

Service-Info

Lean Belt Drives with Overrunning Alternator Decoupler (OAD) Technology

The increased focus on fuel efficiency and green technology in recent years has led to the development of "Lean Belt Drive Systems". This term refers to belt drive systems that have been optimized by the Original Equipment Manufacturers (OEM) for fuel economy and cost.

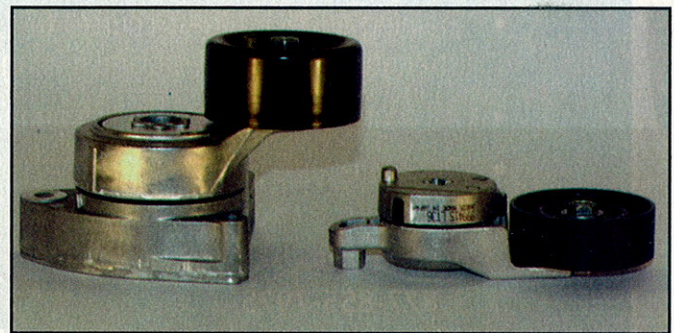
An overrunning alternator decoupler (OAD) that has been designed into a belt system by an OEM allows for the use of smaller tensioners, narrower belts and pulleys, lower idle rpm, and extremely low belt tension. All of these fuel economy and cost reduction strategies can be achieved without any adverse effects for the vehicle owner. Quiet operation throughout the entire rpm range, as well as much smoother vibration control at or below idle enhance the customer's driving experience. Reduction in component cost and increased fuel economy also satisfy OEM requirements. The vehicle achieves improved system durability, which lowers the warranty costs for the OEMs and reduces operating costs for the owner.

Reducing belt drive system tension to extremely low levels, results in much less hub load on all of the bearings within the system. The water pump, power steering pump, tensioner pulley, routing idlers, and of course the alternator bearings all last much longer, and because they are under less tension, they require less energy to operate. Lowering the tension without the use of an OAD could result in a myriad of problems, including excessive belt flutter, worn or broken tensioners, excessive belt wear, belt ejection, unwanted noise from belt slippage, and vibrations that can be heard and felt by the driver.

Using the correct OE replacement pulley technology is critical. Many companies try to interchange their part numbers to Litens or INA, claiming they perform as well as the original OAP or OAD. Although these less expensive

alternatives may "fit" onto the alternator they will never "function" the same. INA OAP's and Litens OAD's are designed and manufactured in conjunction with Original Equipment Manufacturers to provide precise overrun and isolation characteristics for specific vehicle applications.

No substitute product can provide the level of engineering precision necessary for the belt drive system to achieve peak performance.



Pictured on the left is a large automatic belt tensioner (7-rib belt) required on an older 4cyl Honda without an OAD. The tensioner on the right is a smaller automatic belt tensioner (4-rib belt) used on a newer 4cyl Toyota in conjunction with a Litens OAD.

Litens Aftermarket Network

5650 Blazer Parkway
Dublin, OH 43017
Phone 614 734 8385
www.Tendeco.com
www.Decouplerpulley.com



Schaeffler Group USA Inc.

5370 Wegman Drive
Valley City, OH 44280
Phone 800 274 5001
Fax 330 273 3522
www.Schaeffler-Aftermarket.us

