



**12.25 Removing the engine upper tie-bar from the cylinder block**

**22** Undo and remove the two nuts, bolt and spring washers securing the mounting to the subframe.

**23** Raise the jack slightly and remove the bolts securing the mounting to the bracket on the transmission casing. The engine mounting can now be withdrawn.

**24** Refitting is the reverse sequence to removal.

**Upper tie-bar and bushes renewal**

**25** Undo and remove the two bolts securing the tie-bar and mounting bracket to the right-hand side of the engine (see illustration). Move the tie-bar sideways and recover any spacing washers that may be fitted.

**26** If the tie-bar is secured to its mounting bracket on the bulkhead by a through-bolt and locknut, remove the locknut and bolt and lift away the tie-bar.

**27** If the tie-bar is secured by a stud with nuts and spring washers at each end, undo



**12.30 Lower engine tie-bar attachments**

and remove the nuts and spring washers, then slacken the four nuts securing the clutch and brake master cylinder to the bulkhead. When sufficient clearance exists, lift up the tie-bar upper mounting bracket over the tie-bar stud, and withdraw the tie-bar.

**28** With the tie-bar removed, slide out the rubber bushes and spacers and, if there is any sign of swelling or deterioration of the rubber whatsoever, renew the bushes.

**29** Refitting is the reverse sequence to removal.

**Lower tie-bar and bushes renewal**

**30** The lower tie-bar fitted to later models may be mounted in one of two positions; either bolted to a bracket on the left-hand side of the transmission at one end and to the rear of the subframe at the other, or bolted to a bracket on the right-hand side of the transmission at one end and to the front of the

subframe at the other. The renewal procedure is the same for both types (see illustration).

**31** Chock the rear wheels then jack up the front of the car and support it on axle stands (see "Jacking and vehicle support").

**32** Undo and remove the bolts securing the tie-bar to the transmission bracket and subframe, and withdraw the tie-bar.

**33** To remove the bushes it will be necessary to draw them out using a tube of suitable diameter, a long bolt and nut, and packing washers. The new bushes are refitted in the same way but lubricate them with liquid detergent before fitting.

**34** Refitting is the reverse sequence to removal.

**13 Distributor driveshaft - removal and refitting**



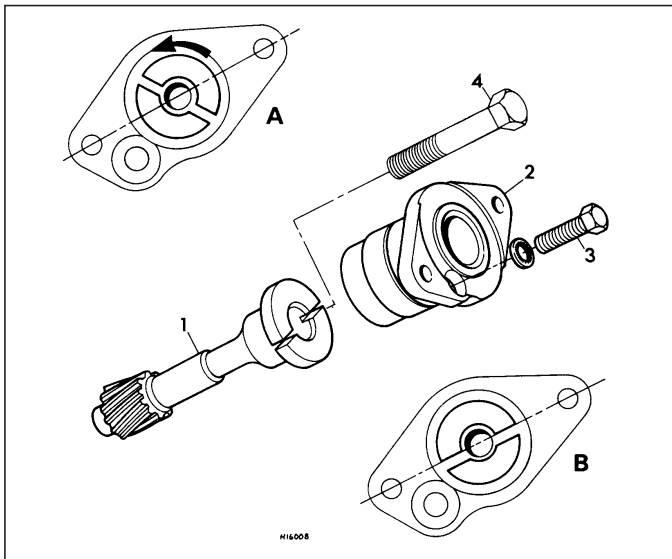
**Removal**

**1** Set the engine with No 1 cylinder at TDC on compression as described in Section 3.

**2** Remove the distributor as described in Chapter 5B.

**3** Where a distributor base housing is fitted to the cylinder block, unscrew the single retaining bolt and lockwasher and remove the housing.

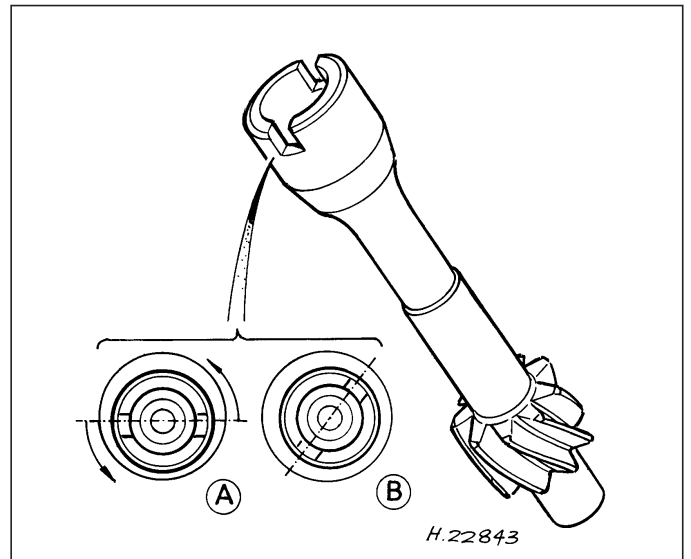
**4** Look down into the distributor aperture and observe the position of the slot in the distributor driveshaft. With No 1 piston at TDC, the slot should be positioned as shown according to engine type (carburettor engines or fuel injection engines) (see illustrations).



