Clutch Pulleys

Overrunning Alternator Pulley (OAP)
Overrunning Alternator Decoupler (OAD)

✓ 2 Year Warranty
✓ Robust patented design
✓ Meet/exceeds O.E.M specifications

Product line coverage
200+ part numbers

Features

✓ Validated using OEM test specifications
  ✓ Durability test at high temperature & high speed (1000 Hours)
  ✓ Endurance reliability test (160,000 cycles)
  ✓ Durability test at variable speed and variable frequency
✓ Zinc-Nickel plated for superior corrosion resistance
✓ Plastic protective cap to prevent water and dirt/dust intrusion

- Grooved inner ring
- Seals
- Radial support bearing
- Outer ring with molded race

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The Power of WAI
Functionality and Benefits

The **Overrunning Alternator Pulley (OAP)** has a one-way clutch inside the pulley allowing the alternator’s rotor to coast to a stop position when the engine is shut down. This “overrunning” feature eliminates “chirp” sounds that happen when the engine decelerates quickly, causing the belt to slip at the alternator pulley (engine shut down or transmission shifting). Other benefits are:

- **Belt**
  - Reduction of belt vibrations / force level
  - Avoid slippage at deceleration (gear shift 1-2)

- **Tensioning system**
  - Reduced forces and displacement

- **Alternator**
  - Reduced load on alternator bearings
  - Rotor is uncoupled

- **System**
  - Extended system life
  - Improved noise reduction and vibration dampening

The **Overrunning Alternator Decoupler (OAD)** has an internal one-way clutch that incorporates a torsion spring designed to absorb the base engine vibrations before reaching the alternator’s rotor. With the installation of an OAD, you will notice less tensioner motion, reduced NVH (noise, vibration and harshness) plus an all around robust accessory drive. This will allow the use of a narrower belt with lower output tensioner that will result in longer life of the alternator, water pump and other accessories’ bearings. Other benefits are:

- **Belt**
  - Stabilization of belt vibrations
  - Reduced force level on the belt

- **Tensioning system**
  - Reduced tensioning force and travel on tensioner
  - Increased service life on belt and tensioner system

- **Alternator**
  - Reduced load on alternator bearings
  - Rotor is uncoupled

- **System**
  - Extended system life
  - Improved noise reduction and vibration dampening
  - Reduced idle speed to improve fuel economy