

# Adjustment of Clutch Pedal Free Play

Job No.
29-3

## A. 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Versions

Models 180, 180 D, 190 SL, and 220 a

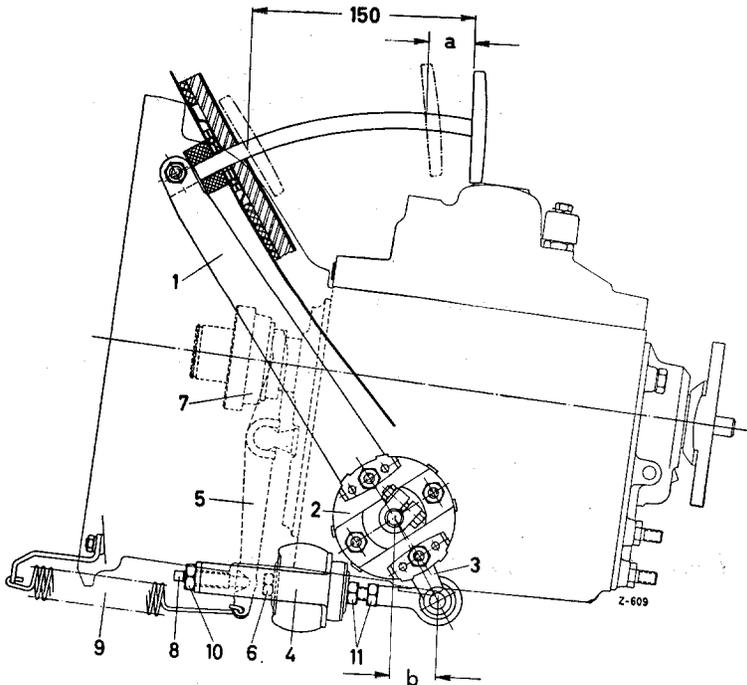


Fig. 29-3/1

- 1 Clutch pedal lever and pedal
- 2 Jointing disk
- 3 Relay lever with bolt
- 4 Shackle with pull rod and pull rod end
- 5 Clutch throw-out fork
- 6 Pull rod
- 7 Clutch throw-out bearing and throw-out unit
- 8 Threaded bolt
- 9 Return spring
- 10 Hexagon nut for threaded bolt
- 11 Hexagon nut for pull rod
- a = Clutch pedal free play
- b = Adjusting dimension for relay lever

1. Loosen the hexagon nut (10) on the threaded bolt (8) of the clutch actuating mechanism. Turn the threaded bolt in and back it out again until the clutch pedal free play "a" = 25 mm (Fig. 29-3/1).

**Note:** This corresponds to a clearance between release lever and throw-out bearing of 2 mm. When new rubber parts (jointing disk etc.) have been installed in the clutch actuating mechanism, the clutch pedal free play should be adjusted to "a" = 15 mm because newly installed rubber parts are compressed when the clutch has been used a few times.

2. Retighten the hexagon nut (10) for the threaded bolt of the clutch actuating mechanism.

**Note:** At least one or two threads of the threaded bolt (8) must be visible after the hexagon nut (10) has been tightened. If this is not the case, the length of the pull

rod (6) should be adjusted accordingly by loosening the hexagon nuts (11) (see Fig. 29-3/1).

3. If necessary, check the position of the relay lever (3) on the clutch pedal shaft. The distance from center pedal shaft to center relay lever bolt should be "b" =  $32 \pm 4$  mm on Models 180, 180 D, and 190 SL, and "b" =  $29 \pm 4$  mm in the case of Model 220 a.

The clutch pedal shaft (1) must always rest against the top of the rubber stop (see Fig. 29-3/1). The distance "b" can be varied by changing the position of the relay lever (3) on the splines of the clutch pedal shaft (see Job No. 29-5).

**Note:** Please note that on the 2<sup>nd</sup> and 3<sup>rd</sup> versions of the clutch pedal shaft the distance from center pedal shaft downward to center compensating spring should be 4 mm when the clutch is engaged (see Fig. 29-1/4). If the distance is too large

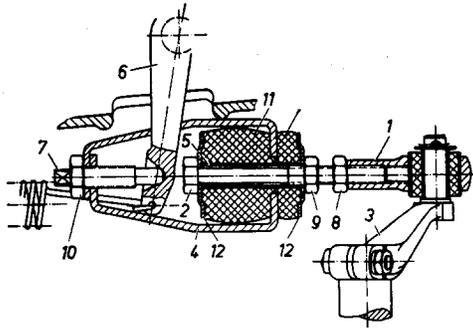


Fig. 29-3/2

- |                         |                         |
|-------------------------|-------------------------|
| 1 Pull rod end          | 7 Threaded bolt         |
| 2 Pull rod              | 8, 9 and 10 Hexagon nut |
| 3 Lever with bolt       | 11 Front rubber buffer  |
| 4 Shackle               | 12 Cup washer           |
| 5 Spacer sleeve         | 13 Rear rubber buffer   |
| 6 Clutch throw-out fork |                         |

the clutch pedal will be difficult to depress since the pull of the compensating spring increases.

With the inside type of compensating spring, the installed length "c" should be 137 mm in the case of Models 180, 180 D, and 190 SL, and 155 mm in the case of Model 220 a (see Fig. 29-1/4).

Check whether the rubber buffers (11) and (13) have sufficient initial tension. The cup washers (12) should rest against the spacer sleeve (5), but the spacer sleeve must not be deformed when the hexagon nut (9) is tightened (see Fig. 29-3/2).

### B. 4<sup>th</sup> Version with Swivel Support

**Models 180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 190 SL, and 220 a as well as Models 219, 220 S, and 220 SE with Mechanical Clutch**

The clutch pedal free play is adjusted in the same way as on Model 190.

### C. Adjustment of Free Play of the Mechanical Clutch

**Models 219, 220 S, and 220 SE with Hydraulic Automatic Clutch**

(see Workshop Manual Passenger Car Models as from August 1959, Job No. 25-10, Section VI, A).