

Introduction:

This bulletin provides guidelines for the certification of vehicles, which are to be **permanently modified** for use as a motorhome.

Conversion of a motor vehicle to a motorhome is deemed to be a vehicle modification. All modifications require certification from an Approved Vehicle Certifier (AVC) and must be completed in accordance with the guidelines applicable to such a conversion, be it the National Code of Practice (NCOP), or Australian Design Rules (ADR's), including any applicable Australian Standards (AS).



Motorhome Conversions

This bulletin applies to all vehicles that have been previously registered in, or imported into Australia, and converted to be a 'motorhome' being a modified vehicle primarily for the purpose of human occupation.

In addition to items covered in this bulletin motorhomes must continue to comply with all applicable standards and ADR's including the requirements of ADR 44 as it applies to motorhomes.

If the modification is intended on a vehicle not previously registered in Australia, the vehicle is subject to the Motor Vehicles Standards Act and requires to be certified as complying with all applicable ADR's. This bulletin does not cover vehicles that do not meet the ADRs. Please seek further advice from an AVC PRIOR to modifying these vehicles.

Below is the link to the Approved Vehicle Certifier list:

http://www.transport.tas.gov.au/vehicles/vehicle_inspections

What is a Motorhome?

A motorhome is a motor vehicle that has been constructed or permanently modified primarily for human occupation when stationary. It must include permanently affixed seats and table, sleeping accommodation, cooking facilities and storage facilities. In this bulletin the terms motorhome and campervan have the same meaning.

This bulletin is not intended to apply to vehicles that are fitted with a removable or "slide on" camping or accommodation units, or caravans which are towed, although many of the requirements such as vehicle suitability, load carrying capacity, dimensions and protrusions still apply.

Vehicle Suitability:

A vehicle selected for modification must be well suited for conversion to a motorhome. Prior to purchasing a vehicle to convert to a motorhome consideration should be given to;

- The vehicle's general mechanical, and structural condition,
- The specified load carrying capacity (GVM) is sufficient to accommodate the additional weight of items associated to a motorhome. Such as; full water tanks, full waste tanks, fridge, cupboards, beds, fittings, equipment, passengers and luggage.
- If the Gross Vehicle Mass (GVM) exceeds 4.5 tonnes what category of driver's license is required?
- All light motor vehicles less than 30 years old must be right hand drive.
- Modifications to Heavy Vehicles seeking certification must be certified in accordance with the requirements of the National Heavy Vehicle Law (NHVL) and be issued a Modification Plate and a Certificate.

Vehicle Mass and Carrying Capacity:

The carrying capacity of a vehicle is the GVM as specified by the manufacturer, less its empty (or tare) weight.

The tare mass of a motorhome includes all fittings, fluid reservoirs, fuel and, water tanks filled to normal operating capacity.

Any increase to a vehicle's GVM almost always requires a suspension and or brake upgrade. This is a further modification process, and is not covered by this bulletin. An increase in GVM requires certification from an AVC.

ADR Compliance:

All vehicles must continue to comply with the applicable ADR's determined by the category of vehicle (modification and bulk removal of seats can change the applicable ADR category), including the sections of ADR's 44 that apply specifically to motorhomes.

Conversion of Buses:

Registration fees for motorhomes are calculated on the number of cylinders rather than the GVM. To be eligible for motorhome registration a vehicle must have at least 70% of the total available internal space permanently modified for use as living quarters. If the vehicle when converted has greater than 9 seating positions it will be classified as a bus and will need to comply / maintain compliance with all relevant bus ADRs and possibly Accreditation requirements.

Vehicle Dimensions:

The following dimensions **MUST NOT BE EXCEEDED**:

- Length 12.5 metres
- Width 2.5 metres
- Height 4.3 metres
- Rear Over-Hang 60% of the wheelbase **OR** 3.7 metres, **whichever is the lesser measurement.**

The 'Wheelbase' is the distance between the centrelines of the front steer axle and the centreline of the rear axle/group. Rear-Over Hang is measured from the centreline of the rear axle/group to the rear most portion of the vehicle/including any extra fittings.

NOTE: All fittings such as awnings, toolboxes, spare wheels, bicycle racks, towbars, bull bars and, any other external fittings not technically essential to the vehicle must be fully contained within the above measurements, and not create dangerous protrusions, have sharp edges, or increase the likelihood of injury upon contact. When fitting items at the rear care must be taken to ensure no regulatory lighting or the registration plate is obscured.

General Safety:

A vehicle must not be modified or fitted with any object, fitting or appliance unless it is fitted in a manner that minimises the risk of bodily injury to any person. Interior fittings must be designed and fitted so as to prevent injury to an occupant. Hazardous projections, sharp edges and corners are not permitted.

All fittings including cupboards, seating, tables and other living area fittings must be securely fastened and be able to withstand a substantial amount of vibration without becoming detached or losing their contents. (Example being driven over unsealed or corrugated roads).

Seats:

Motorhomes are often configured to provide several different seating positions that may be occupied while the vehicle is moving. It strongly recommend that designated seating positions are forward facing, and located towards the front of the vehicle. *Designated seating positions* in this context mean seating positions that are equipped to be used whilst travelling. Seats may be used for several purposes, eg; for dining and or conversion to beds.

