



Loading of vehicles to
achieve a satisfactory
brake
performance
test

CUSTOMER

*An executive agency of the
Department for
Transport*

This leaflet does not apply to operators or presenters of 3 axle semi-trailers

It is our aim in VOSA to conduct an effective check of the performance of vehicle and trailer brakes in all cases. We also aim to inconvenience presenters and operators as little as possible. On many vehicles and trailers our load simulator provides sufficient imposed load such that they can be presented unladen. However, the layout and design of some vehicles and trailers makes the use of the load simulator impractical or unsafe, or in some instances the axle simply cannot be sufficiently loaded using the simulator. These vehicles will require to be presented with a load. We may refuse to conduct a test if we are unable to carry out a satisfactory brake test. **Only in exceptional circumstances will we check the performance of the brakes when the vehicle is unladen.**

Common examples of vehicles and trailers with features that either prevent the use of the load simulator or cannot be sufficiently loaded using the load simulator are:

- ▶ Large heavy tailgates or rear doors, e.g. tippers.
- ▶ Long rear loading ramps e.g. livestock carrying vehicles when their unladen weight is less than 65% of their Design Gross Vehicle Weight (see below).
- ▶ Large tail lifts.
- ▶ Long rear overhangs.
- ▶ Vehicles sealed by Customs and Excise.
- ▶ Bogie weights exceeding 10,000 kg.
- ▶ Drawbar trailers.

On some vehicles, eg 2 axle tippers, the tailgate can be removed before the vehicle is presented for test. But if the rear marker boards

are attached to the removed item then we would advise that it is carried on the vehicle in order that we may examine the marker boards. Failure to do this may result in the vehicle failing the test. We are sorry that the removal of such items will not be allowed on VOSA premises.

On other vehicles and trailers access for the load simulator means that the simulator cannot be used effectively. Where this happens we will require that the vehicle or trailer is presented laden. Enough load must be provided so that the weight of the vehicle or trailer exceeds 65% of the Design Gross Vehicle Weight (or the Maximum GB weight if this is less than 65% of the Design Gross Vehicle Weight). There are a number of ways that this can be achieved:

- ▶ Arranging to load the vehicle or trailer yourself.
- ▶ In the case of a 3 axle tractor unit, using our ballasted trailers (ask your local test station if they have one for hire) or hiring such a trailer.
- ▶ Arranging for your vehicle or trailer to be presented to a designated premises where pull-down or loading facilities are available.
- ▶ Use a combination of a load directly above an axle that the load simulator cannot be applied and request the use of the load simulator on the other axle(s).

Dangerous and hazardous goods vehicles and trailers must be presented in accordance with the guidelines stated in the “Guide to the inspection of dangerous/hazardous goods vehicles”, available from your local test station.

Further details of the types of vehicles and trailers that require a load can be found on the rear of this leaflet or on the back of your appointment letter.

Once again, only in the most exceptional circumstances will we check the performance of the brakes when the vehicle/trailer is unladen.

Q & A

▶ **What is a load simulator?**

A load simulator is a mechanical device that is anchored to the floor of the test hall and applies a load above the rear axles of vehicles and all axles on a trailer during the brake test.

▶ **What load can the simulator apply?**

The load simulator can apply a maximum load of 5000 kg. As VOSA requires the load to exceed 65% of the Design Gross Vehicle Weight for the purpose of the brake test the load simulator is only suitable for use on axle weight up to approximately 10,000 kg.

▶ **How do I know whether the load simulator can be used on my vehicle or trailer?**

In the majority of cases access for the load simulator is through the rear of the vehicle or trailer. The maximum reach of load simulator is approximate 2 meters. Should the distance between the rearmost point of the load platform and the axle exceeds this on your vehicle or trailer then the load simulator may not be able to be applied or may not apply sufficient load for the purpose of the test.

Loading of goods vehicles / trailers / semi-trailers to ensure a satisfactory test of brake performance where a load simulator cannot be used.

A test may be refused if a test location cannot carry out a satisfactory brake test. You are therefore strongly advised to comply with the loading instructions shown below. The following vehicles/ trailers must be presented in the laden condition:

- ▶ **Any multi-axle vehicle or trailer (excluding 3 axle semi-trailers)** with a bogie weight exceeding 10,000 kg.

- ▶ **Three axle tractor units** that are fitted with air suspension on any of the rear axles. To provide sufficient load these must be coupled to a loaded semi-trailer, so that the drive axle is loaded at or very close to the plated weight shown in column 2 of the plate and plating certificate.

Note: Tractor units that have been converted from 2 to 3 axles must also be presented laden if full braking force on the additional axle is related to the load on the drive axle.

- ▶ **Vehicles or trailers where load simulators cannot be positioned above the axles** (not being any of the above because of the construction of the vehicle, for example Tankers, Livestock Carriers*, vehicles or trailers equipped with large tail lifts, heavy tailgates or long rear overhangs.

*Livestock is not acceptable as a load for test purposes.

Note: For the purpose of the brake test the load must exceed 65% of the Gross Vehicle Weight or the Maximum GB Weight, if this is lower. It is an offence to use a vehicle on the road if the weights shown on the plating certificate are exceeded.

If you have any questions relating to the above, please contact your local Heavy Goods Vehicle Test Station Manager.

Visit our websites:

for commercial customers
www.businesslink.gov.uk/transport

for private motorists
www.direct.gov.uk

for corporate information
www.dft.gov.uk/vosa

Contact us:

E-mail
enquiries@vosa.gov.uk

National Number
0300 123 9000*

Monday to Friday - 7.30am until 6.00pm
(normal working hours)

