1999 No 625

New South Wales

Road Transport (Vehicle Registration) Amendment (Vehicle Standards) Regulation 1999

under the

Road Transport (Vehicle Registration) Act 1997

His Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Road Transport (Vehicle Registration) Act 1997*.

CARL SCULLY, M.P.,

Minister for Roads

Explanatory note

The object of this Regulation is to replace Schedule 4 to the *Road Transport (Vehicle Registration) Regulation 1998* so as to allow for the adoption of uniform national motor vehicle standards.

Schedule 4 to the *Road Transport (Vehicle Registration) Regulation 1998* provides for vehicle standards applicable to registrable vehicles.

The vehicle standards prescribed by the new Schedule 4 are (with necessary drafting and other minor changes) substantially the same as the *Australian Vehicle Standards Rules* approved by the National Road Transport Commission and the Ministerial Council for Road Transport.

This Regulation is made under the *Road Transport (Vehicle Registration) Act 1997*, including sections 14 (the general regulation-making power) and 15A (regulations to establish system for vehicle standards and inspections).

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Road Transport (Vehicle Registration) Amendment (Vehicle Standards) Regulation 1999

1 Name of Regulation

This Regulation is the *Road Transport (Vehicle Registration) Amendment (Vehicle Standards) Regulation 1999*.

2 Commencement

This Regulation commences on 1 December 1999.

3 Amendment of Road Transport (Vehicle Registration) Regulation 1998

The *Road Transport (Vehicle Registration) Regulation 1998* is amended as set out in Schedule 1.

4 Notes

The explanatory note does not form part of this Regulation.

Schedule 1 Amendments

(Clause 3)

[1] The whole regulation (other than the definition of "motor cycle" in the Dictionary)

Omit "motor cycle" and "motor cycles" wherever occurring.
Insert instead "motor bike" and "motor bikes" respectively.

[2] Clause 22 (1) and the Dictionary

Omit "motor tricycle" wherever occurring from clause 22 (1) and the definition of ***bicycle rack*** in the Dictionary.
Insert instead "motor trike".

[3] Clause 34 Obligations of disposers: provision of inspection reports

Omit "motor cars" from paragraph (a) of the definition of ***examinable vehicle*** in clause 34 (5).
Insert instead "cars".

[4] Clause 57 Registrable vehicles to comply with vehicle standards specified in Schedule 4

Omit clause 57 (3) (b) (i). Insert instead:

(i) fails to comply with the dimension limits prescribed by Division 2 of Part 4 of Schedule 4, and

[5] Schedule 4 Vehicle standards

Omit the Schedule. Insert instead:

Schedule 4 Vehicle standards

(Section 56)

Part 1 Introductory

Division 1 Object of Vehicle Standards

1 Object of Vehicle Standards

(1) The object of this Schedule is to set standards, about the construction and performance of motor vehicles, trailers and combinations, that are uniform throughout Australia.

(2) The standards set by this Schedule are intended:

(a) to promote, throughout the life of motor vehicles, trailers and combinations, their safe use and efficiency and protection of the environment, and

(b) to reduce the cost of transport administration.

Division 2 General

2 Application of Schedule

(1) Subject to this clause and except where the context of this Schedule otherwise indicates or requires, every registrable vehicle that is, or is to be, driven on a road or road related area:

(a) must be provided with the items of equipment appropriate for the vehicle set out in, and conforming with the provisions of, this Schedule, and

(b) must be so constructed and equipped that it will comply with all other provisions appropriate to the vehicle that are specified in this Schedule.

(2) The provisions of this Schedule (other than this clause) do not apply to any plant.

(3) However, any such plant must comply with any technical specifications entitled "Plant Vehicles: Registration Options Manual" and "Plant Vehicle Certification Manual" published by the Authority from time to time.

(4) In this clause:

plant means a motor vehicle that wholly comprises:

(a) a machine or implement that is not capable of carrying any load other than tools and accessories usually carried, or

(b) a crane or a fork lift truck.

3 Non-application of Schedule—exemption under other laws

(1) A provision of this Schedule does not apply to a vehicle or combination if the vehicle or combination is exempt from:

(a) the provision under another law of this jurisdiction, or

(b) the corresponding provision of the law of another jurisdiction.

(2) However, the vehicle or combination is exempt only if all conditions of the exemption (if any) are being complied with.

Example

An exemption permitting a greater dimension limit for a vehicle is subject to conditions about the route where, and time when, the vehicle is permitted to travel, and the escort vehicles required to accompany the vehicle. A relevant provision of this Schedule does not apply to the vehicle only if these conditions are complied with.

4 Non-application of Schedule—Motor Standards Act approvals

A provision of Parts 2 to 10 of this Schedule does not apply to a vehicle if :

(a) the vehicle does not comply with a requirement of an ADR applying to that vehicle, and

(b) the provision of this Schedule corresponds to the requirement of the ADR, and

(c) despite the non-compliance, approval has been given, under section 10A (2) or (3) of the *Motor Vehicle Standards Act 1989* of the Commonwealth, to place identification plates on vehicles of that type, and

(d) the vehicle complies with the approval conditions (if any).

Note 1. Section 10A (2) of the *Motor Vehicle Standards Act 1989* (Cwlth) deals with vehicles that do not comply with an ADR, but the non-compliance is only in minor and inconsequential respects.

Note 2. Section 10A (3) of that Act deals with vehicles that do not comply with an ADR and the non-compliance is not minor and inconsequential, but the vehicle will be safe to use if conditions are complied with.

5 Interpretation

(1) A reference in this Schedule:

(a) to a clause of this Schedule is a reference to a clause contained in this Schedule, and

(b) to a clause of this Regulation is a reference to a clause of this Regulation other than a clause in any Schedule to this Regulation.

(2) A diagram in this Schedule is part of this Schedule. A diagram of something (except the essential diagram in clause 172) is an illustrative example of the thing in black and white, but does not represent its dimensions or the dimension of any part of it.

Note. The essential diagram in clause 172 provides the dimensions required for a 75 millimetre kingpin used in a B-double or road train.

(3) An example (whether or not in the form of a diagram) in this Schedule is part of this Schedule.

(4) If a clause in this Schedule includes an example of the operation of that clause:

(a) the example is not exhaustive, and

(b) the example does not limit, and may extend, the meaning of the clause, and

(c) the example and the clause are to be read in the context of each other and of the other clauses of this Schedule, but, if the example and the clause as so read are inconsistent, the clause prevails.

6 References to registration before the commencement of Act

A reference in this Schedule to the registration of a vehicle on a date occurring before the commencement of the Act is taken to be a reference to its registration under the *Traffic Act 1909* before that date.

7 Date of manufacture of vehicle

If, in respect of a registrable vehicle imported into Australia, an application is or was made in New South Wales:

(a) on or after 1 January 1984, for registration of the vehicle as a public passenger vehicle, or

(b) on or after 1 July 1987, for registration of the vehicle as a motor lorry having a GVM exceeding 12 tonnes,

the date of manufacture of the vehicle is, for the purposes of this Schedule, taken to be the date of entry of the vehicle into Australia.

8 Optional items

If in a provision of this Schedule, a second edition ADR or a third edition ADR it is provided or indicated that any item of equipment is optional and the item is used on a registrable vehicle to which the provision is applicable, the item must conform with the requirements of that provision.

9 Special requirements for vehicles used by disabled persons

The Authority may require that any registrable vehicle be specially constructed, equipped or adapted in a manner not provided for in this Schedule if:

(a) it is to be used by a person who is suffering from a physical disability, or

(b) it is to be used in such other circumstances as may be necessary in the interests of public safety.

10 Authority may exempt vehicle from requirement of Schedule

(1) The Authority may exempt any particular vehicle or class of vehicle from any requirement of this Schedule.

(2) An exemption may be granted subject to conditions.

(3) The Authority may amend or revoke an exemption or a condition made or imposed in accordance with this clause.

