# Vehicle standards information



#### PUBLISHED 28 SEPTEMBER 2012

Supersedes Nil

62

# **Transporting yachts on trailers**

# Purpose

This Vehicle Standards Information (VSI) No. 62 is intended to:

- enhance road safety for all road users by encouraging operators to use the most appropriate towing vehicle in a vehicle and trailer combination that is carrying a small yacht, commonly known as a 'trailer yacht' or 'trailer sailer', or similar sailboat.
- provide a summary of the dimension limits applying to vehicle and trailer combinations used for transporting the above type of small yachts on New South Wales roads.

For the purpose of this publication, small yachts and similar sailboats are referred to as 'yachts', and a vehicle and trailer combination is referred to as a 'combination'.

### Introduction

The Road Transport (Vehicle Registration) Regulation 2007 (the Regulation) limits the width, height, length and some internal dimensions of vehicles and/or combinations. In addition, the Road Transport (Mass, Loading and Access) Regulation 2005 (the MLAs) limits the mass and dimensions of vehicles and/or combinations when loaded. These regulations are intended to ensure that vehicles using the road network are compatible with the road systems and do not present a danger to other road users.

For explanation of terms used in this VSI No. 62, see 'Glossary' on page 5.

# Dimension and mass limits

In NSW, the dimension limits applicable to a combination depends on the mass of the combination, generally separated into two categories as follows:

- vehicles or combinations with a gross vehicle mass (GVM) and gross combination mass (GCM) not exceeding 4.5 tonnes
- vehicles or combinations with a GVM or GCM exceeding 4.5 tonnes.

This VSI No.62 explains how the requirements of the Regulation and the MLAs are applied to the different categories of combination when the trailer is carrying a load. The major difference is that:

- in a combination not exceeding 4.5 tonnes, the rear projection of the load is measured beyond the rear overhang dimension of the trailer (see Figure 1 on page 2).
- in a combination exceeding 4.5 tonnes, the rear projection of the load is measured within the rear overhang dimension of the trailer (see Figure 2 on page 3).

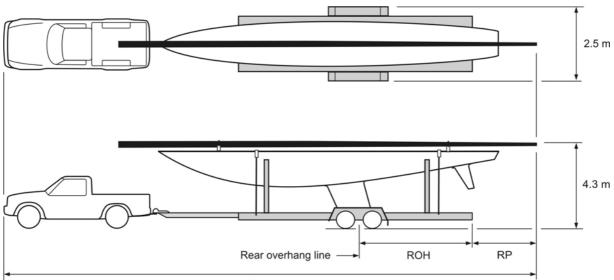
#### **Transport for NSW**

Level 4, 18 Lee Street, Chippendale NSW 2008 PO Box K659 Haymarket NSW 1240 www.transport.nsw.gov.au | (02) 8202 2200 Apart from the dimensions shown in this VSI No. 62, the individual vehicles comprising the combination, with or without load, must be within the applicable regulatory dimension limits – see VSI No. 5 *Vehicle dimension limits* for more information.

# VEHICLE AND TRAILER COMBINATION NOT EXCEEDING 4.5 TONNES GVM AND GCM

The following dimension limits apply to a combination with a GVM and GCM up to and including 4.5 tonnes.

FIGURE 1: COMBINATION UP TO 4.5 TONNES GVM AND GCM



19.0 m

Rear overhang (ROH) In this combination the maximum rear overhang allowed under the Regulation is measured to the rear of the trailer, and is no more than the length of the front load carrying area ahead of the rear overhang line, or 3.7 metres, whichever is the lesser\*.

Note that on boat trailers the length of the front load carrying area is often difficult to define, so the maximum allowable rear overhang of 3.7 metres will normally apply.

Rear projection (RP): 1.2 metres, or more under certain conditions – see below.

\*see page 5 for more information on front load carrying area, and rear overhang line.

