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**WARNING: THE FRONT SUSPENSION SPRINGING MEDIUM IS A PRE-STRESSED TORSION BAR. FOR THIS REASON IT IS MOST IMPORTANT THAT PROCEDURES ARE EXACTLY FOLLOWED IF PERSONAL INJURY IS TO BE AVOIDED.**

## ANTI-ROLL BAR

### Remove and refit

60.10.01

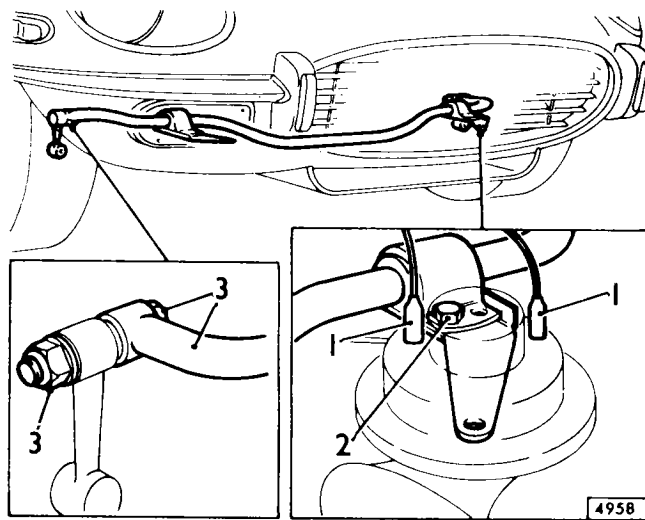
#### Removing

1. Disconnect leads from left and right horns leaving horns attached to anti-roll bar brackets.
2. Remove four nuts and setscrews securing anti-roll bar brackets to chassis member and remove brackets and keeper plates.
3. Remove self-locking nuts and washers and withdraw two bolts securing anti-roll bar link arms; detach anti-roll bar.

#### Refitting

4. Reverse operations 1 to 3.

**CAUTION:** All nuts and setscrews must be tightened with full weight of car on the suspension; premature failure of rubber bushes may occur if this precaution is not taken.



## ANTI-ROLL BAR LINK

### Remove and refit

60.10.02

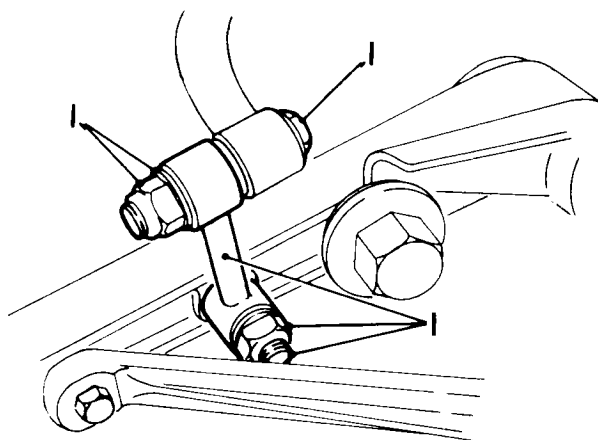
#### Removing

1. Remove nuts and washers and withdraw bolts retaining link to anti-roll bar and lower wishbone. Note location of bevel on washers for reference when refitting.

#### Refitting

2. Check conditions of bushes in link. Replace if damaged – 60.10.03.
3. Reverse operation 1 to refit.

**CAUTION:** Nuts must only be tightened with full weight of car on suspension; premature failure of bushes may occur if this precaution is not taken.



## FRONT SUSPENSION

### ANTI-ROLL BAR LINK BUSHES

#### Remove and refit

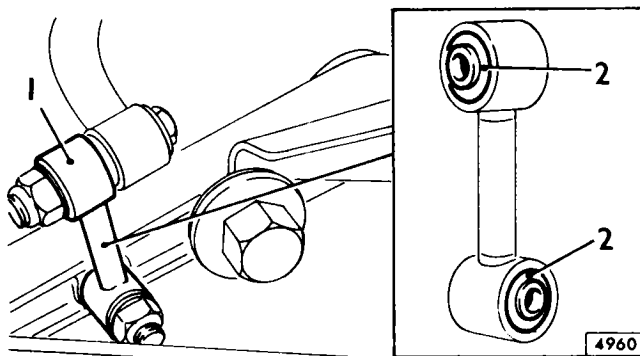
60.10.03

##### Removing

1. Remove anti-roll bar link — 60.10.02.
2. Press out bushes from link arm upper and lower eyes.

##### Refitting

3. Reverse operations 1 and 2 ensuring that each bush protrudes an equal amount from each side of eye. A lubricant made from one part liquid soap to twelve parts water will aid the fitting of bushes.



### ANTI-ROLL BAR RUBBERS

#### Remove and refit

60.10.04

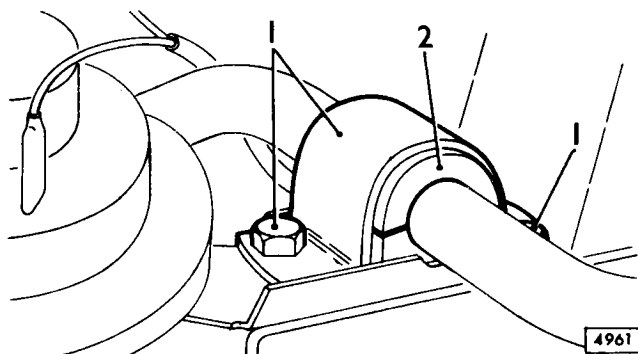
##### Removing

1. Remove nuts and setscrews securing anti-roll bar brackets to chassis member and remove keeper plates.
2. Remove rubbers from around anti-roll bar.

##### Refitting

3. Reverse operations 1 and 2 ensuring that each rubber protrudes an equal amount each side of its respective keeper plate. The split in rubbers should face forward.

**CAUTION:** All nuts and setscrews must be tightened with full weight of car on the suspension; premature failure of rubber bushes may occur if this precaution is not taken.

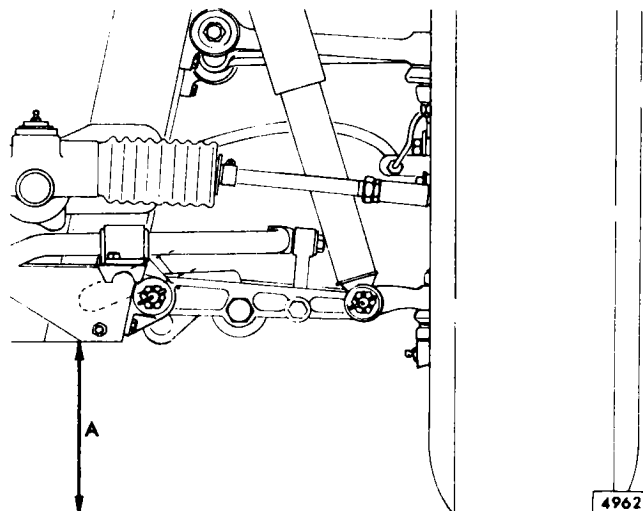


### FRONT SUSPENSION RIDING HEIGHT

#### Check

60.10.18

1. Check that car is full of petrol, oil and water and that tyre pressures are correctly adjusted.
2. Roll car forward three lengths on a perfectly level surface.
3. Measure distance of lower surface of front sub-frame lower cross member to ground at right hand side and left hand side of car. The measurement 'A' should be 15.9 cm.  $\pm$  .64 cm. (6 3/4 in.  $\pm$  1/4 in.). Should adjustment be required operation number 60.20.36 is to be carried out.



