

# Removal and Installation of Clutch Pedal Shaft

Type 220a

Operation No.
Ku 6a

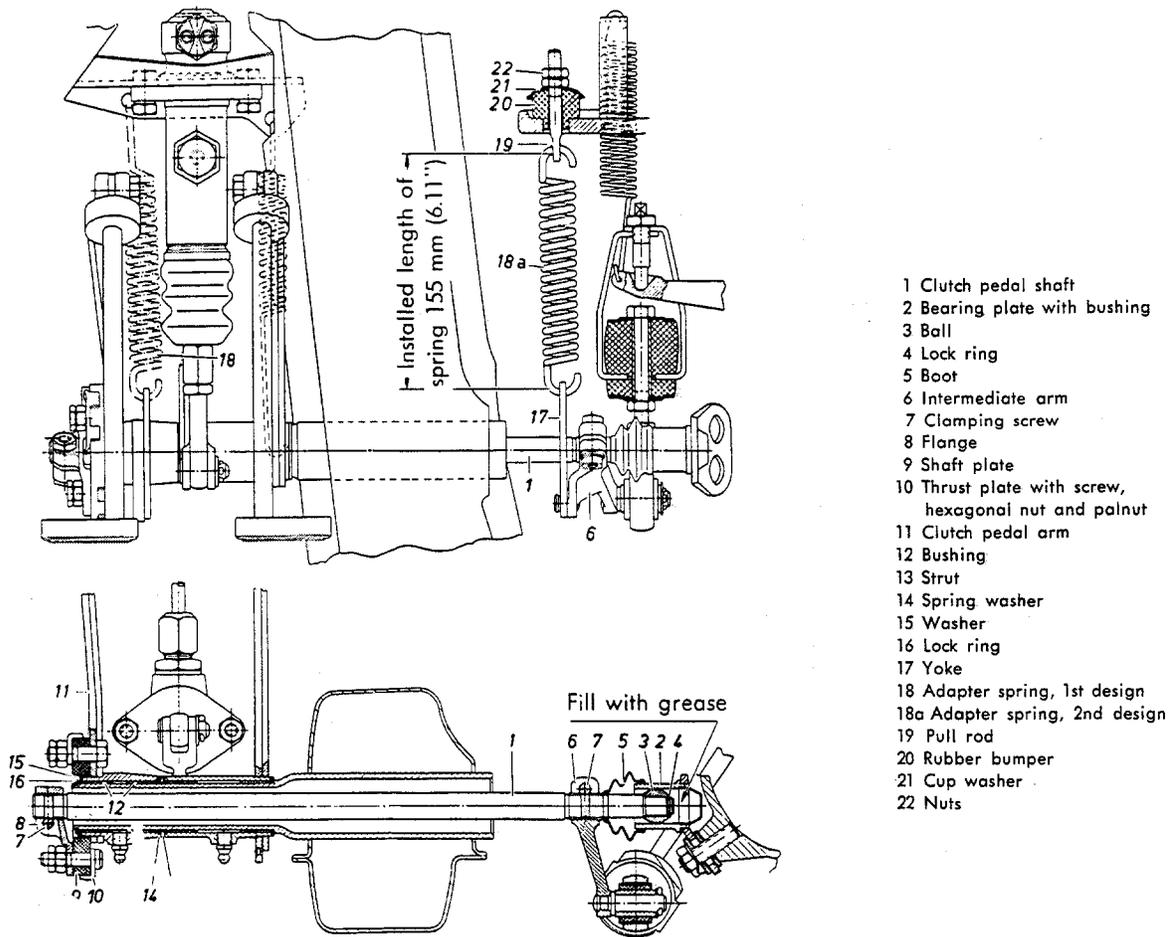


Fig. Ku 6a/01

## Procedure:

**Note:** As a rule it will not be necessary to remove the clutch pedal shaft of Type 220a except when the ball on the shaft is too tight and cannot be pulled in the car.

1. Loosen nuts of pull rod for adapter spring (18a) and unhook spring at yoke to intermediate arm.

**Note:** The former spring design had been attached to the clutch pedal arm and the mounting plate for the master brake cylinder. In Fig. Ku 6a/01 the former design (18) is shown in dotted lines. No pull rod for tensioning the spring had been provided.

2. Unhook return spring for clutch throwout fork as well as clutch linkage (see Fig. Ku 5a/01, Items 4, 5 and 6).

3. Loosen nuts fastening flange (8) to shaft plate (9). See Fig. Ku 6a/3).

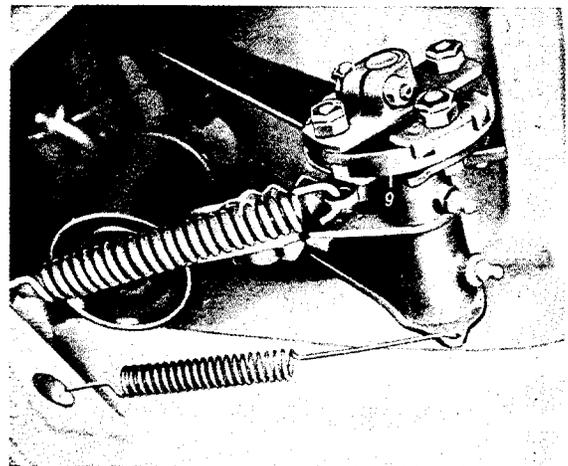


Fig. Ku 6a/3

**Note:** In case the clutch pedal shaft is not removed completely, the shaft plate with flange can also be loosened at the clutch pedal arm (see Fig. Ku 6a/4).