Division 3 Australian Design Rules and other standards

11 Compliance with second edition ADRs

(1) If a second edition ADR recommends that the ADR should apply to the design and construction of a vehicle, the vehicle must comply with the ADR.

(2) If a second edition ADR contains a requirement for a type of equipment fitted to a vehicle built on or after a stated time any equipment of the same type fitted to the vehicle after it is built must comply with:

(a) the requirement as in force when the vehicle was built, or

(b) if the requirement is amended after the vehicle is built and before the equipment is fitted—the requirement as in force:

(i) when the vehicle was built, or

(ii) when the equipment was fitted, or

(iii) at any time between when the vehicle was built and the equipment was fitted.

(3) However, a vehicle, or equipment fitted to a vehicle, need not comply with a recommendation or requirement of a second edition ADR if:

(a) the recommendation or requirement is replaced by, or is inconsistent with, a requirement of a third edition ADR applying to the vehicle or equipment, and

(b) the vehicle or equipment complies with the requirement of the third edition ADR.

(4) If a second edition ADR allows a vehicle built on or after a stated time to be fitted with equipment, a vehicle built before the time may also be fitted with the equipment.

12 Compliance with third edition ADRs

(1) If a third edition ADR applies to the design and construction of a vehicle, the vehicle must comply with the ADR.

(2) If a third edition ADR contains a requirement for a type of equipment fitted to a vehicle built on or after a stated time, any equipment of the same type fitted to the vehicle after it is built must comply with:

(a) the requirement as in force when the vehicle was built, or

(b) if the requirement is amended after the vehicle is built and before the equipment is fitted—the requirement as in force:

(i) when the vehicle was built, or

(ii) when the equipment was fitted, or

(iii) at any time between when the vehicle was built and the equipment was fitted.

(3) However, a vehicle, or equipment fitted to a vehicle, need not comply with a requirement of a third edition ADR if:

(a) the requirement is replaced by, or is inconsistent with, a requirement of a later version of the ADR applying to the vehicle or equipment, and

(b) the vehicle or equipment complies with the requirement of the later version.

(4) If a third edition ADR allows a vehicle built on or after a stated time to be fitted with equipment, a vehicle built before the time may also be fitted with the equipment.

13 Exception to compliance with ADRs—vehicles that are not road vehicles

A vehicle need not comply with an ADR applied by clause 11 (1) or 12 (1) if a determination or declaration under section 5B of the *Motor Vehicle Standards Act 1989* of the Commonwealth provides that the vehicle is not a road vehicle for that Act.

14 Exception to compliance with ADRs—Motor Vehicle Standards Act

(1) A vehicle need not comply with an ADR applied by clause 11 (1) or 12 (1) if:

(a) despite non-compliance with the ADR, approval has been given, under section 10A (2) or (3) of the *Motor Vehicle Standards Act 1989* of the Commonwealth, to place identification plates on vehicles of that type, and

(b) the vehicle complies with the approval conditions (if any).

Note. See notes to clause 4.

(2) A vehicle need not comply with an ADR applied by clause 11 (1) or 12 (1) if:

(a) the vehicle may be supplied to the market under subsection 14A (1) of the *Motor Vehicle Standards Act 1989* of the Commonwealth, and

(b) for a vehicle for which an approval has been given under that subsection—the vehicle complies with the approval conditions (if any).

(3) A vehicle need not comply with an ADR applied by clause11 (1) or 12 (1) if:

(a) the vehicle may be used in transport in Australia under subsection 15 (2) of the *Motor Vehicle Standards Act 1989* of the Commonwealth, and

(b) for a vehicle for which an approval has been given under that subsection—the vehicle complies with the approval conditions (if any).

15 Partial exception to compliance with ADRs—personally imported vehicles

(1) A personally imported vehicle must be fitted with:

(a) seat belts that are as effective as seat belts that meet an Australian Standard or British Standard for seat belts as in force when this clause commenced, and

(b) seat belt anchorages that meet the number and location requirements of second or third edition ADR 5, and

(c) child restraint anchorages that meet the number, location, accessibility, thread size and form requirements of second edition ADR 34 or third edition ADR 5 or 34, and

(d) head restraints that meet the number, location and size requirements of second or third edition ADR 22.

(2) However, a personally imported vehicle need only meet the requirements of an ADR mentioned in subclause (1) if the ADR recommends that it should apply, or applies, to a vehicle of the same type.

(3) A personally imported vehicle need not otherwise comply with an ADR applied by clause 11 (1) or 12 (1).

16 Alteration of specifications

(1) A car or motor car derivative must not be altered from its specifications, as originally manufactured, so that it no longer complies with the requirements of a second edition ADR or third edition ADR applicable to that vehicle or altered in any of the following respects:

(a) by fitting a wheel rim that does not conform to the relevant dimensional standards for wheel rims set down in the Tyre and Rim Standards Manual issued by the Tyre and Rim Association of Australia,

(b) by widening the wheel track of the front or rear wheels by more than 25 mm beyond the maximum specified by the axle or vehicle manufacturer,

(c) by fitting a wheel nut that does not engage the thread of the wheel stud for at least the same length as the wheel nut provided by the vehicle manufacturer or the fitting of a wheel nut that does not match the taper on the wheel stud hole,

(d) by fitting a tyre other than that appropriate to the wheel rim as specified in the Tyre and Rim Standards Manual issued by the Tyre and Rim Association of Australia or in any applicable second edition ADR or third edition ADR,

(e) so that any part of it other than a tyre or wheel rim will contact a road surface in the case of the complete deflation of a tyre,

(f) by welding or heating an axle, stub axle, steering arm or steering knuckle support.

(2) A vehicle, other than a car or motor car derivative, must not be altered from its specifications, as originally manufactured, so that it no longer complies with the requirements of a second edition ADR or a third edition ADR applicable to that vehicle.

(3) If a vehicle is altered from its specifications, as originally manufactured, the Authority may require the owner to supply such information about the alterations as the Authority considers necessary.

(4) Despite subclauses (1) and (2), a vehicle may be altered from its specifications as originally manufactured if the alteration only gives effect to any subsequent second edition ADR or third edition ADR applicable to a vehicle of that category.

17 Compliance with third edition ADR as alternative to compliance with Schedule

Nothing in Parts 2 to 12 prevents a registrable vehicle from being constructed and equipped so as to comply with any relevant requirement of a provision of a third edition ADR as an alternative to being constructed and equipped to comply with any relevant requirements of a corresponding provision of Parts 2 to 12.

18 What is an adopted standard

An ***adopted standard*** is a standard, except a national standard, that is applied, adopted or incorporated by this Schedule.

Example

Clause 66 (7) adopts Australian Standard AS 1906 *Retro-reflective Materials and Devices for Road Traffic Control Purposes*.

19 Exception to compliance with adopted standards

A vehicle need not comply with an adopted standard if:

(a) the standard is replaced by, or is inconsistent with, a later version of the standard, and

(b) the vehicle complies with the later version of the standard.

20 References to adopted standards and national standards

(1) Unless the contrary intention appears, a reference in a clause or subclause to an adopted standard is a reference to the standard as in force when the clause or subclause commenced.

(2) Unless the contrary intention appears, a reference in this Schedule to a national standard is a reference to the standard as in force from time to time.

Part 2 General Safety Requirements

Division 1 All vehicles

21 General requirement to keep vehicles in good order

In addition to complying with the requirements of this Schedule, the weight of any registrable vehicle and everything in its construction, form, equipment, working and general condition must be such that:

(a) it will not contravene any provision of any Act or other law, and

(b) it will not cause danger or unreasonable annoyance to any person.

22 Steering

(1) A motor vehicle with a GVM over 4.5 tonnes must have a right-hand drive.

(2) A motor vehicle with a GVM not over 4.5 tonnes must have a right-hand drive if the vehicle:

(a) is less than 30 years old, and

(b) is required under a law of this jurisdiction to have a right-hand drive.

