

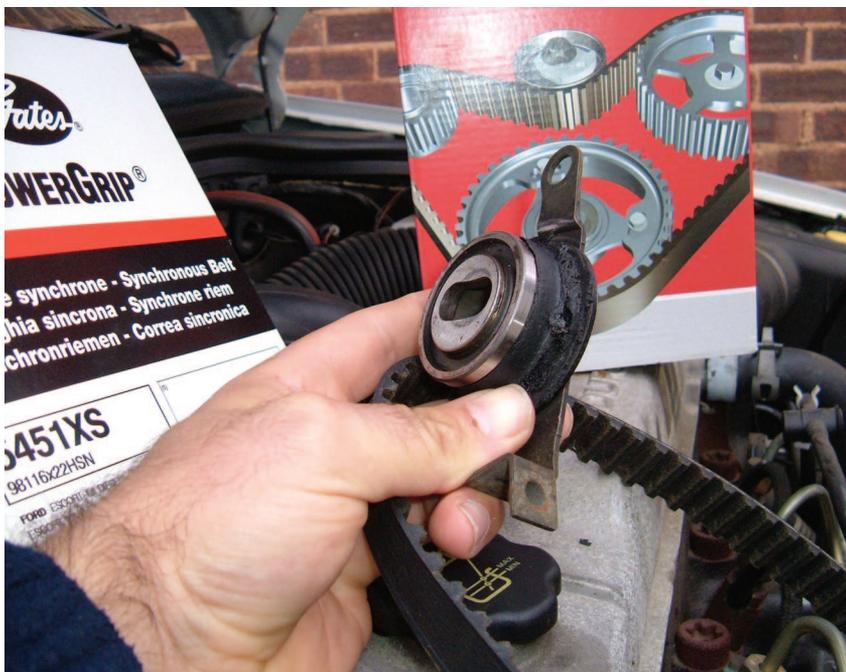


AN OPPORTU

An appointment made in an attempt to clarify the reasons for a timing belt failure could help provide other technicians with an early diagnosis for likely problems in the future, says Gates.

CASE STUDY I

Engine: Ford 1.8 Endura Diesel
Models: Escort, Mondeo and others



When a problem becomes a mystery, fate has a habit of making a timely intervention to help resolve it. That's just what happened recently when OE and aftermarket timing belt manufacturer Gates was called out by a motor factor in the North West of England. The aim of the visit was to try and clarify the reasons for the premature failure of a timing belt that had been fitted to a Ford Mondeo. The vehicle, which was equipped with a 1.8 'Endura' diesel engine, experienced problems following an apparently straightforward and trouble-free replacement procedure:

- 1) Having diagnosed a worn belt, the garage had established the need for a drive system overhaul.
- 2) A Gates OE equivalent replacement kit was installed as recommended at the end of the scheduled duty cycle. The kit comprises of two tensioners, a sprocket, a timing belt and an injection pump belt.

3) All parts were installed according to the manufacturer's recommended procedures.

And yet, less than seven months later, the belt had failed in extraordinary circumstances. The surface of the tensioner had suffered a complete and unexpected 'melt-down'.

BACKGROUND REPORT

The initial Gates report about the Ford Mondeo suggested that the failure of the belt and the effect on the tensioner was the result of an overheating problem. This was attributed to either excessive pressure from the belt, dirty or worn pulleys (creating poor running conditions) or, more likely, pulley seizure.

It was one of those situations where, although the expert opinion seemed plausible to the motor factor, the problem on the vehicle had since been rectified and there was no longer any visible evidence. That made a full and

satisfactory resolution difficult to accept.

A timely telephone call from a mobile mechanic proved to be fortuitous. It not only presented an opportunity to provide immediate technical assistance to a customer in trouble, but also provided the evidence to resolve the motor factor's concern with this particular case as well.

A SECOND CASE

The call came in from a customer who had installed the same part number to a Ford Escort 1.8, fitted with the same Endura engine. Not only had the timing belt failed prematurely, but the tensioner had melted too. It was the same MO.

However, although the components and the consequences appeared the same, the circumstances seemed very different. Whereas the timing belt on the Ford Mondeo had taken seven months to fail, the belt on the Ford Escort had been installed only the