



Fig 1: Cover assembly with permanent PTO



Fig. 2: Torsion damper of PTO



Fig. 3: Torsion spring with clearance



Further technical development of powertrains and torsional dampers may require the use of stepped dampers. This technology is very effective in damping noise and vibrations, and ensures that the torsion damper can take up high strain.

Some designs have clearance between the torsion spring and the spring contact surface (see Fig. 3). This clearance is designed for opposite spring pairs. Not all springs have clearance



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