(3) A motor vehicle has a right-hand drive if the centre of at least 1 steering control of the vehicle is to the right of, or in line with, the centre of the vehicle.

(4) A component of the steering system of a motor vehicle that is essential for effective steering of the vehicle must be built to transmit energy by mechanical means only.

(5) Failure of a non-mechanical component of the steering system must not prevent effective steering of the vehicle.

(6) This clause does not apply to a vehicle if the vehicle is built or used mainly for a purpose other than the transport of goods or people by road.

23 Turning ability

(1) A motor vehicle must be able to turn in a circle not over 25 metres in diameter, measured by the outer edge of the tyre track at ground level.

(2) The vehicle must be able to comply with subclause (1) whether it turns to the left or to the right.

24 Ability to travel backwards and forwards

A motor vehicle with an unloaded mass over 450 kilograms must be able to be driven both backwards and forwards when the driver is in the normal driving position.

25 Protrusions

(1) An object fitted to a vehicle must be designed, built and fitted to the vehicle in a way that minimises the likelihood of injury to a person making contact with the vehicle.

(2) However, subclause (1) does not apply to an object fitted to a vehicle if:

(a) the vehicle was designed before 1965 and the object was part of the design of the vehicle, or

(b) the object was fitted to the vehicle before 1965 in accordance with the law of the place where the object was fitted.

26 Oil and grease not to be dropped

All parts and fittings of a motor vehicle or trailer must be such that an undue amount of oil or grease will not be dropped onto the roadway.

27 Driver's view and vehicle controls

A motor vehicle must be built:

(a) to allow the driver a view of the road and of traffic to the front and sides of the vehicle so the driver can drive the vehicle safely, and

(b) with its controls located so the driver can drive the vehicle safely.

28 Seating

A seat for a driver or passenger in a vehicle must be securely attached to the vehicle.

29 Seat belts for cars registered between 1 January 1965 and 1 January 1969

Every car and motor car derivative first registered on or after 1 January 1965 and before 1 January 1969 must be equipped for each front seat position that is adjacent to the side of the vehicle with a seat belt that:

(a) has been installed in accordance with instructions issued by the manufacturer of the seat belt, and

(b) at the time of its installation has not previously been installed and used in a motor vehicle, and

(c) is of:

(i) a type referred to in Australian Standard AS E35 prepared by the Standards Association of Australia as a Combination Belt (High) and has been manufactured in accordance with that Standard, or

(ii) some other type approved by the Authority.

30 Child restraint anchorage bolts in drive yourself vehicles

(1) Every motor vehicle that is a drive yourself vehicle (as referred to in the Table to Schedule 2 to the *Miscellaneous Acts (Transport Accidents Compensation) Amendment Act 1987*), must be fitted with a child restraint anchorage bolt of a type approved by the Authority.

(2) A child restraint anchorage bolt referred to in this clause must be fitted to a child restraint anchorage point if the vehicle is one required by the second editions ADRs or third edition ADRs to have a child restraint anchorage.

31 Door latches and hinges

Door latches and hinges on every vehicle must be so constructed that the doors are securely affixed to the vehicle and capable of remaining securely fastened when closed.

32 Mudguards and spray suppression

(1) A vehicle must have firmly fitted:

(a) a mudguard for each wheel or for adjacent wheels, and

(b) for each axle group and single axle on a vehicle that is part of a B-double—spray suppression devices complying with Parts 1 and 2 of British Standard AU200–1984 *Spray Reducing Devices for Heavy Goods Vehicle*.

(2) However, subclause (1) (a) does not apply to a vehicle if:

(a) the construction or use of the vehicle makes the fitting of mudguards unnecessary or impracticable, or

(b) the body or part of the body of the vehicle acts as a mudguard.

Examples of vehicles to which subclause (2) (a) applies:

1. Timber jinkers.
2. Most road-making plant.
3. Some agricultural equipment.

(3) A mudguard fitted to a vehicle must, when the wheels of the vehicle are in position to move straight ahead:

(a) reduce the danger of a person contacting the moving wheels, and

(b) for the rear wheels:

(i) cover the overall tyre width of the wheel or wheels to which it is fitted, and

(ii) be fitted so the height above ground level of the lowest edge of the rear of the mudguard is not over one-third of the horizontal distance between the edge and the centre of the rearmost axle.

(4) However, a mudguard may be up to:

(a) 230 millimetres above ground level, or

(b) on a vehicle built to be used off road—300 millimetres above ground level.

(5) The outside of a rear mudguard, except a mudflap, of a vehicle that can be seen from the rear of the vehicle must be coloured white or silver if the vehicle:

(a) is at least 2.2 metres wide, and

(b) has a body the vertical measurement of which is under 300 millimetres at the rear, measured from the lowest point of the body above ground level to the highest point, and

(c) is not fitted with rear marking plates in accordance with clause 126.

(6) For subclause (5) (a), the width of a vehicle is measured disregarding any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

33 Horns, alarms etc

(1) A motor vehicle must be fitted with at least 1 horn or other device that can give sufficient audible warning to other road users of the approach or position of the vehicle.

(2) A motor vehicle must not be fitted with a device that can make a sound like the sound of a siren, exhaust whistle, compression whistle or repeater horn.

(3) However, subclause (2) does not apply to:

(a) a police vehicle, or

(b) an emergency vehicle, or

(c) an Australian Protective Service vehicle, or

(d) an Australian Customs Service vehicle, or

(e) an Airservices Australia vehicle, or

(f) a vehicle at least 25 years old that is fitted as a police or emergency vehicle if:

(i) the vehicle is used for exhibition purposes, or

(ii) it is part of a collection of former police or emergency vehicles, or

(g) an anti-theft alarm if the alarm cannot be operated while the vehicle's ignition is on.

(4) Also, a motor vehicle may be fitted with a device that emits a regular, intermittent sound while the vehicle is reversing or in reverse gear.

(5) The device must not be louder than is necessary so the driver, and a person near the vehicle, can hear the device when it is operating.

34 Rear vision mirrors

(1) A rear vision mirror or mirrors must be fitted to a motor vehicle as required by this clause so that a driver of the vehicle can clearly see by reflection the road behind the vehicle and any following or overtaking vehicle.

(2) At least 1 rear vision mirror must be fitted to:

(a) a car, and

(b) a motor trike with 2 front wheels, and

(c) a motor bike, or motor trike with 1 front wheel, built before July 1975.

(3) At least 1 rear vision mirror must be fitted to each side of the motor vehicle:

(a) if the vehicle has a GVM over 3.5 tonnes, or

(b) if the vehicle is a motor bike, or motor trike with 1 front wheel, built after June 1975, or

(c) if the vehicle is constructed for the carriage of goods (not being a station waggon), or

(d) if the vehicle is a bus, or

(e) if the maximum width of any trailer or other vehicle drawn by the vehicle is greater than that of the vehicle, or

(f) if because of the manner in which the vehicle is constructed, equipped or loaded, or because of the fact that the vehicle is drawing a trailer or other vehicle, or for any other reason, the driver cannot, by means of a mirror fixed to the interior of the vehicle, have reflected to him or her as far as practicable a clear view of the road to the rear of the vehicle and of any following or overtaking vehicle.

(4) A motor vehicle with a GVM not over 3.5 tonnes (except a motor vehicle mentioned in subclause (2) or (3)) must be fitted with:

(a) at least 1 rear vision mirror on the right side of the vehicle, and

(b) at least 1 rear vision mirror on the left side of the vehicle or inside the vehicle.

(5) A rear vision mirror fitted to a motor vehicle with a GVM over 3.5 tonnes must not project over 150 millimetres beyond the widest part (excluding lights, signalling devices and reflectors) of the vehicle or combination.

(6) However, the rear vision mirror may project not over 230 millimetres beyond the widest part of the vehicle or combination if it can fold to project not over 150 millimetres beyond the widest part.

