

SUB-SECTION CONTENTS LIST

SUB-SECTION 14

REMOVAL AND REPLACEMENT PROCEDURES

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SUB-SECTION 14

CHAPTER 1

ROAD SPRINGS - REMOVAL AND REPLACEMENT

NOTE

The following removal and replacement procedures apply to both the front and rear road springs.

REMOVAL

1. To remove a road spring:

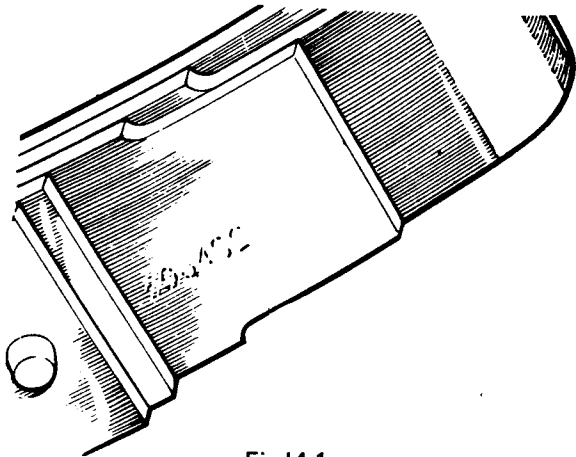


Fig 14.1

- (1) Refer to Fig 14.1. The driver side and passenger side road springs are interchangeable. Springs are identified with the part number which is marked on the top face and on the under face of one of the leaves.

- (2) Jack up the vehicle and support on stands.

- (3) Remove the road wheel.

- (4) Support the axle with a jack.

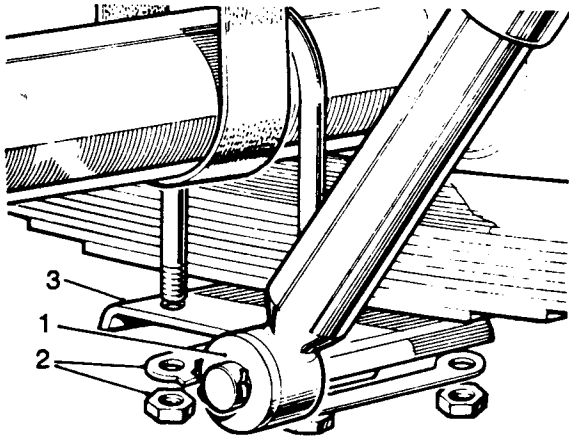


Fig 14.2

- (5) Refer to Fig 14.2. Disconnect the shock absorber (1) at the lower fixings.

- (6) Remove the fixings (2) and withdraw the spring support plate (3).

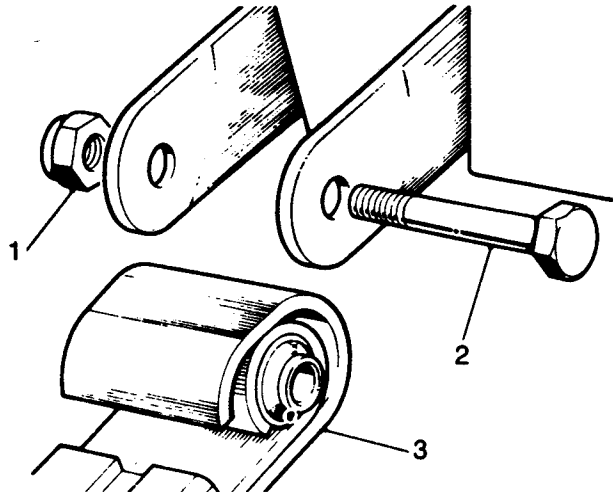


Fig 14.3

- (7) Refer to Fig 14.3. Remove the self-locking nut (1) from the shackle pin in each spring eye.

- (8) Remove the shackle pin (2) from the rear end of the spring, the pin is threaded into the inner shackle plate.

- (9) Remove the shackle pin from the front end of the spring.

- (10) Remove the road spring (3) complete.

REPLACEMENT

2. Replace the road spring:

- (1) Slacken the shackle pin securing the shackle plates to the chassis.

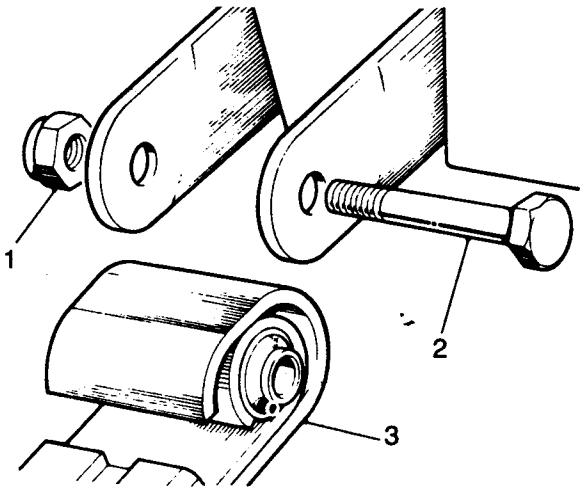


Fig 14.4

- (2) Refer to Fig 14.4. Fit the road spring (3) into the shackles.
- (3) Replace the shackle pin in the front end of the spring but do not tighten at this stage.
- (4) Replace the shackle pin (2) into the rear end of the spring but again do not tighten.
- (5) Screw on the self-locking nut (1) finger tight.

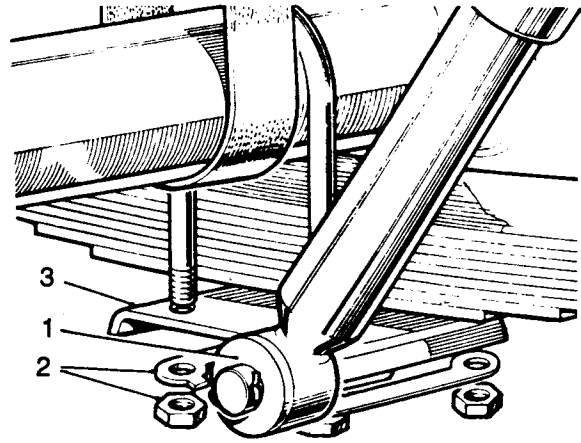


Fig 14.5

- (6) Refer to Fig 14.5. Replace the spring support plate (3) and tighten the fixings (2).
- (7) Set the springs as in Sub-section I3, Chapter 2.
- (8) Reconnect the shock absorber (1) lower fixings.
- (9) Refit the road wheel.
- (10) Remove the stand and lower the vehicle to the ground.
- (11) Check vehicle trim height (see Sub-section I3, Chapter 1).

SUB-SECTION 14

CHAPTER 2

SHOCK ABSORBERS - REMOVAL AND REPLACEMENT

NOTE

Shock absorber fixings for both the front and rear suspension are the same. The following procedure is to be used for either.

REMOVAL

1. To remove a shock absorber:
 - (1) Slacken the fixings at the road wheel.
 - (2) Jack up the front of the vehicle and support on stands.
 - (3) Remove the road wheel.

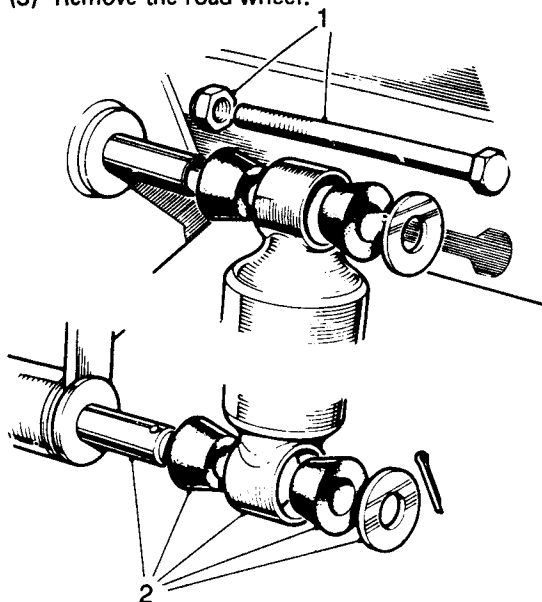


Fig 14.6

- (4) Refer to Fig 14.6. Remove the shock absorber top fixings (1).

- (5) Remove the lower fixings (2).

- (6) Remove the shock absorber.

REPLACEMENT

2. Replace a shock absorber as follows:
 - (1) Fit the shock absorber in position and replace the lower fixings.
 - (2) Extend or compress the shock absorber as required and replace the top fixings.
 - (3) Replace the road wheel.
 - (4) Remove the stands and lower the vehicle to the ground.

