

SACHS Workshop Tip: Clutch Noise.

Causes of clutch noise

Clutch noise such as whistling or clonking is not always an indication of a defective clutch. Whistling noises may e.g. also be caused by off-center contact of the clutch release bearing, a non-centered transmission input shaft, or a defective pilot bearing.

Rattling noises may be due to load alterations if clutch disks are furnished with preliminary dampers. These noises do not impair the function or service life of the clutch disk.

Additional possible causes include installation of the wrong parts, or installation of the clutch disk in the wrong position.

Therefore check:

- Correct part installed?
- Correct installation position?
- Pilot bearing installed and in good condition?

Torsional damper worn



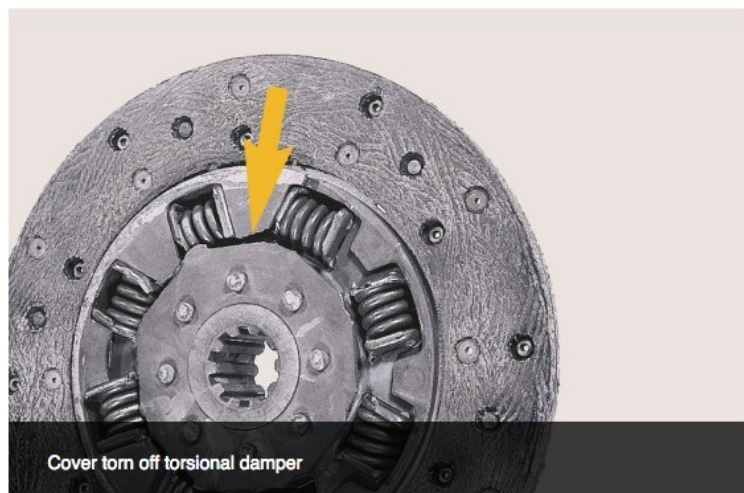
Cause:

- Low-revving driving style, i.e. driving at low speeds in high gear and full throttle
- Extreme irregular engine operation
- Worn joints in the driveline

Consequence:

- Overloading of components

Cover torn off torsional damper



Cause:

- Clutch housing and crankshaft housing flange not centered
- Wobbling motion due to angular or parallel deviation
- Pilot bearing missing, transmission input shaft not guided

Consequence:

- Loose components brush adjacent parts

Please note:

Also usually causes drag.

Wear-induced grooves on inner ring of clutch release bearing



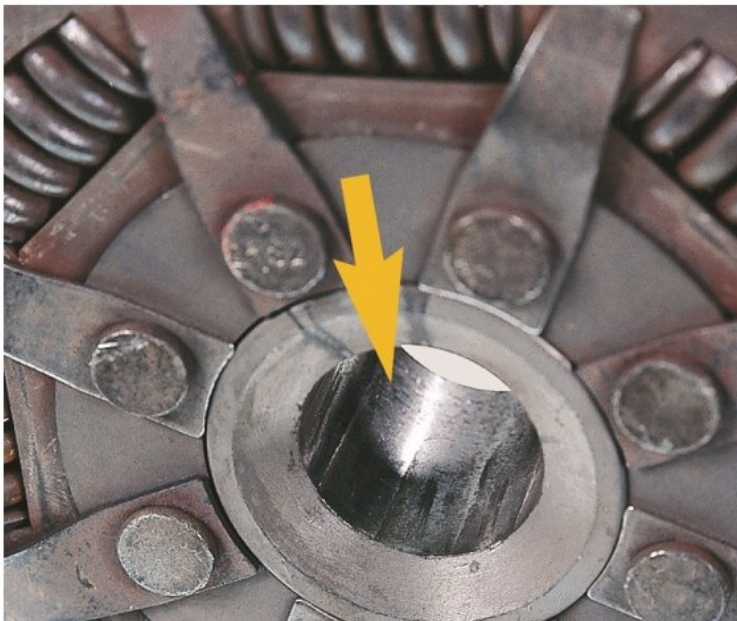
Cause:

- Off-center clutch release bearing contact due to parallel deviation
- Worn guide tube
- Insufficient clutch release bearing preload

Consequence:

- Relative movements cause various types of noise

Hub spline no longer present



Cause:

- Spline ground off hub due to irregular engine operation
- Alignment error, parallel deviation

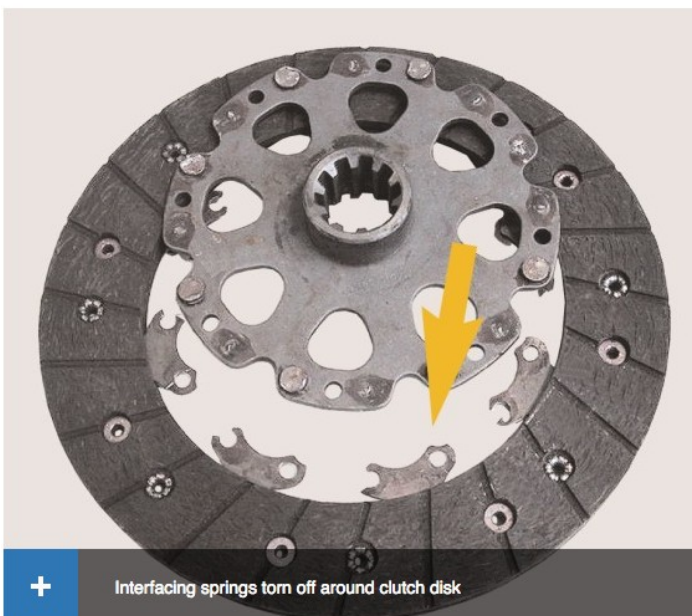
Consequence:

- Loss of connection between engine and transmission

Please note:

Causes noise in early stages.

Interfacing springs torn off around clutch disk



Cause:

- Clutch housing and crankshaft housing flange not centered,
- Wobbling motion due to angular or parallel deviation
- Pilot bearing missing, transmission input shaft not guided

Consequence:

- Loss of connection between engine and transmission

Please note:

Causes drag problems and noise in early stages.