

Carrying motorised mobility devices and motor cycles on vehicles

Purpose

This Vehicle Standards Information (VSI) No. 60 is intended as a guide to the safety and legal requirements that apply when carrying a motorised mobility device (MMD), such as an electric wheelchair or mobility scooter, or a motor cycle, on a rack fitted to the rear of a motor vehicle.

Note: The term 'rack' used in this document includes platforms supported by the motor vehicle.

Introduction

An MMD or a motor cycle may be carried on a rack attached to the rear of a vehicle, provided the rack and its attachment are strong enough to carry the MMD/motor cycle, and that the vehicle is not overloaded or exceeds the permitted dimension limits.

Guidelines

If you carry a MMD or motor cycle on the rear of your vehicle, you must use a suitable rack, attached either to the vehicle's tow bar or directly to its chassis or floor.

Before purchasing the rack, it is important to know the weight of the MMD or motor cycle you intend carrying on it. Once this is known, you should ensure that the rack is capable of safely supporting this weight – check with the manufacturer's specifications. You should also ensure that the rack can be fitted to your vehicle, and the combined weight of the rack and the MMD/motor cycle does not overload the vehicle or the tow coupling or other supporting attachment fitted to it.

The rack and its intended load must not exceed the manufacturer's limits on:

- The load on the rear and front axles, and the load distribution across the axles.
- The vertical load capacity on the vehicle's tow coupling.

Details of your vehicle's load carrying capacity should be in the user's manual, and the tow bar's vertical load capacity should be stated on it. If you cannot find this information, contact the vehicle manufacturer and/or tow bar manufacturer.

Fitting a tow bar or a rack is classified as a *significant modification* under the Road Transport (Vehicle Registration) Regulation 2017 unless it is a modification prescribed by the vehicle's manufacturer, and fitted in accordance with the manufacturer's specifications. A significant modification must be assessed and certified by a licensed certifier registered on the Road and Maritime Services' Vehicle Safety Compliance Certification Scheme.

The loaded vehicle must be able to use the road network safely and not encroach into adjacent lanes or over footpaths during normal driving activities. To ensure the load does not project excessively behind the rear or beyond either side of the vehicle, the load must not protrude more than 150mm to the sides of the vehicle; and the amount of rear overhang must not exceed the lesser of 60 per cent the vehicle's wheelbase or 3.7m. In addition, if the furthest point of the rack or the MMD/motor cycle is more than 1.2m from the rear edge of the vehicle, a red flag or similar object not less than 300 mm square must be fitted at furthestmost projecting point and be clearly visible as a warning to other road users.

These limits are shown in Figure 1.

FIGURE 1: DIMENSION LIMITS

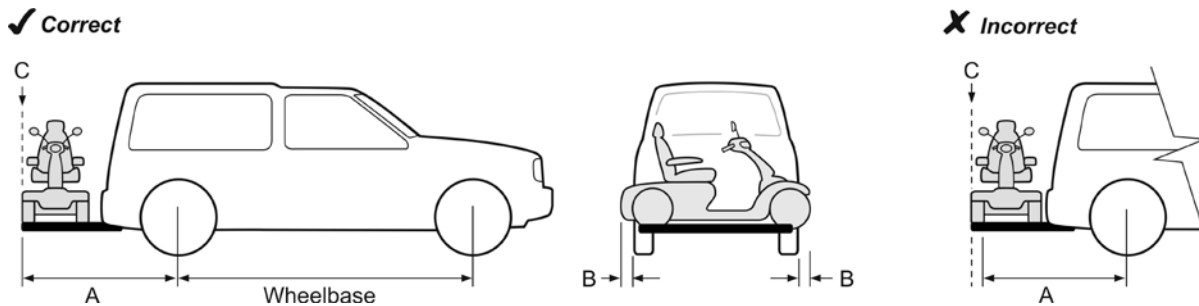
In the following diagrams:

'A' must not exceed the lesser of 60% of the wheelbase or 3.7m;

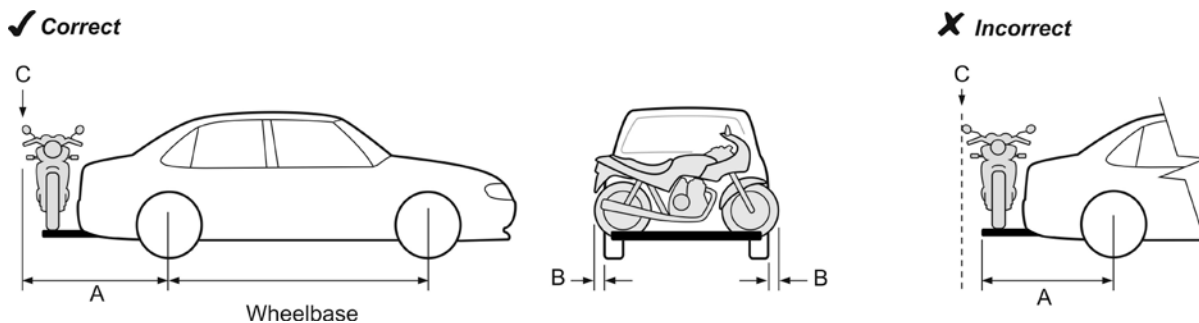
'B' must not be more than 150 mm;

'C' is the furthest point of the MMD/motor cycle from the rear of the vehicle and must not exceed 'A'.

