

Removal and Installation of Clutch

Job-No.

25 — 1

Removal:

1. Remove the transmission (see Job No. 26 — 1, paragraphs 1—9).
2. Place the hold-down clamps 136 589 23 61 under the clutch release levers.

Note: If the clutch is not to be disassembled, the hold-down clamps remain in position until the clutch is reinstalled (Fig. 25 — 1/1).

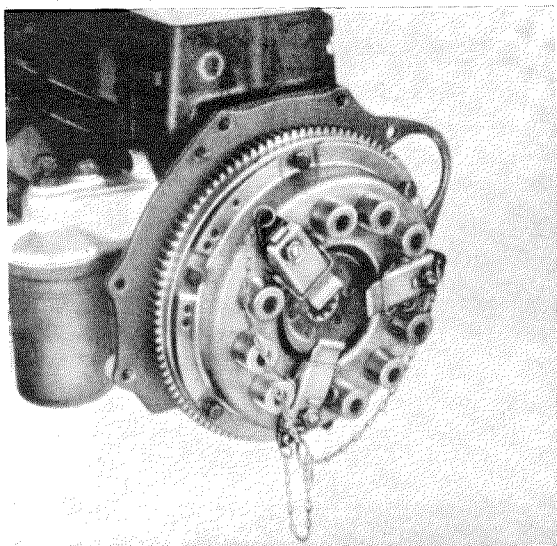


Fig. 25 — 1/1

3. Loosen the clutch fixing screws diagonally and evenly. Then remove the clutch together with the disk.
4. Check the friction surface of the flywheel and the clutch pressure plate for heat cracks and scores. If necessary, regrind or re-turn.

Note: If friction surface "A" is reconditioned, surface "B" must also be refinished until the distance $a = 29$ mm is reestablished (Fig. 25 — 1/2). This is necessary in order to obtain the prescribed clutch pressure. The sur-

faces can be reconditioned until dimension b is 11.5 mm. For reconditioning the clutch pressure plate see Job No. 25 — 4, paragraph 5.

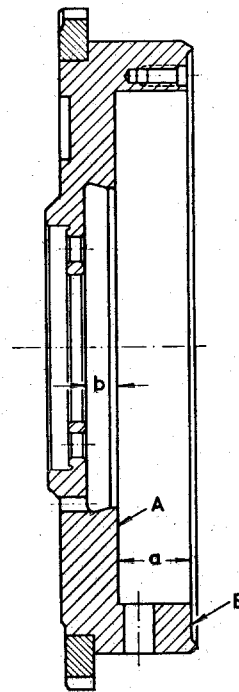


Fig. 25 — 1/2

5. Check whether the disk slides freely on the drive shaft. Turn the disk and check to ensure that the play between the splines of the disk and drive shaft is not excessive; admissible play 0.03—0.08 mm.

Installation:

6. Install the disk with the surface marked "Kupplungsseite" (clutch side) toward the transmission (Fig. 25 — 1/3).

For this purpose center the disk in the flywheel by means of Centering Arbor 136 589 00 61 (Fig. 25 — 1/4).

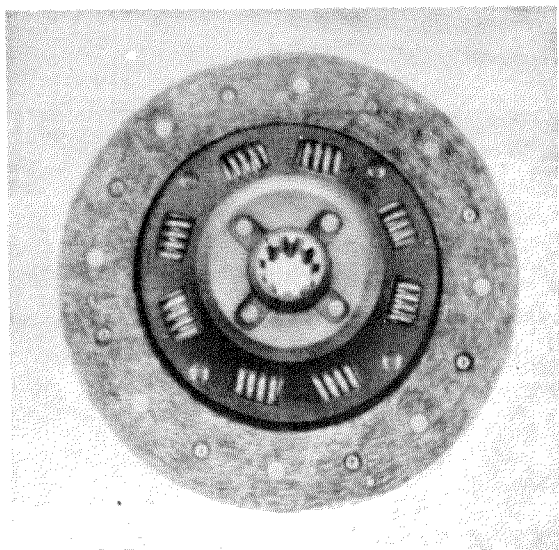


Fig. 25 — 1/3

Note: If necessary, a transmission drive shaft can be used for the purpose.

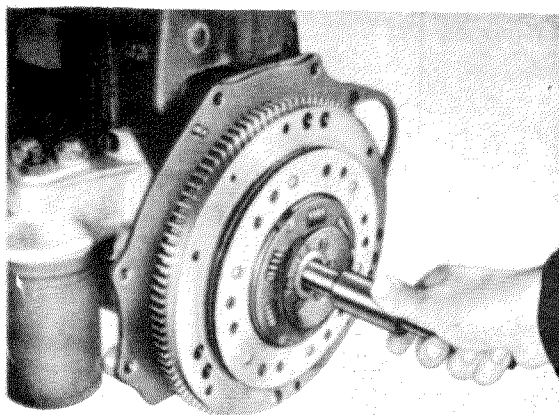


Fig. 25 — 1/4

7. Install the clutch.

Note: The clutch must not be forced into place; it must fit properly into the flywheel recess and must be evenly seated.