SUB-SECTION 15

OVERHAUL OF A ROAD SPRING ASSEMBLY

DISMANTLING

1. To dismantle a road spring:

- (1) Remove the spring assembly (see Sub-section 14, Chapter 1).

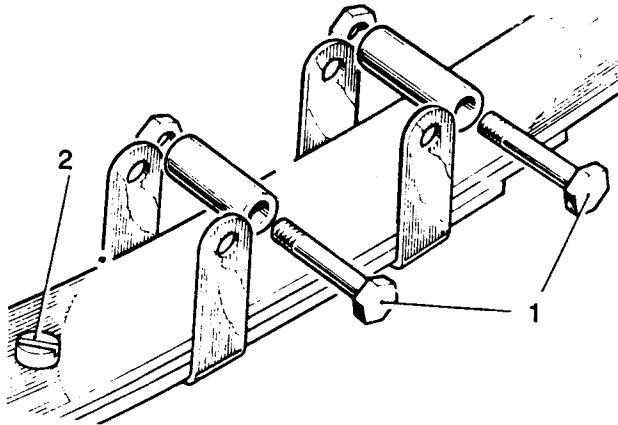


Fig 15.1

- (2) Refer to Fig 15.1. Remove the fixings (1) from the leaf clips, which may be bolts and nuts and/or long screws threaded into the leaf clips.
- (3) Remove the centre bolt (2) and nut to release the spring leaves.

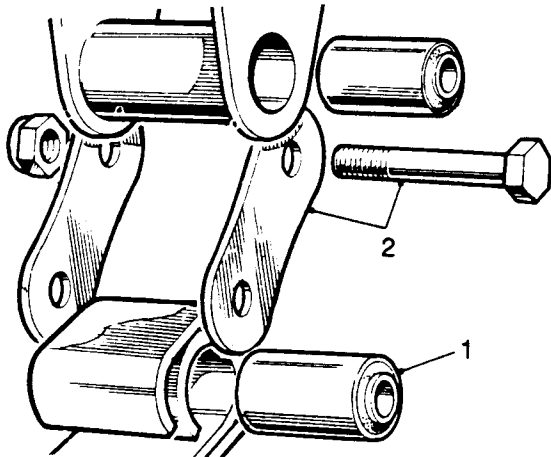


Fig 15.2

- (4) Refer to Fig 15.2. Remove the fixings and withdraw the shackle plates (2) from the chassis frame.
- (5) Press out the bushes (1) from each end of the spring. It is recommended that special tool MF109 is used for this operation.

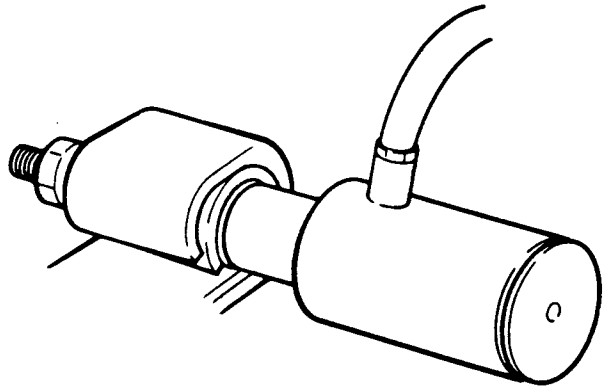


Fig 15.3

- (6) Refer to Fig 15.3 which shows the use of the special tool.
- (7) If necessary, remove the shackle bush from the chassis frame bracket with the aid of a tubular drift or suitable extractor. If the bush disintegrates, leaving the outer casing in the chassis frame bracket, it should be carefully sawn through with a hacksaw to facilitate removal. DO NOT saw the chassis bracket.

INSPECTING

2. Make the following inspection:

- (1) Clean the leaves and examine for cracks. Only the main and second leaves and the spring assembly complete are supplied as a replacement.
- (2) The recambering of road springs is not advised, but if no alternative is possible, the spring should be reset if necessary.

REASSEMBLY

3. Reassemble as follows:

- (1) If removed, fit the shackle bush to the chassis frame bracket. The bush must be a drive fit.
- (2) Grease each leaf with graphite grease and reassemble the spring by fitting the centre bolt and leaf clips. Fit the spring bushes, which must be a press fit.
- (3) Fit the shackle plates to the chassis frame, but do not fully tighten the fixings until the spring is refitted to the vehicle.

SUB-SECTION I6

MAINTENANCE

INTRODUCTION

1. The suspension system is designed for maintenance free operation, requiring only periodic inspections for obvious defects. At intervals specified, the suspension should be inspected and leaf clip bolts checked for tightness.

CLEANING

2. At frequent intervals, depending on operating conditions, the springs and shackles should be cleaned to prevent accumulation of dirt, mud and oil, etc. Dirt and mud must be scraped off with a scraper and then blown off with compressed air. Oil must be wiped off with a dry cloth. Do not use cleaning fluid on springs as it will wash out the lubricant between spring leaves and thus change the characteristics of the spring.

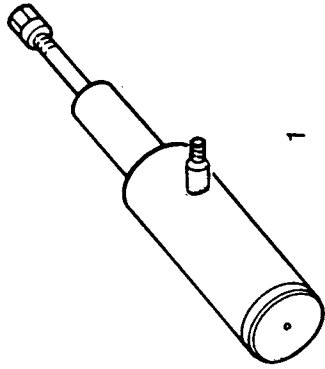
CHECKS AND INSPECTIONS

3. The suspension of a vehicle operating continuously on normal smooth roads should be inspected for damage or wear every ten thousand kilometres. Vehicles operating under off-road conditions should be inspected every two thousand kilometres.

4. Visual inspection of suspension. To inspect the suspension the vehicle must be unloaded and parked on a level surface. The following points should be inspected periodically:

- (1) Inspect shock absorbers for signs of seals leaking.
- (2) Inspect shock absorbers for signs of collapsed or cracked insulator rubber bushes.
- (3) Check if shock absorber shafts are bent.
- (4) Inspect springs for broken leaves.
- (5) Check for sagged (collapsed) springs.
- (6) Check for broken centre bolts.
- (7) Using a torque wrench check tightness of leaf clip bolts and nuts.
- (8) Using a torque wrench check tightness of shackle pins.
- (9) Using a torque wrench check tightness of 'U' bolt nuts.

5. If, during the inspection, any defects are noted, they must be corrected before the vehicle is put back into service.



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AXLES AND HUBS

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SUB-SECTION J1

AXLES AND HUBS

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DESCRIPTION AND SPECIFICATIONS

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SUB-SUB-SECTION J1.1

CHAPTER 1

DESCRIPTION OF AXLES AND HUBS

GENERAL

1. The front and rear axles are driving axles, ie the axle drives the road wheels through a differential unit located in the axle housing. The drive is transmitted from the transfer box to the differential unit by propeller shafts.
2. The axles are each secured to two leaf springs by U-bolts. The drive transmitted to the front and rear axles can be considered in two parts:
 - a. The centre portion containing the differential unit.
 - b. The hub portion containing the brakes on both axles. The front hubs are mounted on swivel housings for steering.
3. The drive to the front axle is not in constant mesh and can be disconnected. The vehicle will then be driven by the rear axle only.
4. The rear axle is in constant mesh and, therefore, is always engaged.
5. The wheel hubs are mounted on the supporting axle tubes, each hub being supported by two lubricated tapered bearings. The drive hub carries the brake drum and road wheel.

SUB-SUB-SECTION J1.1

CHAPTER 2

AXLE AND HUB SPECIFICATIONS

INTRODUCTION

1. The specifications for the axles and hubs are given in the following Tables:

TABLE J1.1 - GENERAL DATA

TABLE J1.2 - TORQUE SPECIFICATIONS

TABLE J1.1 - GENERAL DATA

ITEM	DESCRIPTION
Rear axle:	
Type	Salisbury, spiral bevel, floating shafts
Ratio	4,7:1
Front axle:	
Differential	Spiral bevel
Front wheel drive	Enclosed universal joints
Ratio	4,7:1

TABLE J1.2 - TORQUE SPECIFICATIONS

ITEM	TORQUE (N.m)
Rear axle and final drive:	
Hub driving flange bolts	39
Salisbury type axles:	
Differential case bolts	91 to 104
Crownwheel bolts	130 to 145
Differential bearing cap bolts	129 to 145
Differential cover bolts	28 to 35
Front axle and final drive:	
Hub driving flange bolts	39
Hub driving flange nut	14 to 20
Bevel pinion driving flange nut	117,5
Crownwheel bolts (10 mm approx.) diameter	62
(9,5 mm approx.) diameter	48
Differential bearing cap bolts	83

SUB-SUB-SECTION J1.2

FAULT DIAGNOSIS AND CORRECTIVE ACTION

INTRODUCTION

1. This Sub-sub-section deals with faults diagnosis and the corrective action required for the driven front axle. In Table J1.3, a list of symptoms the probable cause and the necessary remedies are given. If a fault is suspected, the faults listed in the accompanying Table should be consulted. It should be remembered that the Table is not exhaustive and, therefore, faults may occur which are not listed. Should this fail to reveal the fault, remove the suspect component/s for a closer inspection and/or overhaul of components.

