



P03-5224-57

- | | | | |
|---|---|----|---|
| 1 | Primary flywheel mass | 7 | Spacer pin of secondary flywheel mass/damper system |
| 2 | Secondary flywheel mass | 8 | Ring gear |
| 3 | Outer spring damper | 9 | Grooved ball bearing |
| 4 | Inner spring damper | 10 | Dowel pin |
| 5 | Friction device | 11 | Grooved ball bearing |
| 6 | Spacer pin of primary flywheel mass/damper system | 12 | Stretch shank bolt or straight stretch shank bolt |

Design

The two-mass flywheel consists of three principal parts:

Primary flywheel mass (1)

The primary flywheel mass (1) is bolted to the crankshaft by eight M10×1×57 stretch shank bolt. The grooved ball bearing (9) for mounting the transmission input shaft is placed in the primary flywheel (1). The starter ring gear (8) is shrink-fitted on the outside.

Secondary flywheel mass (2)

The secondary flywheel mass (2) pivots on the primary flywheel mass (1) by means of a grooved ball bearing (9). The clutch is installed on the secondary flywheel mass (2).

Damper system

The damper system is installed between the two flywheel masses. It consists of an inner and outer spring damper and friction devices. The slewing range of the flywheel masses to each other is limited by the damper system to ± 15 and ± 40 , respectively. Each flywheel mass is connected to the damper system with riveted spacer pins (6) and (7).

Function

The two-mass flywheel absorbs the rotational vibrations of the crank assembly and reduces the transmission of these vibrations to the gearbox-propeller shaft area.

Ride comfort is improved in the lower engine speed range.

Critical vibrations do not become effective except below idling speed range as a result of the different distribution of the moments of inertia of the primary and secondary flywheel masses.

The primary flywheel mass (1) is bolted to the crankshaft and connected by spacer pins (6) to the secondary flywheel mass (2).

The torsion and friction system positioned between has a damping effect on residual vibrations.

The ring gear (8) is shrink-fitted onto the primary flywheel mass (1).

A two-mass flywheel cannot be repaired and is supplied as a replacement part.