If the clutch has been disassembled, the three hold-down clamps 136 589 23 61 must on reassembly again be placed under the release levers in order to avoid forcing the clutch on installation (see Job No. 25 — 4).

8. Tighten the fixing screws diagonally and evenly.

Note: Do not forget the snap rings!

Only the prescribed special screws should be used.

9. After installation remove centering arbor and hold-down clamps.

10. Check the position of the release levers (Fig. 25 — 1/5).

Note: When a new disk is installed of the prescribed thickness of $9.1 + 0.3$ mm (compressed) and $10.3 + 0.3$ mm (released) the release levers if correctly adjusted must have a distance from the cover plate of 17.8 mm. This distance is increased if the clutch facing is worn. If the distance reaches a maximum of 28.8 mm either the disk or the facing has to be replaced. **Press down the release levers several times before measuring. It is important that the distance from the cover plate should be identical for all three release levers**, since otherwise clutch noise may result, the clutch may have a tendency to grab and the throw-out bearing would be subject to uneven pressure (Fig. 25 — 1/5).

If, on releasing the clutch, the throw-out unit should rub against the disk, the throw-out unit must be given a 15° bevel.

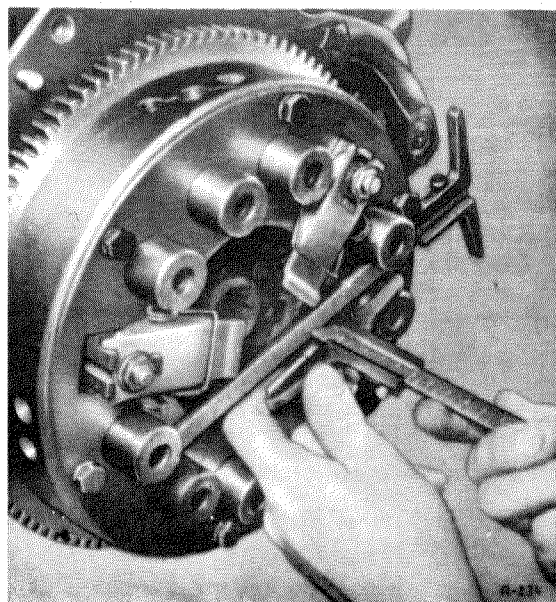


Fig. 25 — 1/5

As of transmission No. 65 00 195 all throw-out units have this 15° bevel.

11. Install transmission (see Job No. 26—1, paragraphs 10—19).

Note: The 2 mm clearance (X) between release lever and throw-out bearing (see Fig. 25—1/6) is established by adjusting the clutch pedal free movement (see Job No. 29—3).

Clutch Adjustment Data

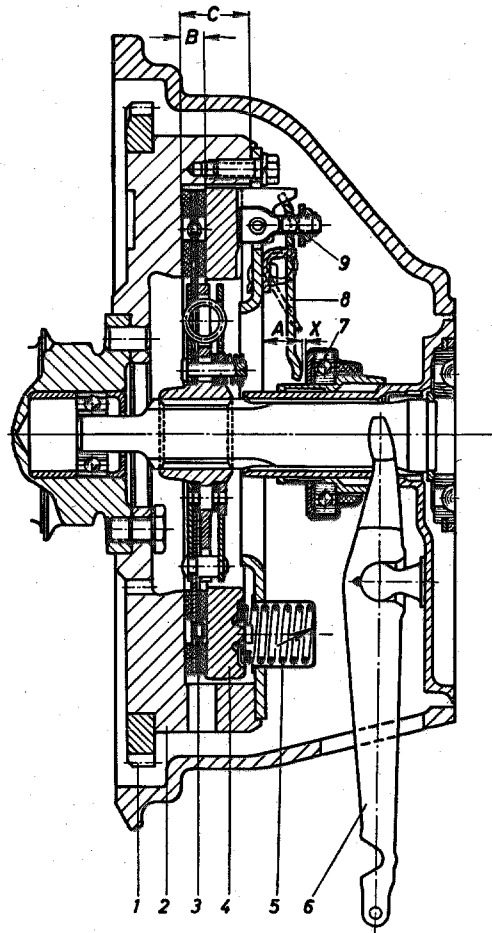


Fig. 25—1/6

- 1 Starter gear rim
- 2 Flywheel
- 3 Disk, thickness of facing 3.5 mm
- 4 Clutch pressure plate (if reconditioned minimum thickness 14.0 mm; new 15 mm)
- 5 Clutch spring
- 6 Throw-out fork
- 7 Throw-out bearing and throw-out unit
- 8 Release lever
- 9 Adjusting nut

A = 17.8 mm = adjusting dimension of a disk which has a thickness of $10.3 + 0.3$ mm released, and $9.1 + 0.3$ mm compressed.

28.8 mm = thickness of a newly-faced, compressed disk

B = $9.1 + 0.3$ mm = maximum admissible dimension if clutch facing is worn

C = 29.0 mm = distance between clutch surface and flywheel recess

X = 2.0 mm = clearance between release lever and throw-out bearing

Maximum admissible unbalance of disk 5 cmg

Maximum admissible unbalance of clutch 20 cmg