60.10.03  
60.10.18

## BALL JOINT UPPER

## Remove and refit

60.15.02

## Removing

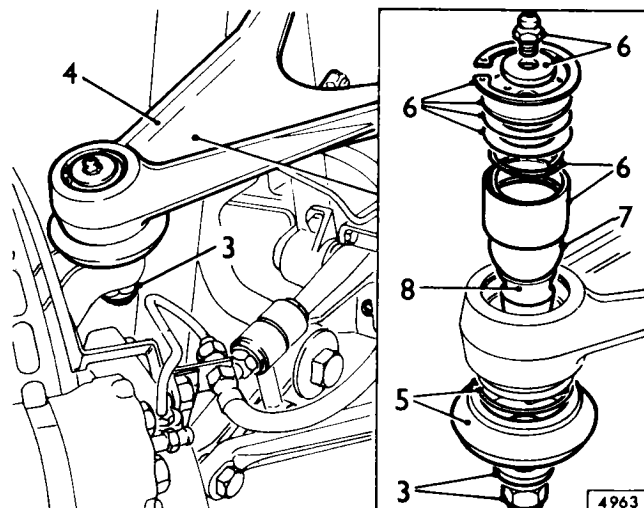
1. Remove road wheel — 70.20.01.
2. Support hub on stand.
3. Remove ball pin nut and tap sharply with hammer adjacent to the ball joint to free taper.
4. Withdraw wishbone from carrier.
5. Remove gaiter from ball joint.
6. Remove circlip and top cover. Collect shims, spring, and top socket, nylon washer and grease nipple.
7. Withdraw ball pin.
8. Remove rubber sleeve.
9. Clean and examine all metal parts. Ball pins and sockets **must** be renewed if worn or scored.

## Refitting

10. Renew gaiter and rubber sleeve over ball pin.
11. Lightly grease ball pin and insert into wishbone seat.
12. Fit top socket, shims, spring cover and circlip.
13. Check ball pin clearance and adjust as necessary.
14. Add shims until ball pin is tight in socket. Remove one shim and re-check.

**CAUTION:** Excessive wear must not be compensated for by shimming. **New parts must be fitted.**

15. Repeat operation until pin moves readily under pressure.
16. Refit wishbone and pin assembly to carrier.
17. Charge the ball joint with the recommended grade of lubricant.



## BALL JOINT LOWER

### Remove and refit

60.15.03

#### Removing

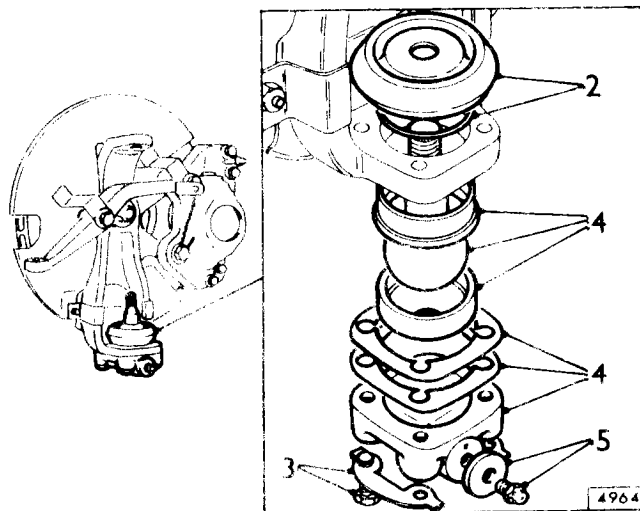
1. Remove stub axle carrier — 60.25.23.
2. Remove ring and clip retaining gaiter and remove gaiter.
3. Bend back tab washers, remove four screws securing ball pin cap to stub axle carrier.
4. Detach ball pin cap, shims, socket, ball pin and spigot from stub axle carrier.
5. Remove grease nipple and washer from ball pin cap.
6. Clean and examine all parts. Renew where necessary.

#### Refitting

7. Fit grease nipple and washer to ball pin cap.

**CAUTION:** In order to obtain correct adjustment of the ball joint it is necessary to shim to the correct clearance. Excessive wear on ball pin and sockets must not be adjusted by shims. **Worn parts must be renewed.**

8. Fit spigot, ball pin, socket, shims, ball pin cap and screws. Remove shims one by one until the ball pin is tight in its socket with screws fully tightened.
9. Remove screws, ball pin cap, shims and socket. Add shims to the value of .10 mm. to .15 mm. (.004 in. to .006 in.).
10. Lightly grease ball pin and socket. Refit socket, ball pin cap and new tab washers. Refit and tighten screws. Ball pins should now move readily in socket.
11. Reverse operations 1 and 2.
12. Charge ball joint with recommended lubricant.

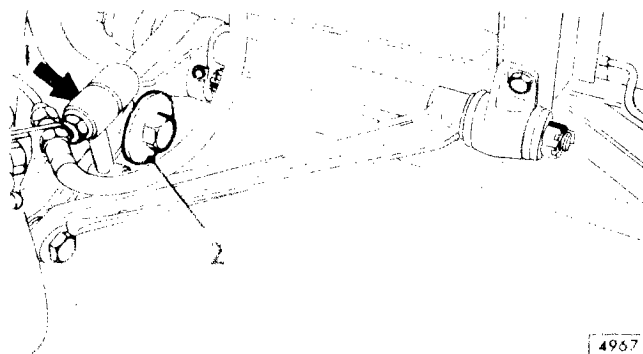


## TORSION BAR

### Adjust

60.20.36

1. Slacken locknut on cam adjuster on lower wishbone front.
2. Rotate cam adjuster to give correct riding height — 60.10.18.
3. Tighten locknut to a torque of \*\*7.6 kg.m. (55 lb.ins.).\*\*
4. Check front suspension riding height — 60.10.18.



**TORSION BAR****Remove and refit****60.20.42**

Up to chassis number 1S50064 R.H.D. 1S70412 L.H.D.