35 Rear vision mirrors—surfaces

(1) A rear vision mirror required to be fitted to the side of a motor vehicle with a GVM over 3.5 tonnes must have a reflecting surface of at least 150 square centimetres.

(2) A rear vision mirror required to be fitted to the right side of a motor vehicle with a GVM over 3.5 tonnes must have a flat reflecting surface if:

(a) the motor vehicle has only 1 steering control, and

(b) the centre of the steering control is to the right of, or in line with, the centre of the motor vehicle.

(3) The reflecting surface of the rear vision mirrors that are required to be fitted to a motor bike or moped must:

(a) each be of the same curvature, and

(b) if convex, be part of a notional sphere with a radius of at least 1.2 metres.

36 Additional rear vision mirrors

A motor vehicle may be fitted with additional rear vision mirrors or mirror surfaces that are flat or convex or a combination of flat and convex surfaces.

37 Automatic transmission

(1) A motor vehicle fitted with an automatic transmission must have an engine starter mechanism that cannot operate when the transmission control is in a position to drive the vehicle.

(2) A vehicle built after 1975 that is fitted with an automatic transmission must have an indicator in the driver's compartment showing the transmission control position.

(3) Subclauses (1) and (2) do not apply to a motor vehicle with less than 4 wheels.

(4) If a motor vehicle (other than a motor bike or an implement) manufactured on or after 9 January 1976 is equipped with automatic transmission:

(a) the transmission control lever position and an indication of the transmission gear ratio selected, must be displayed within the driver's compartment in such a location that they will be readily visible to the driver, and

(b) the sequence of transmission control lever positions must:

(i) include a neutral position (whereby no power is transmitted to the driving wheels) located between the reverse drive and forward drive positions, and

(ii) in cases where a park position (whereby forward or rearward movement of the vehicle is prevented) is included, be such that the park position is located at the end of the sequence adjacent to the reverse drive position.

(5) If a car or a motor car derivative manufactured on or after 9 January 1976 is equipped with automatic transmission:

(a) if the transmission control lever is located on the steering column:

(i) the movement of the lever from neutral to reverse must be clockwise except that in cases where all lever positions are to the right of the vertical longitudinal plane through the centre of the steering wheel, the movement of the lever from neutral to reverse must be anti-clockwise, and

(ii) the movement of the device provided to indicate the transmission gear ratio selected must be generally in the same linear or rotational direction as the movement of the lever, and

(b) if the transmission control lever is located in a position other than on the steering column:

(i) all lever positions must be to the left of the vertical longitudinal plane through the centre of the steering wheel, and

(ii) movement of the lever from neutral to reverse must be generally upwards, forward or to the left according to whether the lever is constrained to be moved generally in a vertical, longitudinal or transverse direction, as the case may be.

38 Diesel engines

A motor vehicle propelled by a compression ignition engine (commonly known as a diesel engine) must be fitted with a device preventing the engine from being started accidentally or inadvertently.

39 Bonnet securing devices

(1) A motor vehicle with a moveable body panel forward of the windscreen that covers an engine or luggage storage or battery compartment, must have a device to secure the panel.

(2) However, if the panel opens from the front in a way that partly or completely obstructs the driver's forward view through the windscreen, the panel must have primary and secondary devices to secure the panel.

40 Electrical wiring, connections and installations

(1) The wiring of electrical equipment of a vehicle, except the high tension ignition wiring, must:

(a) be supported at intervals of not over 600 millimetres, unless the vehicle is a pole-type trailer with a pole with an adjustable length, or an extendible trailer, and

(b) be insulated at each of its joints, and

(c) be located where it cannot:
(i) become overheated, or
(ii) contact moving parts, or
(iii) come near enough to the fuel system to be a fire hazard, and

(d) be protected from chafing.

(2) The electrical connectors between motor vehicles and trailers, for operation of the vehicle lights required by this Schedule, must comply with Australian Standard AS 2513-1982 *Electrical Connections for Trailer Vehicles*.

(3) A trailer must be equipped with an electrical conductor, independent of the trailer coupling, that provides a return path between the electrical circuits of the trailer and towing vehicle.

(4) The electrical wiring, connections and installations of a semi-trailer, dog trailer or converter dolly used in a road train over 19 metres long after June 1998 must comply with third edition ADR 63, whether or not it was built before the date stated in the ADR for vehicles of that type.

41 Speedometers

Every motor vehicle (not being a trailer) manufactured on or after 1 July 1974 and capable of being driven at a speed in excess of 40 kilometres per hour on a level road must be fitted with a speedometer that must:

(a) indicate the speed at which the vehicle is being driven in kilometres per hour, and

(b) indicate, when the vehicle is travelling at a speed in excess of 50 kilometres per hour, a speed that is not more than 10% less than the actual speed, and

(c) be readily visible to the driver.

42 Television receivers and visual display units

(1) A television receiver or visual display unit must not be installed in a vehicle so any part of the image on the screen is visible to the driver from the normal driving position.

(2) However, subclause (1) does not apply to:

(a) a television receiver or visual display unit that cannot be operated when the vehicle is moving, or

(b) a driver's aid in any vehicle or a destination sign in a bus.

Examples of driver's aids:

1. Closed-circuit television security cameras.
2. Dispatch systems.
3. Navigational or intelligent highway and vehicle system equipment.
4. Rear view screens.
5. Ticket-issuing machines.
6. Vehicle monitoring devices.

(3) A television receiver, or visual display unit, and its associated equipment in a vehicle must be securely mounted in a position that:

(a) does not obscure the driver's view of the road, and

(b) does not impede the movement of a person in the vehicle.

43 Windows generally

(1) Every window must be sound and properly fitted and each movable window must be fitted with a suitable device to enable it to be opened and closed.

(2) At least half of the number of windows must be capable of being opened.

44 Windscreens and windows

(1) Transparent material used in a windscreen, window, or an interior partition, of a motor vehicle must be of approved material if:

(a) the vehicle was built after June 1953, or

(b) the material was first fitted to the vehicle after June 1953.

(2) Despite subclause (1), non-shatterable transparent material may be used in a window or an interior partition of a motor vehicle.

(3) In this clause:

approved material means material with the same characteristics as material mentioned in any of the following standards:

- Australian Standard AS R1–1965 *Safety Glass for Land Transport*
- Australian Standard AS R1–1968 *Safety Glass for Land Transport*
- Australian Standard AS 2080–1977 *Safety Glass for Vehicles*
- British Standard BS 857:1967 *Specification for Safety Glass for Land Transport*
- British Standard BS 5282:1975 *Road Vehicle Safety Glass*
- British Standard BS AU178:1980 *Road Vehicle Safety Glass*
- Japanese Industrial Standard JIS R 3211–1979 *Safety Glasses for Road Vehicles*
- American National Standard ANSI Z26.1–1980 *Safety Code for Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highway*.

transparent material does not include any coating added to the windscreen, window or partition after its manufacture.

45 Window tinting

(1) Glazing used in a windscreen of a motor vehicle must have a luminous transmittance of at least:

(a) for a motor vehicle built after 1971—75%, or

(b) for another motor vehicle—70%.

(2) Windscreen glazing of a motor vehicle must not be coated in a way that reduces its luminous transmittance.

(3) However, subclauses (1) and (2) do not apply to the greater of the following areas of a windscreen:

(a) the area above the highest point of the windscreen that is swept by a windscreen wiper,

(b) the upper 10% of the windscreen.

(4) Glazing used in a window or interior partition of a motor vehicle must have a luminous transmittance of at least 70%.

(5) Glazing behind the rear of the driver's seat may be coated to achieve a luminous transmittance of not less than 35%.

(6) Glazing in a side window forward of the rear of the driver's seat may be coated to achieve a luminous transmittance of not less than 70% or, if another law of this jurisdiction allows a lesser luminous transmittance, the greater of:

(a) the lesser luminous transmittance allowed under the other law, and

(b) 35%.

