

Checking and Refacing of Clutch Disk

Job-No.
25 — 5

The purpose of the clutch is to transmit power from the engine to the transmission. In order to damp the crankshaft vibrations which occur at critical speeds the disk permits a limited amount of motion between facing and hub. The torque is transmitted by torsion springs, and a damper element consisting of friction disks quickly cushions the resulting vibrations (Fig. 25 — 5/1).

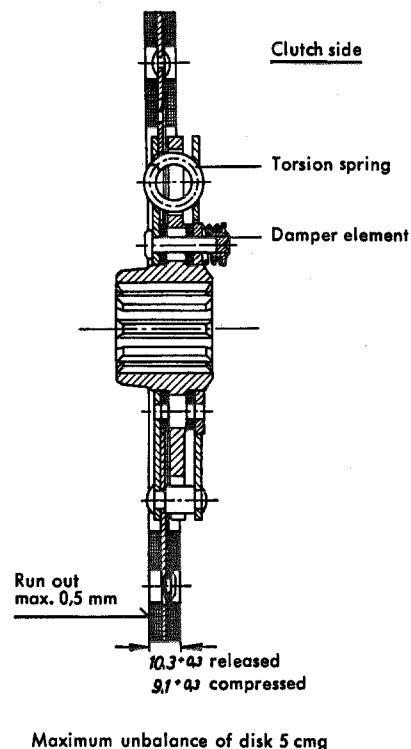


Fig. 25 — 5/1

Free motion torque = 12 mkg.

Free motion torque is defined as the torque required to turn the disk until it comes up to the stop.

Stop angle = $5^{\circ} 30'$.

Stop angle is defined as the angle by which the disk can turn until it comes up to the stop.

Friction torque = 0.4 — 0.6 mgk.

Friction torque is defined as the torque required to overcome the resistance of the damper element.

1. Check the disk. If the hub splines are worn or if torsional power or damping are unsatisfactory, replace the disk.
2. Check the disk facing for wear and scores. Maximum admissible wear 1 mm of the overall thickness.
Thickness of the released disk when new 10.3 ± 0.3 mm.
3. Replace worn, cracked, oiled, or burnt facings. A disk with a cracked spring plate must be replaced.
4. When refacing the disk, rivet the facings alternately to the metal plate and the spring plate. The facings must not be riveted through; this would interfere with the required spring action between them. (Fig. 25 — 5/2).

5. After riveting the facings check disk for run-out and, if necessary, true up by means of a fork (Fig. 25 — 5/3). Under no circumstances should the facings be ground! Admissible run-out 0.5 mm.

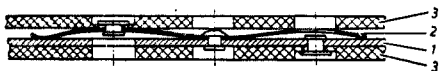


Fig. 25 — 5/2

- 1 Metal plate
- 2 Spring plate
- 3 Disk facing

When truing the disk, care should be taken not to damage the facings.

If on releasing the clutch the throw-out unit

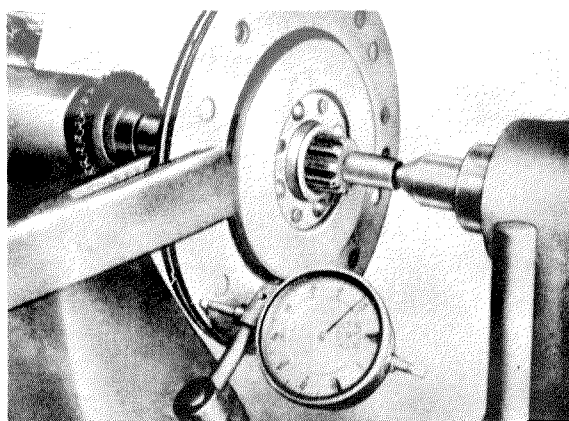


Fig. 25 — 5/3

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

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