



# TIMING IT

## Gates explores some of the issues surrounding timing belt technology.

**T**iming belts are a relatively recent evolution as far as the modern engine is concerned. Although most of today's experienced automotive technicians have successfully adapted to what can sometimes be a complex installation procedure, the variations in drive layout or timing belt profiles that can exist between models in the same manufacturer's vehicle range clearly raises the potential for error.

Andrew Vaux is a District Sales Manager for Gates and runs many of the company's timing belt technology seminars. He explains that component upgrades and enhanced engine specifications are often the main reasons for the differences outlined previously. It could mean a new belt for any or all of a number of reasons:

"Many of the common rail diesel engines run at much higher levels of tension," he says. "We may be talking



about a change in belt construction, as well as change in the tooth profile — usually, all in a much tighter space. That is why it's vital that the most recent fitting data is consulted every time. You can never be sure when the procedure was last revised," he adds.

At a recent seminar in the Midlands, one technician confirmed how a concern with the belt supplied for a Renault 1.9 diesel engine proved

revealing in more ways than one:

"We realised that there wasn't just one type of belt for the model range; there were several, all of a similar length, with roughly the same width and different tooth profiles," he

said, thereby moving the discussion on to problems that can arise through the simple comparison of the old and new timing belt.

### COMPARISON OF BELTS

Stretching the old and new belts between the thumbs of each hand is no way to provide a healthy comparison of the belts. For a start, some replacement belts have been known to have a slightly different profile as a result of a change in the manufacturer's specifications. It is also possible to subject the new belt to a 'fold' that is tighter than the belt is designed to withstand. There are some basic handling rules that should always be followed when a new belt is delivered:

- Never fold it
- Never crimp it
- Never refit it

Crimping and folding can damage the tensile strength of the cords inside the belt. The third point must be observed no matter how brief the running time may have been.