TABLE J1.3 - DRIVEN FRONT AXLE FAULT DIAGNOSIS CHART

SYMPTOM	POSSIBLE CAUSE	REMEDY
Noisy axle (hub)	Shaft bearings damaged or worn. Damaged or worn wheel bearings. Insufficient grease in hub. Loose wheel bearings.	Replace. Replace. Clean and regrease. Adjust.
Hub overheating	Insufficient grease in hub. Wheel bearings too tight.	Clean and regrease. Adjust.
Hub leaking grease	Inner or outer seals worn or damaged.	Replace.
Steering effort excessive	Seized or damaged swivel pin needle bearings. Lack of lubrication.	Overhaul the swivel pin assemblies. Lubricate with grease and check the steering effort.
Axle leaking oil	Shaft axle seal worn or damaged.	Replace.

SUB-SUB-SECTION J1.3

HUB BEARINGS END FLOAT - CHECK AND ADJUST

NOTE

The following procedure applies to both front and rear hub bearings.

REMOVAL

1. Carry out the procedure in Sub-sub-section J1.4, Chapter 6, para 1, steps (1) to (8) to remove the brake drum and hub driving member.

CHECKS AND ADJUSTMENTS

2. Carry out the following procedure.

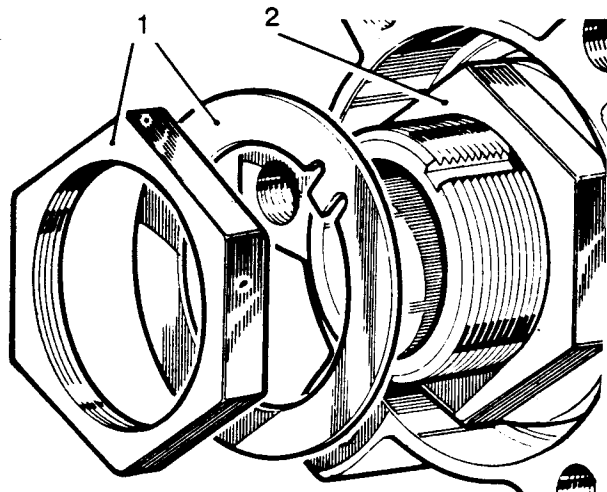


Fig J1.1

- (1) Refer to Fig J1.1. Remove the locknut and lockwasher (1) from the hub.
- (2) Spin the hub vigorously, causing the bearing roller to settle in the tapered races, producing maximum end-float conditions.
- (3) Tighten the adjuster nut (2) sufficient only to take up any obvious end-float. It is necessary to spin the hub every time before checking the end-float, as moving the hub laterally will settle the rollers, affecting the measurable end-float.
- (4) Fit the lockwasher and nut, tighten the nut but do not engage the lockwasher.

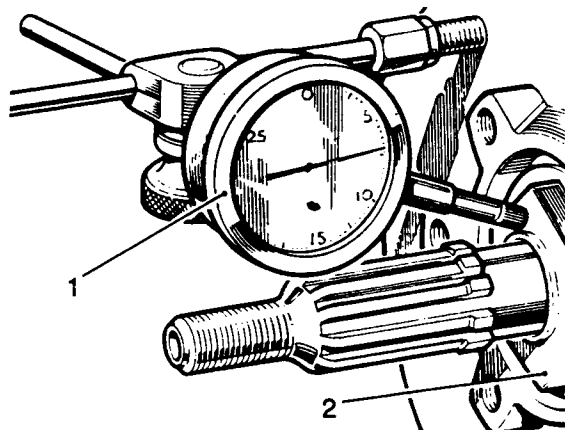


Fig J1.2

- (5) Refer to Fig J1.2. Using a dial test indicator (1), check the end-float of the hub, which must be 0,05 to 0,10 mm.
- (6) If the hub end-float is not within the permitted limits, remove the locknut and washer (2) and readjust the inner nut. Fit the lockwasher, tighten the locknut and recheck the end-float.
- (7) When the end-float is correct, engage the lockwasher.

REPLACEMENT

3. Replace the assembly by carrying out the procedure of Sub-sub-section J1.4, Chapter 6, para 2, steps (5) to (11).

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SUB-SUB-SECTION J1.4

REMOVAL AND REPLACEMENT PROCEDURES

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4	FRONT AXLE ASSEMBLY - REMOVAL AND REPLACEMENT	J1.18
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SUB-SUB-SECTION J1.4

CHAPTER 1

REAR AXLE SHAFTS - REMOVAL AND REPLACEMENT

REMOVAL

1. Remove a rear axle shaft as follows:

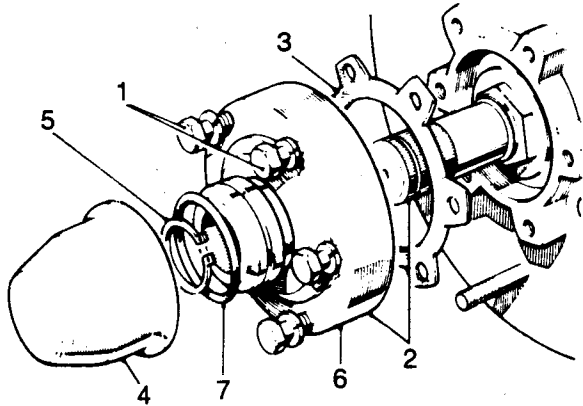


Fig J1.3

- (1) Refer to Fig J1.3. Remove the hub driving member fixings (1).
- (2) Withdraw the driving member and axle shaft complete (2).
- (3) Withdraw the joint washer (3).
- (4) Prise off the hub cap (4).
- (5) Remove the circlip (5).
- (6) Withdraw the driving member (6) from the shaft.
- (7) Withdraw the O-ring seal (7).

REPLACEMENT

2. To replace an axle shaft:

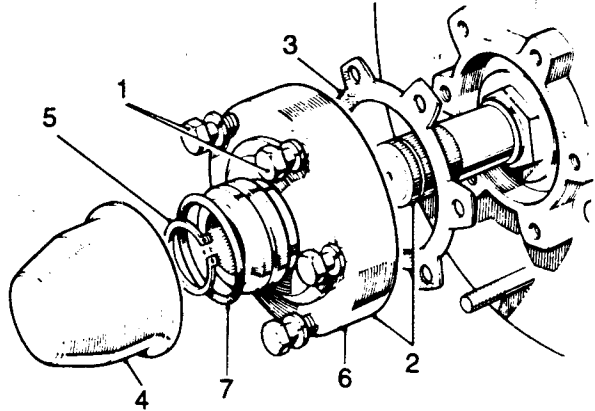


Fig J1.4

- (1) Refer to Fig J1.4. Replace the O-ring seal (7).
- (2) Fit the driving member (6) to the shaft.
- (3) Refit the circlip (5).
- (4) Replace the hub cap (4).
- (5) Fit a new joint washer (3).
- (6) Replace the driving member and axle shaft complete (2).
- (7) Tighten the hub driving member fixings (1).

SUB-SUB-SECTION J1.4

CHAPTER 2

REAR AXLE ASSEMBLY - REMOVAL AND REPLACEMENT

REMOVAL

1. To remove the rear axle assembly:
 - (1) Slacken the fixings at both rear wheels.
 - (2) Jack up the rear of the vehicle and support on stands.
 - (3) Remove both rear road wheels.

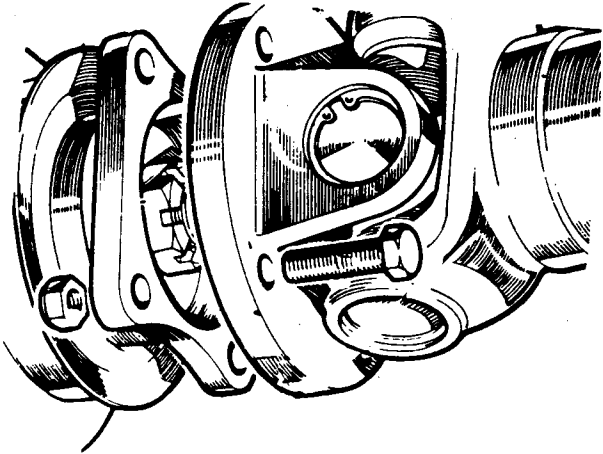


Fig J1.5

- (4) Refer to Fig J1.5. Disconnect the rear propeller shaft and move it clear of the final drive unit.

