

Vehicle Standards Guide 22 (VSG-22) Requirements for tag trailers

Introduction

Amendments to the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation* (the MDL Regulation), commenced in July 2018, introducing 'tag trailers' as a type of semitrailer. This guide provides heavy vehicle owners and operators with an understanding of:

- how to determine if a heavy trailer should be categorised as a tag trailer under the MDL Regulation
- the applicable operating requirements for tag trailers under the *Heavy Vehicle National Law* (HVNL).

Note: Low loader, platform and other semitrailers that may have a drawbar and are equipped with a king pin, were never intended to be classed as tag trailers. The operating conditions of these trailer types remain unchanged.

How to determine the trailer type

The HVNL describes three main (typical) types of heavy trailers: dog, pig and semitrailers. These types of trailers may then be combined or have physical or load carrying characteristics that result in further refinement of their standard definition.

A typical **dog trailer** has an axle or axle group at the front that is steered by connection to a towing vehicle by a drawbar and an axle or axle group at the rear of its load carrying surface.



Figure 1: Typical dog trailer

A typical *pig trailer* has a single axle or an axle group near the middle of its load carrying surface **and** is connected to the towing vehicle by a drawbar.



Figure 2: Typical pig trailer

A typical (conventional) *semitrailer* has a single axle or an axle group towards the rear of its load carrying surface.

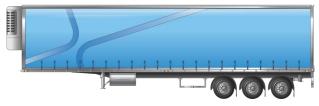


Figure 3: Typical (conventional) semitrailer

Note: Semitrailers can either be a 'conventional' type or a 'tag trailer'. Both types of trailers have their axle groups towards the rear and result in a portion of the mass being imposed on the towing vehicle. A conventional type of trailer is characterised by having a king pin fitted under the front of the body or tray. A tag trailer has a drawbar and in most cases, uses a coupling other than a king pin.

A typical **tag trailer** is a type of semitrailer that has a single axle or axle group towards the rear of its load carrying surface **and** is connected to the towing vehicle by a rigid drawbar.



Figure 4: Typical tag trailer

Note: The HVNL recognises other variations of trailer types (for example, low loader, agricultural trailer, pole type trailer and the new tag trailer). However, these variations are considered sub-categories of one of the three main types of trailer.

How to determine the relevant position of the axle or axle group

To determine if the axle or axle group is located near the middle or towards the rear of the load carrying surface, divide the length of the load carrying surface equally into thirds. The relevant position of the axle group will then determine the type of trailer, as displayed in Table 1.



Table 1: Trailer type based on position of axle/axle group

| Trailer type | Relevant position of axle/axle group | |
|---|--|--|
| Pig trailer | If the centre-line of the axle or axle group falls in the front or middle third of the load carrying surface, the trailer is considered to be a <i>pig trailer</i> . | |
| Semitrailer or a tag trailer | If the centre-line of the axle or axle group falls in the rear third of the load carrying surface, the trailer is considered to be a <i>semitrailer</i> or a <i>tag trailer</i> . | |
| Dog trailer | If the trailer has an axle or axle group in both the front and rear thirds of the load surface, the trailer may be considered a <i>dog trailer</i> . | |
| Note: If a turilar has a desided to the discuss that is not | | |

Note: If a trailer has axles distributed in a way that is not described in *Table 1*, it is not mentioned in this document (e.g. this would apply mostly to oversize overmass (OSOM) platform type trailers).

Mass limits for tag trailers

The MDL Regulation prescribes the mass requirements for heavy vehicles. The prescribed mass limits for an axle or axle group applicable to a tag trailer, are the same as those applicable to a semitrailer.

Note: The centre-line of a single axle or axle group is defined as the rear overhang line described in Schedule 6 of the MDL Regulation.

Maximum towed mass ratio of 1:1

Under the MDL Regulation, a heavy vehicle in combination with a tag trailer may operate at a maximum towed mass ratio of 1:1. The 1:1 mass ratio does not allow a trailer to exceed the manufacturer's mass limits or applicable prescribed axle mass limits.

This means that when in combination, the operating axle mass/es of a tag trailer must not be more than the total axle mass of the towing vehicle or the lowest rated component in the combination. The MDL regulations state that, unless operating under an exemption, these requirements also apply to dog and pig trailers.

Note: The 1:1 towed mass ratio does not apply to:

- a semitrailer that is not a tag trailer
- a trailer (e.g. a dog trailer) operating under a notice that permits a higher towed mass ratio.

More information on general mass limits (GML) can be found on the NHVR website.

Vehicle standards and dimension requirements for tag trailers

As a tag trailer is a type of semitrailer, the vehicle standards and dimension requirements for semitrailers also apply to tag trailers.

Towing capacity limits

Working out the tow limitations of a vehicle or combination is not just determined by the limit of the trailer. Instead, the tow capacity of a combination is limited by the lowest rated towing related component. These components include:

- vehicle tow coupling
- vehicle tow bar
- Gross vehicle mass (GVM)/Aggregate trailer mass (ATM) vehicle gross combination mass (GCM)
- trailer tow coupling
- trailer drawbar.

Registration

The classification of a heavy vehicle for registration purposes is determined by State and Territory legislation and may vary in each jurisdiction.

The prescribed mass limits applicable to a heavy trailer are not determined by the nominated registration category. The applicability of the 1:1 mass requirement to a tag trailer is determined by the definition in the HVNL.

Complying with the Heavy Vehicle National Law

The operator of a heavy vehicle must ensure their vehicle complies with the Australian Design Rules (ADRs), HVNL, heavy vehicle safety standards and MDL Regulation. Using or permitting another person to use a defective heavy vehicle, or a heavy vehicle with unapproved modifications on a road, is an offence. It is also an offence to use a vehicle on a road that exceeds a mass or dimension limit.

Penalties can include on-the-spot fines or prosecution. Formal warnings or a defect notice may also be issued. For more information about vehicle defects, see the *Heavy vehicle defects—Compliance and enforcement bulletin* at https://www.nhvr.gov.au/ce-bulletins

For more information about vehicle dimension limits, see the *National heavy vehicle mass and dimension limits information sheet* at https://www.nhvr.gov.au/road-access/mass-dimension-and-loading/general-mass-and-dimension-limits

For more information:

| Subscribe: www.nhvr.gov.au/subscribe | | |
|---|--|--|
| Visit: www.nhvr.gov.au | | |
| Phone: 1300 MYNHVR* (1300 696 487) | | |
| Email: info@nhvr.gov.au | | |
| © Copyright National Heavy Vehicle Regulator 2017, creativecommons.org/licenses/by- sa/3.0/au | | |
| Disclaimer: This fact sheet is only a guide and should not be relied upon as legal advice. *Standard 1300 call charges apply. Please check with your phone provider. | | |

VSG22: Revision history

| First Published | June 2018 | |
|-----------------|----------------|-----------------|
| Revised | July 2018 | Minor amendment |
| Revised | September 2018 | Minor amendment |
| Revised | December 2019 | Minor amendment |