



HEALTH CHECK

Just as you would expect specialists, not GPs, to diagnose rare conditions, so you might turn to OEMs' diagnostic tools for your truck ills. Or should you? Steve Banner gives us a sanity check

Gone are the days when truck makers jealously guarded every scrap of technical data they possessed, refusing to release it to independent suppliers of diagnostics systems. European Union legislation has long since compelled them to be more forthcoming. Hence, for example, Texa's commercial vehicle diagnostics tool, with its IDC4 software, which now covers every model on the market, according to sales manager Dave Gordon.

"I'm not just talking about trucks either," enthuses Gordon. "It can help diagnose faults on vans, buses and coaches, too. And that includes faults on components sourced from third party suppliers, such as Cummins engines and Allison transmissions." Nor is the information it reveals solely relevant to vehicles that are four or five years old and probably no longer serviced by franchised dealers. "When it comes to new vehicles, we're usually only about six months behind the manufacturer's release of the diagnostics software to its own network," he insists. "We already have 95% coverage of DAF's Euro 6 line-up, for example."

In fact, Texa has forged close links with all of the vehicle manufacturers, and is an OE supplier to Mercedes-Benz and VDL, among others. "If our technical helpline specialists cannot solve a customer's problem, there is nothing to stop them ringing their opposite numbers at DAF, Volvo and so

on," he says. "There aren't the constraints on two-way communication that there used to be."

But it is not solely legislation that has produced this new mood of openness, especially where Euro 5 and Euro 6 engines are concerned. It has, in part, been driven by commercial reality. "During the recession, many franchised dealers saw their workshop throughputs fall, and realised they needed to take on all-makes work just to stay afloat," contends Gordon. And, like it or not, that meant universal diagnostics kits.

Piracy problems

Hence the flowering of universal diagnostic tools for trucks over the past two or three years, with the likes of Snap-On entering the market. Others include Actia Muller, launching a new version of Multi-Diag Trucks, and Delphi introducing its Truck Diagnostic Solution. Be warned, however: not all tools are what they appear to be, and the industry is rightly concerned about what it sees as a significant rise in hardware and software piracy.

This caring, sharing approach has its limits though, especially when it comes to obtaining the software to reprogramme and update ECUs. "The manufacturers make it available, but they charge handsomely for it if you're not one of their dealers," states Gordon. "You can be talking about around £650. Furthermore, if you are, say, an independent

"We're usually only about six months behind manufacturers' release of diagnostics software to their network"
Dave Gordon

No alternative to technician training

While diagnostics tools are extraordinarily capable, they are not a panacea. They may, for example, show that a key component has failed, but the technician then has to work out exactly why. And that is not always easy. "It may be because a wire has broken or there is a fault with a switch," comments MAN technical training manager Peter Jones. But which wire? And what switch?

"What something like our Tech Tool will not do is tell you to go straight to pin 27 in plug XYZ just 10 seconds after you've switched it on," observes John Conway, regional service manager at Volvo Trucks. "But it will guide the user through a step-by-step process to solve a problem, gradually eliminating those items that are not faulty and, in some cases, identifying the item that is."

In short, technicians must have sufficient training and experience to grasp what Tech Tool is telling them. And the same applies to all diagnostic equipment. "That's why making diagnostics software available to third parties, as the regulations oblige us to do, can create difficulties," argues Conway. "You need the training, too, and not everyone buys that."

Nor do manufacturer software and training courses come free of charge. Diagnostics software for a Euro 6 model could cost you more than £1,000, if you're not a dealer representing the manufacturer concerned. To justify that sort of expenditure you've got to be using it regularly.



workshop and your Internet connection goes down mid-way through the download, the whole process has to start again and that will be another £650."

What about the OEMs? Like its counterparts at other manufacturers, MAN's CATS II diagnostics tool also has restrictions. "It allows you to alter the setting of a speed limiter, for example – some operators like to have their trucks restricted to 52mph rather than 56mph – but only if you've received the necessary training and hold the right ID card for the tool to read," explains technical training manager Peter Jones. "This way, you leave a fingerprint."

That should be enough to prompt anybody tempted to alter the limit upwards, rather than

downwards, to think twice. And Volvo adopts a similar approach. "Every one of our technicians has a user ID and password, so we always know who has done what," says John Conway, regional service manager at Volvo Trucks.

Jones explains that other changes – such as remaps to alter the gear change points – can only be made if the appropriate conversion file is downloaded from MAN's server in Germany. "Furthermore, it will only be usable in relation to that particular chassis number," he says.

But that's less stringent than the limits on universal diagnostics tools. "With ours, you can see if the speed limiter setting is incorrect, but you would have to take the vehicle to a main dealer if you wanted to change it," says Texa's Gordon. The firm's IDC4 software is, however, capable of actions such as reprogramming air driers and configuring EBS braking systems on trailers.

And it doesn't just work with modern trucks. Technicians who need to diagnose faults on older trucks without the now-universal EOBD (European onboard diagnostics) connector can still use the systems, but need a selection of cables to connect the diagnostics tool to the vehicle in question. The only issue: "Cables can cost anywhere from £58 to £327," Gordon observes.

Multi-processing

On Euro 5 and Euro 6 vehicles, however, the connection may be via Bluetooth. "If one of our trucks is equipped with a suitable transmitter then the technician can communicate with it at a distance of up to 50 metres," explains Jones. "And using different frequencies, four or five technicians can communicate with four or five trucks simultaneously."

It's a similar story with universal kit. Texa's Axone 4 universal tool has Bluetooth as standard, along with a camera that can be used to attach a photograph to a spare parts order, using a smartphone.

How about communicating with trucks that are hundreds of miles away? Given the proliferation of GPS-based onboard monitoring and tracking systems and their related facilities, surely this should be around the corner? They can, says Conway, but their ability to act on the information they receive until the truck gets back to the dealership remains limited.

"The latest generation of vehicles can transmit fault codes to the workshop so that technicians get advance warning of what they will have to deal with when the truck arrives," he explains. But, fixing glitches while a truck is on the other side of the country remains problematic. "Some parameters can be changed on Euro 5 and Euro 6 vehicles," says Conway. "I'm talking, for instance, about the speed at which the PTO operates. But they have to be stationary with the power on. In the future, it may be possible to correct faults by changing software remotely; but we're not there yet." 