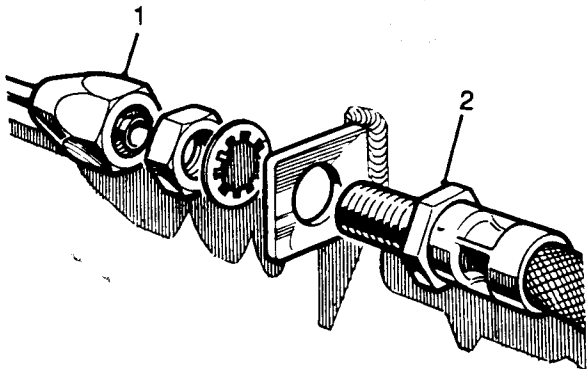


Fig J1.6

- (5) Refer to Fig J1.6. Disconnect the rear brake pipe (1) at the connection with the flexible hose.
- (6) Withdraw the flexible hose (2) from the chassis bracket.
- (7) Depress the brake pedal and wedge in that condition to minimise brake fluid loss.

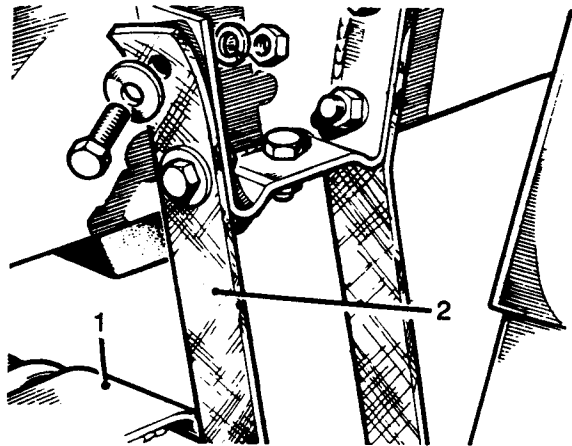


Fig J1.7

- (8) Refer to Fig J1.7. Support the axle, using a jack (1).
- (9) Disconnect one end of each axle check strap (2).

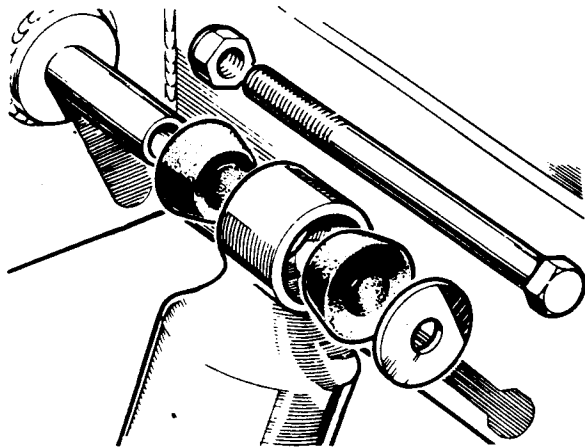


Fig J1.8

- (10) Refer to Fig J1.8. Disconnect the shock absorbers at the upper fixings.

SUB-SUB-SECTION J1.4

CHAPTER 1

REAR AXLE SHAFTS - REMOVAL AND REPLACEMENT

REMOVAL

1. Remove a rear axle shaft as follows:

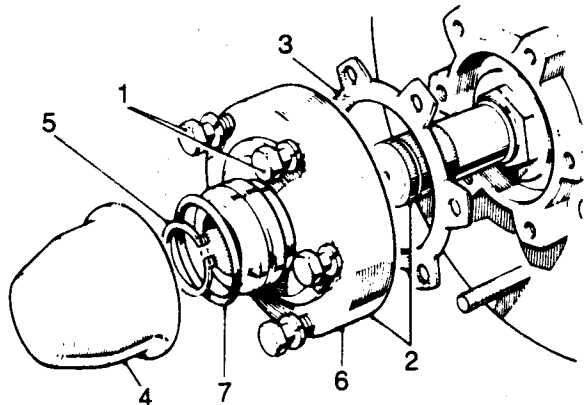


Fig J1.3

- (1) Refer to Fig J1.3. Remove the hub driving member fixings (1).
- (2) Withdraw the driving member and axle shaft complete (2).
- (3) Withdraw the joint washer (3).
- (4) Prise off the hub cap (4).
- (5) Remove the circlip (5).
- (6) Withdraw the driving member (6) from the shaft.
- (7) Withdraw the O-ring seal (7).

REPLACEMENT

2. To replace an axle shaft:

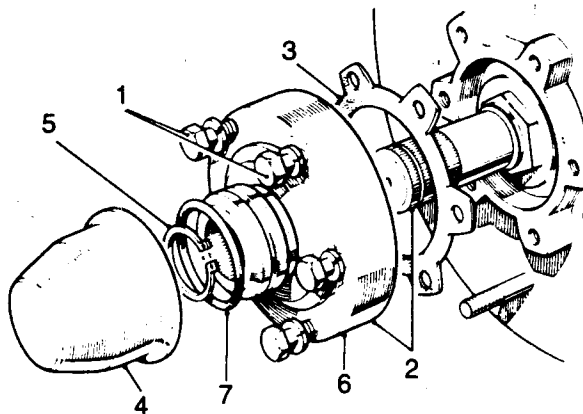


Fig J1.4

- (1) Refer to Fig J1.4. Replace the O-ring seal (7).
- (2) Fit the driving member (6) to the shaft.
- (3) Refit the circlip (5).
- (4) Replace the hub cap (4).
- (5) Fit a new joint washer (3).
- (6) Replace the driving member and axle shaft complete (2).
- (7) Tighten the hub driving member fixings (1).

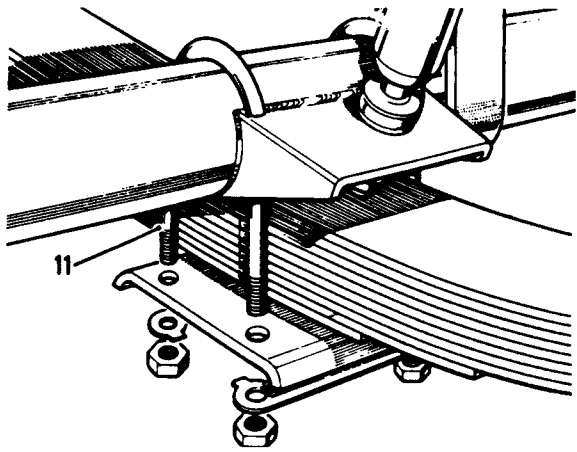


Fig J1.9

(11) Refer to Fig J1.9. Remove the four U-bolts from the axle.

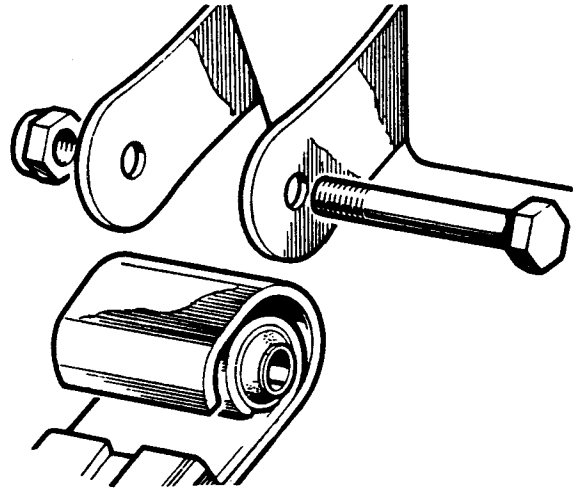


Fig J1.11

(2) Refer to Fig J1.11. Fit the two rearmost shackle pins but do not tighten any of the six shackle pins at this stage.

