TRAILING BEHIND

Lacking the force of the law, inspections of small trailers may not be carried out as often as they should. Kevin Swallow reviews how operators should maintain and service LCV trailer couplings

Small trailers are most popular among farmers, construction companies, the allied trades, and utility companies, transporting animals, materials, machines and equipment, respectively.

Use of a van with a trailer for hire and reward requires an operator's licence, a tachograph with a limit on daily driving time, and an annual MOT when the combination exceeds 3.5t gross vehicle weight (gvw). While a licence to operate such heavy commercial vehicles requires planned maintenance, light commercial vehicles under 3.5t gvw are only required by law to pass an annual MOT. Trailers of all sizes must be tested one year after they were first supplied, according to DVSA.

These lightweight and versatile trailers, which can measure up to 7m long, are often overlooked when it comes to planned maintenance and servicing. They fall into two categories: O1 covers trailers up to 750kg gvw, and does not require brakes, but if they are fitted they must be in full working order. O2 covers trailers with a gvw from 751kg up to 3,500kg; they require brakes. (DVSA states that some trailers in this weight class do require an annual MOT: those weighing more than 1,020kg unladen that are fitted with powered braking systems.)

Although the European Union has plans to introduce some form of testing for what it calls light trailers, the UK's Department for Transport has not revealed any plans to otherwise introduce MOT trailer testing.

In 2015, efforts to improve trailer standards led to members of the National Trailer and Towing Association (NTTA) offering free safety checks, which they still do, visually inspecting lights, electrics, brakes, tyres and the drawbar, among other components (*https://is.gd/ikazuv*).

Although not necessarily representative of the UK trailer population as a whole, the results of that first survey were still shocking: 90% of the 195 trailers checked failed, with all bar eight trailers recommended for servicing. Lights, handbrake operation

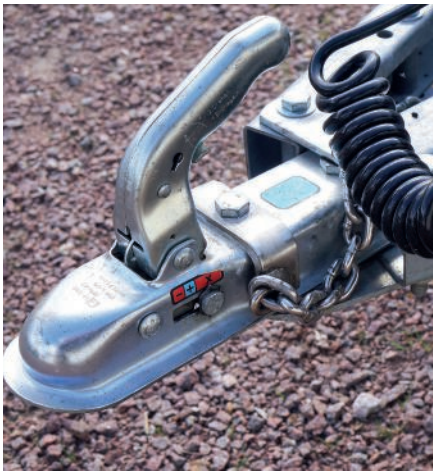
USAGE TIPS

COMPATIBILITY

- **Using a trailer eye shaft requires specifying the right throat jaw clearance for articulation. Eye coupling sizes tend to be 30, 40 or 50mm. If the pin is too large, or the clearance between the jaw and pin is too great, then towing and braking loads will be put on to the pin, which will lead to damage.**
- **Any trailer below 3,500kg gvw towed by a heavy goods vehicle should use a 50mm ball coupling to cope with the additional forces imposed on it by a harder suspension and possible extra overhang behind the rear wheels on the towing vehicle.**

TOWING JAWS AND HOOKS

- **There should be sufficient room behind the pin of any towing jaw to allow a bar of 31.75mm to pass through, ensuring adequate articulation. Any larger gap would allow the back of the eye to hit the front of the pin before the front of the eye contacts the throat of the jaw. A non-compliant jaw opening restricts articulation upwards and downwards, and will induce stress fractures on either the coupling or the trailer chassis drawbar.**



and electrics led the way in failures. On the tow hitch, one in four of the trailers checked had defective breakaway cables (a safety lanyard is required in O2 trailers over 1,500kg mass); one in three had secondary coupling defects; and 15% of the trailers had primary coupling issues bad enough for failure should the trailer go up for a MOT.

This initiative has gained notable traction, with support from Karin Smyth, MP for Bristol South. She is a strong advocate for trailer safety following a constituency tragedy in 2014, when three-year-old Freddie Hussey was struck and killed by a runaway trailer that did not fall within a mandatory MOT category. It sparked a Driver and Vehicle Standards Agency (DVSA) publicity campaign #TowSafe4Freddie aiming to improve driver education.

Many trailer dealers and service agents support greater regulation. Ray Pinder, partner at Barnsley Towbar Centre and a NTTA committee member, says: "These trailers travel our road network around the UK and the people towing them are unaware of the dangers. Currently the towing vehicle and its towbar must pass a MOT, but the thing that is attached has very little mandatory regulation in place to ensure the complete towing set-up is safe. It highlights the need for a basic level of trailer mandatory inspection – like an MOT – to ensure our roads stay safe."

Also advising regular checks of the towbar, whether ball or jaw-and-pin type, is Martin Brown, who runs a mobile towbar installation business in Cumbria. Says Brown: "Every 12 months, remove the entire towbar from the chassis and check it properly. With the way roads are gritted with salt, corrosion can damage the bolts and weaken the assembly."

Penalties for motorists using a vehicle, including a trailer, in a dangerous condition is a fine of up to £2,500, a driving ban and three penalty points. TE

FURTHER INFORMATION

SMMT Trailer Towing Guidance and the law, 8th ed – https://is.gd/udeseg

NTTA Guide to Safe Legal Towing (short version) – https://is.gd/ixopuz

INSPECTION ADVICE

Basic day-to-day checks and established milestone checks are required to stop a tow hitches and couplings falling into disrepair. When in doubt, users should refer to the manufacturer's guide.

DAILY CHECKS

- Check for loose bolts in the vehicle's chassis
- Check the 7- or 13-core electric cable, and that pins and plug are not damaged or worn
- Make sure the breakaway cable or secondary coupling device is working and undamaged
- Assess wear and tear on the ball joint in the towbar
- Add grease where applicable
- Check that coupling locking mechanism works, and inspect for external damage.

FREQUENCY OF SERVICING

- 600 miles: essential for new trailers or if new brake linings and/or new Bowden cables are fitted
- Three months: commercial/industrial trailers used intensively in terms of distance or application, and boat trailers that are immersed in water
- Six months: commercial/industrial trailers, based on average use
- Annual MOT for towing vehicle, which includes towbar.

TROUBLESHOOTING

- Difficulty coupling and uncoupling: coupling head mechanism dirty or damaged; clean or replace. Towball dirty: clean and, if necessary, grease. Towball damaged: replace.
- Excessive play between coupling head and towball: check both for wear and tear, replace accordingly.

DAMAGE

- Stress fractures on couplings or trailer drawbar: incorrect eye/jaw combination; replace with compatible components. Mismatch of towing heights: modify towball or trailer coupling position, or fit height-adjustable equipment.