SERPENTINE SYSTEM DIAGNOSTICS STARTS...

WORN BELT?
INSPECT THE TENSIONER FIRST.
TENSIONERS: THE EARLY WARNING SYSTEM FOR THE SERPENTINE BELT DRIVE SYSTEM

Many of the symptoms that indicate a problem with the serpentine belt drive system — squeal, vibration, excessive belt wear, and illumination of the “check engine” light — can be traced to a worn or failed tensioner. That’s why the tensioner is the best place to start when diagnosing trouble.

Although the TENSIONER appears to be a hard part, it is actually a wear part. Several internal components are subject to rates of wear similar to that of the serpentine belt itself.

The DAMPING MECHANISM is made of tough thermoplastic material. Its function is to dampen tensional vibration created as each cylinder fires or when an accessory cycles on and off. Failure of this component will lead to excessive vibration and increased shock and wear to bearings and other system components – which are often much more expensive to replace.

The PIVOT BUSHING, which provides smooth pivot action and ensures proper alignment with the belt, is also made of a durable thermoplastic, but it endures millions of pivot cycles over the typical life of the belt. When this wears out, pulley alignment is lost. If it fails, adjacent metal surfaces will eventually fail as well.

When replacing a tensioner, choose Gates DriveAlign® Tensioners. Gates patented technology makes them the best in the business.

IT’S TIME TO THINK 160/R90

WHEN TO INSPECT

• Start inspecting serpentine systems at 60,000 miles, or at the manufacturer’s recommended interval.
• Use a Gates belt wear gauge for a quick and reliable pass/fail inspection.

WHEN TO REPLACE

• Re-inspect and replace worn parts at 90,000 miles.
• Recommend the correct repair to ensure optimal performance.
• All the components in a system – belts, tensioners & pulleys wear at the same rate.
• Replacing them together is a smart long-term investment.
It’s important to use a systems approach when you diagnose and service the serpentine belt drive. Wear rates or failure of each component affects the others.

Belts and tensioners are designed to have the same life cycle. When a high mileage belt is replaced, the tensioner has likely met its life cycle as well. Replacing the tensioner is critical to avoid potential comebacks.

Install Century Series Serpentine Belts by Gates—
the world’s #1 OE belt manufacturer.

- Matched OE size, materials and construction
- Adaptation to OE specifications
- Quietest and best performing belts available
- Reduces noise, vibration and premature failure

TODAY’S BELTS DO NOT SHOW VISIBLE SIGNS OF WEAR. THE BELT WEAR GAUGE WILL HELP YOU ACCURATELY CHECK FOR BELT WEAR. GET YOURS FREE FROM YOUR GATES SALES REP. »
Ensures trouble-free alternator charging. Worn alternator decoupler pulleys are a common cause of charging problems.

Powers many accessories and is critical to their performance. Belts with as little as 5% wear can affect both accessory and overall vehicle performance.

Worn pulleys can cause premature belt wear and reduced accessory performance.

When it’s time for replacement, talk to your local Gates Sales Representative to get the widest coverage of premium OE quality parts available.