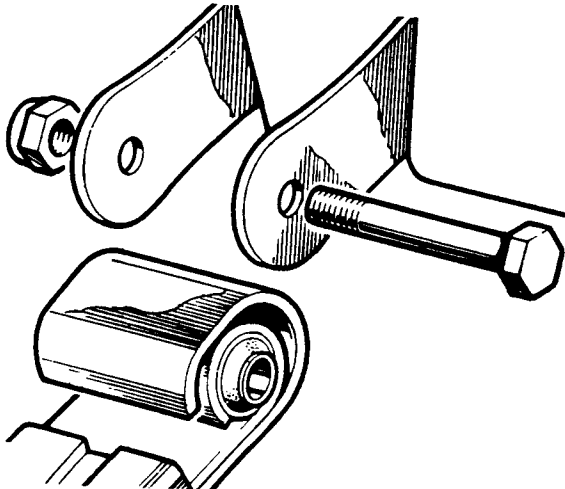


Fig J1.10

(12) Refer to Fig J1.10. Slacken the six shackle pins at the rear road springs, then remove the two rearmost shackle pins.

(13) Lower and withdraw the rear axle.

REPLACEMENT

2. Replace the rear axle assembly as follows:

(1) Lift and position the rear axle.

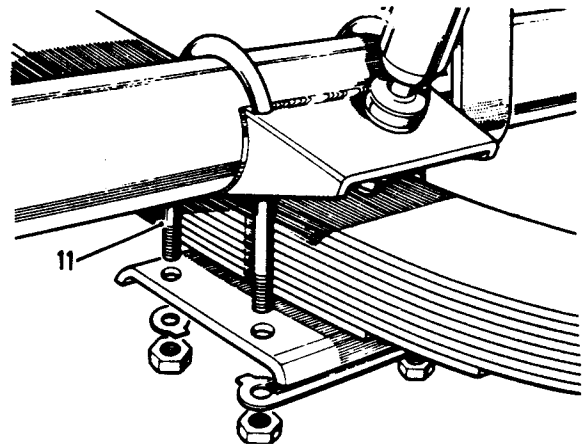


Fig J1.12

(3) Refer to Fig J1.12. Replace the four U-bolts.

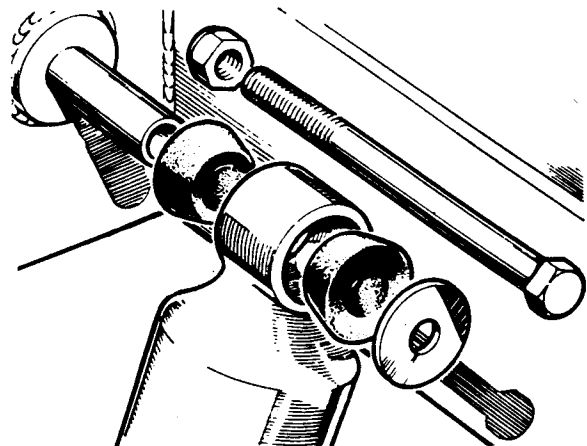


Fig J1.13

(4) Refer to Fig J1.13. Refit the shock absorbers and tighten the fixings.

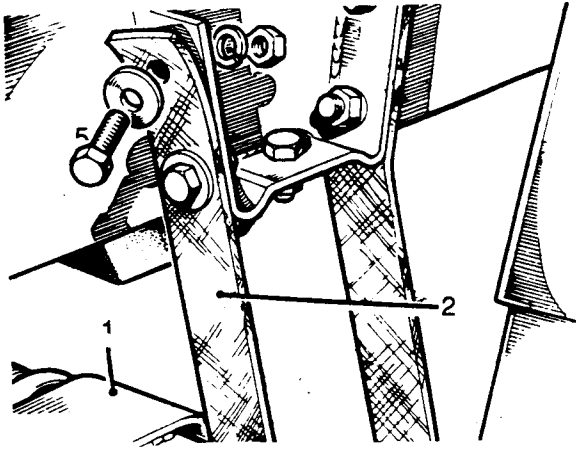


Fig J1.14

- (5) Refer to Fig J1.14. Reconnect the axle check straps (2). The jack may now be removed.

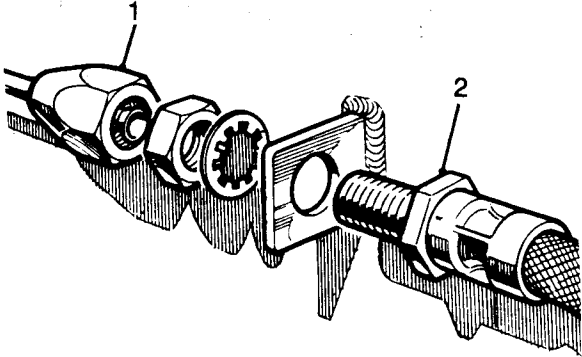


Fig J1.15

- (6) Refer to Fig J1.15. Replace the flexible brake hose (2) into the chassis bracket and reconnect the rear brake pipe (1).

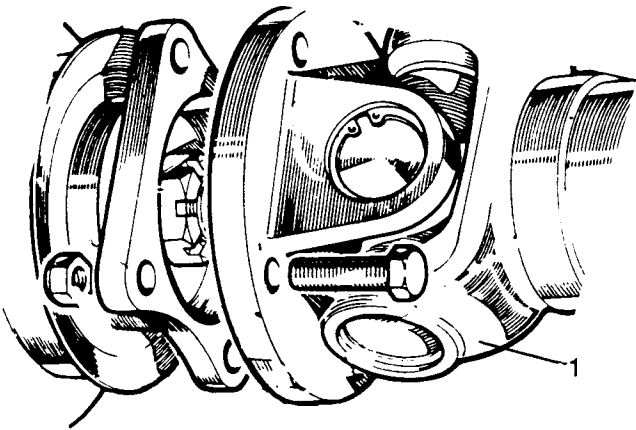


Fig J1.16

- (7) Refer to Fig J1.16. Reconnect the rear propeller shaft (1).

- (8) Replace the rear road wheels.

- (9) Lower the vehicle to the ground and move vehicle bodily backward and forward to settle the springs.

- (10) Tighten all six shackle pins and locknuts.

NOTE

If the shackle pins and locknuts are tightened prior to lowering the vehicle to the ground, premature failure of the spring bushes may occur.

- (11) Bleed and adjust the brakes (see Sub-section K1.6).

- (12) Replenish the front axle lubricating oil if required.

SUB-SUB-SECTION J1.4

CHAPTER 3

FRONT AXLE CASE OIL SEAL - REMOVAL AND REPLACEMENT

REMOVAL

1. To remove the oil seal:
 - (1) Remove the swivel pin housing, axle half shaft and front hub assembly complete (see Sub-sub-section J2.3, Chapter 3, para 1, steps (1) to (9) only).

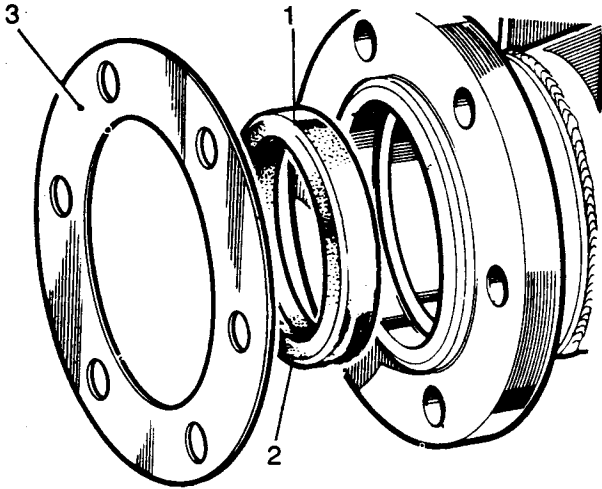


Fig J1.17

- (2) Refer to Fig J1.17. Prise out the axle case oil seal (1).

REPLACEMENT

2. Replace the oil seal as follows (Fig J1.17 still applies):
 - (1) Where the oil seal outside diameter (2) is metal and not rubber covered, smear the diameter with suitable jointing compound.
 - (2) Fit the oil seal (1) lipped face inward, until flush with the axle recessed end.
 - (3) Grease and fit the joint washer (3).
 - (4) Refit the items removed in para 1 above (see Sub-sub-section J2.3, Chapter 3, para 2, steps (3) to (10) only).

SUB-SUB-SECTION J1.4

CHAPTER 4

FRONT AXLE ASSEMBLY - REMOVAL AND REPLACEMENT

REMOVAL

1. To remove the front axle assembly:
 - (1) Slacken the fixings at both front road wheels.
 - (2) Jack up the front of the vehicle and support on stands.
 - (3) Remove both front road wheels.
 - (4) Disconnect the front propeller shaft from final drive unit.