(7) Glazing that has been coated to reduce its luminous transmittance must not have a reflectance of over 10%.

(8) The luminous transmittance requirements in subclauses (5) and (6) apply to a vehicle instead of the corresponding requirements in the relevant ADR.

46 Glazing in windscreens, windows and interior partitions

(1) Clause 45 does not apply in relation to:

(a) any part of the glazing of a window (other than a windscreen) or interior partition of a motor vehicle that was first registered (whether or not in New South Wales) before 1 August 1994, if that part of the glazing has a luminous transmittance of not less than:

(i) 35% (except when subparagraph (ii) applies), or

(ii) the luminous transmittance it had immediately before 1 August 1994 if it had a luminous transmittance of less than 35% at that time, or

(b) any part of the glazing of a window (other than a windscreen) or interior partition of a motor vehicle that was first registered (whether or not in New South Wales) on or after 1 August 1994, if:

(i) that part of the glazing has a luminous transmittance of not less than 35%, and

(ii) the motor vehicle is equipped with an external rear vision mirror, or external rear vision mirrors, complying with the requirements of clause 34 of this Schedule, or

(c) any part of the glazing of a window or interior partition in a caravan, or

(d) any part of the glazing of a windscreen, window or interior partition in a motor vehicle that was first registered before 1 July 1984, being glazing that was fitted to the motor vehicle on or before the date on which it was so registered.

(2) For the purposes of clause 45 and this clause, the luminous transmittance or reflectance of glazing must be determined in accordance with the luminous transmittance test or the reflectance test, as the case may require, set out in any technical specification published by or adopted by the Authority from time to time.

47 Windscreen wipers and washers

(1) A motor vehicle with 3 or more wheels that is fitted with a windscreen must be fitted with at least 1 windscreen wiper unless a driver in a normal driving position can obtain an adequate view of the road ahead of the motor vehicle without looking through the windscreen.

(2) At least 1 windscreen wiper fitted to the motor vehicle must:

(a) be able to remove moisture from the part of the windscreen in front of the driver to allow the driver an adequate view of the road ahead of the motor vehicle when the windscreen is wet, and

(b) be able to be operated from a normal driving position, and

(c) for a motor vehicle built after 1934—continue to operate until the wiper is switched off, and

(d) for a motor vehicle built after 1959 the driving position of which is nearer one side of the vehicle than the other:

(i) be able to remove moisture from the part of the windscreen in front of the driver, and a corresponding part of the windscreen on the other side of the centre of the motor vehicle, to allow the driver an adequate view of the road ahead of the motor vehicle when the windscreen is wet, and

(ii) if the windscreen wipers are operated by engine manifold vacuum—be provided with a vacuum reservoir or pump to maintain the efficient operation of the wiper or wipers while the vehicle is in motion.

(3) If the motor vehicle was built after 1982 and has a GVM over 4.5 tonnes, it must also be fitted with a windscreen washer that can direct water onto the windscreen within the area swept by a windscreen wiper so the wiper can spread the water to all of the area swept by the wiper.

Note. The ADRs require certain vehicles with a GVM not over 4.5 tonnes to be fitted with a windscreen washer.

(4) The windscreen washer must be able to be operated from a normal driving position.

48 Wheels and tyres—size and capacity

The wheels and tyres fitted to an axle of a vehicle must be of sufficient size and capacity to carry the part of the vehicle's gross mass transmitted to the ground through the axle.

49 Pneumatic tyres generally

A vehicle built after 1932 must be fitted with pneumatic tyres.

50 Pneumatic tyres—carcass construction

(1) A vehicle with a GVM not over 4.5 tonnes must not have pneumatic tyres of different carcass construction fitted to the same axle, but the tyres may have different cord materials and a different number of plies.

(2) However, subclause (1) does not apply to a tyre being used in an emergency as a temporary replacement for a tyre complying with the subclause.

51 Pneumatic tyres—size and capacity

The size and capacity of a pneumatic tyre to be fitted to a vehicle must be decided using a cold inflation pressure that is not more than the lesser of:

(a) the pressure recommended by the tyre manufacturer, and

(b) a pressure of:
(i) for a radial ply tyre—825 kilopascals, or
(ii) for another tyre—700 kilopascals.

52 Tyres—defects

A tyre fitted to a vehicle must be free of any apparent defect that could make the vehicle unsafe.

53 Tyres for use on vehicles with GVM over 4.5 tonnes

(1) A tyre fitted to a vehicle with a GVM over 4.5 tonnes must be suitable for road use at the lesser of:

(a) 100 kilometres an hour, and

(b) the vehicle's top speed.

(2) This clause applies to a vehicle instead of the tyre speed category requirements in the relevant ADR.

54 Tyres—manufacturer's rating

(1) This clause applies to a motor vehicle if the vehicle:

(a) has 4 or more wheels, and

(b) was built after 1972, and

(c) has a GVM not over 4.5 tonnes.

(2) However, this clause does not apply to a tyre if the tyre:

(a) is recommended by the vehicle builder as suitable for limited use on the vehicle in special circumstances at a speed less than the speed applying to the vehicle under subclause (3), or

(b) is being used in an emergency as a temporary replacement for a tyre complying with this clause.

(3) A tyre fitted to a motor vehicle must, when first manufactured, have been rated by the tyre manufacturer as suitable for road use at the lesser of:

(a) a speed of at least:

(i) for a car with special features for off-road use—140 kilometres an hour, or

(ii) for another car—180 kilometres an hour, or

(iii) for another motor vehicle—120 kilometres an hour, and

(b) the vehicle's top speed.

Example for paragraph (a) (i):
A four-wheel drive vehicle.

(4) This clause applies to a vehicle instead of the tyre speed category requirements in the relevant ADR.

55 Retreads

(1) A tyre that is retreaded before the commencement of this clause must not be used on a vehicle if:

(a) Australian Standard AS 1973–1976 *Retreaded Pneumatic Passenger Car and Light Truck Tyre* or Australian Standard AS 1973–1985 *Retreaded Pneumatic Passenger and Light Truck Tyre* applies to the tyre, and

(b) the tyre was retreaded after publication of the Australian Standard, and

(c) the tyre was not retreaded in accordance with Australian Standard AS 1973–1976 *Retreaded Pneumatic Passenger Car and Light Truck Tyre*,

Australian Standard AS 1973–1985 *Retreaded Pneumatic Passenger and Light Truck Tyre* or Australian Standard AS 1973–1993 *Pneumatic Tyres—Passenger Car, Light Truck and Truck/Bus—Retreading and Repair Processes*.

(2) A tyre that is retreaded after the commencement of this clause must not be used on a vehicle if:

(a) Australian Standard AS 1973–1993 *Pneumatic Tyres—Passenger Car, Light Truck and Truck/Bus—Retreading and Repair Processes* applies to the tyre, and

(b) the tyre was not retreaded in accordance with the Australian Standard.

Note. The Australian Standards mentioned in this clause require various markings on retreaded tyres. These may include a speed rating less than the rating originally marked on the tyre.

56 Tyre tread

(1) A tyre on a motor vehicle must not have cleats or other gripping devices that could damage road surfaces.

(2) Except at tread wear indicators, a tyre fitted to the vehicle must have a tread pattern at least 1.5 millimetres deep in a band that runs continuously:

(a) across:

(i) for a vehicle with a GVM over 4.5 tonnes—at least 75% of the tyre width that normally comes into contact with the road, or

(ii) for another vehicle—the tyre width that normally comes into contact with the road, and

(b) around the whole circumference of the tyre.

(3) A vehicle must not be fitted with a tyre that has been treated by recutting or regrooving the tread rubber, unless the tyre was:

(a) constructed with an extra thickness of rubber designed for recutting or regrooving, and

(b) labelled to indicate the construction.