As far as possible, all the designated seating positions should be forward facing and are those that would most likely be occupied when travelling, such as seats immediately behind the front row of seats, rather than those at the rear of the vehicle.

Swivel seats, if intended to be used as seating positions when travelling, must be capable of being locked against rotation in the position in which they will be occupied when the vehicle is in motion. If a swivel seat is used in a designated seating position, it must be easily lockable without the use of tools in position(s) as intended for use in transport and ADR compliance must be determined for those locked position(s).

There must be a designated seating position for each sleeping berth provided in the motorhome. For example, a motorhome that has four sleeping berths must have at least four designated seating positions.

Seatbelts:

All seatbelts and seatbelt anchorages must comply with relevant ADR's and any applicable Australian Standards.

Seatbelts must be fitted to all designated seating positions. A lap-sash type belt is required for the driver and front outboard passenger positions and a lap belt is required for any centre seating position. Side facing seats may only have lap belts fitted.

Doors:

Every motorhome must be fitted with at least one outward opening or sliding door on the left hand side or the rear of the vehicle. Outward security doors fitted over bi-fold or inwards folding doors are not categorised as outward opening doors for this purpose.

Doors must provide a clear and direct path of access between the outside and inside of the residential area of the motorhome. The door must not be obstructed by any items such as furniture or a designated seating position. The door should be of a size which allows an average-sized person to easily and directly enter and exit the residential area of the motorhome. The door must be sufficiently close to the ground so that it can be accessed without steps or with a minimal number of fixed steps and does not require portable steps of any kind.

Glass:

All windscreen and window glass must meet Australian Standards, and be so marked on the glass. Interior household type light fittings and cupboard fronts, made of non-safety glass should not be used.

Those that are not safety glass must be adequately enclosed or otherwise protected to minimise the risk of injury caused by broken glass in an accident. Perspex or plastic are recommended alternatives to glass for internal fittings.

Fire Extinguishers:

Motorhomes must have at least one fire extinguisher with a minimum rating of 5B and must be fitted in accordance with AS 2444. Extinguishers must have a hose fitted so it may be directed to inaccessible places such as engine bays. If there are multiple compartments (rooms) then a second fire extinguisher is required, a fire blanket is also recommended where cooking facilities may use fats or oils.

Extinguishers must be located in a conspicuous and readily accessible position and mounted no higher than 1.2 metres from the floor. The mounting bracket must be securely fitted so the extinguisher does not dislodge due to vibration when travelling.

Liquefied Petroleum Gas (LPG)

Liquefied Petroleum Gas (LPG) appliances, such as stoves and water heaters, must be installed by a licenced gas installer and each appliance must be accompanied by an Installation Compliance Certificate, which identifies the vehicle by its Vehicle Identification Number (VIN)/Chassis number. Gas appliances must comply with the Australian Standards and the manufacturer's specifications. The installation of LPG appliances must comply with the applicable requirements of AS5601.

The vehicle's petrol or diesel fuel tank filler point must be on the opposite side of the vehicle to the refrigerator vent and any pilot lights that may create a source of ignition.

Gas appliances used in motorhomes **must not be connected to or derive fuel** from the vehicle's LPG fuel system (if fitted).

Mains Wiring Electrical Connections and Installations:

The electrical installation within the motorhome must at all-times comply with the requirements of the Australian Standard AS/NZS 3000 and AS/NZS 3001. All electrical work within the motorhome is prescribed work and therefore may only be performed by a suitably licenced electrical contractor. For all minor repairs to the electrical installation within a motorhome, the electrical contractor must provide the customer with a "Record of Electrical Work" that certifies that the work performed complies with the mandated standard.

Television and Visual Display Units:

Any television receiver or visual display units and their associated equipment must be securely mounted in a position which:

- Does not obscure the driver's vision;
- Does not impede driver or passenger movement in the vehicle;
- Ensure placement is not likely to increase the risk of injury to any occupant.
- Does not impinge on any SRS air bag deployment.

Unless being used as a driver's aid, all television receivers or visual display units must be installed so that no part of the image on the screen is visible to the driver from the normal driving position.

Toilets, Sinks and Showers:

A motorhome must not be equipped with a closet or urinal that can be discharged directly onto the road.

Waste from any closet, urinal, sink or shower must be plumbed to drain into a holding tank or tanks. Holding tanks must be vented outside the vehicle to the atmosphere.

No sink or shower drains are to be connected to any closet or urinal or to the same holding tank as the closet or urinal.

Motorhomes

Useful Links:

Approved Vehicle Certifiers:

http://www.transport.tas.gov.au/vehicles/vehicle_inspections

Australian Design Rules:

<https://infrastructure.gov.au/roads/motor/design/>

The National Heavy Vehicle Regulator:

<https://www.nhvr.gov.au/>

For more information contact:

Department of State Growth

Vehicle Standards

GPO Box 536

Hobart TAS 7001

Phone: (03) 03 6166 3263

Email: vehicle.standards@stategrowth.tas.gov.au

Web: www.transport.tas.gov