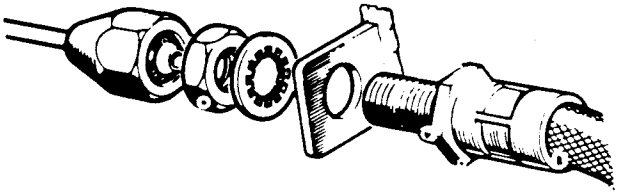


Fig J1.18

- (5) Refer to Fig J1.18. Disconnect the front brake pipes at their connections with the flexible pipes each side of the vehicle and withdraw the flexible pipes from the chassis brackets.
- (6) Depress and wedge the brake pedal to prevent further leakage of brake fluid.

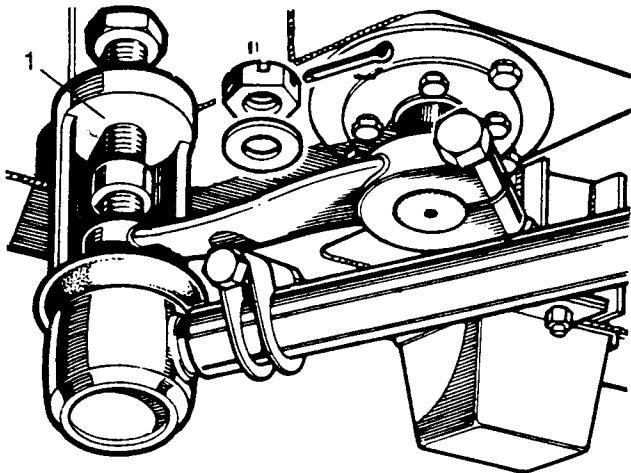


Fig J1.19

- (7) Refer to Fig J1.19. Disconnect the steering drag link from the lower relay lever, using special tool 601763 (1) to extract ball joints.

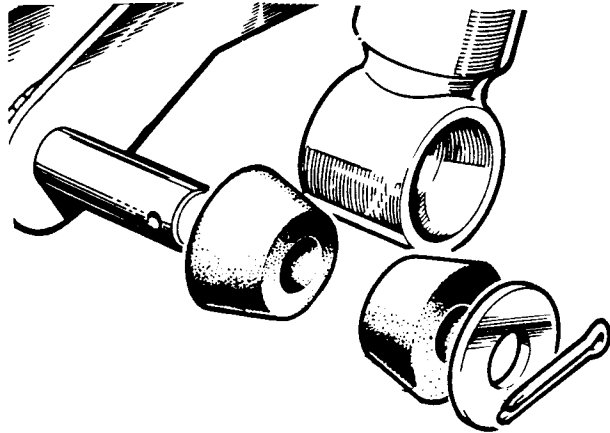


Fig J1.20

- (8) Refer to Fig J1.20. Disconnect the lower ends of the shock absorbers from the road spring bottom plates.

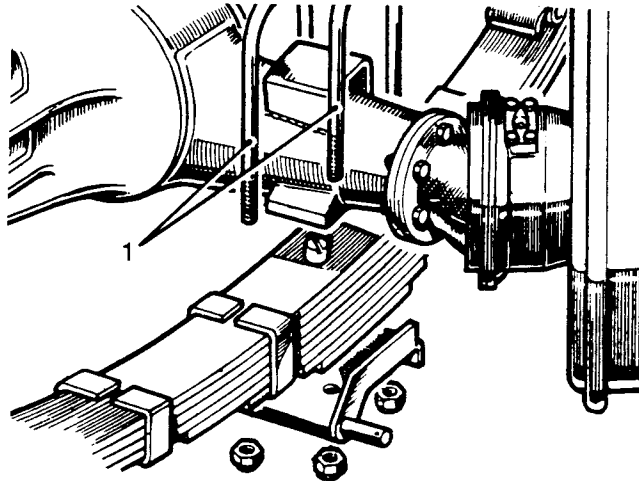


Fig J1.21

- (9) Refer to Fig J1.21. Remove the four U-bolts (1) from the axle.

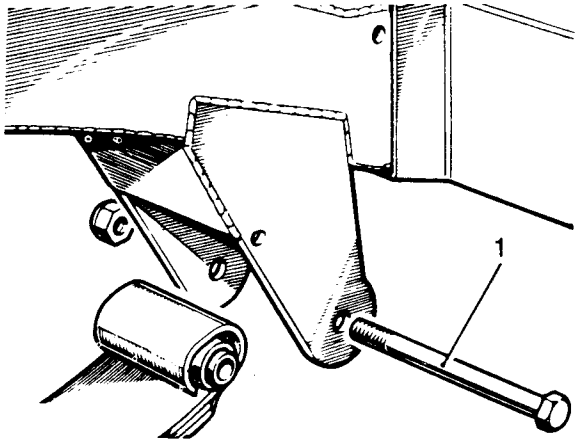


Fig J1.22

(10) Refer to Fig J1.22. Support the front axle with a jack, slacken all six shackle pins (1) at the front road springs, then remove the two front pins.

(11) Lower the jack and withdraw the axle.

REPLACEMENT

2. Replace the front axle assembly as follows:

(1) Place the axle assembly into position and support with a jack.

(2) Using a second jack, raise each road spring in turn and connect the front ends of the springs to the chassis, but **DO NOT** tighten the shackle pins and locknuts at this stage.

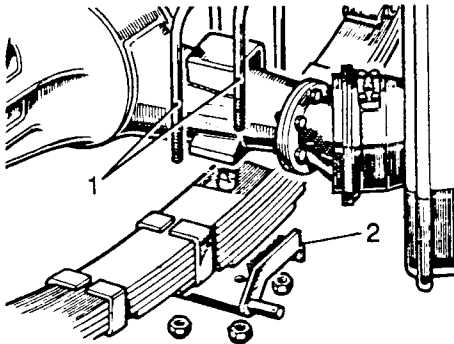


Fig J1.23

(3) Refer to Fig J1.23. Fit the axle U-bolts (1) and engage the lock plates (2).

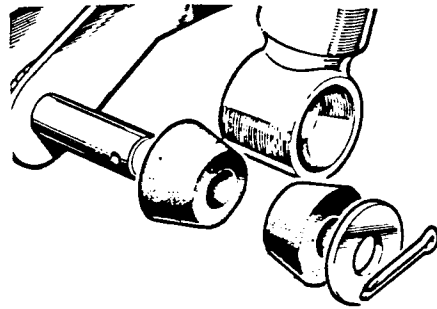


Fig J1.24

(4) Refer to Fig J1.24. Reconnect the lower ends of the shock absorbers to the road spring bottom plate.

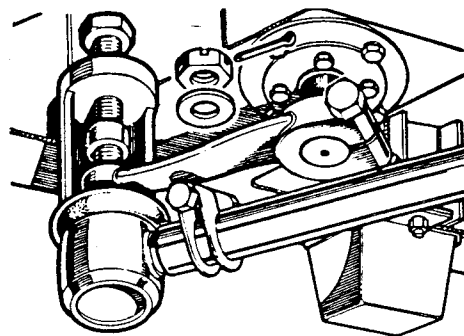


Fig J1.25

(5) Refer to Fig J1.25. Refit the steering drag link to the lower relay lever. Torque the ball joint fixings to 40 N.m.

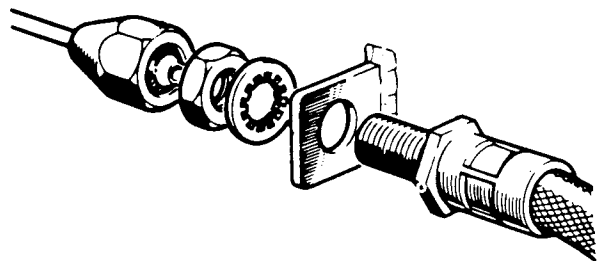


Fig J1.26

(6) Refer to Fig J1.26. Connect the front brake pipes to the flexible pipes on each side of the vehicle, fitting the flexible pipes through the chassis brackets.

(7) Refit the front propeller shaft to the final drive unit.

(8) Replace both front road wheels.

(9) Lower the vehicle to the ground and move vehicle bodily backward and forward to settle the springs, then tighten all six shackle pins and locknuts.

NOTE

If the shackle pins and locknuts are tightened prior to lowering the vehicle to the ground, premature failure of the spring bushes may occur.

(10) Bleed (see Sub-section K1.6) and adjust the brakes (see Sub-section K1.3).

(11) Replenish the front axle lubricating oil if required.

(12) Check, and if necessary, adjust the steering stop (see Sub-section L3, Chapter 3).

