

# TECHNICAL BULLETIN

**TB NO. 1017**  
**REV. 1**

**Subject: Torsional Vibration Dampners  
Superior Engines  
(6) Cylinder Inline Engines  
(12) & (16) Cylinder Vee Engines**

Torsional Vibration Dampners are normally installed on all (6) Cylinder Inline and (12) & (16) Cylinder Vee Engines to dampen the torsional response and reduce the torsional stresses in the crankshaft. Torsional Vibration Dampners also contribute to extending the life of engine auxiliary drive systems such as camshaft drive chains and oil and water pumps.

The Vibration Dampner, located on the drive end of the crankshaft behind the front end cover, consists of a sealed outer case with a bearing and a free floating flywheel inside along with a viscous silicone fluid that transmits the energy from the outside case to the flywheel. The dampners are active devices with moving parts that retain very close tolerances for proper functioning.

The life of the Vibration Dampner is dependent upon the individual engine operating circumstances as well as the engine application. Over a period of time under normal operating temperatures, the silicone fluid goes through a change of state and turns to a granular powder. When this occurs the dampening effect is lost and component damage can be expected such as chain breakage, gear wear or breakage, bearing wear which could cause a broken crankshaft.

Since test equipment is not available to field test Vibration Dampners, it is recommended that Torsional Vibration Dampners be replaced after 35,000 to 40,000 operating hours. Because front end disassembly is required to replace the dampner, we recommend that this be accomplished while down for a normal scheduled overhaul.

Even though some vendors claim that a rebuilt Vibration Dampner will perform as good as a new one, **EnDyn's** field experience with these products leads us to recommend purchasing new.

For further information concerning Vibration Dampners in Superior engines, please contact **EnDyn's** Technical Service Department or your local authorized **PowerParts**® Distributor.

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