Preferred Components Inc.

Some facts about timing belts

Notice: timing belt facts 08

Below are some facts the professionals already know. Knowledge helps any job go well. Here are important tips to know, and always follow the vehicle manufacturer's timing belt installation instructions specific to your vehicle's engine. This is good information to know.

1. *Timing belts should never be twisted, folded, crimped, handled rough, or jerked on. Any unusual handling can damage the internal cord to rubber bonding and shorten the life of any timing belt. If this happens, or may have happened, discard the belt and do not use it. Buy a new one.*

2. *If any chemicals (no matter how little) touch any part of the timing belt, do not bother wiping it off. Simply discard the timing belt and use a new one. Antifreeze, oil, grease, solvent, brake cleaners, carb cleaners, general cleaners, and other chemicals will attack the rubber and in short time cause failure of the cord to rubber bonding. Once this occurs, the timing belt will break from the damage caused by the chemical. A timing belt that has antifreeze on it has only about 10% of its life left before failure because of the damage antifreeze causes. There is no way to clean a chemical off of a timing belt.*

3. *Before the old timing belt is removed be sure you know if the engine is an interference engine or not. Be sure the camshafts and all other shafts are "locked" in position and that you do not move any shafts during the complete replacement process until done (unless instructed to do so). A camshaft will not stay in place by itself often. Many camshafts will move when the timing belt is taken off. Be very careful and be sure the shafts are all locked in place first. You need the right tools for this. Severe engine damage can occur from errors when shafts move at all into the wrong position. Inspect the old timing belt for proper wear. If problems are noted, make needed corrections.*

4. *Be sure the crankshaft is only rotated in operation direction before, during, and after installation. Never turn the shafts backwards. Turn it forward to reach the position desired. Do not backup. This ensures the rigid side is tight. If the rigid side is not tight, damage can occur when started. Also, the timing belt could be broken from excessive force loads if it is not tight.*

5. *During installation it is often tempting to use the wrong tools like pry bars, screw drivers, pipe wrenches, and more. Never use these things. Timing belts do not stretch. If the timing belt does not fit properly, look for other problems. Do not try and stretch a timing belt. The slightest pull from one of these tools causes internal damage to the belt's structure and destroys it. Just one soft little pry destroys any timing belt. In addition, it will cause a mark on the sprocket teeth. The sprocket teeth are very sensitive also. These should only be cleaned with a soft bristle paint brush or similar. Never wire brushes, steel wool, or like things. The finish on the teeth should be mirror like if you want long life from your installation. Also, any small nick in a sprocket's tooth means the sprocket needs to be replaced. Do not try and fix it. The damaged spot will wear a timing belt fast and cause early failure from damage.*

6. *The environment for a timing belt should be free from dirt and any chemical leaks or spills. It should remain clean at all times. If a water pump leak develops, change the timing belt also.*

7. *Many vehicle manufacturers recommend timing belt inspection at 30,000 or 40,000 miles. These inspections are set up for a new engine with new sprockets and bearings. We recommend timing belt inspection at 25,000 miles to be sure the sprockets are not being aggressive or any other problems exist. Any problems will be seen at 25,000 miles and it might save major damage. Don't skip this.*