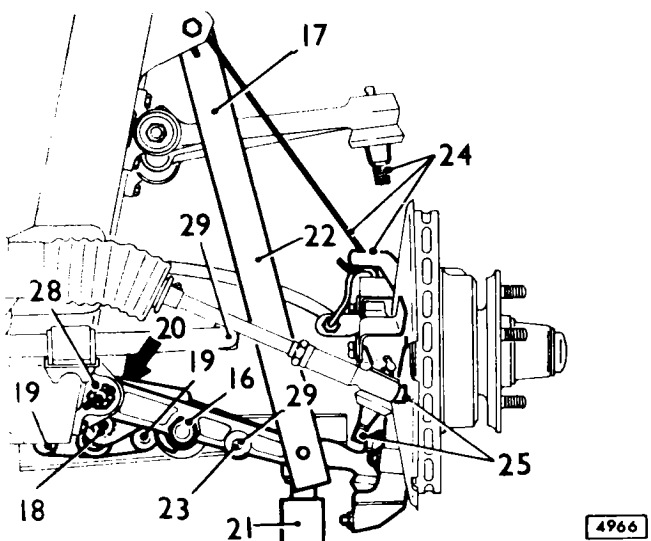
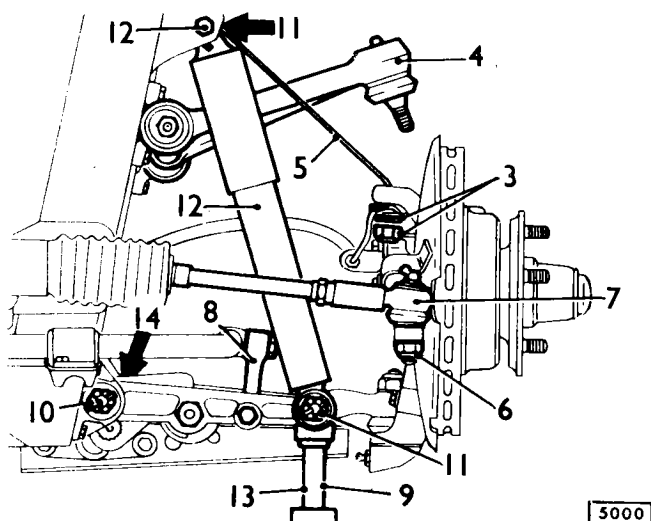
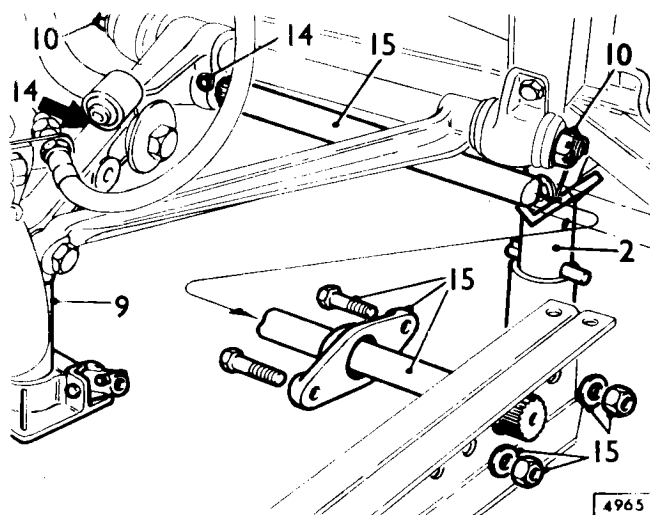
BLUE coding on Torsion Bar for L.H. fitting  
 RED coding on Torsion Bar for R.H. fitting

**Removing**

1. Remove road wheel 70.20.01.
2. Place stand under cross tube bracket beneath rear lower wishbone fulcrum support bracket.
3. Remove ball pin nut and tap sharply with light hammer adjacent to ball joint to free seat.
4. Withdraw joint and wishbone from carrier.
5. Tie stub axle carrier to sub frame to hold axle carrier in vertical position.
6. Remove self locking nut from steering tie rod end.
7. Lift tie rod to pull ball pin out of taper seat in stub axle carrier.
8. Remove anti-roll bar link 60.10.02.
9. Jack up lower wishbone at a point adjacent to damper lower mounting but do not lift car off stands.
10. Remove split pins and slacken nuts retaining lower wishbone rubber mountings.
11. Remove split pin and nut from damper top and bottom mounting bolts.
12. Withdraw top mounting bolt and detach damper from car.
13. Lower jack.
14. Remove locknut and torsion bar locating bolt from lower wishbone adjusting lever and withdraw torsion bar from splines in lower wishbone and reaction bracket.
15. Remove bolts, washers and locknuts securing torsion bar reaction bracket and remove reaction bracket and torsion bar.

**Refitting**

16. Slacken locknut on cam adjuster of lower wishbone front, set cam at its lowest point and tighten locknut to a torque of \*\*7.6 kg.m. (55 lb.ins.).\*\*
17. Fit setting gauge with two holes drilled at 49.69 cm. (19.563 in.) centres to damper mounting points to position lower wishbone.
18. The torsion bar has 24 splines front and 25 splines rear for micro-adjustment. Fit torsion bar into lower wishbone and reaction bracket so that fixing holes of reaction bracket coincide with holes in mounting bracket; the torsion bar is rotated spline by spline in wishbone and reaction bracket to achieve this position.
19. Fit bolts, washers and locknuts securing reaction bracket.
20. Secure torsion bar with locating bolt and locknut.
21. Jack up lower wishbone at a position adjacent to the lower mountings.
22. Remove setting gauge and fit damper, replace bolts and nuts but do not fully tighten nuts.
23. Loosely fit anti-roll bar link 60.10.02.
24. Untie stub axle carrier and replace upper ball pin taper into seat in stub axle carrier and secure with washer and locknut.
25. Replace tie rod end ball pin in taper seat in stub axle. Replace and tighten nut.
26. Remove stands and jack. Refit road wheel.
27. Tighten nuts securing damper and insert split pins.
28. Tighten lower wishbone fulcrum shaft nuts and insert split pins.
29. Tighten nuts securing anti-roll bar link.
30. Check front suspension riding height -- 60.10.18.



## TORSION BAR

### Remove and refit

60.20.42

(From cars numbered 1S50065 R.H.D.  
1S70413 L.H.D.)

### Service Tool

JD.43 Torsion bar  
tensioning rack

**WARNING:** Torsion bar colour coded BLUE Fit to left hand side.  
Torsion bar colour coded RED Fit to right hand side.

### Removing

1. Remove road wheel – 70.20.01.
2. Place stand under lower wishbone fulcrum support bracket.
3. Remove ball pin nut and tap sharply with light hammer to ball joint to free seat.
4. Withdraw joint and wishbone from carrier.
5. Tie stub axle carrier to sub frame to hold carrier in vertical position.
6. Remove self-locking nut from steering tie rod end.
7. Lift tie rod to pull ball pin out of taper seat in stub axle carrier.
8. Remove nut, bolt and washers from top of anti roll bar link.
9. Jack up lower wishbone at a point adjacent to the damper lower mounting but do not lift car off stands.
10. Remove split pins and slacken nuts retaining lower wishbone rubber mountings.
11. Remove split pin and nut from damper top and bottom mounting bolts.
12. Withdraw top mounting bolt and detach damper from car.
13. Lower jack to fit setting gauge with holes drilled at 48.89 cm. (19.25 in.) centres between damper securing points.
14. Slacken locknut on cam adjuster of lower wishbone and set cam to lowest point.