Division 2 Additional requirements for motor bikes

57 Steering gear and handlebars

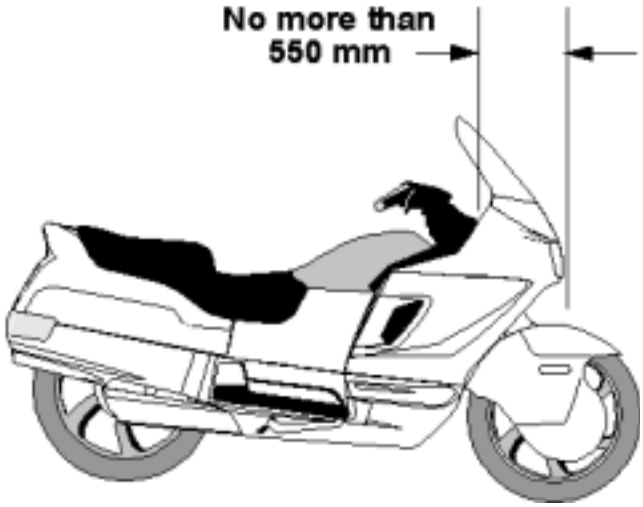
(1) The handlebars on a motor bike must extend at least 250 millimetres, but not over 450 millimetres, on each side of the centre line of the vehicle.

(2) In taking a measurement for subclause (1), mirrors and lights mounted on the handlebars of the motor bike are disregarded.

(3) The lowest part of the hand grip on the handle bars must not be higher than 380 millimetres above the attachment point of the handlebars to the motor bike.

(4) Hand grips on the handle bars must be fitted symmetrically.

(5) If a motor bike has the head stem as the steering pivot point, the horizontal distance from the midpoint between the head stem bearings to the centre of the front wheel must not be over 550 millimetres.



Maximum horizontal distance from midpoint between head stem bearings of motor bike to centre of front wheel

58 Foot rests

A motor bike must be fitted with foot rests for the driver, and for any passenger for whom a seating position is provided.

59 Chain guards

(1) If the engine power of a motor bike is transmitted to the rear wheel by a chain, the driver and any passenger must be protected from the front sprocket and at least the upper part of the chain by:

(a) the frame or equipment of the motor bike, or

(b) a chain guard.

(2) A chain guard must cover the chain to a point:

(a) at least 300 millimetres to the rear of the rearmost foot rest, or

(b) above the centre of the rear drive sprocket.

Part 3 Vehicle marking

Note. This Part contains requirements for a vehicle that help to identify the vehicle and, if the vehicle is unusually long, to warn other motorists.

60 Vehicle and engine identification numbers

(1) In this clause:

number includes letter.

(2) A motor vehicle must have an individual engine identification number clearly stamped, embossed or otherwise permanently marked on it.

(3) A motor vehicle built after 1930 must have the engine identification number on its engine block or the main component of its engine.

(4) A vehicle must have an individual vehicle identification number clearly stamped, embossed or otherwise permanently marked on a substantial part of its frame or chassis.

(5) A vehicle or engine identification number must be located where a person can read it easily without having to use tools to remove a part of the vehicle that would otherwise obstruct the person's view.

61 Compliance plates to be affixed to certain vehicles

Any motor vehicle (other that a tractor, a trailer or an implement) registered for the first time on or after 1 August 1972 must have securely and prominently affixed within the engine compartment or other position approved by the Authority a plate approved by the Australian Motor Vehicle Certification Board or the Administrator of Vehicle Standards that:

(a) identifies the specific vehicle, and

(b) indicates that it meets the standards and procedures administered by the Australian Motor Vehicle Certification Board for that class of vehicle.

62 Trailer compliance plates

(1) This clause applies to the following trailers:

(a) a trailer manufactured on or after 1 July 1985, and having an individual gross trailer weight rating (as determined by the Authority) of more than 15 tonnes, but not more than 60 tonnes,

(b) a semi-trailer manufactured on or after 1 July 1984, and having an individual gross trailer weight rating (as determined by the Authority) of more than 20 tonnes, but not more than 60 tonnes,

(c) a trailer or semi-trailer manufactured on or after 1 January 1986, and having an individual gross trailer weight rating (as determined by the Authority) of more than 4.5 tonnes, but not more than 60 tonnes.

(2) At or after the time of the first registration of a trailer to which this clause applies, the trailer must have securely and prominently affixed to it in a position designated by the Australian Motor Vehicle Certification Board a plate approved by that Board or the Administrator of Vehicle Standards that:

(a) identifies the specific vehicle, and

(b) indicates that it meets the standards and procedures administered by the Australian Motor Vehicle Certification Board for that class of vehicle.

63 White or silver band on certain vehicles

(1) This clause applies to a vehicle that:

(a) is at least 2.2 metres wide, and

(b) has a body with a vertical measurement under 300 millimetres at the rear, measured from the lowest point of the body above ground level to the highest point, and

(c) is not fitted with rear marking plates in accordance with clause 126.

(2) For subclause (1) (a), the width of a vehicle is measured disregarding any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

(3) The vehicle must have a white or silver band at least 75 millimetres high across the full width of the rearmost part of the body of the vehicle.

64 Warning signs for combinations over 22 metres long

(1) The following vehicles must display road train warning signs complying with this clause and clause 66:

(a) a combination over 36.5 metres long,

(b) a road train over 30 metres, but not over 36.5 metres, long that includes 1 or more dog trailers.

(2) The following vehicles must display road train warning signs, or a long vehicle warning sign, complying with this clause and clause 66:

(a) a road train over 22 metres, but not over 30 metres, long that includes 1 or more dog trailers,

(b) a road train over 22 metres, but not over 36.5 metres, long that does not include a dog trailer.

(3) Another combination over 22 metres, but not over 36.5 metres, long must display a long vehicle warning sign complying with this clause and clause 66.

(4) Subclauses (1), (2) and (3) do not apply to the extent of any inconsistency with a notice or permit issued under another law of this jurisdiction that applies to the combination.

(5) Road train warning signs must be used in pairs and fitted horizontally, one at the front and the other at the rear of the combination.

(6) A long vehicle warning sign must be fitted horizontally at the rear of the combination.

65 Warning signs not to be displayed on other vehicles

(1) A road train warning sign must not be displayed on a vehicle unless the vehicle is part of a combination or road train mentioned in clause 64 (1) or (2).

(2) A long vehicle warning sign must not be displayed on a vehicle unless the vehicle is a part of a combination or road train mentioned in clause 64 (2) or (3).

66 Specifications for warning signs

(1) A road train or long vehicle warning sign must be manufactured in 1 or 2 parts from sheet steel 0.8 millimetres thick or another material of at least the same stiffness, unless it is designed to be fixed to a vehicle using an adhesive.

(2) The warning sign must be at least 1.02 metres wide and at least 250 millimetres high.

(3) A road train warning sign must display the words "road train", and a long vehicle warning sign must display the words "long vehicle", in black capital letters at least 180 millimetres high in typeface Series B (N) that complies with Australian Standard AS 1744 *Forms of Letters and Numerals for Road Signs*.

(4) If the warning sign is in 2 parts, one word of the expression "road train" or "long vehicle" must be on one part and the other word of the expression must be on the other part.

(5) The warning sign must display the sign manufacturer's name or logo, and the brand and class of retro-reflective material used, in block letters not over 10 millimetres high.

(6) The warning sign must have a black border.

(7) The warning sign must be coated with yellow retro-reflective material of class 1 or 2 that meets Australian Standard AS 1906 *Retro-reflective Materials and Devices for Road Traffic Control Purposes*.

