

CHAPTER 6

THE CLUTCH

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6:1 Description

The clutch unit is a Borg and Beck single dry plate type operated by a hydraulic mechanism. Early vehicles are equipped with a coil spring cover unit but later vehicles have the diaphragm spring cover. This latter unit cannot be overhauled and in the event of failure must be exchanged for a new one at a Rover Service Agent. The latest vehicles are also fitted with a hydrostatic operating mechanism which requires no adjustment throughout the life of the clutch. Instructions for setting this mechanism are included in this Chapter.

6:2 Adjustment of pedal travel

This operation should be carried out regularly if the early non-hydrostatic mechanism is fitted to ensure that all the free play is not taken up, thereby allowing spring pressure to load the release bearing giving rise to clutch slip as the friction plate wears. It must also be done whenever the clutch unit or any parts of the mechanism are removed and overhauled. This applies to both early and late type mechanisms. **FIG 6:1** illustrates the early mechanism and **FIG 6:2** the later (hydrostatic) mechanism.

First check and if necessary adjust the pedal position and master cylinder free movement as shown by **FIG 6:3**. Adjust screw A until dimension E is appropriate to the type of mechanism. Now slacken locknuts B and rotate pushrod C until $\frac{1}{16}$ inch (1.5 mm) play is apparent at dimension D; tighten the locknuts. This will give $\frac{3}{8}$ inch (8 mm) free movement at the pedal pad.

Early models:

Refer to **FIG 6:4**, slacken locknut C and rotate pushrod B on the slave cylinder until the pedal free travel measured at the pedal pad increases from $\frac{3}{8}$ inch (8 mm) to $1\frac{1}{2}$ inch (38 mm). Tighten the locknut.

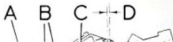
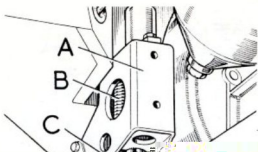
Late models, hydrostatic mechanism:

Hold the cranked operating lever on the clutch cross-shaft down to ensure that all backlash in the mechanism is absorbed. Refer to **FIG 6:5**. Slacken nut E and turn nut D until dimension C is obtained. Lock nut E. Never loosen nut D on the shaft B, it must always be held against the end of the thread.

6:4 Servicing the hydraulic system

(a) The master cylinder

Removal of the master cylinder is a straightforward disconnecting operation but it is a little more difficult on lefthand steering vehicles than righthand steering ones. On lefthand steering vehicles the lefthand front wing



must be removed and also the whole pedal bracket and its fixings. This allows the clutch pedal, bracket and master cylinder to come out as one assembly. On righthand steering vehicles it is only necessary to remove the top cover from the pedal bracket before undoing the bolts holding the master cylinder and releasing the pushrod from the pedal trunnion. When the hydraulic pipes are released take great care to prevent dirt entering them. It is best to wrap adhesive tape right over the end until ready for reassembly.

For overhauling the master cylinder a kit of seals and rubbers is obtainable. Note that it does not matter whether or not the master cylinder has an integral or separate reservoir. The internal components are identical. In all operations

