



Service Info



Clutch disc with new first stage damper

Six spring torsional damper with first stage damper for higher capacity

In addition to transmitting engine torque, the clutch disc has the task of preventing torsional engine vibrations from reaching the powertrain, ensuring a smooth start and fast switching.

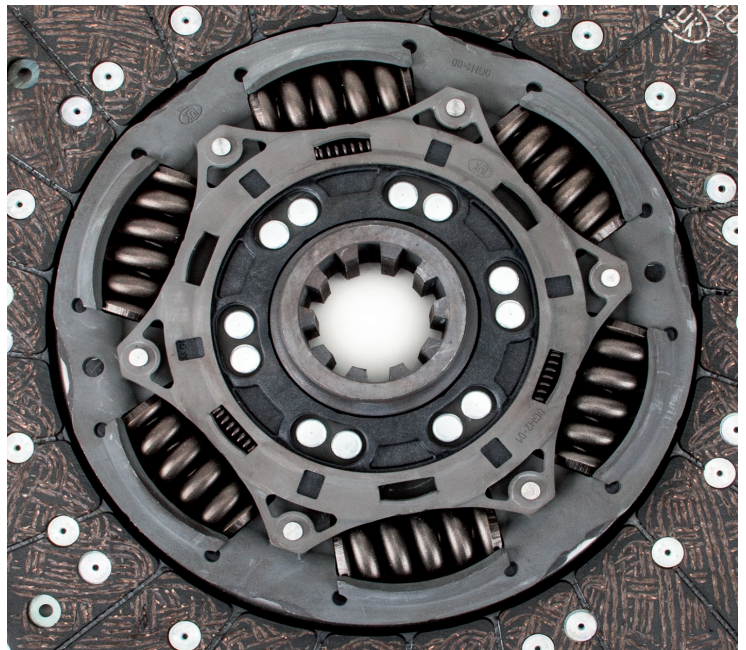
In order to achieve this, the clutch disc is fitted with a variety of devices, including a torsional damper.

The torsional dampers used today normally comprise eight tangentially arranged helical compression springs. These have a variety of spring rates and form the main damper stage.

Most LuK clutch discs are fitted with six torsion dampers. Compared to eight spring dampers, the construction of the springs is longer and they therefore have a larger angular deflection, which reduces the tension and increases the damper capacity.

In order to further increase capacity, an additional first stage damper is integrated into the torsional damper. The first stage damper consists of small springs and a friction control device. The operation resembles that of the torsional damper but with a much lower spring rate. This guarantees the isolation of torsional vibrations from the engine even when idle, and effectively avoids gear rattle.

We have supplemented the entire damper unit with a new hub design that allows for some axial misalignment.



Six spring damper with first stage damper

