

PowerGrip® timing belt tensioners

For high damping and optimised tension capabilities



As a result of our design and engineering capabilities and our reputation for innovation and development, we have become known as the Automotive Belt Drive System Specialist. For example, not only are we the world's largest belt manufacturer, delivering products both to OEMs and to the aftermarket, but we're also one of the largest suppliers for automatic OE belt tensioners in Europe. We offer a line of tensioners and idlers for timing belt drive systems to the aftermarket.

Tensioners, like any other part, don't last forever, and automotive technicians will be replacing more and more of them. A failed tensioner can cause the belt to break or jump teeth, resulting in a breakdown. Often the cause is misdiagnosed as a belt problem, when in reality the tensioner should be replaced. Now there's a solution for this: Gates – the name you trust – will provide you with high-quality OE equivalent tensioners. They come with all the convenience and ease of doing business that you're used to with Gates.





Thanks to their high strength and low weight, combined with long life, low noise and fuel consumption advantages, Gates timing belts are used extensively for driving the camshafts of modern automotive engines. This is a demanding task, requiring correct tensioning to ensure that belt performance is maintained at the optimum level. Tension is provided by a tensioner, which is either fixed or automatic. With a fixed tensioner, the installer needs to make sure it is installed correctly in order to provide the correct tension. Automatic tensioners, on the other hand, adjust themselves in order to maintain constant tension.

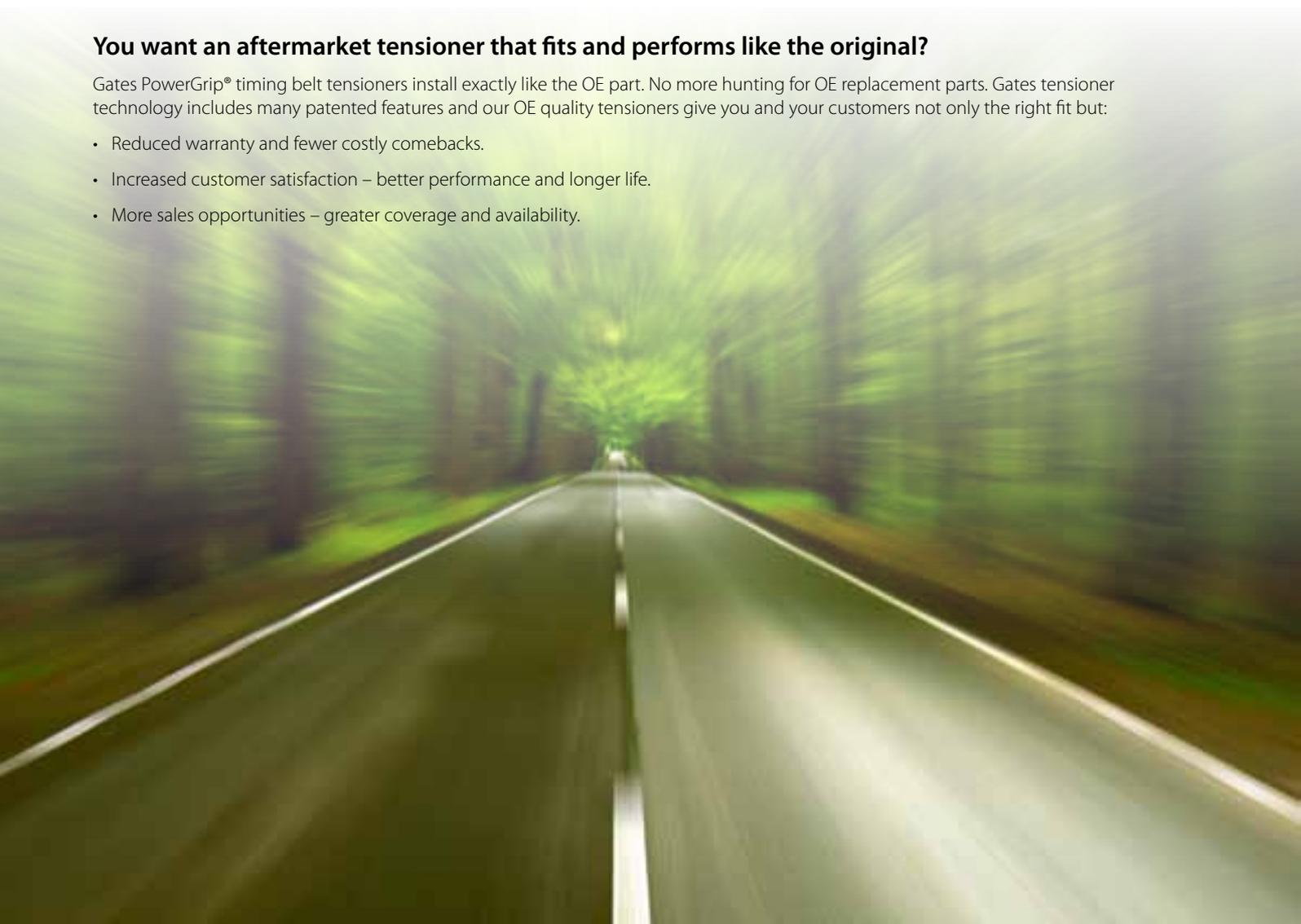
Automatic tensioners are designed into the belt drive system for several reasons:

- Proper tension is maintained throughout the belt life.
- They increase belt life because the belt is maintained at an ideal tension under all conditions.
- They eliminate the need for a relatively difficult tensioning operation during installation, so the belt is always installed at the right tension – and stays there!

You want an aftermarket tensioner that fits and performs like the original?

Gates PowerGrip® timing belt tensioners install exactly like the OE part. No more hunting for OE replacement parts. Gates tensioner technology includes many patented features and our OE quality tensioners give you and your customers not only the right fit but:

- Reduced warranty and fewer costly comebacks.
- Increased customer satisfaction – better performance and longer life.
- More sales opportunities – greater coverage and availability.





Tensioner types and designs

Depending on the application, Gates provides you with the exact tensioner you need:

- **Locked centre tensioners:** tensioners with or without a spring, which can only be adjusted manually.
- **Automatic tensioners:** automatically adjust the tension of the timing belt. This type of tensioner can be mechanical or hydraulic. Hydraulic tensioners provide damping by using the flow resistance of hydraulic oil; mechanical automatic tensioners on the other hand, use carefully controlled friction between the tensioner components to provide damping. As the demand for engines with high power, high performance and high reliability continues to increase, automatic tensioners are generally expected to be used more often and – eventually – even to replace their fixed counterparts.

OE fit, not retrofit

Gates PowerGrip® timing belt tensioners offer precise OE fit for most applications. That means no time-consuming installation – and no confusing instruction manuals. Gates tensioners bolt on just like the original tensioner. With Gates PowerGrip® tensioners, you'll get performance that is equal to or better than the original. In fact, Gates engineers analyse the failure modes of OE designs and make any necessary adjustments to improve performance.

Durable design

Made of steel, high-pressure die-castings and thermoplastic, Gates PowerGrip® tensioners provide excellent wear resistance, heat dissipation and damping. They resist dust, grit, salt, and other contaminants that reduce life. The extra long life bearings are designed to operate under high temperatures and exhibit less wobble, thereby extending belt service life.

- Made of premium materials for longer life.
- Designed to operate under severe conditions and provide greater reliability.
- Built with premium bearings and seals that can operate at higher temperatures.





Vibration and noise resistance

The presence of a damping mechanism is a great advantage to the life of a tensioner and the proper function of the drive as a whole. OEM tensioners have damping mechanisms as do Gates PowerGrip® tensioners, which have a damping mechanism made of highly engineered components, whether they are mechanical or hydraulic. Essentially, a damper acts just like a shock absorber does on a vehicle suspension system, reducing tensioner motion and minimizing vibration and noise. Without it, there is inadequate vibration absorption for the drive and there would be a tendency for the tensioner to vibrate and the belt to “flap”, creating noise and risking damage to belt, tensioner and the engine itself. Dampers extend the life of the belt, the tensioner and the other drive components.



With advantages like these, there's no reason why you shouldn't order a premium Gates PowerGrip® tensioner from your local parts dealer. It's the OE equivalent tensioner that fits and performs like the original, but comes with aftermarket convenience. Choosing the right tensioners is easy when you choose Gates.

www.gates.com/europe

Your distributor:

