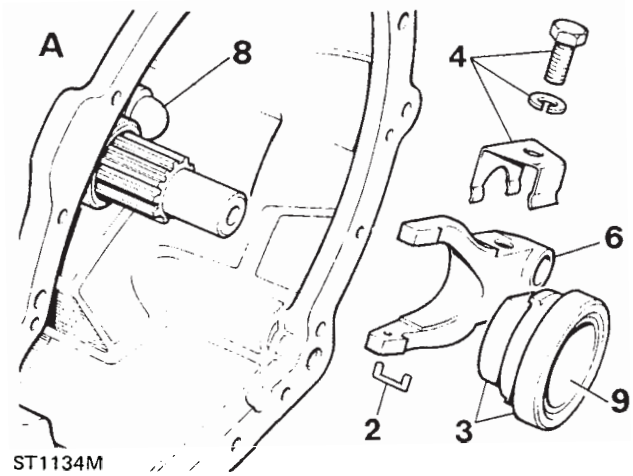
OVERHAUL RELEASE BEARING ASSEMBLY

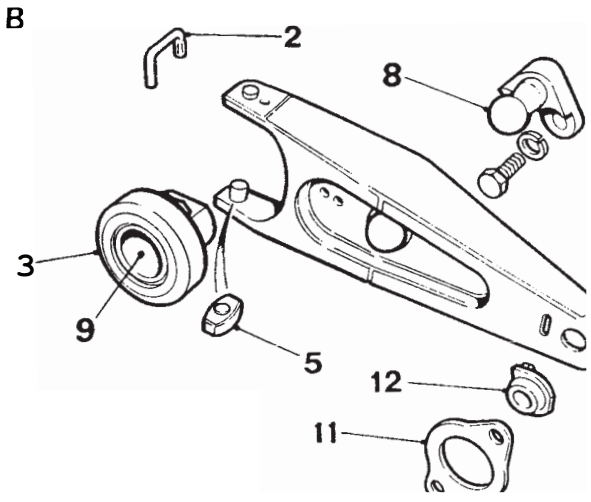
1. Remove the clutch slave cylinder from the bell housing.
2. Withdraw the retaining staple, if fitted.
3. Remove the release bearing assembly.
4. Remove spring clip retaining bolt and spring — V8.
5. Remove the slipper pads — 4-cylinder engines only.
6. Withdraw the release lever.
7. Discard worn parts.
8. Smear the pivot with grease and fit the release lever and retain with the spring clip and bolt — V8.
9. Smear the release bearing sleeve inner diameter with Molybdenum disulphide base grease.
10. Fit the slipper pads.
11. Fit the release bearing assembly and retain with the staple. The staple is to aid assembly and has no other purpose. It may become dislodged in service, without detriment.
12. Coat both sides of the backing plate with a waterproof joint compound such as Hylomar PL32M and locate the backing plate and dust cover in position on the slave cylinder.
13. Check that the push-rod clip is in position.
14. Fit the slave cylinder, engaging the push-rod through the centre of the dust cover and with the bleed screw uppermost. Secure the cylinder with the two bolts, tightening evenly to the correct torque.