#### Rear projection exceeding 1.2 metres

Rear projection may exceed 1.2 metres provided the overall length of the combination, together with the loading or equipment on it, is no more than 19.0 metres.

#### Warning devices for projecting load or equipment

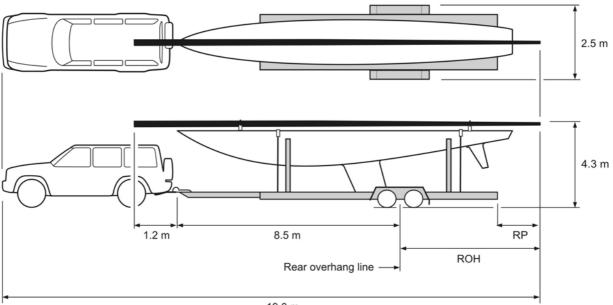
If the rear projection is greater than 1.2 metres, the rear of the load or equipment must have attached a brightly coloured flag or piece of material not less than 300 mm square. In addition to the flag, when travelling at night or in adverse weather conditions that restrict visibility, a red light that can be seen for 200 metres or at least two red reflectors capable of projecting a red reflection of light from the light of any following vehicle must be attached.

These requirements also apply to any load or equipment that projects less than 1.2 metres if it projects in such a way that it is not readily visible to a person following immediately behind the vehicle.

#### VEHICLE AND TRAILER COMBINATION EXCEEDING 4.5 TONNES GVM or GCM

The following dimension limits apply to a combination with a GCM exceeding 4.5 tonnes, or a combination that includes a vehicle with a GVM exceeding 4.5 tonnes.

Projecting loads must not exceed these limits unless the vehicle operates under a notice or permit.



#### FIGURE 2: COMBINATION EXCEEDING 4.5 TONNES GVM OR GCM

19.0 m

Rear overhang (ROH) In this combination the maximum rear overhang allowed under the Regulation is measured to the rear of the load, and is no more than the length of the front load carrying area ahead of the rear overhang line, or 3.7 metres, whichever is the lesser\*.

Note that on boat trailers the length of the front load carrying area is often difficult to define, so the maximum allowable rear overhang of 3.7 metres will normally apply.

Rear projection (RP): 1.2 metres, or more under certain conditions – see below.

\*see page 5 for more information on front load carrying area, and rear overhang line.

#### Rear projection exceeding 1.2 metres

Rear projection may exceed 1.2 metres provided:

- it is contained within the ROH dimension as shown in Figure 2 above
- the overall length of the combination, together with the loading or equipment on it, is no more than 19.0 metres.

#### Warning devices for projecting load or equipment

If the rear projection is greater than 1.2 metres, in daytime the rear of the load or equipment must have attached a brightly coloured flag or piece of material not less than 300 mm square. When travelling at night the warning signal must be a red light that can be seen for 200 metres

It is recommended that these warning devices are also used for any load or equipment that projects less than 1.2 metres if it projects in such a way that it is not readily visible to a person following immediately behind the vehicle.

# Towing ratio

A combination that is carrying a yacht must comply with the regulatory requirements applicable to all general access combinations i.e. the mass of the laden trailer must not exceed the lesser of:

- the capacity of the towbar, tow coupling and any other towing attachment/s e.g. safety chains.
- the aggregate trailer mass (ATM) specified for the trailer by it's manufacturer
- the maximum towing capacity specified by the manufacturer of the towing vehicle.

Where the manufacturer of the towing vehicle has not specified the maximum towing capacity, the following maximum towing capacity applies:

- 1½ times the unladen mass of the towing vehicle, providing the trailer is fitted with brakes that are working properly, or
- the unladen mass of the towing vehicle, if no trailer brakes are fitted.

