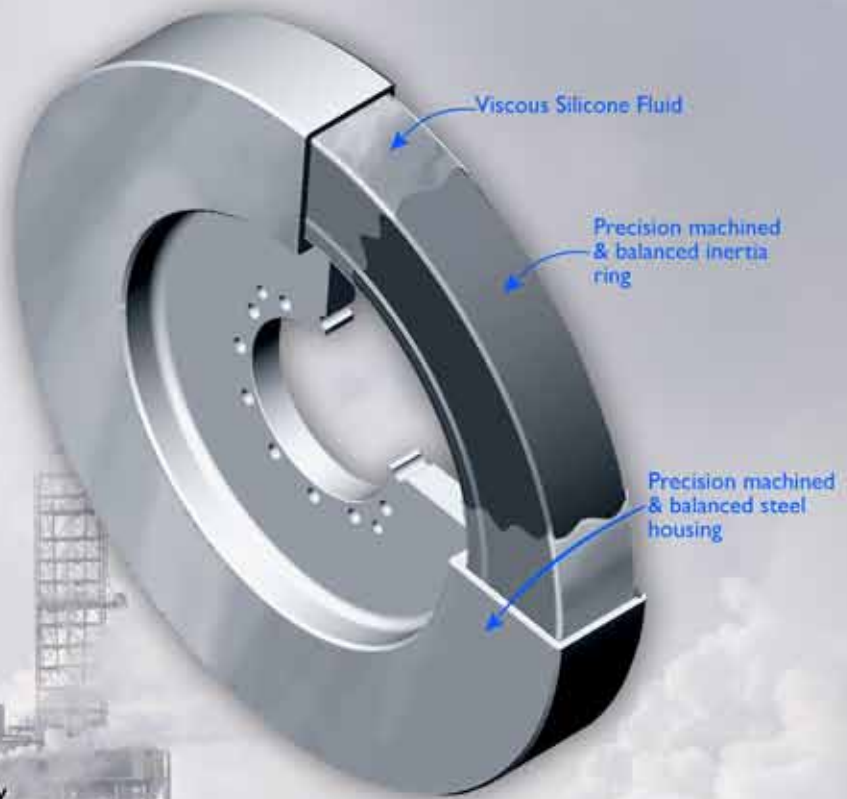


Heavy Duty Diesel Dampers Do Wear Out

- ◆ Routine replacement of the harmonic damper helps ensure reduced downtime and extends engine lifecycle. Vibrattech TVD recommends crankshaft damper replacement every **15,000 hours**.
- ◆ Silicone in a new viscous damper is clear & approximately 45,000x thicker than 30w motor oil.
- ◆ This allows the damper to tune to crankshaft torsional vibration in real time.
- ◆ Normal operating conditions will cause silicone to gradually harden over an extended time. As this occurs, the damper's ability to tune in real time is diminished.
- ◆ If not replaced at the recommended interval, eventually the silicone will polymerize into a solid paste and lock the internal inertia ring.
- ◆ Once this occurs, it will lead to catastrophic engine failure and costly downtime.



Regardless of Hours, Replace Damper If:

- ◆ Any signs of abuse or dents to the outer housing. Never use a hammer to install or remove a viscous damper.
- ◆ Any leaks around housing weld. Silicone is a very thick, tacky substance.
- ◆ Bulging of housing cover.
- ◆ Rebuilding an engine without replacing the damper may end up costing more than twice as much in associated repairs, plus downtime.
- ◆ There are any vibrations in the engine.
- ◆ **Always use a new genuine Vibrattech TVD replacement damper.**



Worn-out viscous damper showing dried silicone flakes. Silicone should be clean and fluid.

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Signs Of Viscous Damper Wear

- Excessive bearing wear
- Broken camshaft(s)
- Broken crankshaft
- Accessory drive gear wear
- Broken accessory brackets
- Loosening or broken bolts
- Throwing or slapping of belts
- Loss of torque & horsepower
- Loss of Fuel Economy
- Damper housing damage



For more information, please contact us at
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or go online: www.vibrattech.tvd.com

Example of silicone polymerization

This damper came from an engine that had been rebuilt but the damper was not replaced. The end result was a broken crank (picture top right). The deteriorated condition of this damper was clearly a major factor in the failure of the crankshaft.

Shiny area shows bare steel without silicone

Thickened silicone



Picture shows a damper with silicone that is still clear and fluid.



Broken snout of crankshaft



Worn guide bearings