Drawbar dos and don'ts

oward Ostle does not mince his words. "We're terrible at drawbar coupling maintenance in Britain," he states; and as UK sales and marketing manager at VBG Group Sales, he has seen the consequences of a lax approach taken by too many operators.

A key player in the drawbar sector, VBG has recently rolled out a range of couplings with new power actuators and locking devices. They are unlikely to live long and healthy lives, however, if workshops decide to slap grease all over them in them in the way they might grease a fifth wheel (pictured, right). He warns: "You never, ever put grease on a drawbar coupling's jaws, because if you do, it will act like a grinding paste."

The coupling is far closer to the road surface than a fifth wheel is, he points out, and that means it is closer to all the dirt and grit that highway surfaces generate. Combine all this detritus with grease, and you have a recipe for trouble.

"Use plenty of lubricant instead," Ostle advises. "Oil is a cheap mechanic, and if you lubricate a coupling, then you won't get a problem."

Although in a distant second place compared to fifth wheels, drawbar couplings are used in the UK and must be properly cared for to continue to serve in the long term, finds Steve Banner

Paul Clayton, UK technical sales and support manager at Jost, agrees that plastering everything with grease can be harmful. "We have Rockinger couplings available with automatic lubrication systems," he adds. Rockinger is one of Jost's brand names, and sits alongside Tridec and Edbro.

Grease is not necessarily harmful, argues Andy Walton, technical manager at Marcar Steel and Engineering, which distributes V.Orlandi drawbar

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equipment in the UK. It all depends on how much is used. "Orlandi couplings have a grease nipple and all you need to do is give them a shot of grease once a year," he says.

A light spray of oil is beneficial, too, he adds, especially after a truck has been washed. V.Orlandi is owned by SAF-Holland.

Ostle says that couplings should be examined during a truck's statutory inspection - "we provide a service check sheet" - as should the eye on a drawbar trailer's draw beam.

"Look for damage, cracks and loose or missing bolts, and excessive wear," he advises. "Check for cracks in and damage to the draw beam, too."

Says Clayton: "The coupling pin and wear plates should be checked and the lower bush should be inspected, too."

The pin should lock properly into the lower bush, without excessive movement. "Any sensors attached to the

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coupling should be checked to ensure they are working," he adds.

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Andy Walton

Bear in mind that if a drawbar combination is involved in an accident, and the cause appears to be a fault in the link between the prime mover and the trailer, then the enforcement authorities will want to see evidence that inspection and maintenance procedures were adhered to. The operator will be in hot water if no such evidence can be produced.

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Training is available for workshop technicians who may need to maintain drawbar couplings. Says Jost's Clayton: "I do some of the training myself at customers' own premises, and there is plenty of advice and information available on our website."

To help ensure that the prime mover and trailer are properly coupled together, VBG has introduced an airoperated coupling with red and green lights that complement the red and green lights in the cab. If the green light is illuminated, then all is well. If the red light has come on, however, then the driver should stop immediately and investigate why.

"We can take a fibre optic cable to the side of the chassis so that red and green lights can be shown there, too," says Ostle. That should help ensure that whoever is on the gate will see that there is a problem and will stop the truck and trailer from leaving the yard.

"Remember that all drawbar couplings have a secondary lock rather like a locking button, and that lock must be fully in place," he says. Drivers should ensure that it is, especially if the coupling is a manual one, because there may not be lights in the cab to tell them that everything is OK.

"Air-operated couplings have to have them," Ostle says. "Manual ones don't."

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Don't apply grease to drawbar couplings be

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VBG has also come up with Driver Assist, which uses radar technology to communicate with drivers. Sensing the position of the draw beam and its eye, it guides the driver during coupling and triggers a warning if there is a risk of jackknifing.

Equally aware of the risk of damage occurring when the prime mover is being hooked up to the trailer, Jost has launched the Rockinger Drawbar Finder in the UK. A camera which sits above the trailer coupling provides the driver with horizontal and vertical visual guidance. It uses a crosshair which enables the driver to aim for the towing eye when reversing (pictured). Green guiding lines indicate the optimum height range of the vehicle in relation to the eye. "It helps reduce the risk of damage, which can occur if, for example, the trailer is sitting at a different height to the truck thanks to its air suspension," he says.

Turning to the couplings themselves, V.Orlandi is now supplying them with a cast steel rather than a cast iron jaw. "Cast steel is standard on the 57mm coupling and optional on the 50mm model," says Walton. "It's harder to break than cast iron."

Other brands are heading down the cast steel route, too - but no matter whether cast steel or cast iron is involved, drawbar couplings have to be treated with consideration.

"Just remember that when you are reversing up to a drawbar trailer, it's gently does it," says Walton. "Force is the enemy of drawbar couplings."

GAINING IN POPULARITY

While Britain remains primarily a tractor unit/semi-trailer market, drawbar combinations have become more popular on this side of the Channel over the past five or six years, says Ostle, especially among operators transporting bricks, blocks, skips and forestry products. They offer versatility – a fleet can make collections and deliveries solely using the prime mover if the size of the load does not warrant using a trailer, too – and ease of manoeuvrability, he adds.

UK operators of drawbar combinations include animal feed supplier Harbro. It has acquired an IVECO S-Way 6x2 rigid equipped with a 7.9m curtainsider body and fitted with a VBG coupling which it uses to haul a tri-axle curtainsider trailer. When deliveries have to be made to farms that are difficult to access, the driver uncouples the trailer and takes the feed in using the rigid. It has a rear-steer third axle to aid manoeuvrability.