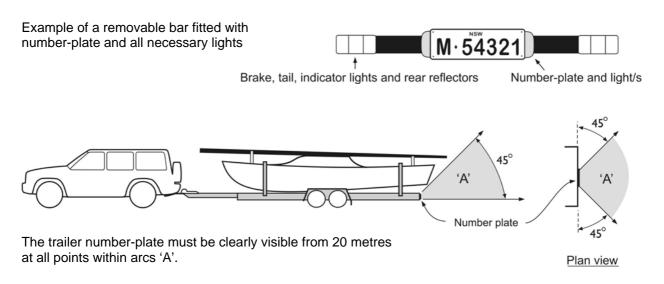
The total mass of a combination must not exceed the towing vehicle's GCM.

# Visibility of the trailer's rear lights and number-plate

The trailer's brake, tail, direction indicators, number-plate light/s, rear reflectors and numberplate must be clearly visible. The necessary lights, indicators, reflectors and number-plate may be attached to a removable bar, such as that shown in Figure 3 below, that can be fitted to the trailer or at the rear of the load as required.

The trailer number-plate must be clearly visible from 20 metres at all points within the arcs 'A' shown in Figure 3. If any part of the load obscures the number-plate, the plate must be moved to the rear of the yacht for the duration of the journey. The plate must face the rear and its top edge must not be more than 1.3 metres above the ground. A light must be provided that will enable the number-plate to be read from 20 metres at night or in adverse weather conditions.

#### FIGURE 3: VISIBILTY OF TRAILER NUMBER-PLATE AND REAR LIGHTS



# Oversize combinations

It is sometimes impracticable for a combination carrying a yacht to be within the maximum dimension limits imposed by the Regulation or the MLAs. There may also be instances where a relatively light, and therefore inappropriate, towing vehicle is used to keep the combination below 4.5 tonnes.

To encourage operators to use the most appropriate towing vehicle (generally one of the larger 4-wheel-drive type vehicles with the latest safety features), the 'Class 1 Yacht Trailer Combination Exemption Notice 2012' (the Notice) has been issued by RMS. Under the Notice, a combination exceeding 4.5 tonnes and carrying a yacht may be driven on the road provided it:

- does not exceed 19.0 metres in length, and
- does not have a rear overhang exceeding 5.0 metres, and
- complies with all of the requirements and conditions of the Notice.

A copy of the Notice must be carried in the driving compartment whenever the combination is operating under the Notice so that it can be produced if requested by a police officer or an authorised officer.

If the dimensions of the combination exceed the limits imposed by the Notice, a specific permit issued by the RMS Special Permits Unit is required – see page 6 for contact details.

# Travelling interstate

It is important to note that operating conditions vary across Australia and permits may be required from other State and Territory road authorities for travel in their respective jurisdictions. It is advisable to contact the relevant road authority before travelling interstate with the type of combination described in this VSI No. 62.

# Glossary

**Aggregate trailer mass (ATM)** is the laden mass of the trailer. The ATM is specified by the trailer manufacturer and is shown on the identification plate fitted to the trailer.

**Front load carrying area** is that part of the trailer forward of the rear overhang line, and on which a load can be carried.

**General access** means the combination may operate on any road, except where a load or dimension restriction is indicated by a sign – see VSI No. 5 for more information.

**Gross combination mass (GCM)** is the value specified by the manufacturer of a vehicle as being the sum of its GVM plus the maximum loaded mass of any trailer that it can tow in combination.

**Gross vehicle mass (GVM)** of a vehicle means the maximum loaded mass of the vehicle as specified by the vehicle's manufacturer.

**Rear overhang** is the distance measured between the rear overhang line and the rear of the trailer or of the load, depending on the mass of the combination.

**Rear overhang line** is the point from which rear overhang is measured. Most trailers used to carry a yacht have a single axle, or a tandem axle group; the rear overhang is measured from the vertical centreline of the single axle, or the centre of the axle group. For a trailer with a different axle configuration, see VSI No. 5 for more information.

Rear projection is the distance the load projects beyond the rear of the trailer.

**Unladen mass of the towing vehicle** is the vehicle's mass, unoccupied and unladen, with all fluid reservoirs filled to nominal capacity except for fuel, which shall be 10 litres only, and with all standard equipment and any options fitted. This is found on the vehicle's registration document, or can checked at a licensed weighbridge.