Illustration **A.** V8 engine



ST1134M

Illustration B. 4-cylinder engines

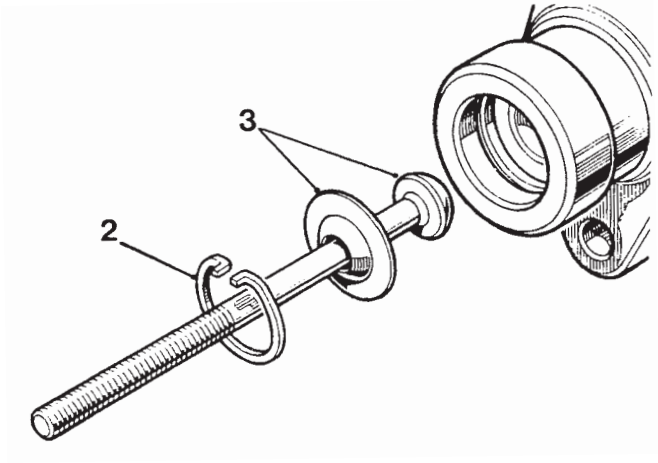


ST1135M

OVERHAUL MASTER CYLINDER — All models

DISMANTLE

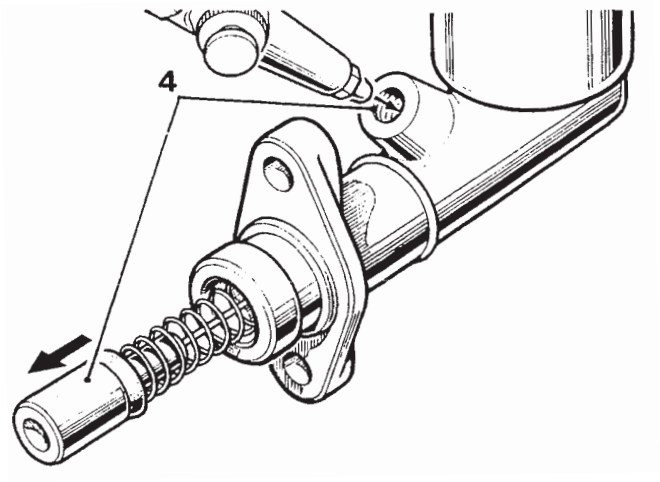
1. Remove the master cylinder from the vehicle.
2. Remove the circlip.
3. Withdraw the push-rod and retaining washer.



ST1136M

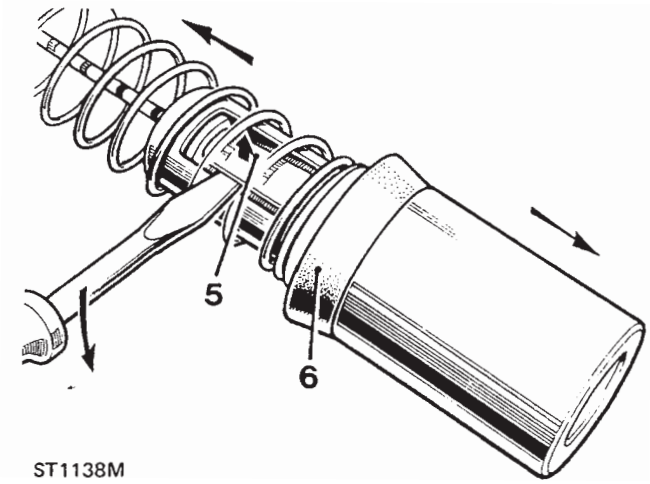
4. Withdraw the piston assembly. If neccssary, apply a low air pressure to the outlet port to expel the piston.

continued



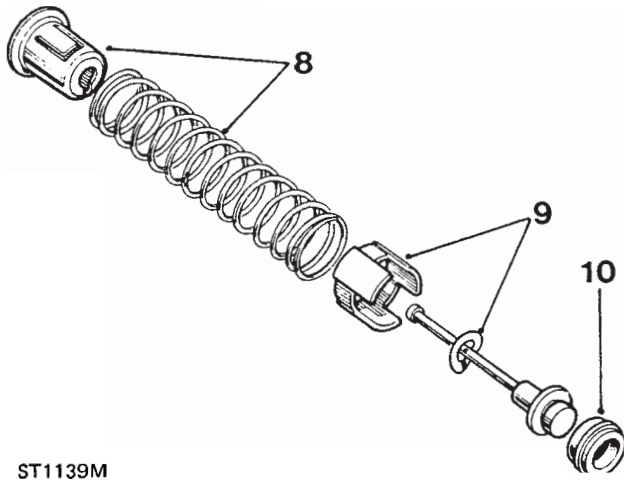
ST1137M

5. Prise the locking prong of the spring retainer clear of the piston shoulder and withdraw the piston.
6. Withdraw the piston seal.
7. Compress the spring and position the valve stem to align with the larger hole in the spring retainer.



ST1138M

8. Withdraw the spring and retainer.
9. Withdraw the valve spacer and spring washer from the valve stem.
10. Remove the valve seal.



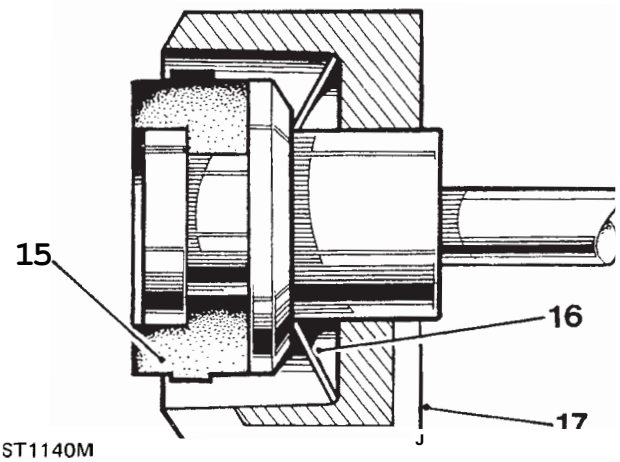
ST1139M

Inspection

11. Clean all components in Girling cleaning fluid and allow to dry.
12. Examine the cylinder bore and piston, ensure that they are smooth to the touch with no corrosion, score marks or ridges. If there is any doubt. fit new replacements.
13. The seals should be replaced with new components.