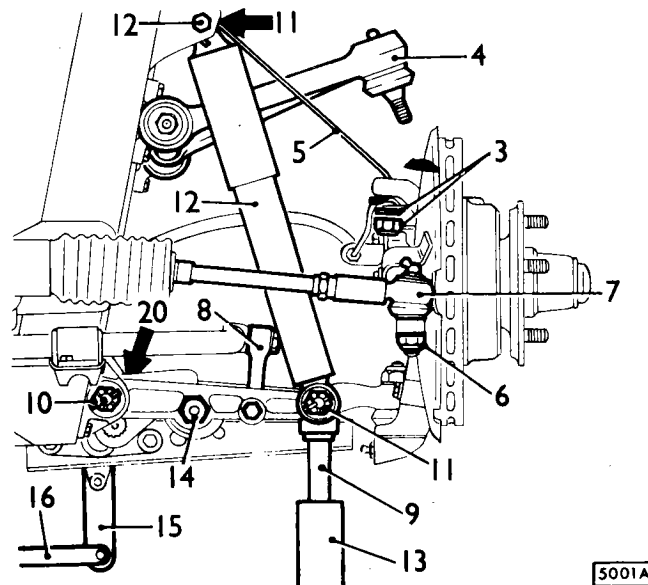
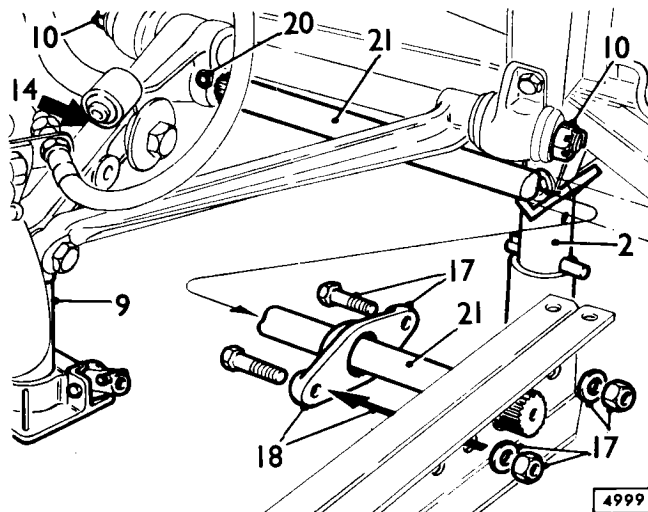
**WARNING: BEFORE REMOVING TORSION BAR, SET BARREL NUT OF TORSION BAR TENSIONING RACK SO THAT APPROXIMATELY 25.4 mm. (1.0 in.) OF THREAD IS SHOWING AT RACK END OF NUT.**

**WHEN REFITTING, SET RACK TO SHOW 63.5 mm. (2.5 in.) OF THREAD. UNDER NO CIRCUMSTANCES MUST THE RACK BE USED WITH MORE THAN 63.5 mm. (2.5 in.) OF THREAD SHOWING.**

15. Fit tool to rear of torsion bars.
16. Slightly turn barrel nut to shorten link and take bar torsion.
17. Remove setscrews and nuts securing torsion bar reaction bracket.
18. Slide bracket forward along torsion bar.

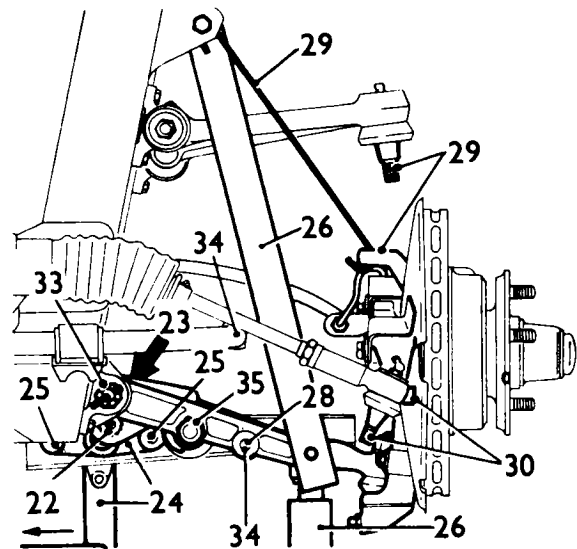
**NOTE:** It may be necessary to slowly ease tension of bar to half cover bolt holes in reaction bracket, then tap through to free.

19. Turn barrel nut to completely release torsion; remove tool.
20. Remove locknut and torsion bar locating bolt from lower wishbone adjusting lever.
21. Tap torsion bar rearwards through lower wishbone and remove.



# Refitting

22. The torsion bar has 24 splines front and 25 splines rear for micro-adjustment. Fit torsion bar into lower wishbone and reaction bracket so that the fixing holes of reaction bracket coincide with holes in mounting bracket; the torsion bar is rotated spline by spline to achieve this position.
23. Secure torsion bar into lower wishbone with locating bolt and locknut.
24. Scribe reference mark between spline on reaction bracket and torsion bar; fit tool onto rear of torsion bars, slide reaction bracket along torsion bar clear of splines, wind on torsion bar one spline by shortening tool link using barrel nut; re-engage reaction bracket and torsion bar splines in new position.
25. Fit bolts, washer and locknuts securing reaction bracket, remove setting tool from rear of torsion bars, tighten nuts on bolts.
26. Use jack beneath lower wishbone at a point adjacent to the lower mountings, until setting gauge is not under tension. Remove setting gauge.
27. Fit damper, replace bolts and nuts but do not fully tighten nuts.
28. Loosely fit anti roll bar link.
29. Untie stub axle carrier; replace upper ball pin taper into seat in stub axle carrier and secure with washer and locknut.
30. Replace tie rod end ball pin in taper seat in stub axle assembly. Replace and tighten locknut.
31. Remove stands and jack. Refit road wheel.
32. Tighten nuts securing damper and insert split pins.
33. Tighten lower wishbone fulcrum shaft nuts and insert split pins.
34. Tighten nuts securing anti roll bar.
35. Check front suspension riding height — 60.10.18.



5022A



### FRONT HUB ASSEMBLY

#### Remove and refit

60.25.01

##### Removing

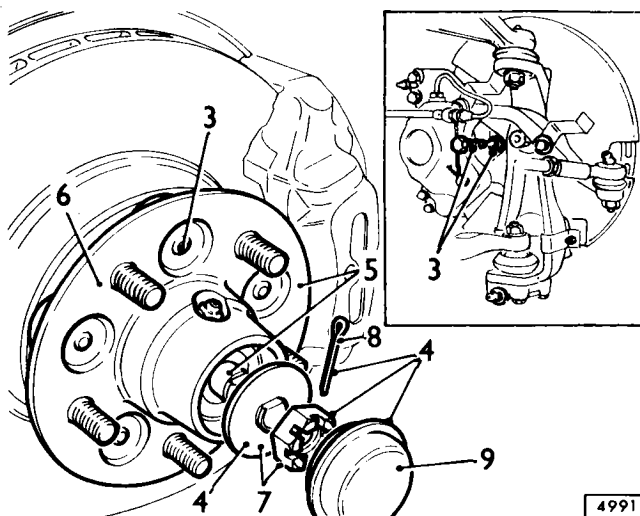
1. Remove road wheel.
2. Place stand under lower wishbone support bracket.
3. Remove bolts holding hub assembly to brake disc through aperture in disc shield.
4. Remove hub grease cap, extract split pin, remove nut and washer from stub axle.
5. Remove hub assembly from stub axle with a suitable extractor.