# Attachment

Copy of 'Class 1 Yacht Trailer Combination Exemption Notice 2012'.

#### FURTHER INFORMATION

#### **New South Wales Legislation**

www.legislation.nsw.gov.au | T (02) 9321 3333

- Road Transport (Vehicle Registration) Regulation 2007
- Road Transport (Mass, Loading and Access) Regulation 2005

#### **Roads and Maritime Services Technical Enquiries**

PO Box 1120, Parramatta NSW 2124 T 1300 137 302 | F 02 8837 0037 | E tech-enq@rta.nsw.gov.au

• Vehicle construction and registration requirements in NSW

#### **Roads and Maritime Services**

www.rms.nsw.gov.au | T 13 22 13 for details of your nearest motor registry

- Yacht Trailer Combination Exemption Notice 2012'
- VSI No. 5 Vehicle dimension limits
- Brochure Towing trailers things you should know
- Load Restraint Guide

#### **Roads and Maritime Services Special Permits Unit**

PO Box 94, Glen Innes NSW 2370

T 1300 656 371 | F 1300 361 570 | E spu@rms.nsw.gov.au

· Overdimension and/or overmass permits

#### Road Transport (General) Act 2005

#### Class 1 Yacht Trailer Combination Exemption Notice 2012 under Division 3 of Part 2 of the Road Transport (Mass, Loading and Access) Regulation 2005

I, Peter Duncan, Chief Executive of Roads and Maritime Services, pursuant to Clause 12 of the *Road Transport (Mass, Loading and Access) Regulation 2005*, exempt vehicle and trailer combinations to which this Notice applies from the requirement of Clause 8(2) of Schedule 1 Part 2 of the *Road Transport (Mass, Loading and Access) Regulation 2005* and Clause 91(1) of Part 7 of the Road Transport (Vehicle Registration) Regulation 2007 provided that they comply with the conditions of the exemption as provided in the Schedule of this Notice.

Peter Duncan Chief Executive Roads and Maritime Services

#### SCHEDULE

#### PART 1 – PRELIMINARY

This Notice is intended to enhance the safe travel of a vehicle and trailer combination that is carrying a small yacht (commonly known as a 'trailer yacht' or 'trailer sailer'), or similar sailboat, in such a way the combination does not comply in all respects with the *Road Transport (Mass, Loading and Access) Regulation 2005* and the Road Transport (Vehicle Registration) Regulation 2007. This Notice provides variations in certain aspects of the regulations, allowing operators to use the safest and most appropriate towing vehicle in the combination.

#### 1.1 Citation

This Notice may be cited as the *Class 1 Yacht Trailer Combination Exemption Notice 2012*.

#### 1.2 Commencement

This Notice takes effect on and from the date of publication in the NSW Government Gazette.

#### 1.3 Effect

This Notice remains in force up to and including 30 September 2017 unless it is amended or repealed earlier.

#### 1.4 Interpretation

- 1.4.1 Unless stated otherwise in this Notice, the words and expressions used in this Notice have the same meaning as those defined in the *Road Transport (General) Act 2005.*
- 1.4.2 Except where a contrary intention is indicated, the notes in the text of this Notice do not form part of this Notice.

#### PART 2 – APPLICATION

#### 2.1 Application

- 2.1.1 This Notice applies to a vehicle and trailer combination:
  - (1) that exceeds:
    - (a) 4.5 tonnes gross vehicle mass (GVM), or
    - (b) 4.5 tonnes gross combination mass (GCM), and
  - (2) which comprises:
    - (a) a motor vehicle; and
    - (b) a trailer designed to carry a small sailboat commonly known as a 'trailer yacht' or 'trailer sailer', or similar sailboat; and
  - (3) where the trailer load comprises a vessel as described in 2.1.1(2)(b).
- 2.1.2. The exemptions from the operation of the Road Transport (Mass Loading and Access) Regulation 2005 apply to the above-mentioned vehicles complying with the conditions specified in Parts 3 and 5.
- 2.1.3. The exemptions from the operation of the Road Transport (Vehicle Registration) Regulation 2007 apply to the abovementioned vehicles complying with the conditions specified in Part 4 and 5.

