



Fleet and Heavy Duty TECHTIPS



Selecting the best belt tensioner

Why Should The Tensioner Spring Be Contamination-Free?

The tensioner spring's worst enemy is contamination from dust, dirt, grime, petroleum products, water or any other matter that could adhere to the surface of the spring and reduce its movement.

Flat spring tensioners and round spring tensioners use different methods to seal out contaminants.

Rubber plugs: Flat spring designs use a rubber plug that is inserted into the opening where the spring-end protrudes through the spring housing. However, rubber plugs can dry up, crack or fall out, and eventually allow contaminants to enter the spring area and adhere to the coils

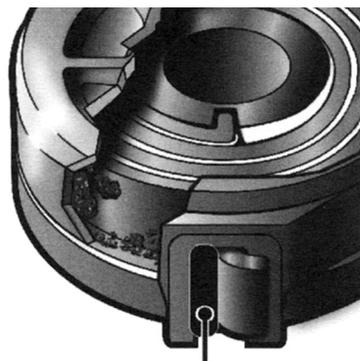
For a "safety" measure, flat spring designs use a layer of PTFE tape as a lubricant. This worsens the problem because contaminants become

lodged between the coils, adhere to the tape and cause the tensioner to seize. Dirt and dust will also cause noise problems and increase heat build up.

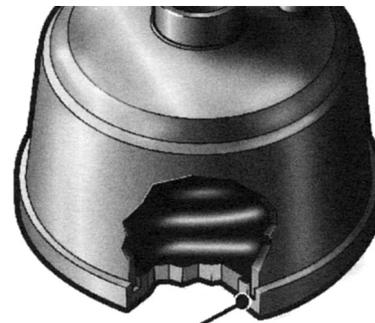
Labyrinth seal: The labyrinth seal system found in round spring designs minimizes contamination to the internal components of the tensioner.

This system consists of a series of tight-fitting interlocking channels between the spring housing and the base of the tensioner arm.

The solid-sealing aluminum design does not break down over time and offers a distinct advantage over flat spring tensioners.



Flat Spring Design - Rubber Plug



Round Spring Design - Labyrinth Seal



www.gatesaustralia.com.au/transportation