



Fig. 11.10 Exploded view of the rear hub components (Sec 15)

A All models except Cooper S and 1275GT  
 B Cooper S and 1275GT

- |  |  |   |
|--|--|---|
| 1 Brake drum and retaining screw                   | 6 Outer bearing outer race               | 11 Oil seal                                     |
| 2 Hub cap  | 7 Rear hub                               | 12 Oil seal installed with lips facing inwards  |
| 3 Hub retaining nut assembly                       | 8 Inner bearing outer race               | 13 Oil seal installed with lips facing outwards |
| 4 Outer ball bearing inner race and spacer         | 9 Inner ball bearing inner race          |   |
| 5 Outer taper roller bearing inner race and spacer | 10 Inner taper roller bearing inner race |   |

bearing outer race facing away from the hub centre (see Fig. 11.10A). Press or tap the bearing into position, using the outer race only, with a tube of suitable diameter until the bearing abuts the shoulder in the hub. Take great care to keep the bearing square as it is installed, otherwise it will jam in the hub bore, and could cause the outer race to crack.

12 Fit a new oil seal to the rear of the hub with its lip facing *towards* the bearing. On models fitted with taper roller bearings, the oil seal lip faces *away* from the bearing.

13 Place the distance piece in position and fit the outboard bearing into the hub, again ensuring that the narrow edge of the bearing outer race faces away from the hub centre. **Note:** some makes of plain ball-bearings have lengthened inner races which butt against each other. In this case the bearing distance piece is no longer needed.

14 With the bearings installed, refit the hub to the stub axle and gently tap it home using a soft-faced mallet. Ensure that the stub axle squarely enters the distance piece between the two bearings.

15 Place the thrustwasher over the stub axle, chamfered side toward the bearing, then refit the securing nut and tighten it to the specified torque. Align the next split pin hole and fit a new split pin.

16 Refit the hub cap, brake drum and roadwheel, readjust the brake adjuster and then lower the car to the ground.

#### 16 Rear rubber cone spring – removal and refitting

- 1 Jack up the rear of the car and place axle stands under the subframe. Withdraw the wheel trim and remove the roadwheel.
- 2 Place a block of wood or a jack beneath the radius arm and then

remove the rear shock absorber as described in Section 18.

3 With the shock absorber removed, lower the radius arm as far as it will go.

4 Using a screwdriver or thin flat bar, prise the rear end of the spring strut out of the rubber cone (photo). Now disengage the ball end of the knuckle joint at the front of the spring strut from its seat and lift the strut off the car.

5 The rubber cone spring can now be levered off its location in the subframe and withdrawn from the car (photo).

6 Before refitting the rubber cone spring, drift the ball end of the knuckle joint out of its location in the spring strut; examine it and its seat in the radius arm for scoring, corrosion and damage. Renew the complete knuckle joint if worn. If the joint is in a satisfactory condition, pack the cup seat with Dextragrease GP (available from your local dealer) and then refit the ball end of the knuckle joint to the cup seat. Ensure that the rubber dust cover is correctly located, otherwise water and grit will enter the joint.

7 The remainder of the refitting procedure is the reverse sequence to removal. When refitting the shock absorber, be sure that the spring strut and knuckle joint are properly engaged as the radius arm is raised.

#### 17 Rear Hydrolastic displacer unit – removal and refitting

**Note:** To enable the displacer unit to be removed it will first be necessary to have the Hydrolastic system depressurised by your local *BL garage*.

- 1 Jack up the rear of the car and support it on axle stands placed under the rear subframe.