

## **SMOOTH DRIVE OPERATION**

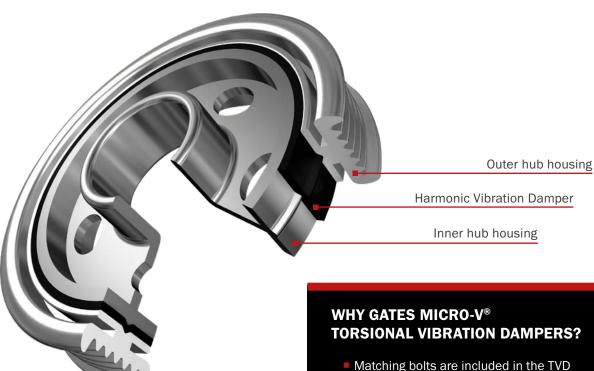
Practically all car manufacturers use torsional vibration dampers (TVDs) in their combustion engines, to counter mainly resonance vibrations from the crankshaft, where the more sophisticated versions will also counter the torsional vibrations. These vibrations are caused by power impulses of the engine, each time a cylinder fires, and can result in increased wear of the components driven by the crankshaft or even crankshaft breakage. The TVD is designed to reduce this twisting motion, therefore increasing engine component life and minimising crankshaft failure. When it's time to change the dampening device, rely on Gates Micro-V® torsional vibration dampers to ensure a problem-free operation of the accessory belt drive system.





## EVERYTHING YOU NEED TO DO THE JOB RIGHT. NO MORE, NO LESS.

Gates offers a wide range of Micro-V $^{\otimes}$  torsional vibration dampers including **all bolts in the packaging that have to be replaced**. As a complete system supplier, Gates offers Micro-V $^{\otimes}$  kits containing all components necessary for a complete overhaul of the system – also kits with matching torsional vibration dampers.



## **BENEFITS**

- Prevents failure of the crankshaft by fatigue
- Decreases wear and tear on the belt, tensioner and other components in the driven assembly
- Improves noise, vibration and harshness (NVH) characteristics, and therefore increases the comfort of vehicle drivers and their passengers

- Matching bolts are included in the TVD box only when they have to be replaced, resulting in less wastage and more clarity
- OE quality that fits the application perfectly
- Coverage on all major models in the market
- Easy to find in our online parts catalogue on Gatesautocat.com or the Gates Automotive Catalogue App
- Expert technical advice on removal and installation on Gatestechzone.com