

Bolts for dual mass flywheels (DMF) and compact DMF (DFC)

Another service provided by your partner, Schaeffler Automotive Aftermarket oHG

Professional replacement of DMFs or compact DMFs (DFC) should also include the use of new bolts. This is because the bolts used are stretch bolts and/or bolts with microencapsulation.

Why do the DMF/DFC bolts need to be replaced?

Due to continuous, strong alternating loads, specially designed bolts are used to secure flywheels. These are usually stretch bolts or bolts with microencapsulation.

Stretch bolts have an antifatigue shaft that only covers around 90% of the thread core diameter.

When tightened to the torque specified by the vehicle manufacturer (in some cases plus a fixed angular value) the stretch bolt becomes an elastic bolt. The resulting torque is greater than the external force acting on the flywheel during operation. The elasticity of the stretch bolt means it can be stretched right up to the elastic limit.

As they do not possess these properties, normal set screws would break after a certain amount of time due to material fatigue, even if they were strong enough in their design.

Bolts with microencapsulation (these can also be stretch bolts) seal off the clutch chamber from the crankshaft chamber filled with engine oil. This is necessary because the threaded holes in the crankshaft flange are open to the crankcase.

These coatings also have adhesive and gripping properties, eliminating the need for any further bolt retaining devices.

Bolts that have already been used must not be used again.

Experience has shown that these snap when they are tightened. In addition, their sealing and gripping properties are no longer effective.

Due to the aforementioned reasons, Schaeffler Automotive Aftermarket oHG supplies DMFs/DMCs incl. the necessary bolts and also offers sets of bolts that can be ordered separately.

Why are all DMFs not supplied with the necessary bolts?

The required bolts are already supplied together with some of the approx. 350 different article numbers that make up the delivery programme.

However, for many DMFs, different bolts are required depending on the vehicle model.

For this reason, all DMFs have their own reference/order code, which indicates whether or not the bolts are included in the delivery.

In cases where the bolts are not included in the delivery of a DMF, Schaeffler Automotive Aftermarket oHG offers sets of bolts appropriate for the vehicle on which the DMF will be used.



Where can I find information on this topic?

All DMFs/DFCs available for sale are listed in our usual sales literature (online catalogue, RepXpert, Schaeffler catalogue CD, printed catalogue) and are linked to the corresponding vehicles.

Sets of DMF bolts, which must be ordered separately, can also be found there.