

# Pulley Maintenance and Repair

A pulley's job is to maintain proper tension and alignment on the drive belt at all times, making it prone to wearing out.

There are two basic pulley types – the idler pulley and the tensioner pulley – but their role and design are similar. A tensioner pulley uses a spring loaded arm or a hydraulic actuator to apply the proper pressure and help keep the belt tensioned and aligned. On a drive belt system, the tensioner pulley is spring loaded to maintain proper tension and alignment of the serpentine belt. The idler pulley is bolted on the engine and serves as a guide to wrap the belt in the correct direction.

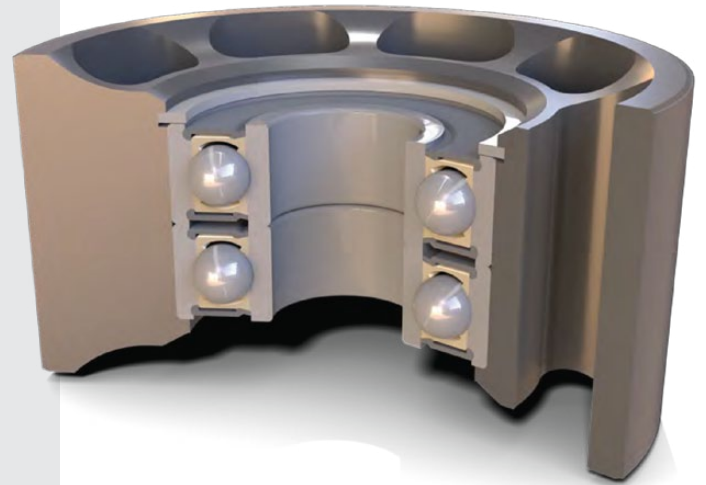
Pulleys consist of a bearing and cylindrical pulley shell, and spin freely when turned. The real key to pulley quality is in the sealed bearings they contain. Heavy duty OEMs specify high-quality bearings as the pulley has an expected life of at least 100,000 miles. These bearings are tuned to work with the specific pulley shells they are paired with. Some pulleys will have dual bearings to carry a heavier load.

## Top Three Pulley Repair Tips

1. Never replace a dual bearing pulley with a single bearing pulley.
2. Never attempt to replace only the bearing inside the pulley.
3. Always replace a pulley when a timing or serpentine belt are changed.

## Dayco Pulleys Designed to Match OE

Dayco's idler and tensioner pulleys come in different materials – from stamped and forged steel to plastic and powdered metal. Ultimately each one is designed based on the OE recommendations. Dayco includes premium pre-lubricated bearings and high temperature seals to ensure peak performance, which is the most critical element of a pulley's service life.



## 8 Signs a Pulley Needs Replacement

1. Excessive free rock
2. Misalignment
3. Cracked or broken
4. Spins freely
5. Seized or locked bearing
6. Discoloration of the pulley
7. Pulley surface buildup
8. Excessive surface wear