SUB-SUB-SECTION J1.4

CHAPTER 5

FRONT HALF SHAFT ASSEMBLY - REMOVAL AND REPLACEMENT

REMOVAL

1. To remove the half shaft:
 - (1) Drain the oil from the differential and swivel pin housing.
 - (2) Remove the stub axle (see Sub-sub-section J1.4, Chapter 7).

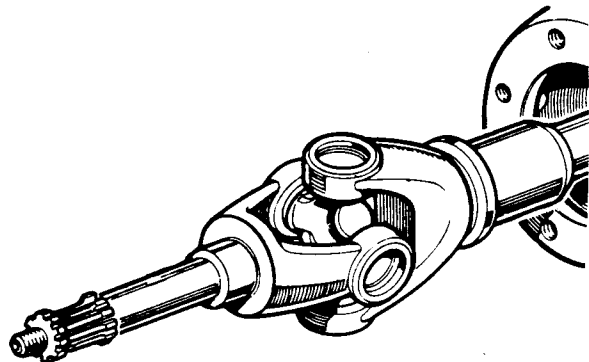


Fig J1.27

- (3) Refer to Fig J1.27. Withdraw the axle half shaft complete.

REPLACEMENT

2. Replace the half shaft as follows:
 - (1) Fit the half shaft long end first, taking care to avoid damaging the axle case oil seal.
 - (2) Carry out the following check (step 3) at the top and bottom swivel pins with the yokes at the maximum angle with the chamfered radius closest to the swivel pin end face.

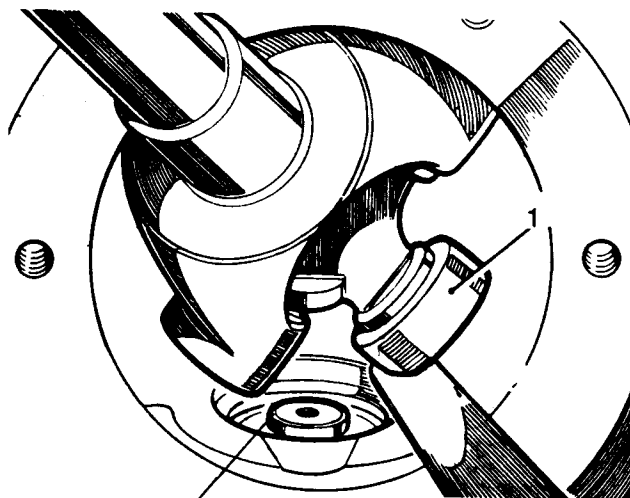


Fig J1.28

- (3) Refer to Fig J1.28. Rotate the half shaft and check that there is a minimum clearance of 1,2 mm between the joint yoke ears (1) and the swivel pin end faces (2).
 - (4) If the clearance is insufficient, increase the chamfer on the yoke ears radius.
 - (5) Replace the stub axle (see Sub-sub-section J1.4, Chapter 7).

SUB-SUB-SECTION J1.4

CHAPTER 6

HUB ASSEMBLY - REMOVAL AND REPLACEMENT

NOTE

There is little difference in the procedures for removing front and rear hubs and with few exceptions the procedure below is suitable for both hubs. Ignore references to the swivel pin housing when working on the rear hub.

REMOVAL

1. To remove a hub assembly:
 - (1) Drain the swivel pin housing lubricating oil.
 - (2) Jack up the front or rear of the vehicle.
 - (3) Remove the road wheel.
 - (4) Slack off the brake shoe adjuster.

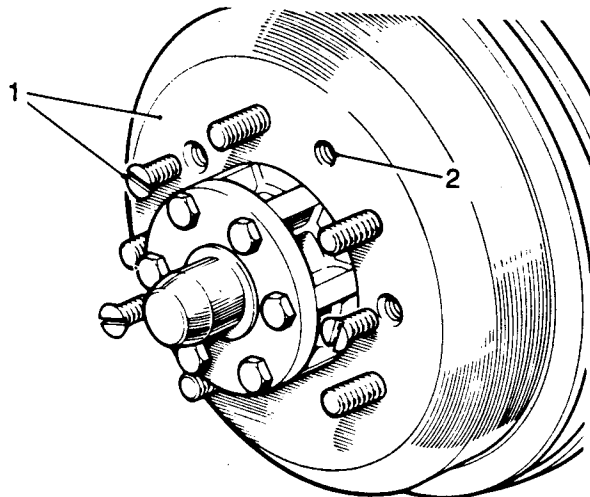
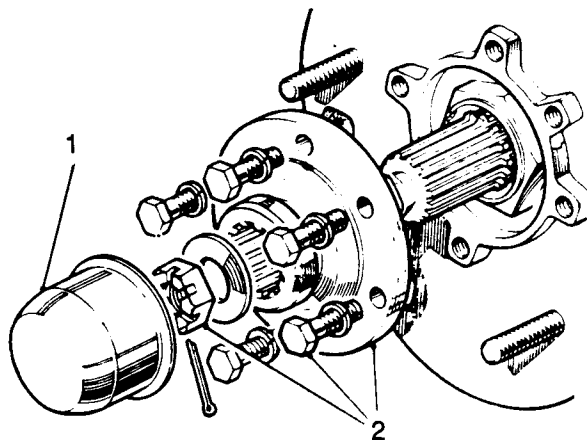
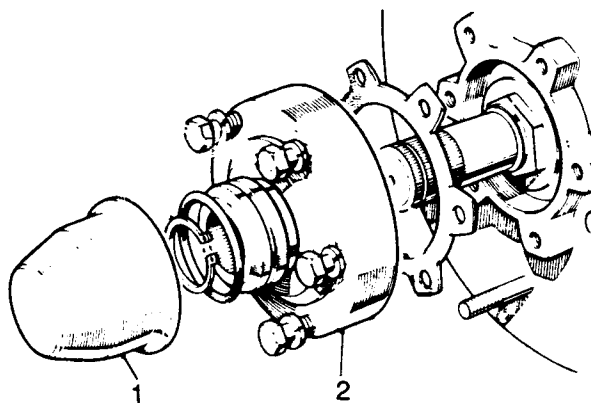


Fig J1.29

- (5) Refer to Fig J1.29. Remove the brake drum (1) noting the provision of an extractor tapping (2).
- (6) If difficulty is experienced in removing the drum, fit one of the drum fixing screws into the extractor tapping provided and turn in the screw whilst using a mallet to dislodge the drum.



FRONT HUB



REAR HUB

Fig J1.30

- (7) Refer to Fig J1.30. Prise off the hub cap (1).
- (8) Remove the driving member (2) from the axle stub shaft and hub.

- (1) Lubricate the bearings, using the recommended grease. Do not pack the hub with grease.
- (2) Replace the hub and bearing.
- (3) Replace the hub fixings.
- (4) Adjust hub bearing end float (see Sub-sub-section J3.3).

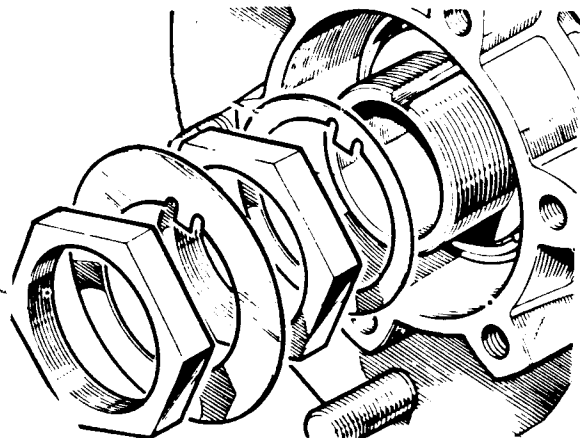


Fig J1.31

- (9) Refer to Fig J1.31. Remove the hub fixings.
- (10) Hold in position the outer roller bearing.
- (11) Withdraw the hub and bearing.

REPLACEMENT

- 2. Replace the hub assembly as follows:

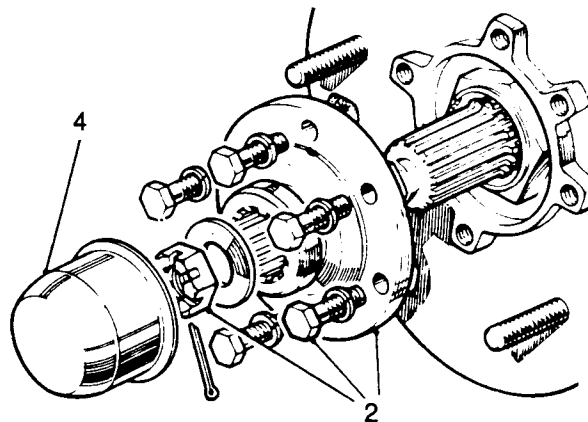


Fig J1.32

- (5) Refer to Fig J1.32. Fit the driving member (2) with the felt and rubber oil seal, fitted with the rubber side facing outwards. Torque load for driving member fixing bolts is 39 N.m. Torque load for stub shaft to driving member nut is 14 to 20 N.m using special tool RO1010 on models with the circular castellated nut.

