



DPF350.01

Assembly/disassembly recommendations

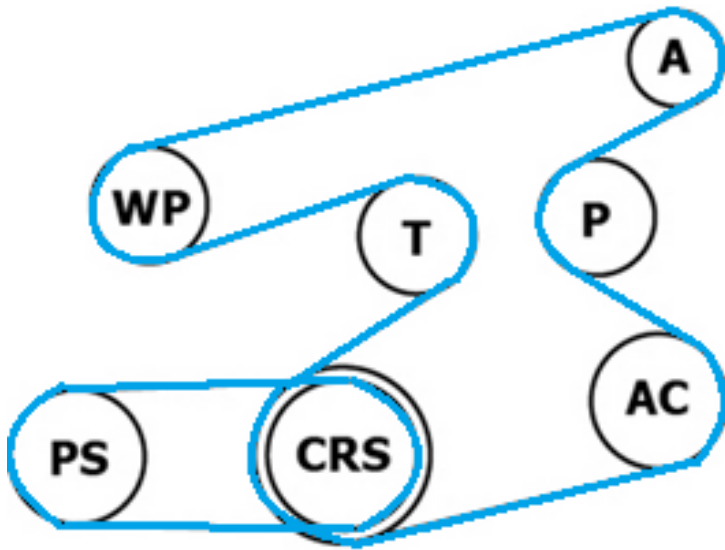
BMW:	Series 1 (E87), Series 3 (E46/E90/E91/E92/E93), Series 5 (E60/E61), Series 5 LCI (E60/E61), X3 (E83), X3 LCI (E83)	ENGINES	OE reference
		2.0 D, 2.0TD	11 23 7 805 696, 11 23 7 801 977, 11 23 7 793 882

IDENTIFICATION OF DAMPER PULLEY DPF350.01

Traceability

DPF350.01





A	Alternator	P	Return pulley
AC	Air-conditioning compressor	PS	Power steering
CRS	Crankshaft	T	Tensioner roller
		WP	Coolant pump

COMMON PROBLEMS

PULLEY VIBRATION PROBLEMS

Probable causes

Retaining bolt incorrectly tightened

The crankshaft pulley retaining bolt must be tightened correctly in four steps: **100 Nm + 60° + 60° + 30°**.

A retaining bolt incorrectly tightened allows the pulley to vibrate, and may even become noisy in some instances.



Spalling traces on the front contact face of the pulley are an indication of an incorrectly tightened retaining bolt.



Bolt deformation

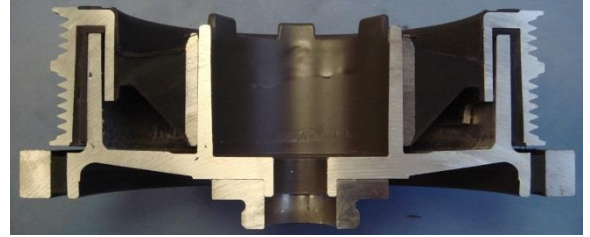
The dimensions of a new retaining bolt are **M18 x 1.5** with a maximum length of **85.5 mm**. It is essential to use a washer with this bolt.

During torque angle tightening, the bolt will become deformed and stretched. It is therefore recommended that a new retaining bolt is used when either a new or old pulley is fitted. Failure to do so can result in the pulley not being tightened correctly, allowing it to spin on the crank.

Composition

This crankshaft pulley is comprised of an outer aluminium pulley attached to an inner hub with an elastomeric (rubber) element sandwiched between them.

Sometimes a small amount of grease leakage can be seen from the rear plate of the pulley. This does not effect the correct operation of the pulley.



This pulley is made of aluminium, this means that it is very fragile, impact damage may cause the pulley to become unsuitable for use.

REPLACEMENT OF THE DAMPER PULLEY

Safety precautions

- Always use a new bolt.
- Never rotate the crankshaft without the accessory belt.

Special tools

- Torque wrench and torque-angle spanner
- HAZET tool set: (pulley extractor)
Ref.1789N-1 for pulley removal



REMOVAL

- 1) Remove the accessory belt
- 2) Remove the old crankshaft pulley
Use a HAZET extractor.
- 3) Clean any debris and dirt from around the crankshaft area

RE-INSTALLATION

- 4) Reinstall the new crankshaft pulley on to the crank
- 5) Tighten the new retaining bolt to the recommended torques (making sure the a washer is in place)
- 6) Replace and tension the accessory belt

Remember to always use a new bolt



Precise tightening of the retaining bolt is absolutely essential: the correct tools must always be used.

Recommendations

Follow the vehicle manufacturer's installation procedures and apply the specified tightening torques.

Refer to the vehicle applications in our online catalogue: eshop.ntn-snr.com



Scan this QR code to access our online catalogue.

**FOLLOW THE RECOMMENDATIONS
OF THE VEHICLE MANUFACTURER!**

©NTN-SNR ROULEMENTS

The contents of this document are the copyright of the publisher and any reproduction, even partial, is prohibited without permission. Despite the care taken in preparing this document, NTN-SNR Roulements disclaims any liability for errors or omissions that may slip through, as well as for losses or direct or indirect damage arising from its use.