#### PART 3 – DIMENSIONS

#### **3.1** Dimension Limits

- 3.1.1 The combination and its load must not exceed an overall length of 19.0 metres.
- 3.1.2 The combination and its load must not exceed the dimension limits prescribed in Table 1.
- 3.1.3 As far as is practicable, any projection beyond the rear of the vehicle must be minimised.

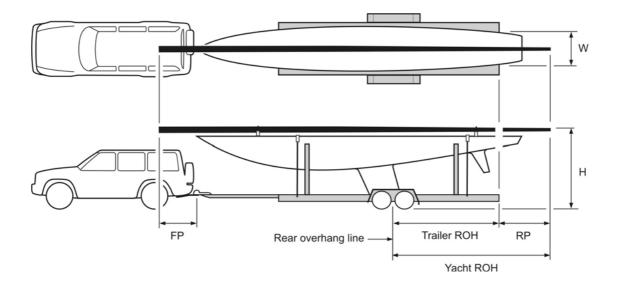
Forward projection (FP)	Rear overhang of trailer (Trailer ROH)	Rear overhang when carrying a yacht (Yacht ROH)	Width of any rear projection of load extending beyond Trailer ROH (W)	Height (H)
1.2 metres	3.7 metres	5.0 metres	2.0 metres	4.3 metres

 Table 1: Maximum dimensions (refer to Diagram 1)

In this notice:

- **Trailer ROH** means the distance between the rear overhang line and the extreme rear of the trailer's constructed length.
- Yacht ROH means the distance between the rear overhang line and the extreme rear of the yacht, including any of its equipment.

#### **Diagram 1: Dimensions**



#### PART 4 – LIGHTING AND NUMBER-PLATE

#### 4.1 Lighting, number-plate, and number plate light/s

- 4.1.1 The trailer's brake, tail, direction indicators, number-plate light/s, reflectors, and number-plate must not be obscured. The necessary lights, direction indicators, reflectors and number-plate may be attached to:
  - (a) a removable bar that can be fitted to the trailer or at the rear of the load as required, or
  - (b) a retractable bar that forms part of the trailer, and that when not carrying a yacht, is retracted to fit within the allowable dimension limits for the trailer, and when carrying a yacht, can be extended in a way so that it is contained within dimension (W) allowed for in Table 1.

#### PART 5 – OPERATING, TRAVEL AND OTHER CONDITIONS

#### 5.1 Travel Conditions

- 5.1.1 Subject to the **Yacht ROH** exceeding the **Trailer ROH**, a warning signal such as red flag or other suitable object of not less than 300 mm square must be fitted at the extreme rear of the load. The flag or object must be clearly visible at all times as a warning to persons on the roadway in the near vicinity of the vehicle or trailer. At night or in adverse weather conditions, the warning signal must be a red light that can be seen for 200 metres.
- 5.1.2 The towing vehicle's headlights must be on at all times when operating with the combination, unless the vehicle is fitted with daytime running lights, in which case the daytime running lights may be used instead of the headlights during daytime.
- 5.1.3 The combination is restricted to a speed limit of 90 km/h.
- 5.1.4 A copy of this Notice must be carried in the driving compartment whenever the combination is operating under this Notice and must be produced in response to a request by a police officer or an authorised officer.

#### 5.2 Other Conditions

5.2.1 In all other respects, the individual vehicles comprising the combination must comply with the dimension limits and other applicable requirements imposed under the *Road Transport (Vehicle Registration) Regulation 2007*, and the dimension and mass limits imposed under the *Road Transport (Mass, Loading and Access) Regulation 2005*.