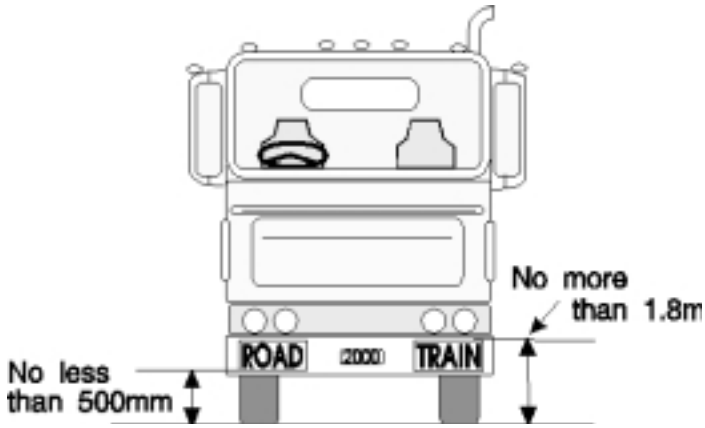
(8) The warning sign must be fitted so:

(a) no part of the sign is:

(i) over 1.8 metres above ground level, or

(ii) under 500 millimetres above ground level, and

(b) if the sign is in 2 parts—the parts are fitted at the same height above ground level.



Positioning of a warning sign

67 Left-hand drive signs

(1) This clause applies to a motor vehicle with a GVM over 4.5 tonnes that has the centre of a steering control to the left of the centre of the vehicle.

(2) The vehicle must display the words ‘left hand drive’ on the rear of the vehicle.

(3) The words must be in letters at least 75 millimetres high, and in a colour contrast with the background to the words.

Part 4 Vehicle configuration and dimensions

Note. This Part sets out various requirements covering the suspension on vehicles and size limits for single vehicles and combinations of vehicles, so that they can be operated safely with other traffic, without taking up too much road space or damaging the road and structures on the road.

Generally, the limits in this Part apply to a vehicle and any load it may be carrying.

Specific requirements for loaded vehicles are covered by other laws.

Division 1 Axles

68 Axle configuration

(1) A motor vehicle, except an articulated bus, must have only:

(a) 1 axle group, or single axle, towards the front of the vehicle, and

(b) 1 axle group, or single axle, towards the rear of the vehicle.

(2) An articulated bus must have:

(a) on its front section:

(i) only 1 axle group, or single axle, towards the front of the section, and

(ii) only 1 axle group, or single axle, towards the rear of the section, and

(b) on another section—only 1 axle group or single axle.

(3) A trailer must have only:

(a) 1 axle group or single axle, or

(b) 2 axle groups, 2 single axles, or 1 axle group and single axle, in the following configuration:

(i) 1 axle group, or single axle, towards the front of the vehicle, with all the wheels on the axle group or single axle connected to the steering mechanism for that part of the trailer,

(ii) 1 axle group, or single axle, towards the rear of the vehicle.

(4) A semi-trailer that is extendible, or is fitted with sliding axles, must:

(a) have a securing device that:

(i) can securely fix the extendible part or sliding axles to the rest of the vehicle in any position of adjustment provided, and

(ii) is located in a position that can prevent accidental or inadvertent release, if the device is mounted on the chassis of the vehicle, and

(iii) is fitted with a visible or audible warning system to indicate to a person standing beside the vehicle that the device is not engaged, and

(iv) is fitted with a way of preventing loss of air from the air brake supply, if the device uses air from the brake system and fails in a way allowing air to escape, and

(v) is held in the applied position by direct mechanical action without the intervention of an electric, hydraulic or pneumatic device, and

(b) be built so the adjustable parts of the vehicle remain connected if the securing device fails.

69 Relation between axles in axle group

(1) The axles in an axle group, except a twinsteer axle group, fitted to a vehicle with a GVM over 4.5 tonnes must relate to each other through a load-sharing suspension system.

(2) In this clause:

load-sharing suspension system means an axle group suspension system that:

(a) is built to divide the load between the tyres on the group so that no tyre carries a mass over 10% more than the mass that it would carry if the load were divided equally, and

(b) has effective damping characteristics on all axles of the group.

Division 2 Dimensions

70 Width

(1) A vehicle must not be over 2.5 metres wide.

(2) For subclause (1), the width of a vehicle is measured without taking into account any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

71 Length of single motor vehicles

(1) A motor vehicle, except an articulated or controlled access bus, must not be over 12.5 metres long.

(2) A controlled access bus must not be over 14.5 metres long.

(3) An articulated bus must not be over 18 metres long.

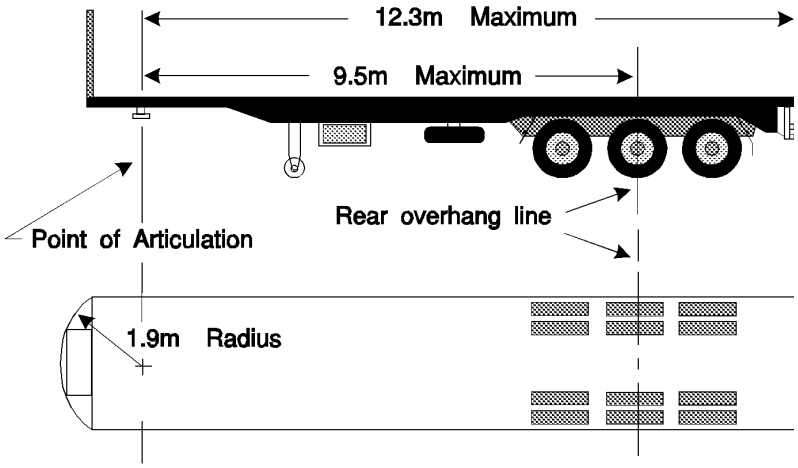
72 Length of single trailers

(1) On a semi-trailer or a dog trailer:

(a) the distance between the point of articulation at the front of the trailer and the rear overhang line must not be over 9.5 metres, and

(b) the distance between the point of articulation at the front of the trailer and the rear of the trailer must not be over 12.3 metres.

(2) A projection forward of the point of articulation at the front of a semi-trailer must be contained within a radius of 1.9 metres from the point of articulation.



Maximum dimensions of a semi-trailer

(3) If a semi-trailer has 2 or more points of articulation at the front of the trailer, it must comply with subclauses (1) and (2) when measured at one of the points.

(4) A trailer built to carry cattle, sheep, pigs or horses on 2 or more partly or completely overlapping decks must not have over 12.5 metres of its length available for the carriage of animals.

(5) For subclause (4), the length available for the carriage of animals on a trailer is measured from the inside of the front wall or door of the trailer to the inside of the rear wall or door of the trailer, with any intervening partitions disregarded.

73 Length of combinations

(1) A combination must not be over:

(a) for a B-double—25 metres long, and

(b) for a road train—53.5 metres long, and

(c) for a combination, except a road train, designed to carry vehicles on 2 or more partly or completely overlapping decks—25 metres long, and

(d) for another combination—19 metres long.

(2) In a B-double built to carry cattle, sheep, pigs or horses, the 2 semi-trailers must not have over 18.8 metres of their combined length available for the carriage of animals.

(3) For subclause (2), the length available for the carriage of animals on a trailer is measured from the inside of the front wall or door of the trailer to the inside of the rear wall or door of the trailer, with any intervening partitions disregarded.

74 Rear overhang

(1) The rear overhang of a semi-trailer, or dog trailer consisting of a semi-trailer and converter dolly, must not exceed the lesser of:

(a) 60% of the distance between the point of articulation at the front and the rear overhang line, and

(b) 3.7 metres.

(2) A semi-trailer with 2 or more points of articulation at the front must comply with subclause (1) when measured at the same point used for measurement for compliance with clause 72 (3).

(3) The rear overhang of a trailer with only 1 axle group or single axle (except a semi-trailer) must not exceed the lesser of:

(a) the length of the load carrying area, or body, ahead of the rear overhang line, and

(b) 3.7 metres.

