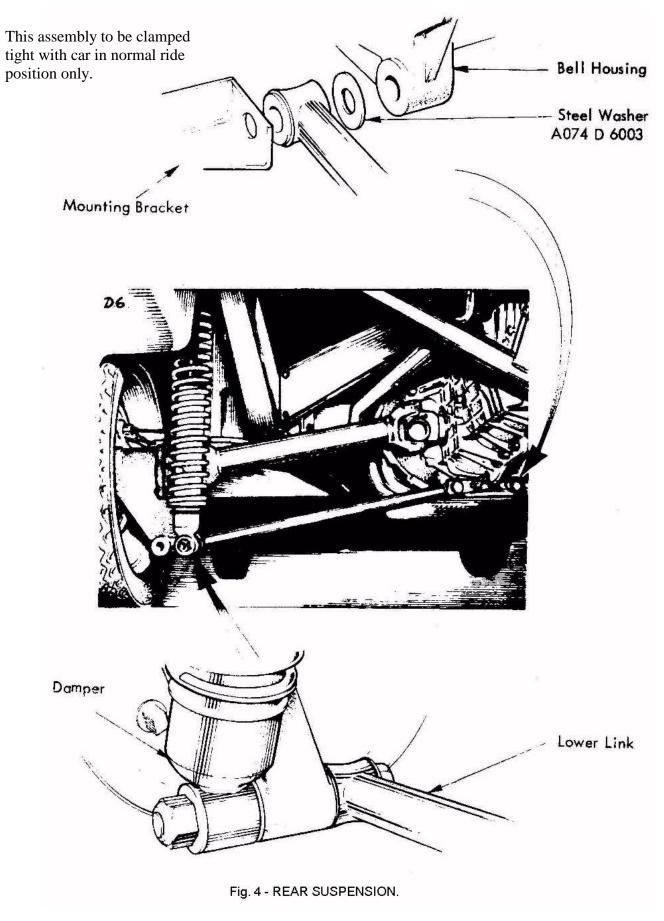


Fig. 3 - LOWER LINK BRACKET (Later Cars)



D.3 - REAR HUB BEARING SPACERS.

When replacing rear hub bearings, it is IMPORTANT to check the length of the spacer (A of Fig. 5). This measurement is critical and if ignored, could result in a side-load being placed upon the new bearings, thus causing premature failure.

Spacer measurements are as follows: -

 $X046 D 0148Z = 2.125^{+}$. 010 in. this spacer used an all models up to introduction of Europa Special. A074 D 0215Z = 2.000^{+} . 005 in. this spacer being used on Europa Special models only.

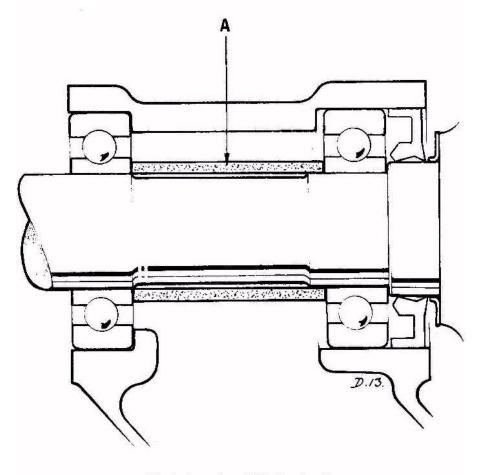


Fig. 5 - Location of Hub Bearing Spacer.