- Slip rubber boot off bearing plate (2) and pull clutch pedal shaft out of bearing plate to the outside (Fig. Ku 6a/4).

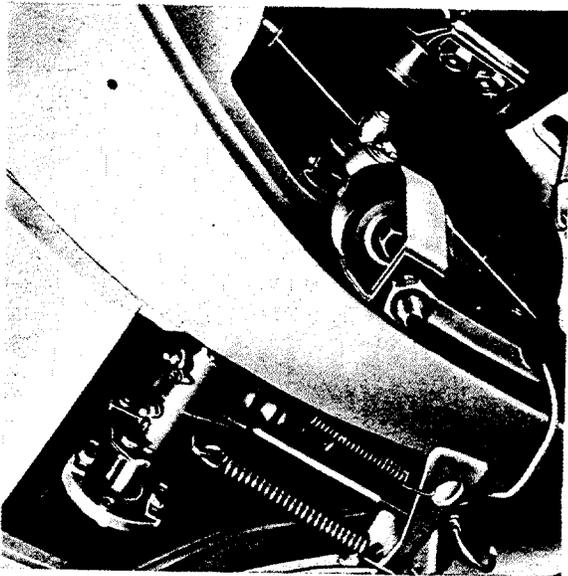


Fig. Ku 6a/4

- If ball (3) on clutch pedal shaft is worn, remove lock ring (4), pull ball and replace with a new one.  
If bore in bearing plate is worn out, replace the plate.

$$\text{Ball diameter } \frac{19.980}{19.947} \text{ mm } \frac{0.78661}{0.78531} \text{ in.}$$

$$\text{Bore in bearing plate} = \frac{20.000}{20.021} \text{ mm } \frac{0.78740}{0.78823} \text{ in.}$$

- If clutch pedal shaft is to be pulled completely, the transmission must be removed before.

After clamping screw (7) has been loosened and flange (8) taken off, the clutch pedal shaft can be pulled out towards the middle of the car.

- When installing the clutch pedal shaft note the following:

a) The intermediate arm (6) must be placed on the clutch pedal shaft in such a way that the eyelet is  $29 \pm 3 \text{ mm}$  ( $1.14 \pm 0.12''$ ) to the rear when clutch pedal arm abuts against the fire wall (see Fig. Ku 5a/01).

b) The **vertical** distance between center of clutch pedal shaft and center of adapter spring of 2nd design should be 4 mm ( $0.16''$ ) in engaged condition. Larger deviations can be corrected by displacing the bearing plate at the transmission (see Fig. Ku 6a/01). If the distance is excessive, the clutch pedal moves heavily because the resistance offered by the adapter spring has to be overcome.

c) The installed length of the adapter spring of 2nd design must be adjusted to 155 mm ( $6.11''$ ). See Fig. Ku 6a/7.

d) Fill bore in bearing plate liberally with grease.

**Note:** The yoke to the intermediate arm has been shifted to the bottom to avoid that the hand brake cable rubs at the yoke. If required, the intermediate arm with yoke at top can be exchanged for an arm which has the yoke at the bottom (see Fig. Ku 6a/7).

- After the clutch pedal shaft has been installed, adjust free travel of clutch pedal (see Operation No. Ku 5a).

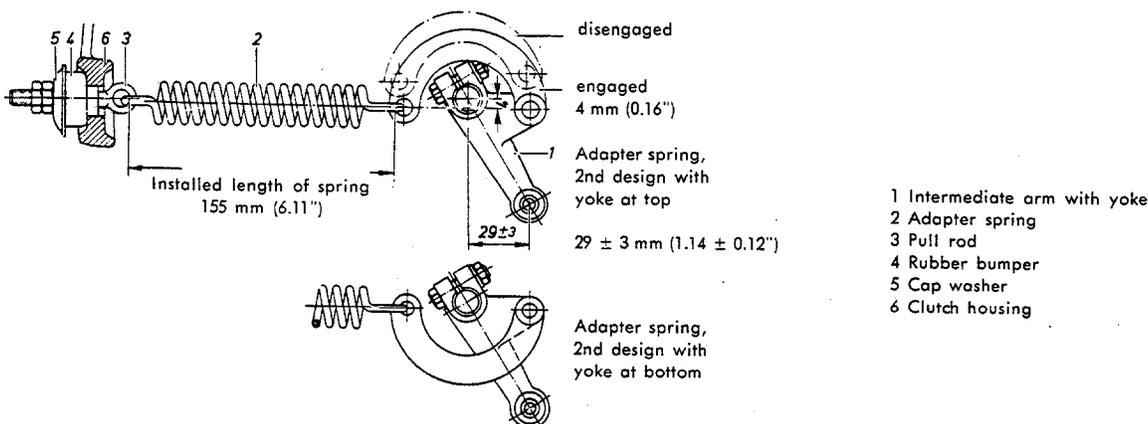


Fig. Ku 6a/7