



BELT DRIVE DISPLAY

MOVE FORWARD. ALWAYS.™



Part No: 99113

Inspect and Replace

Ignoring Maintenance has its Price

A worn belt drive system can jeopardize a vehicle's performance and heighten the risk of engine failure. Avoid costly breakdowns - belt inspection should begin at 100 000 km and all worn belts and belt-related components should be replaced by 150 000 km to ensure safe and reliable service.

Timing Belt Maintenance is Critical

The life of a newly replaced timing belt can be reduced as much as 50% if worn components are not changed at the same time.

Broken timing belts on an interference engine can cause severe engine damage and 70% of vehicles equipped with a timing belt are designed with an interference engine.

SERPENTINE DRIVE



EPDM belts wear differently than the earlier neoprene constructed belts. Belt wear can be difficult to detect because they tend to wear like a tire tread, i.e. there is a material loss from the rib surface.

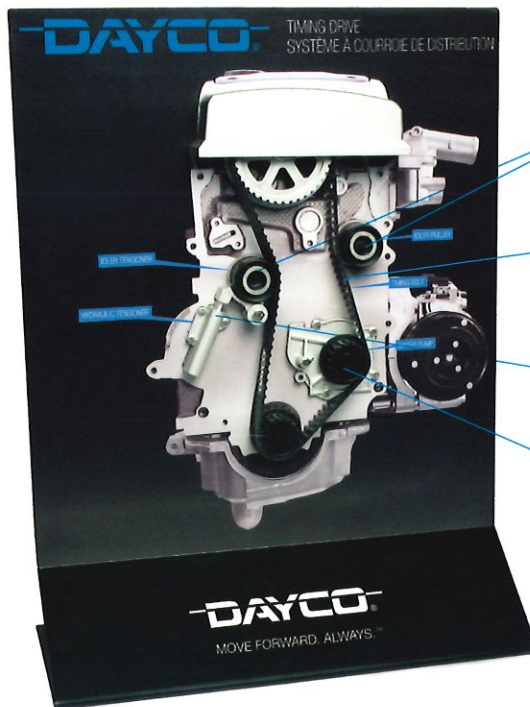
Once the rib profile is changed, there is less material (and therefore less surface area) coming into contact with the pulleys. This material loss can cause slippage that will affect the performance of the accessories and possibly result in an annoying, noisy belt.

All **serpentine belts** need to be closely inspected to identify any signs of wear. These belts are asked to perform in some of the most hostile environments because of high heat, contaminants and debris. Regular inspection of all drive belts, tensioners and accessories should be recommended once the vehicle passes 100 000 km.

If you are replacing a worn belt on a vehicle with over 150 000 km, there is a good chance that other components such as the **tensioner** and **idler pulleys** will also be worn. The life of a newly installed serpentine belt will be greatly reduced if a worn tensioner or even a worn pulley isn't replaced at the same time. Worn tensioners can cause belts to slip and therefore glaze, destroying a new belt. Worn tensioners can also cause belts to slip on the alternator causing a "check engine" light. A pulley with a worn bearing can cause misalignment, causing wear to the sidewall of the belt and belt noise.

Belts should also be considered when installing an alternator or water pump. Alternators and water pumps have nearly the same life expectancy as belts. To ensure long lasting maintenance free performance, do the job right and replace all worn components.

TIMING DRIVE



One of the most common causes of timing belt failures is worn **idler tensioners** or **idler pulleys**. Additional labor costs are minimal when changing a timing belt.

A **timing belt** is a wear item and must be replaced within the recommended Original Equipment replacement interval. When a timing belt breaks, severe engine damage can occur and your engine will no longer run.

Hydraulic timing belt tensioners help set or maintain constant tension on the system. Loss of timing belt tension may lead to major engine damage.

Water pumps driven by a timing belt should be replaced when changing the timing belt. Engine coolant from a worn leaking water pump can contaminate and destroy a new timing belt.