##### Refitting

6. Pack hub with suitable grease and refit to stub axle.
7. Fit nut and washer to stub axle and tighten nut to give .05 to .15 mm (.002 in. to .006 in.) endfloat.

**NOTE:** End float is measured by fitting a dial test indicator with the button against the hub.

8. Refit split pin.
9. Refit grease cap.



## STUB AXLE

## Remove and refit

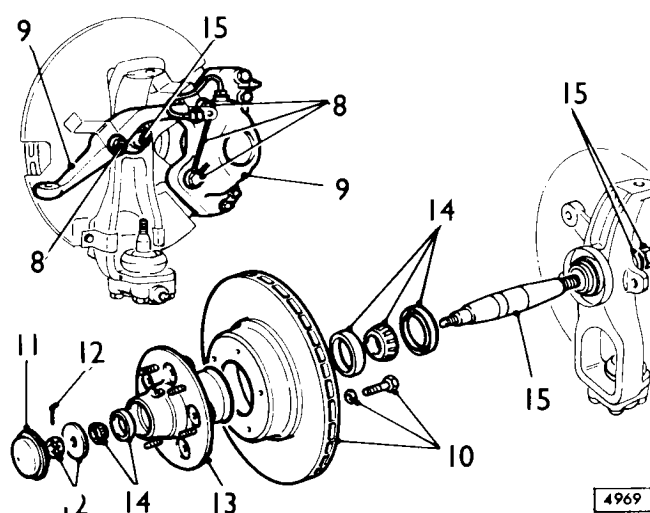
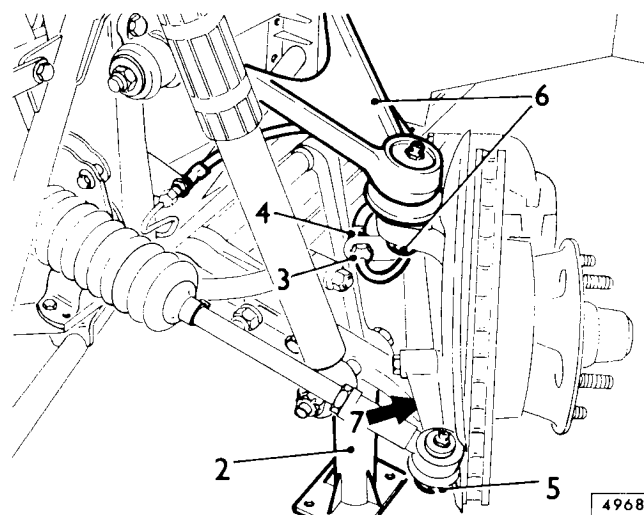
60.25.22

## Removing

1. Remove road wheel – 70.20.01.
2. Place stand under lower wishbone at a point adjacent to the damper.
3. Disconnect brake pipe from flexible hose at bracket on stub axle and blank off unions to prevent loss of fluid and ingress of dirt.
4. Remove nut and lockwasher from flexible brake pipe, detach pipe from bracket and blank off unions to prevent loss of fluid and ingress of dirt.
5. Remove self-locking nut securing steering ball pin and remove ball pin from taper seat in steering arm.

**CAUTION:** It is advisable to support the stub axle assembly before carrying out the next two operations. This is to protect the operator and prevent damage to ball pins.

6. Remove self-locking nut and washer securing upper ball pin to stub axle carrier and remove upper wishbone ball pin out of taper seat in carrier.
7. Remove self-locking nut and washer securing lower ball pin in lower wishbone, drift ball pin from taper seat in lower wishbone and remove stub axle assembly from car.
8. Remove locking wire, two bolts and washers securing caliper to stub axle carrier. Remove bolt securing steering arm to stub axle carrier.
9. Remove steering arm, shims, clip and caliper from stub axle carrier.
10. Remove bolts and washers securing disc to hub and separate disc from hub. (Nuts are also removed when wire spoked road wheels are fitted to vehicle).
11. Remove hub sealing cap (not fitted with wire spoked road wheels).
12. Remove split pin, nut and washer securing hub to stub axle.
13. Remove hub from stub axle.
14. Remove oil seal and bearings and examine for wear. Should new bearings be required extract taper seats from hub.
15. Remove self-locking nut and washer securing stub axle to carrier and detach stub axle.

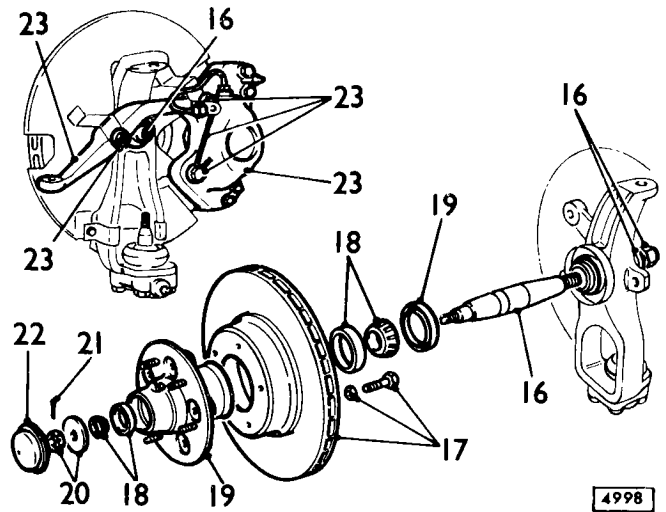


## Refitting

16. Fit stub axle into taper seat in axle carrier, replace washer and nut. Tighten nut to a torque of 13.4 to 14.8 kg.m. (97 to 107 lbs.ft.).
17. Fit disc to hub and tighten bolts to a torque of 4.1 to 5.0 kg.m. (30 to 36 lbs.ft.).
18. Refit taper bearings into hub, grease and replace bearings.
19. Replace oil seal and fit hub to stub axle.
20. Replace washer and nut to stub axle and tighten nut to give end float .05 to .15 mm (.002 in. to .006 in.).