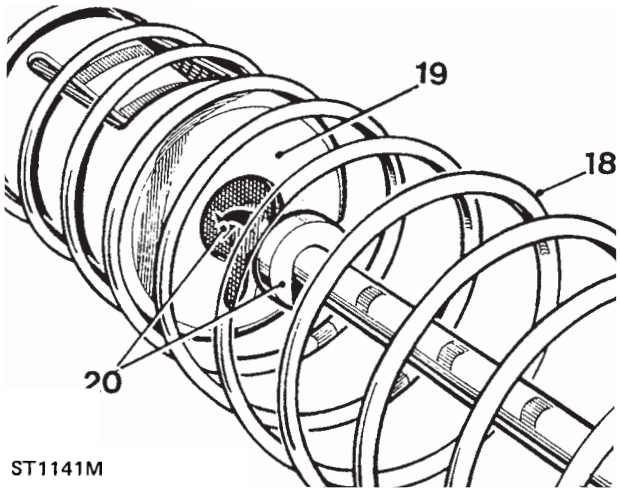
Assemble

14. Smear the seals with Castrol-Girling rubber grease and the remaining internal items with Castrol-Girling brake and clutch fluid.
15. Fit the valve seal, flat side first, onto the end of the valve stem.
16. Place the spring washer, domed side first, over the small end of the valve stem.
17. Fit the spacer, legs first.



ST1140M

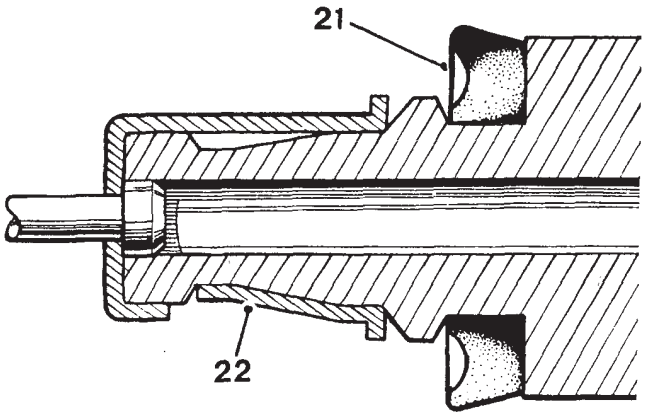
18. Place the coil spring over the valve stem.
19. Insert the retainer into the spring.
20. Compress the spring and engage the valve stem in the keyhole slot in the retainer.



ST1141M

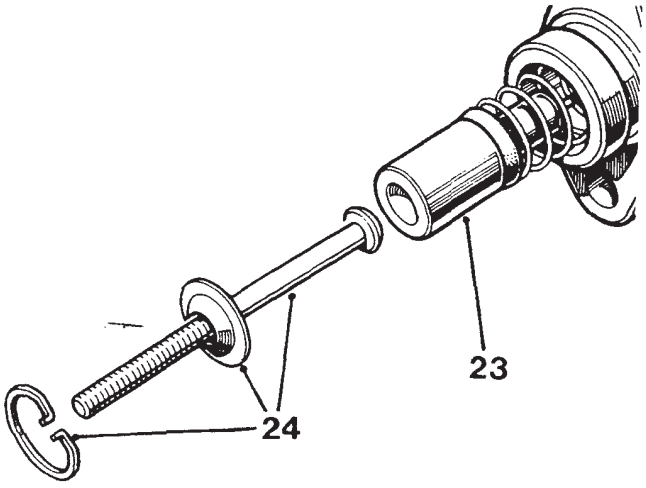
21. Fit the seal, large diameter last, to the piston.
22. Insert the piston into the spring retainer and engage the locking prong.

continued



ST1142M

23. Smear the piston with Castrol-Girling rubber grease and insert the assembly, valve end first, into the cylinder.
24. Fit the push-rod, retaining washer and circlip.



ST1143M

BLEED CLUTCH HYDRAULIC SYSTEM

When the gearbox and bell housing assembly has been fitted to the vehicle the hydraulic clutch release system must be bled to expel air.