- (6) Replace the hub cap (4).
- (7) Replace the brake drum and secure with the fixing screws.
- (8) Replace the road wheel.
- (9) Adjust the brakes (see Sub-section K1.3).
- (10) Lower the vehicle to the ground.
- (11) Fill the swivel pin housing with the correct grade of lubricating oil.

SUB-SUB-SECTION J1.4

CHAPTER 7

HUB STUB AXLE - REMOVAL AND REPLACEMENT

NOTE

Removal and replacement procedures for front and rear hub axles are the same. The procedures given in this Chapter apply to both.

REMOVAL

1. To remove the stub axle:

- (1) Remove the hub (see Sub-sub-section J1.4, Chapter 6).

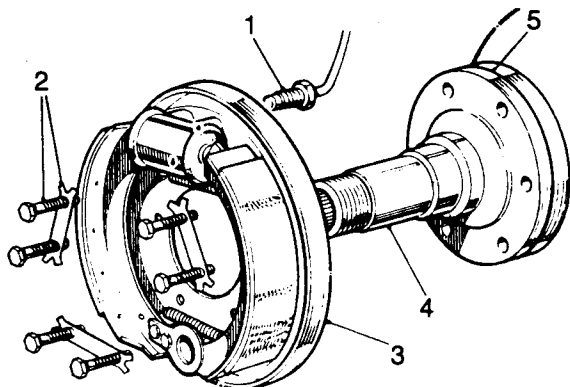


Fig J1.33

- (2) Refer to Fig J1.33. Release the brake pipe (1) from the retaining bracket at the upper swivel pin.
- (3) Remove the brake anchor plate and stub axle fixings (2).
- (4) Suspend aside the anchor plate assembly (3).
- (5) Withdraw the stub axle (4).
- (6) Withdraw the joint washer (5).

REPLACEMENT

2. Replace the stub axle as follows:

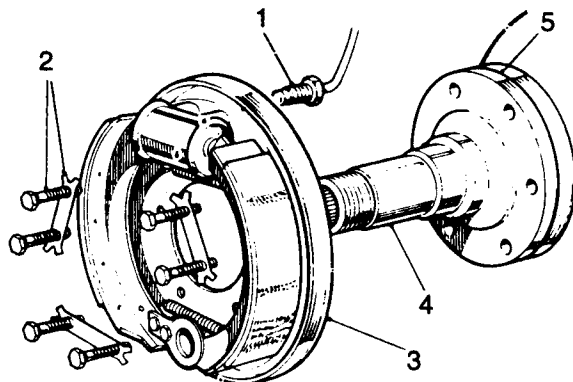


Fig J1.34

- (1) Refer to Fig J1.34. Grease and fit the joint washer (5).
- (2) Refit the stub axle (4).
- (3) Replace the anchor plate assembly (3).
- (4) Replace the brake anchor plate and stub axle fixings (2).
- (5) Refit the brake pipe (1) to the retaining bracket.
- (6) Replace the hub (see Sub-sub-section J1.4, Chapter 6).

SWIVEL PIN HOUSING - REMOVAL AND REPLACEMENT

REMOVAL

1. Remove the swivel pin housing as detailed below:

(1) Remove the front axle half shaft assembly (see Sub-sub-section J1.4, Chapter 5).

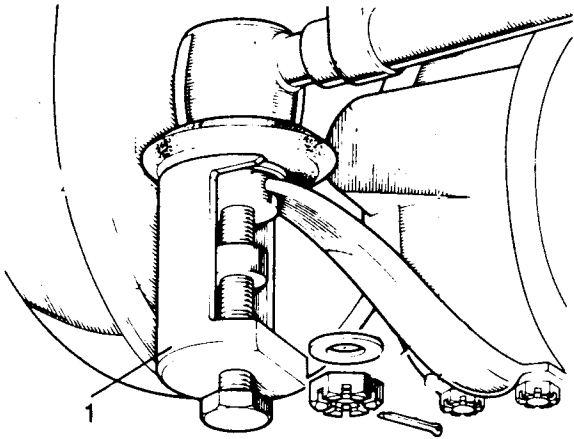


Fig J1.35

(2) Refer to Fig J1.35. Disconnect the track rod at the ball joint, using special tool 601763 (1).

(3) If required, disconnect the drag link at the ball joint, using special tool 601763.

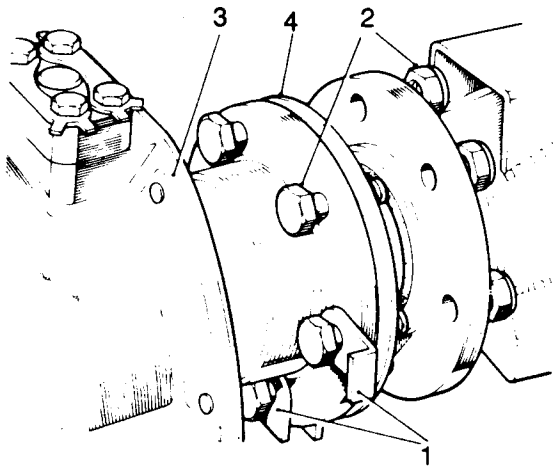


Fig J1.36

(4) Refer to Fig J1.36. Note the fitted position of the steering lock stop plate (1) and on the RH side only, the jack location stop plate.

(5) Remove the fixings (2) swivel pin housing to axle case.

(6) Withdraw the swivel pin housing (3).

(7) Withdraw the joint washer (4).

REPLACEMENT

2. To replace the swivel pin housing:

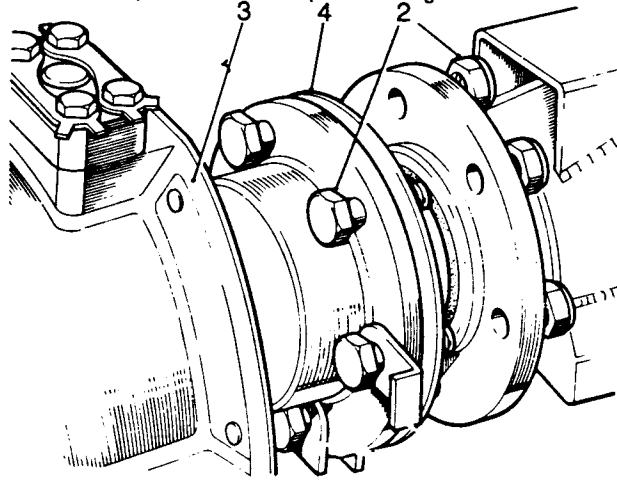


Fig J1.37

(1) Refer to Fig J1.37. Grease and replace the joint washer (4).

(2) Position the swivel pin housing (3) and secure with the fixings (2).

(3) If removed, refit the drag link at the ball joint.

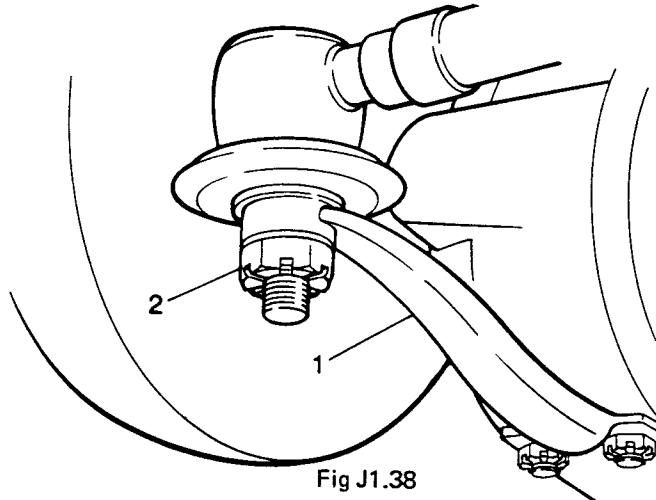


Fig J1.38

(4) Refer to Fig J1.38. Reconnect the track rod (1) at the ball joint. Torque the castellated nut (2) to 40 N.m and fit a new split pin.

(5) Replace the front axle half shaft (see Sub-sub-section J1.4, Chapter 5).

(6) Check and, if necessary reset, the position of the steering lock stop plate.