**NOTE:** End float is measured by fitting a dial test indicator with the button against the hub.

21. Refit split pin.
22. Fit grease cap to hub, (not fitted with wire road wheels).
23. Fit caliper, shim, steering arm and clip to axle carrier and insert bolts. Tighten bolts securing caliper to a torque of 6.9 to 8.2 kg.m. (50 to 60 lbs.ft.) and fit locking wire on bolts. Tighten bolt securing steering arm to a torque of 6.8 to 7.6 kg.m. (49 to 55 lbs.ft.).
24. Reverse operations 1 to 7.
25. Bleed brakes — 70.25.02.



## STUB AXLE CARRIER

## Remove and refit

60.25.23

## Removing

1. Remove road wheel — 70.20.01.
2. Place stand under lower wishbone at a point adjacent to the damper.
3. Disconnect brake pipe from flexible hose at bracket on stub axle and blank off unions to prevent loss of fluid and ingress of dirt.
4. Remove nut and lockwasher from flexible brake pipe, detach pipe from bracket and blank off unions to prevent loss of fluid and ingress of dirt.
5. Remove self-locking nut securing steering ball pin and remove ball pin from taper seat in steering arm.

**CAUTION:** It is advisable to support the stub axle assembly before carrying out the next two operations. This is to protect the operator and prevent damage to the ball pins.

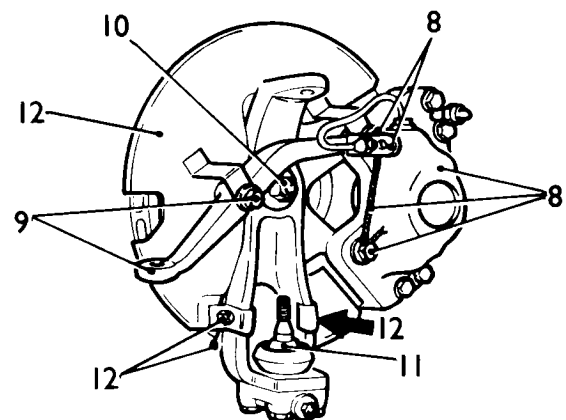
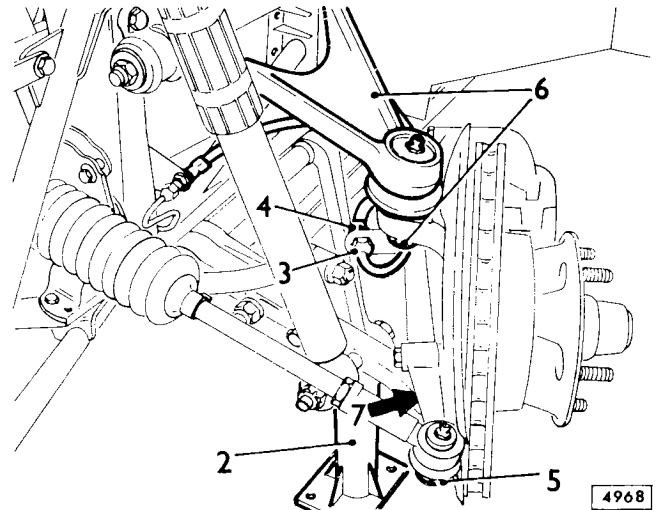
6. Remove self-locking nut and washer securing upper ball pin to stub axle carrier and remove upper wishbone ball pin out of taper seat in carrier.
7. Remove self-locking nut and washer securing lower ball pin in lower wishbone, drift ball pin from taper seat in lower wishbone and remove stub axle assembly from car.
8. Remove locking wire, two bolts and washers securing caliper to stub axle carrier. Remove brake pipe bracket, shims and caliper from stub axle carrier.
9. Remove bolt securing steering arm to stub axle carrier. Remove steering arm.

**CAUTION:** Support hub and disc assembly before breaking taper.

10. Remove self-locking nut and washer securing stub axle to carrier and detach stub axle and hub assembly from carrier.
11. Remove lower ball joint — 60.15.03.
12. Remove two self-locking nuts securing brake disc shield brackets and remove shields.

## Refitting

13. Reverse operations 1 to 12. Tighten all securing bolts and nuts to correct torque figures.
14. Bleed brakes — 70.25.02.



## FRONT SUSPENSION

### FRONT HUB STUDS

#### Remove and refit

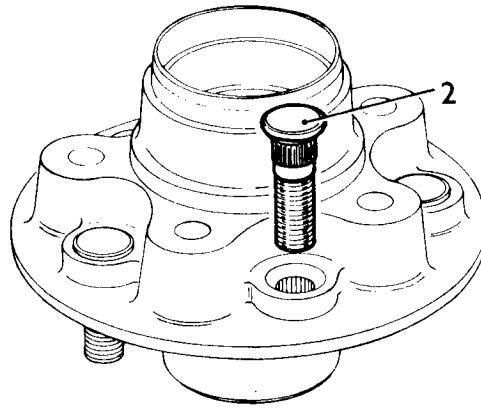
60.25.29

##### Removing

1. Remove front hub – 60.25.01.
2. Using power press and suitable mandrel, press stud/s from hub.

##### Refitting

3. Use power press and suitable mandrel to press stud/s into hub.
4. Refit front hub – 60.25.01.



### FRONT DAMPER

#### Remove and refit

60.30.02

**WARNING:** The jack must be left in position while the damper is not in place in order to control the torsion bar pre-load.

##### Removing

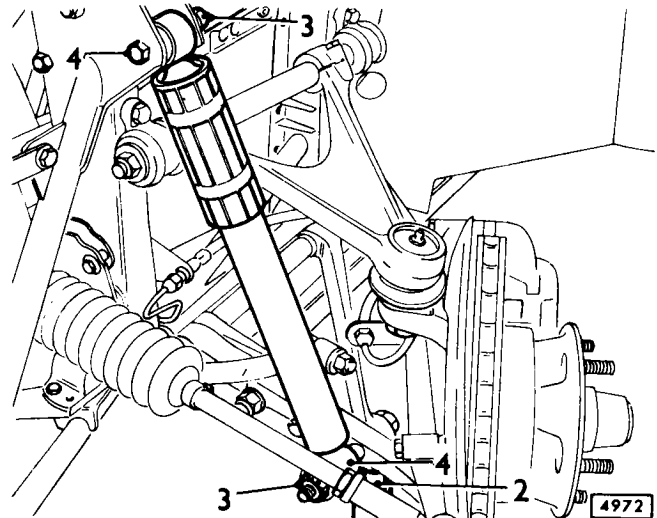
1. Remove road wheel – 70.20.01.
2. Jack up car at a point adjacent to the damper lower mounting.
3. Remove split pin and nut from the damper top and bottom mounting bolts.
4. Remove top mounting bolt, withdraw damper from bottom mounting and remove from car.

**NOTE:** Before fitting a new damper it is advisable to 'bleed' the damper. Hold damper in vertical position and make several short strokes (not more than half way) until there is no lost motion. Extend the damper to its full extent once or twice. Keep damper in vertical position after 'bleeding' until it is fitted to car.

##### Refitting

5. Reverse operations 1 to 4.

**CAUTION:** The slotted nuts should not be tightened until full weight of car is on the suspension. Early failure of rubber bushes may occur due to undue torsional load if nuts are not tightened with full weight of car on suspension.