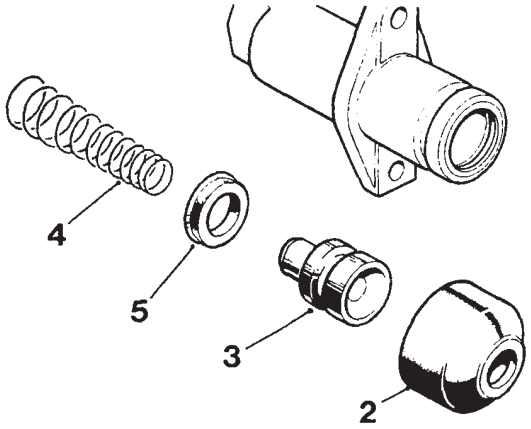
NOTE: During the following procedure, keep the fluid reservoir topped-up to avoid introducing air into the system. Use only the fluid recommended in the Lubrication chart. Use only new fluid from a sealed container.

1. Attach a length of suitable tubing to the slave cylinder bleed screw and immerse the free end of the tube in a glass jar containing new clutch fluid.
2. Slacken the bleed screw and depress the clutch pedal, pausing at the end of each stroke, until the fluid issuing from the tubing is free of air with the tube free end below the surface of the fluid in the container. Whilst holding the clutch pedal down and with the free end of the tube below the fluid, tighten the bleed screw.

OVERHAUL SLAVE CYLINDER

DISMANTLE

1. Remove the slave cylinder from the vehicle.
2. Withdraw the dust cover.
3. Expel the piston assembly, applying low pressure air to the fluid inlet.
4. Withdraw the spring.
5. Prise off the seal from the piston.



ST1144M

Inspection

6. Clean all components with Girling cleaning fluid and allow to dry.
7. Examine the cylinder bore and piston, ensure that they are smooth to the touch with no corrosion, score marks or ridges. If there is any doubt, fit new replacement.
8. The seal should be replaced with a new component.

Assemble

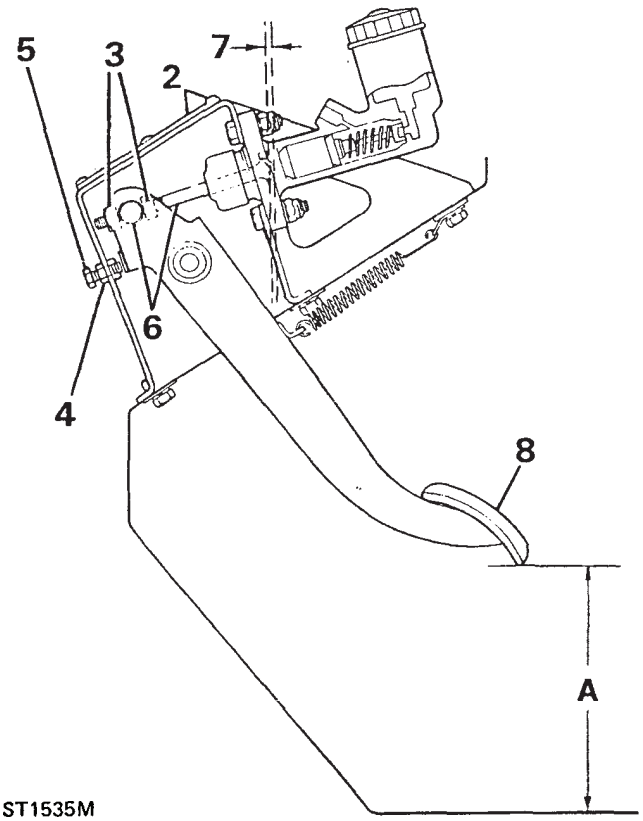
9. Smear the seal with Castrol-Girling rubber grease and the remaining internal items with Castrol-Girling brake and clutch fluid.
10. Fit the seal, large diameter last, to the piston.
11. Locate the conical spring, small diameter first, over the front end of the piston.
12. Smear the piston, with Castrol-Girling rubber grease and insert the assembly, spring end first, into the cylinder.
13. Fill the dust cover with Castrol-Girling rubber grease and fit the cover to the cylinder.

CLUTCH PEDAL AND MASTER CYLINDER ADJUSTMENT

1. The correct height for the clutch pedal from the floor of the footwell, without a mat, to the lower edge of the pedal is 140 mm *(5.5* in), dimension **'A'.**

Adjust

2. Withdraw the six screws and remove the top plate.
3. Slacken master cylinder push-rod locknuts to provide free movement of the push-rod through the pedal trunnion.
4. Slacken the adjustment screw locknut.
5. To increase the pedal height, turn the adjustment screw anti-clockwise. To reduce turn clockwise. When correct tighten the locknut.
6. To adjust the master cylinder push-rod, check that the push-rod has free-play through the trunnion.
7. Adjust the locknuts until the push-rod has 1,5 mm (0.062 in) free-play between the push-rod and master cylinder. When correct tighten the locknuts.
8. Check that there is 6 mm (0.350 in) free movement of the pedal at the pad. If necessary re-adjust the push-rod.
9. Refit the top plate.



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