

In this digital era, the term ‘connectivity’ has taken on a new meaning. But, from a transport industry standpoint, just how well connected are you?

Some years ago, there was a drive to check not only pin wear on the fifth wheel coupling (by testing against allowable movement), but also the surface of the rubbing plate and the coupling itself. There was an accepted view that perhaps the rubbing plate thickness might become insufficient for the work it was undertaking, in terms of stresses.

As a result, thicker plates were specified to overcome the problem of fractures, failures and potential major incidents that might follow. The supporting structure was also reinforced in some instances, to prevent bending stresses and flexing, which could also lead to fracture.

Nevertheless, it was also considered good practice to disconnect the trailer, and thoroughly clean and investigate the surface of the rubbing plate, looking for any visible signs of stress. Technicians knew that checking coupling plates and welds on the pin was easier on some trailers than on others, but whatever the details of access and visibility, they needed thorough examination.

However, with the ever-increasing demand for efficiency and productivity, a question for today's transport engineers is: has the fifth wheel coupling been subject to re-engineering for weight-saving, using new, lighter duty materials and reduced plate thicknesses? And another is: how often are prime movers and trailers disconnected for a thorough check as part of scheduled maintenance? When was your last check carried out? Was it documented?

The fifth wheel is not checked at annual test (other than for movement), so it is arguably more important than ever that an inspection regime is in place that checks the plate regularly. Perhaps the annual test should include uncoupling and inspection – although it is unlikely that a VOSA tester would clean a plate for checking. Alternatively, a signed declaration for presentation on request might be a way forward – proving that the plate has been thoroughly examined at least once a year.

Either way, checking for weld cracks around the pin boss and rubbing plate should not be overlooked. Peace of mind in this vital area cannot be achieved without a good regime.

Staying well connected in the physical, as well as electronic, sense is vital to ensuring the safety of the vehicle – and the public.

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Transport Engineer's regular 'IRTE to IRTE' members' column: focusing on the issues, challenges and concerns that matter to transport engineers and fleet managers