

Dash light: stop or go?

ortunately, spurious fault codes are comparatively rare events these days, because electrical systems have become more reliable, says MAN product marketing manager Les Bishop. At the same time, he concedes that sensors can sometimes be "a bit temperamental". He continues: "What usually triggers a false code though is something as simple as a cable moving or dirt getting under a connection." Dirt can worm its way inside connections, too.

Volvo national technical manager Mark Palin agrees that truck electrics are more robust than they once were. "That said, water can occasionally get into an ECU via a Suzie Connector, and trigger all sorts of false codes," he observes. A warning light appearing on the dashboard can be a recipe for confusion, especially if the truck is some distance from home base or a dealer's workshop. Is it real? Is it safe? Will it cause problems with DVSA roadside checks?

Steve Banner has the answers

The foregoing suggests that truck manufacturers should attach cables more securely. They might think about fitting better quality connectors, too, but there is a reason why they do not, according to one senior truck industry executive who asked not to be named.

Not surprisingly, it is a financial one.

"Trucks are built to a price, and that means the cost of each and every component, no matter how small, is taken into account," he observes. "Better quality connectors would be more expensive, and could result in products being over-engineered for many applications.

"The existing connectors are perfectly adequate if all you are doing is trunking up and down the motorway," he continues. "Where they tend to be vulnerable is if the truck is going in and out of a quarry, or on and off a landfill site.

"We could, of course, offer operators on that sort of work upgraded connectors," he comments. "I doubt, however, if they would be willing to pay more for them."

Something else that can generate false positives is the starting procedure followed by drivers, Palin contends.

"What you should do is turn the key [part-way], then wait five seconds before you start the engine, to allow all the ECUs to talk to each other, and for all the warning lights to go out one by one," he says. "If you don't, and try to fire up the engine immediately, then a false fault code may be generated."

If that happens, he advises to turn the engine off, wait a few seconds, turn the key, wait a few more seconds, and any false alerts should disappear.

He warns: "If you panic, try to re-start the engine too quickly, and do so two or three times, then the ECUs will get out of sync and as a consequence the engine may refuse to re-start at all."

"These days, you have to, in effect, boot up the truck's computer before you start the engine," says Scania aftersales director Mark Grant. "Drivers should be briefed accordingly, although I sometimes wonder whether operators realise just how complicated trucks have become, primarily as a result of legislation."

INVESTIGATING FAULT ALERTS

Fault codes can, of course, be genuine, points out Bishop, and can be invaluable. "They can be an early indication that something is going to fail," he says. "They will be logged in the truck's memory so that a technician can deal with them the next time a truck is serviced."

Palin agrees: "They can be a pain, but they can help you, too."

If the truck has a telematics system plugged into the onboard diagnostics port, then it may be possible to transmit any fault codes to a dealer's workshop before the truck arrives, says Bishop. The technicians will then know in advance what they will be dealing with, how long

it will take, and will be able to ensure that any replacement parts required are available.

MAN offers this facility under the 'MAN Check' banner, and it is integrated with the manufacturer's e-workshop system.

"We can use telematics to poll the truck remotely, take the fault codes off, then determine whether or not any of them are serious," says Grant. "Scanias have been fitted with the technology that allows this to happen ever since 2011."

Different manufacturers are at different stages so far as remote fault code diagnosis is concerned. Volvo, for example, is running pilots to enable it to observe faults remotely, so they can be diagnosed and removed if required, points out Palin.

The appearance of a fault code does not automatically signal that something is going to stop working immediately, although this may of course happen if the issue is not addressed.

"The braking system can trigger a number of different codes, but that may happen solely because there is a problem with a sensor," Palin says. "It does not mean that the foundation brakes are about to fail."

Operators may also fear that a warning light showing that there is something wrong with the ABS could lead to some awkward roadside moments with the Driver and Vehicle Standards Agency. Manufacturers have been working with DVSA to ensure that drivers are not detained unnecessarily, says Palin. "You should be allowed to

proceed, provided that it is only an amber light that has illuminated, that it has come on during the journey, that you have notified your home base and that the truck has been booked into a workshop so that the problem can be

workshop so that the problem can k investigated," he says.

If you have any doubts about a warning light, then you can always ring the truck manufacturer's 24-hour helpline, advises Bishop. "A lot of big fleets have their own operations teams that can be contacted, and they can usually tell you if a light that has come on is going to be a problem," says Palin.

A host of fault codes can sometimes be generated by ancillary equipment such as a refuse collection body with a compactor fitted, Palin says. They can be difficult to extinguish, because doing so requires close liaison with the equipment maker's technical team. "That can sometimes be a challenge if the firm concerned happens to be in mainland Europe," he observes.

Other third party equipment can also cause problems, says Palin. He explains that as transmissions are often sourced from tier one, third party OE suppliers, their electrical architecture may not be immediately compatible with that of the rest of the truck.

To conclude, Bishop at MAN provides a warning to drivers: "Always remember that if a red light comes on - no matter what has triggered it - then you should stop and seek immediate help. The truck should not be driven any further."

Doing so could have catastrophic and expensive consequences. Far better to stay put and call out a technician.

FURTHER INFORMATION

'Health scan' – https://is.gd/awebac 'From a distance' – https://is.gd/ufonam Roadworthiness: IRTE guide to industry best practice – https://is.gd/ivohor Roadworthiness: IRTE guide to industry best practice for PCVs – https://is.gd/uzakef