



# VKM 22380 / VKM 22385

Technical Bulletin - April 2009



CITROËN, PEUGEOT, FIAT, RENAULT, OPEL/VAUXHALL



SOFIM Engine: Mounting recommendations



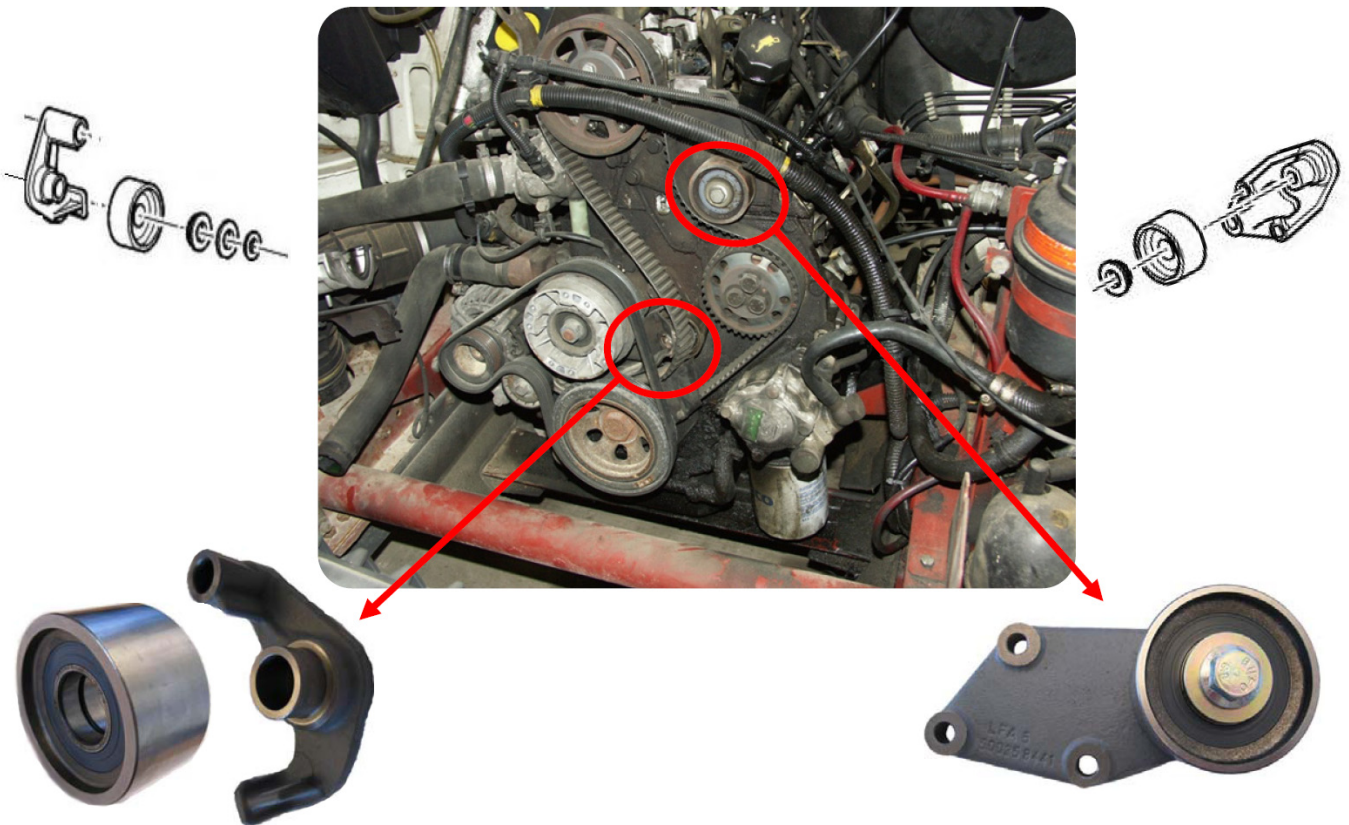
How to avoid incorrect torque and failures during installation

CAR MAKER	MODEL	SOFIM ENGINE	VKM 22380 included in kits	VKM 22385 included in kits
CITROËN	Jumper/Relay	2.8 HDI	VKMA 02381	VKMA 02381
PEUGEOT	Boxer	2.8 HDI	VKMA 02383	VKMA 02382
FIAT	Ducato	2.5 D, 2.5 TD, 2.8 JTD	VKMA 02983	VKMA 02383
RENAULT	Master, Trafic	2.5 D, 2.5 TD, 2.8 DTI		VKMA 02384
OPEL/VAUXHALL	Arena, Movano	2.5 D		VKMA 02386
				VKMA 02983
				VKMA 02984
				VKMA 02986



VKM 22380

VKM 22385



Whilst mounting the bearings:



- Always make sure the back plate is clean and free of dust and debris, as this could misalign the bearing or even result in the incorrect torque being achieved during the installation, resulting in irreparable damage to the bearing.
- Install the unit by pushing on the inner ring of the bearing using light pressure – do not force the bearing onto the mount!



# How to avoid failures?

- Always apply the tightening torques as recommended by the OE vehicle manufacturer - this determines the preload of the bearing!

- Always clean and set up the bearing correctly.

## Risks:

- Excessive force on the bearings could result in misalignment during installation, eventually resulting in the bearing collapsing.
- A wrongly positioned bearing or installation on a dirty axle could also lead to premature failure.

- Apply the right belt tension.

## Risks:

- Incorrect belt tension can affect the performance of the bearings on the engine. If there is too little tension, there is a risk of the belt jumping. Too much tension could lead to premature bearing failure and ultimately the failure of the timing belt itself. Either scenario offers a high risk of valve-to-piston damage in the engine.

- Bad tightening torque.

## Risks:

- The engine vibrations and the belt load will lead to the complete unscrewing of the bolts/nuts. This will end up in the disassembling of the inner ring and therefore the bearing failure.
- In this case, the seal has come out of the bearing and the ball cage with the balls have been ejected.

