

PRECISION



the increased stress on one side of the tensioner, the bond between the two halves was compromised and the rivets collapsed.

LEARNING POINTS

In the first case, a belt kit was not installed, the belt had frayed and the tensioner had collapsed. It was only because a belt kit had been installed in the second case, that the real problem, an alignment issue, was identified. Gates recommends the use of a belt kit at every change and urges garages to implement a formal inspection procedure as a safety first approach. It should be included as part of a complete drive system overhaul.

occasion, a timing belt kit had indeed been installed.

SECOND SIGHT

The technician had installed a complete timing belt kit, so all of the components were new. Once again, the tensioner had parted and the belt had broken. The belt had fouled the timing belt cover. As in the previous case, the belt had frayed on one side, before it had been completely destroyed. It was also clear that this wear had taken place on the side nearest to the timing belt cover.

Upon closer investigation, it was observed that within the overall layout of the drive system, the belt ran very close to the timing belt cover. The alignment must be precise. With this particular engine, any slight deviation of the belt can bring it into direct contact with the timing belt cover. Once the belt makes contact with the cover, it is drawn towards

the cover with potentially disastrous consequences for the engine.

As the belt frayed, 100% of the load eventually became concentrated on only 50% of the tensioner. With



need to know more?

- For more information on Gates timing belts and tensioning equipment circle readerlink 306