When To Replace Belt Tensioners

Serpentine drive systems utilize a long belt which "snakes around most, if not all, of the accessory pulleys. A spring allows for an increase in torque to be transmitted to the belt when needed. In a conventional V-Belt system, this torque is limited to static tension due to the belt adjustments having locked centers.

If, when installed, the belt was tensioned insufficiently, or if the belt has stretched or worn through use, it will slip when placed under a load resulting in poor accessory performance and premature belt failure. If the belt was over tensioned when installed, there is risk of premature accessory bearing failure.

A spring-loaded automatic tensioner compensates for the belt's stretch and wear by maintaining a constant tension on the belt throughout the life of the belt

Replace Tensioners When:



Tensioner Makes Noise



Belt is Tracking Improperly



Tension loss is evidenced by belt squeal or an accessory that has stopped working completely.

Loss of Tension



When removing or replacing the belt, check the tensioner torque by applying torque to move the tensioner arm from stop to stop. The arm should move smoothly and without hesitant movement.

Sticking or Notchy Movement Listen closely to the tensioner when the engine is running. When the engine is shut off and the belt is removed ...check the pulley for free rotation. If you hear a noise of feel resistance to turning this could be the sound of impending bearing failure.

If the belt is tracking off center, at or off the edge of the pulley, or if the belt flips off the tensioner, this is a sign of bushing wear resulting in tensioner misalignment.



If there is any metal contact between arm and spring case, this is a sign of spring bushing or pivot bushing wear.

Metal To Metal Contact



When removing or replacing the belt, check the tensioner "stops" located on both the tensioner arm and on the spring case to see if they are broken.

Busted Tensioner "Stops"

This documentation was provided by **Dayco Products**.