## FRONT DAMPER BUSHES

### Remove and refit

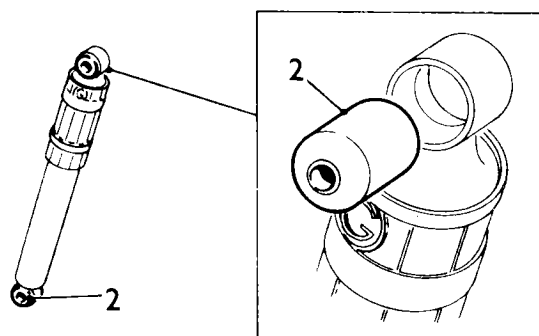
60.30.07

#### Removing

1. Remove front damper — 60.30.02.
2. Remove rubber bushes from top and bottom of damper, examine and renew as necessary.

#### Refitting

3. Reverse operations 1 and 2.



4973

## WISHBONE UPPER

### Remove and refit

60.35.01

#### Removing

1. Remove road wheel — 70.20.01.
2. Support lower wishbone at a point adjacent to damper.
3. Remove ball pin nut and tap sharply with light hammer adjacent to the pin to free taper seat.
4. Support hub assembly on stand and withdraw wishbone from carrier.
5. Remove nuts, washers and set screws securing fulcrum shaft housings to frame. Lift wishbone clear and recover shims.

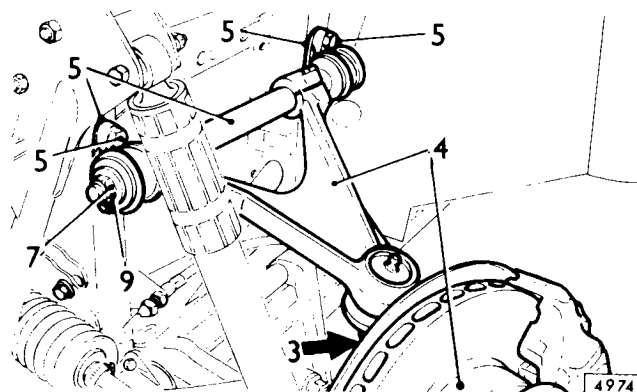
**CAUTION:** Note number and location of shims for reference when refitting.

#### Refitting

6. Reverse operations 3 to 5, fitting shims in the location from which they were removed.
7. Slacken nuts at ends of fulcrum shaft.
8. Remove stand from lower wishbone. Refit road wheel.

**CAUTION:** The nuts at each end of fulcrum shaft must be tightened with full weight of car on suspension; premature failure of rubber bushes may occur if this precaution is not taken.

9. Tighten nuts at each end of fulcrum shaft. Torque to 8.3 to 9.7 kg.m. (60 to 70 lbs.ft.).
10. Check castor angle — 57.65.04.
11. Check camber angle — 57.65.05.



4974



## WISHBONE LOWER

### Remove and refit

60.35.02

#### Service Tool

JD.43 Torsion bar  
tensioning rack

#### Removing

1. Remove road wheel – 70.20.01.
2. Place stand under cross tube bracket beneath lower wishbone rear fulcrum support.
3. Support lower wishbone on a suitable jack at a point adjacent to damper.
4. Disconnect brake pipe from frame connection, disconnect flexible hose and blank off pipe and hose to prevent loss of fluid and ingress of dirt.
5. Remove self-locking nut securing steering ball pin and remove ball pin from taper seat in steering arm.

**WARNING:** It is advisable to support the hub assembly before carrying out the next two operations. This is to protect operator and prevent damage to ball pins.

6. Remove self-locking nut and washer securing upper ball pin in stub axle carrier, remove upper wishbone ball pin from taper seat in carrier and tie upper wishbone to frame.
7. Remove self-locking nut and washer securing lower ball pin in lower wishbone drift ball pin from taper seat in lower wishbone and remove stub axle assembly from car.
8. Remove anti roll bar link – 60.10.02.
9. Remove front damper – 60.30.02.

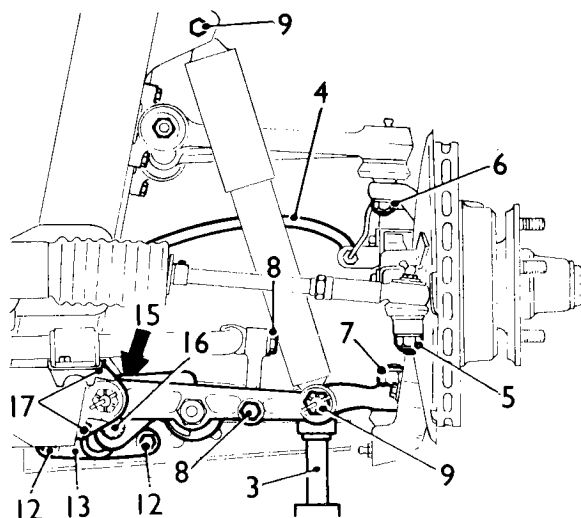
**WARNING:** The car is still to be supported on stand beneath cross member whilst carrying out the next operation.

**NOTE:** On cars up to 1S 50064 R.H.D. and 1S 70412 L.H.D. it is sufficient to lower jack and proceed with operation 12. If car chassis number is 1S 50065 R.H.D. or 1S 70413 L.H.D. or greater, it is necessary to continue with operation 10.

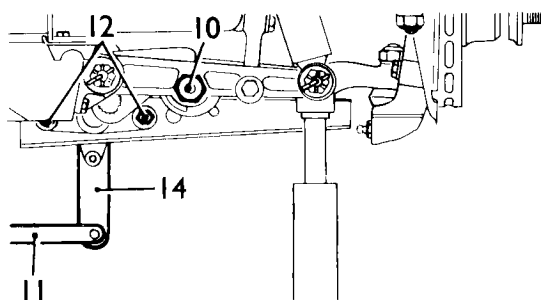
10. Slacken locknut on cam adjuster of lower wishbone and set cam to lowest point.

**WARNING: BEFORE REMOVING TORSION BAR, SET BARREL NUT OF TORSION BAR TENSIONING RACK SO THAT APPROXIMATELY 25.4 mm (1.0 in.) OF THREAD IS SHOWING AT EACH END OF NUT. WHEN REFITTING, SET RACK TO SHOW 63.5 mm (2.5 in.) OF THREAD. UNDER NO CIRCUMSTANCES MUST THE RACK BE USED WITH MORE THAN 63.5 mm. (2.5 in.) OF THREAD SHOWING.**

11. Fit tool to rear of torsion bars. Slightly turn barrel nut to shorten link and take bar torsion.
12. Remove setscrews and nuts securing torsion bar reaction bracket.