**13.4a Distributor driveshaft components and fitting details - carburettor engines**

*Inset A shows the position of the slot ready for fitting  
Inset B shows the shaft correctly installed*

- 1 Driveshaft
- 2 Housing
- 3 Retaining screw
- 4 5/16 in UNF bolt (for removal and refitting of driveshaft)



**13.4b Distributor driveshaft fitting details - fuel-injection models**

*A Drive slot position prior to engagement with skew gear  
B Correct drive slot position with shaft correctly installed*



13.5 Using a 5/16 in UNF bolt to remove the distributor driveshaft



14.2 Removing the oil pressure relief valve

There is a degree of conflicting information from the manufacturer as to the correct position of this slot on later engines. As a general rule, when refitting the driveshaft, set the slot in the same position it was in prior to removal. If there is any doubt about the original position, set it as shown in the illustrations when refitting.

5 Screw into the end of the distributor driveshaft a 5/16 in UNF bolt. A tappet cover bolt (where fitted) is ideal for this purpose. The driveshaft can then be lifted out, the shaft being turned slightly in the process to free the shaft skew gear from the camshaft skew gear (see illustration).

**Refitting**

6 With the engine still positioned with No1 piston at TDC, hold the driveshaft so that its slot is in the correct position for refitting as shown in the accompanying illustrations, ie so that its larger segment is uppermost (offset slot towards the bottom). Engage the driveshaft gear with the camshaft skew gear, and push the drive fully into position. As the gear engages, the driveshaft will rotate anti-clockwise to the final, correct fitted position. If necessary, withdraw the driveshaft again and adjust its position as necessary until this is so.  
7 Remove the bolt from the driveshaft.

8 Where applicable, refit the distributor base housing using a new O-ring and lock it in position with the single bolt and lockwasher.  
9 The distributor can now be refitted as described in Chapter 5B.

**14 Oil pressure relief valve - removal, inspection and refitting**



**Removal**

1 To prevent excessive oil pressure - for example when the engine is cold - an oil pressure relief valve is built into the right-hand side of the engine just below the oil delivery pipe union.  
2 The relief valve is identified externally by a large domed hexagon nut. To remove the unit unscrew the nut and remove it, complete with the two fibre or copper sealing washers. The relief spring and the relief spring cup can then be easily extracted (see illustration).

**Inspection**

3 In position, the metal cup fits over the opposite end of the relief valve spring resting in the dome of the hexagon nut, and bears against a machining in the block. When the oil

pressure exceeds the specified pressure the cup is forced off its seat and the oil returns, via a drilling, directly to the sump.

4 Check the tension of the spring by measuring its free length. If it is shorter than the length shown in the *Specifications* it should be renewed. Check the condition of the cup checking carefully for wear ridges which would prevent the cup seating effectively. Renew the cup if its condition is suspect.

**Refitting**

5 Refitting is the reverse sequence to removal.

**15 Oil filter housing and delivery pipe - removal and refitting**



**Removal**

1 Drain the engine/transmission oil and remove the oil filter as described in Chapter 1.  
2 On manual transmission models, Unscrew the banjo union bolt securing the delivery pipe to the cylinder block. Note that on later 1275 cc engines a tube nut and olive type fitting is used instead of the banjo union. At the other end of the pipe unscrew the nut securing the pipe to the oil filter housing (see illustrations). Lift away the pipe and collect the two copper washers at the banjo union, or the rubber seals at the tube nut connections, according to type. be prepared for oil spillage.  
3 On manual transmission models, unscrew the two nuts and slide the oil filter housing off the cylinder block studs. Recover the gasket.  
4 On automatic transmission models, undo the two bolts and remove the filter housing from the top of the transmission casing flange. Recover the gasket.  
5 Thoroughly clean the components and remove all traces of gasket from the mating surfaces.

2A



15.2a Oil feed pipe banjo union at the engine . . .



15.2b . . . and pipe nut attachment at the filter housing