

## Timing Belts

### What is a timing belt?

The timing belt plays a very important role when it comes to making your engine run. It controls the camshafts in your engine, causing the engine valves to open and close at the proper time, and keeps the entire operation running smoothly. The valves must open and close at exactly the right time in relationship to the piston movement in order for the engine to run properly.

### Why is changing the timing belt so expensive?

Changing the timing belt is a big job, taking a number of hours. The timing belt runs on the front of the engine, so we need to remove everything from the front of the engine in order to access it.

### What do Production Automotive do when changing the timing belt?

It is important to note that when we do a timing belt we do not only change the belt itself – we always use a complete timing belt kit. The kit contains not only the belt but also new oil seals and tensioner pulleys.

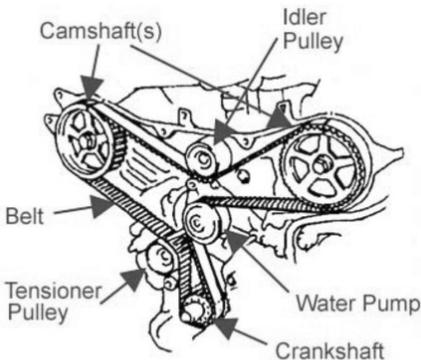
The oil seals are located behind the camshaft pulley and crankshaft pulley. It is important to replace oil seals because quite often they leak. The seals have been there for 100,000km, so it is unlikely that they will last another 100,000km. An old leaking seal may also cause damage to the new belt down the track. Our approach is that while the engine is apart, prevention is better than cure!

We also replace the tensioner pulleys. These are the bearings that help guide the belt and keep it to the right tension. If the bearing fails, it can damage the belt, causing major engine damage. Again, your tensioner pulleys have been working hard for 100,000km so it makes sense to also ensure they are replaced with the timing belt to prevent problems down the track.

Timing belt failure is somewhat easy to prevent, and although it may not be the cheapest or easiest operation in the world, it is definitely a better option than purchasing either a new car or a new engine!

### When do timing belts need to be replaced?

Timing belts have limited life spans. We recommend that timing belts should be changed every 100,000km, although some cars may have higher change points. A broken timing belt can cause major damage to your car's engine – the pistons may hit the valves, resulting in bent valves, broken pistons... and a dead engine. Changing your belt early is definitely a lot safer for your engine, and can save you a lot of money and a new car in the long run!



Typical V6 Timing Belt