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5003A

13. Slide bracket forward along torsion bar.

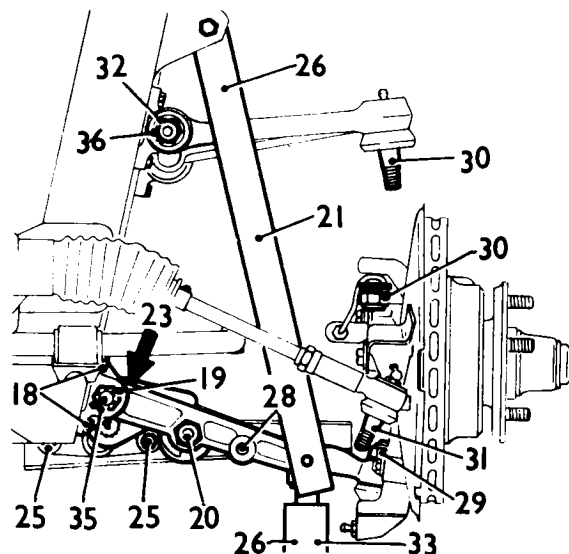
**NOTE:** It may be necessary to slowly ease tension of bar to half cover bolt holes in reaction bracket, then tap through to free.

14. If setting tool used turn barrel nut to completely release torsion; remove tool.
15. Remove locknut and torsion bar locating bolt from lower wishbone adjusting lever.
16. Tap torsion bar rearwards through lower wishbone and remove.
17. Remove bolts, setscrews, nuts and washers securing fulcrum shaft housing to frame and withdraw wishbone assembly from car.

**Refitting**

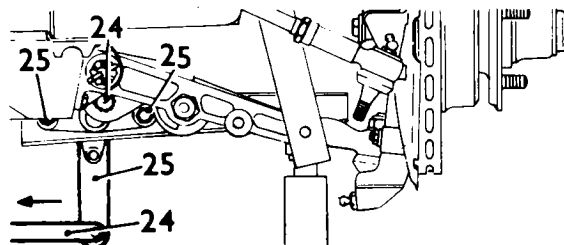
18. Fit wishbone assembly to car and secure fulcrum shaft housing to frame with bolts, setscrews, nuts and washers.
19. Remove split pins and slacken nuts at ends of fulcrum shaft.
20. Slacken locknut on cam adjuster of lower wishbone front, set cam at its lowest point.
21. Fit setting gauge at damper mounting points to position lower wishbone.
22. The torsion bar has 24 splines front and 25 splines rear for micro-adjustment. Fit torsion bar into lower wishbone and reaction bracket so that fixing holes of reaction bracket coincide with holes in mounting bracket: the torsion bar is rotated spline by spline in wishbone and reaction bracket to achieve this position.
23. Secure torsion bar in lower wishbone with locating bolt and locknut.

**NOTE:** On cars up to 1S 50064 R.H.D. and 1S 70412 L.H.D. it is sufficient to proceed with operation 25. If car chassis number is 1S 50065 R.H.D. or 1S 70413 L.H.D. or greater, it is necessary to continue with operation 24.



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24. Scribe reference mark between spline on reaction bracket and torsion bar; fit tool onto rear of torsion bars, slide reaction bracket along torsion bar clear of splines, wind on torsion bar one spline by shortening tool link using barrel nut, re-engage reaction bracket and torsion bar splines in new position.
25. Fit bolts, washers and locknuts securing reaction bracket, remove setting tool from rear of torsion bars. Tighten nuts on bolts.
26. Use jack beneath lower wishbone at a point adjacent to the lower mountings, until setting gauge is not under tension. Remove setting gauge.
27. Fit damper, replace bolts and nuts but do not fully tighten nuts.
28. Loosely fit anti roll bar link – 60.10.02.
29. Fit lower ball pin in lower wishbone and secure with self-locking nut and washer.
30. Untie upper wishbone and fit ball pin in stub axle carrier, secure with self-locking nut and washer.
31. Replace tie rod end ball pin in taper seat in stub axle assembly. Replace and tighten locknut.
32. Slacken nuts at the ends of upper wishbone fulcrum shaft.



5002A

**CAUTION:** The nuts at the ends of fulcrum shafts must be tightened with full weight of car on the suspension; premature failure of rubber bushes may occur if this precaution is not taken.

33. Remove stand and jack. Refit road wheel.
34. Tighten nuts securing damper and insert split pins.



## FRONT SUSPENSION

### WISHBONE UPPER

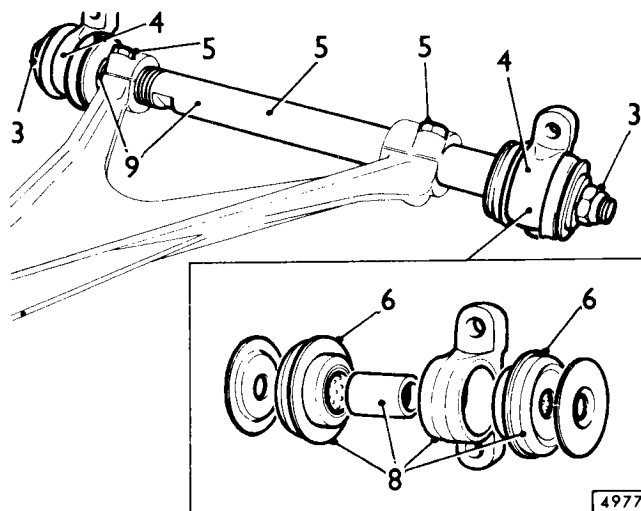
#### Overhaul

60.35.08

1. Remove upper wishbone – 60.35.01.
2. Remove upper ball joint – 60.15.02.
3. Remove self-locking nuts at each end of fulcrum shaft.
4. Withdraw washer, thrust washers and housings complete with bushes from each end of the shaft.
5. Slacken pinch bolts locking upper wishbone to fulcrum shaft and unscrew from wishbone.
6. Extract bush assembly from each housing.

**NOTE:** Check wishbone dimensions if damaged.

7. Examine all parts and renew as necessary.
8. Separate bush assembly. Lubricate rubber with Esso process oil 'L'. Press rubber bush into housing. Insert metal bush and press rubber bush into opposite side of housing. Repeat operation for other housing.
9. Screw fulcrum shaft into wishbone until thread protrudes 7.1 mm. (.28 ins.) from outer edge of wishbone.
10. Reverse operations 1 to 5.



### WISHBONE LOWER

#### Overhaul

60.35.09

1. Remove lower wishbone – 60.35.02.
2. Remove spacer from bolt which secures front and rear wishbones.
3. Remove split pins, nuts and washers from each end of fulcrum shaft. Remove housings, washer, front wishbone, cam lever, rear wishbone and spacer from fulcrum shaft; withdraw bolt from front and rear wishbone.
4. Press rubber/steel bushes from each housing.

**NOTE:** Check wishbone dimensions if damaged.

5. Examine all parts and renew as necessary.
6. Press rubber bushes into housings so that an equal amount protrudes from each side of each housing. A solution of one part liquid soap to twelve parts water used as a lubricant will facilitate the fitting of bushes.
7. Reverse operations 1 to 3.