(i) Dimension limits for a vehicle fitted with a rack carrying a motorised mobility device



(ii) Dimension limits for a vehicle fitted with a rack carrying a motor-cycle



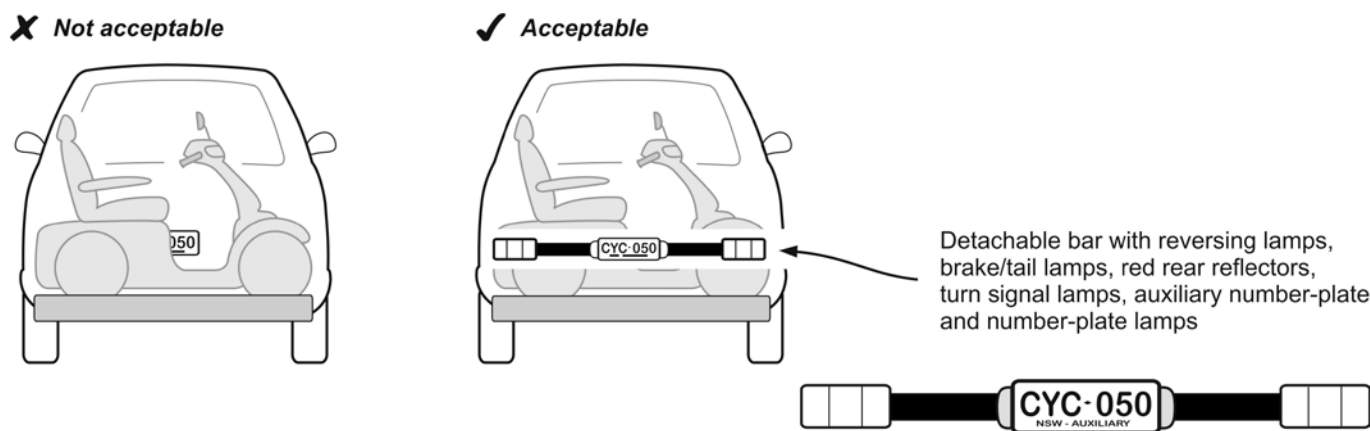
Before travelling with a rack holding a MMD or a motor cycle you must:

- Make sure that the rack is secured to the vehicle coupling device
- Make sure that the MMD or motor cycle is properly secured to the rack
- Make sure that the loaded rack does not reduce the ground clearance at the rear of the vehicle to less than 100 mm, and the rack and its load will be able to pass over common features, such as peaks and troughs in the road, drains, culverts and traffic calming devices without scraping along the ground
- Make sure the limits shown in Figure 1 are not exceeded
- Make sure that if the furthest point of the rack or MMD/motor cycle is within the 60% wheelbase limit shown as dimension 'A' in Figure 1.
- If the furthest point of the rack or MMD/motor cycle is more than 1.2 metres from the rear edge of the vehicle, make sure that an appropriate warning device, as described above, is fitted. This warning device may be part of an additional lighting system.
- Make sure the vehicle number-plate is clearly visible. If the number-plate is obscured, you must fit a special 'auxiliary number-plate', which is a smaller copy of the vehicle number-plate. This can be ordered online at www.myPlates.com.au, by telephoning the Plate Marketing Call Centre on 131 758, or at your nearest registry or Service NSW centre. If an auxiliary number-plate is used when carrying a MMD or a motor cycle, it may only be fitted to a rack that is attached to the motor vehicle

- Make sure the auxiliary number-plate is securely attached and that its top edge is no more than 1300 mm above the ground; and that it is clearly visible up to 20 m and legible at all points within an arc of 45° from the surface of the plate, above and to either side of the vehicle – see VSI No. 58 ‘Number-plate visibility’ for more information
- Make sure the rack and MMD/motor cycle do not obscure the vehicle lights including the brake lights, centre-mounted brake light and indicators. If any lights are obscured you must attach an additional set of lights either at the rear of the rack or on the item being carried. Also, if using the rack at night, you must fit one or more number-plate lights to illuminate the auxiliary number-plate if fitted. These lights are available from automotive accessory shops and other shops which sell racks. Figure 2 below demonstrates the correct installation of an auxiliary number-plate and light bar.
- If you use an auxiliary light bar, make sure the lights and indicators comply with the applicable vehicle safety standards and road rules.

When the rack is not in use, it should be folded up, or removed so that it is not a hazard to pedestrians and other road users, or obscure the vehicle’s lights.

FIGURE 2: INSTALLATION OF AUXILIARY NUMBER-PLATE AND LIGHT BAR



Penalties may apply if:

- The rack or the MMD/motor cycle it supports obscures any light or the number-plate, and it is not fitted with an additional set of lights and auxiliary number-plate
- The rack, with or without a MMD/motor cycle, creates a dangerous protrusion to either side or to the rear of the vehicle
- The MMD/motor cycle is not properly secured.
- The MMD/motor cycle exceeds the maximum capacity of the vehicle or rear axle.

FURTHER INFORMATION

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- Vehicle construction and registration requirements in NSW