

TIMING BELTS



Ralph Seekins

I was recently asked by a young adult vehicle owner what a timing belt was. It seems he had been told at an oil-change center that, based on mileage on his car, he needed to get the timing belt changed. So, let's talk about timing belts.

A timing belt is a notched rubber belt used in an internal combustion engine to control the opening and closing of the intake and exhaust valves at precise intervals in relation to the piston movement. Almost all vehicles on the road today use four stroke engines. These engines have an intake stroke, a compression stroke, a power stroke and an exhaust stroke. To operate properly, the valves have to open and close at exactly the right time in relation to the piston movement. To do that, the crankshaft must revolve exactly twice for every one revolution of the camshaft. Then, the camshaft will push open the intake and exhaust valves in exactly the right time with the up and down movement of the pistons.

Modern vehicles have either "interference" or "non-interference

engines." Interference engines are commonly called motor wreckers. If a timing belt slips a notch or breaks, the valves will almost certainly be pushed into the tops of the pistons making for a very expensive repair. In non-interference engines, a belt skip or failure will probably leave you stranded but the pistons won't collide with the valves – resulting in a much less costly repair. The local dealer for your brand of vehicle can easily tell you whether your vehicle has an "interference" or "non-interference engine. If you have an "interference" engine, be smart and change the belt at the manufacturer's recommended intervals. You're likely to save a bundle doing so. If you have a "non-interference" engine, you risk being stranded if you ignore replacement intervals. But, the tow bill may be rather shocking. For example, I have a friend who had his car towed about 60 miles from up near Livngood because of a timing belt that skipped a couple notches – not a fun experience.

Generally, manufacturers recommend timing belt replacement somewhere in the area of every 50-70,000 miles. A quick check of your owner's manual will provide that interval. A belt can generally be replaced rather quickly at the same time you have the oil and filter changed. When you do replace a timing belt, I highly recommend you use an original manufacturer part. When you do, you know you're getting the right

high quality belt for your vehicle's engine. Frankly, and sadly, all belts that look the same are not the same and this is one area in which you don't want to be shortchanged.

It's also a good idea to have your vehicle's timing belt checked somewhere about half way between recommended change intervals. Your technician will check for looseness, cracking or other signs of wear as well as for any oil leaks that can damage the belt and thereby shorten its useful life.

I know that all the "check this, check that, replace this, replace that" and other recommendations we make seem almost endless. However, in almost every case, you'll find these recommendations in the owner's manual that came with your car or truck. And one thing I am absolutely convinced of is that truly professional service technicians are going to follow your manufacturer's recommendations when servicing and inspecting your car or truck and won't mind showing you how he or she serviced your vehicle according to those recommendations.

Until next time, safe driving. Remember that our roads are now at their most slippery conditions with daily thawing and nightly freezing.

Ralph Seekins has more than 40 years' experience in the automotive industry. He started as a mechanic, worked in sales, and for the past 32 years, has been the owner of Seekins Ford Lincoln Mercury.

Visit SEEKINS.COM to view "Ralph's Column Archive" ... useful information on many automotive topics!