

# VIBRATION CONTROL

## WHY CHOOSE OUR CRANKSHAFT PULLEYS?



### HARMONIC



### DE-COUPLED



#### MOUNTING BOLTS

Commonly stretch bolts or torque to Yield (TTY) bolts that must be replaced whenever the pulley is removed, failure to replace the bolts can reduce the security of the pulley against the mounting face and cause premature failure of the pulley and other ancillary components.



#### MOUNTING AND BEARING SURFACE

Machined under strict tolerances to ensure a smooth surface is produced and control any concentricity which could lead to excessive noise, vibration and increased belt wear.



#### HARMONIC BALANCERS

A Press fit or injected Rubber ring to absorb vibration from the crankshaft



#### OUTER HARMONIC RING

This acts as a counter weight to the pulley which also incorporates the Drive belt ribs. The number of ribs is dependent on the load requirements from the belt. The greater the load, the more ribs are required to handle the load.

#### OUTER PULLEY/DRIVE BELT RIBS

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- Material can be made from press formed and machined steel or cast and machined aluminium.

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#### TEFLON BEARING

Made from a self-lubricating metal that provides smooth movement to the pulleys outer diameter when under load. Made under strict tolerance to ensure a smooth surface, if out of tolerance can wear out the rubber spring, leading to premature failure.

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#### THRUST RING

To control the axial movement of the pulley during moments of acceleration and deceleration.

#### CENTRE HUB

Is directly or indirectly connected to the crankshaft of the engine, this static element acts as an anchor point for the TVD to operate from.

#### RUBBER SPRING

- Commonly found on decoupled pulleys, the rubber spring acts as a damper to absorb torsional energy from the crankshaft, as well as functioning as a spring to control the pulleys load during acceleration and deceleration.
- Natural, polymer and AMC mix's used based on the OE specification
- Endurance tested to exceed the life span of the OE equivalent.

#### ROTATIONAL LIMITER BOLTS AND COVERS

- The purpose of these bolts is to control the movement of the outer pulley when under load.
- The cover is there to stop any contamination that may prevent the movement of the pulley, these must be left on during installation.

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