

Blue in the face

The law has clamped down on operators found to have fitted AdBlue cheat devices on their vehicles, finds Steve Banner



Operators who are so ill-advised as to fit AdBlue emulators to their trucks will be given short shrift by traffic commissioners if they are caught and appear before them, no matter what excuses they come up with.

It is a point hammered home by the TCs in their 2017-2018 annual report (www.is.gd/jereso). They say that operators who are caught using emulators typically advance one of two defences to their conduct. They either claim that they bought the vehicle without being aware that an emulator was in place - which begs the question why they thought it did not need to use any AdBlue - or that they fitted one in response to performance issues with the emission control system. Neither defence will be accepted, the TCs stress. "Both suggest low levels of competence, knowledge or integrity in parts of the industry," they contend.

The strict line TCs are taking is illustrated by the recent decision made by Simon Evans, TC for the north-west of England, to curtail the O licence held by Burnley, Lancashire-based Express Freight Solutions after AdBlue devices were found on five of its vehicles. The operator admitted that up to 12

such devices had been installed in its vehicles at some stage. Express Freight Solutions claimed that the device only functioned if the truck went into limp-home mode because of a problem with the AdBlue system. It was brought into operation by the driver disconnecting the main AdBlue system fuse.

Evans was not prepared to accept this as an excuse. "The extent to which devices were fitted to the operator's vehicles, and later brought into operation, represented acts that were discreditable, anti-competitive in nature and increasing the risk to the public from the greater release of NOx and particulates into the atmosphere.

"These devices have commonly been characterised as cheat devices," he continues. "Such a description appears to me suitably apt in portraying both the nature of the tricking of the engine management system into believing that emissions controls were operating in accordance with the manufacturer's fitted equipment, but also fooling any interested witness that a vehicle was meeting emission standards, when it was not."

The good repute of the operator was retained, but only by the narrowest of margins, Evans stresses. "There is no clear evidence that any devices

remained installed and active (as opposed to ready for action) for longer than was necessary for vehicles to return to base, albeit that this was done at the operator's convenience, and was therefore longer than was necessary," he says.

More serious penalties have been handed out to other operators who have used emulators, with O licences being revoked, and transport managers losing their good repute.

A SERIOUS MATTER

Kevin Rooney, west of England TC, says: "NOx emissions are considered currently to reduce life expectancy of affected persons by, on average, five months. Emission controls on heavy-duty diesel engines are a central part of the UK's and Europe's public health strategy, and circumventing emission controls is a serious matter."

Scania services director Mark Grant has been vocal in his criticism of the use of AdBlue emulators. "It is cheating and gives businesses that fit them an unfair commercial advantage," he states.

The use of such devices could of course affect a truck's warranty. Scania has reported companies promoting them to the Driver and Vehicle Standards Agency and advised the

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Mark Grant



DVSA of the whereabouts of trucks to which they are likely to be fitted. “They can often take some finding, though, and in some cases can involve whoever is looking for them having to strip down the dashboard and get behind panels,” he says.

He concedes that the early AdBlue systems fitted to trucks were less than dependable, with at least one manufacturer suffering major problems. “It took quite some time for the technology to become reliable, but now it is,” he observes.

At DAF, marketing manager Phil Moon disputes the notion that AdBlue controls have been error prone. He states: “Anything on a truck can go wrong, but evidence that AdBlue systems are disproportionately troublesome is somewhat unfounded.”

TRACING FAULTS

So when faults do arise, what causes them? One reason could be the use of low-grade AdBlue which prevents the system from functioning properly. “Always use good-quality AdBlue from a reputable source,” Grant advises.

Another reason could be the use of AdBlue that has been inadvertently contaminated with dirt or vehicle fluids such as oil or diesel. Whatever is being used to dispense the fluid must be kept scrupulously clean, and so should the vehicle’s AdBlue filler point and the area around it.

“Onboard AdBlue pumps are very susceptible to dirt,” Grant points out.

AdBlue systems contain multiple filters designed to keep dirt out, with gauze strainers fitted to the tank pick-up unit and the pre-filter inlets to the pump and doser, says Scania technical manager Aaron McGrath. These are usually only changed if debris has found its way into the reservoir. “However, the main filter cartridge in the AdBlue pump should be renewed during routine maintenance,” he says.



A lack of servicing could be one reason why AdBlue systems sometimes give trouble. Supplier Eminox says that they should be serviced at least annually to avoid the risk of a build-up of urea deposits and the possibility of permanent filter damage. Filters should be removed and replaced as necessary, and the injector nozzle should be changed, too.

Other tasks should also be carried out as part of general maintenance. All of the pipes should be checked for damage; the accumulator re-pressurised; and the electronic control unit (ECU) should be downloaded so that any faults that have arisen can be identified and diagnosed.

If parts need to be replaced, then they should be swapped for quality ones made to OEM specifications, says Moon. “Fit a cheap, poor-quality NOx sensor, for example, and you are likely to get trouble,” he observes.

WIDELY AVAILABLE

Emulators are widely available online. A quick internet trawl revealed that devices are on sale for as little as £15, although it is a moot point as to how effective anything that cheap would be.

Typical installation locations include close to the on-board diagnostics (OBD)

port or the selective catalytic reduction ECU, or near to the fuse board.

HITTING HOME

The message that emulators should never be fitted appears to be hitting home. In 2017/18 the DVSA ran a pilot at five sites where it checked 20,986 vehicles for AdBlue emulators at the roadside. It found 449.

Since 1 September 2018 it has been checking for the presence of emulators during roadside checks nationwide. At the time of writing it had checked 50,644 vehicles and found a comparatively modest – but still concerning – 75. “Operators are heeding the warning that emulators are not acceptable,” says DVSA enforcement policy manager Dave Wood.

The DVSA says that a transport company caught using an AdBlue cheat device will receive an S-marked delayed prohibition, and be given ten days to remove it. If it fails to do so, then its vehicle can be taken off the road immediately, and the matter referred to the traffic commissioners.

Grant at Scania makes the point that the operator may be obliged to take the truck to a reputable dealership to have the cheat device taken off, if it has not already been removed, and for checks to be carried out to ensure that the AdBlue system is functioning properly once again.

The dealer can be asked to produce a letter confirming that this has been done, which can then be shown to the enforcement authorities.

If repairs have to be carried out because the AdBlue system has been allowed to fall into disuse, then they may not come cheap. “Removing an emulator and returning an AdBlue system to full working order can cost many thousands of pounds,” the DVSA warns.

So any supposed saving likely to be achieved by fitting an emulator could turn out to be illusory. [TE](#)