(4) The rear overhang of a vehicle not mentioned in subclause (1) or (3) must not exceed the lesser of:

(a) 60% of the distance between the centre of the front axle and the rear overhang line, and

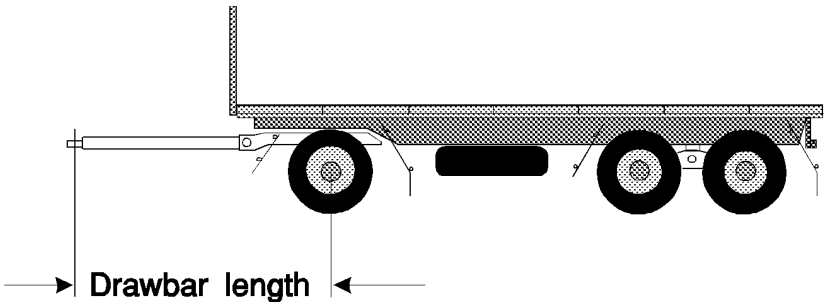
(b) 3.7 metres.

75 Trailer drawbar length

(1) The distance between the coupling pivot point on the drawbar of a dog trailer, and the centre line of the front axle group or of the front single axle of the trailer, must:

(a) not be over 5 metres, and

(b) not be under 3 metres, if the trailer is used in a road train over 19 metres long.



Length of a drawbar on a dog trailer

(2) The distance between the coupling pivot point on a drawbar, and the centre line of the axle group or single axle on a trailer with only 1 axle group or single axle (except a semi-trailer) must not be over 8.5 metres.

76 Height

(1) A vehicle must not be over 4.3 metres high.

(2) However:

(a) a vehicle built to carry cattle, sheep, pigs or horses must not be over 4.6 metres high, and

(b) a double-deck bus must not be over 4.4 metres high.

77 Ground clearance

(1) In this clause:

ground clearance, of a vehicle, means the minimum distance to the ground from a point on the underside of the vehicle, except a point on a tyre, wheel, wheel hub, brake backing plate or flexible mudguard or mudflap of the vehicle.

(2) A motor vehicle or combination must have a ground clearance of:

(a) at least 100 millimetres at any point within 1 metre of an axle, and

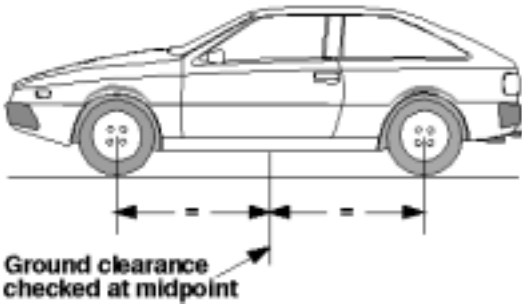
(b) at least one-thirtieth of the distance between the centres of adjacent axles at the midpoint between them, and

(c) at any other point—at least the distance that allows the vehicle or combination to pass over a peak in the road with a gradient on either side of 1:15, if the wheels of 1 axle of the vehicle or combination are on the slope on one side of the peak and the wheels of the next axle are on the slope on the other side.

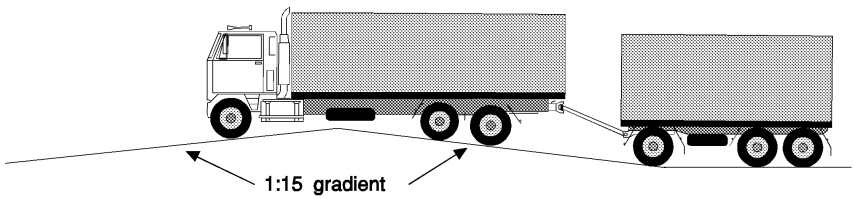
(3) However, subclause (2) does not apply to:

(a) a motor vehicle with less than 4 wheels, or

(b) a combination that includes a motor vehicle with less than 4 wheels.



Ground clearance at the mid-point between 2 axles



Ground clearance over a peak in the road

Division 3 Exceptions to requirements as to dimensions

78 Dimensions of vehicles regulated by permit

The limits prescribed in this Part for the dimensions of motor vehicles do not apply to a vehicle that is exempted from the dimension limits by the operation of clause 90 of this Regulation.

79 Vehicle lengths

(1) Despite clause 72 (1) (a), the distance from the point of articulation of a low-loader float to the foremost extremity of the rear overhang may exceed 9.5 m.

(2) Despite clause 72 (1) (b), the distance from the point of articulation of a low-loader float to the rearmost extremity of the rear overhang may exceed 12.3 m.

80 Rear overhang of controlled access bus

Despite clause 74 (4), the rear overhang of a controlled access bus must not exceed 70% of the distance between the centre of the foremost axle and the foremost extremity of the rear overhang, or 4.9 m, whichever is the shorter length.

Part 5 Lights and reflectors

Note. This Part deals with how the lights on a vehicle must be fitted and work so that the driver can see the road, pedestrians and other vehicles at night, and can signal to others.

Other laws provide for when certain lights must be switched on.

In this Part, the description "yellow" is used as a more modern term, instead of the description "amber" which is used in earlier legislation and some ADRs.

Division 1 General requirements for lights

81 Lighting devices that can be attached to vehicles

A device capable of projecting light must not be attached to any vehicle unless it is a device required or permitted to be attached to the vehicle by this Schedule.

82 Certain requirements apply only at night

The requirements of this Part for a light, except a brake or direction indicator light, to be visible over a stated distance apply only at night.

83 Prevention of glare

A light, except a high-beam headlight, fitted to a vehicle must be built and adjusted to provide the necessary amount of light, without dazzling the driver of another vehicle approaching, or being approached by, the vehicle.

84 Pairs of lights

(1) If lights are required under this Schedule to be fitted to a vehicle in pairs:

(a) a light must be fitted on each side of the longitudinal axis of the vehicle, and

(b) the centre of each light in a pair must be the same distance from the longitudinal axis of the vehicle, and

(c) the centre of each light in a pair must be at the same height above ground level, and

(d) each light in a pair must project approximately the same amount of light of the same colour.

(2) Subclause (1) applies to a motor bike with an attached sidecar as if the sidecar were not attached.

Division 2 Headlights

85 Headlights to be fitted to vehicles

(1) A motor vehicle must be fitted with:

(a) 1 low-beam headlight if it is a moped, motor bike, or motor trike with 1 front wheel, or

(b) a pair of low-beam headlights if it has 4 or more wheels or is a motor trike, except a moped, with 2 front wheels.

(2) If a motor vehicle built after 1934 can travel at over 60 kilometres an hour:

(a) each low-beam headlight mentioned in subclause (1) must be able to work in the high-beam position, or

(b) the vehicle must be fitted with:

(i) 1 headlight that can work in the high-beam position if the vehicle is required to have 1 low-beam headlight, or

(ii) a pair of headlights that can work in the high-beam position.

(3) A motor bike may be equipped with a headlight modulation system that:

(a) varies the brightness of its high-beam headlight or low-beam headlight, but not both, at a rate of at least 200 and at most 280 flashes a minute, and

(b) is designed to operate only in the daylight.

(4) Additional headlights may be fitted to a motor bike or motor trike, or a motor vehicle with 4 or more wheels that was built before 1970.

(5) Additional pairs of headlights may be fitted to a motor vehicle with 4 or more wheels that was built after 1969.

86 How headlights are to be fitted

(1) The centres of low-beam headlights fitted as a pair on a motor vehicle with 4 or more wheels must be at least 600 millimetres apart.

(2) However, subclause (1) does not apply to a motor vehicle built before 1970 if the centres of its low-beam headlights:

(a) were under 600 millimetres apart when the vehicle was built, and

(b) are not nearer than they were when the vehicle was built.

(3) Each low-beam headlight of a pair on a motor trike (except a moped) with 2 front wheels must not be over 400 millimetres from the nearer side of the vehicle.

(4) The centre of a low-beam headlight fitted to a motor vehicle built after June 1953 must be:

(a) at least 500 millimetres above ground level, and

(b) not over 1.4 metres above ground level.

87 How single headlights are to be fitted

(1) A motor bike or trike with a single headlight fitted must have the light fitted in the centre.

(2) Subclause (1) applies to a motor bike with an attached sidecar as if the sidecar were not attached.

88 How additional headlights are to be fitted

If 2 or more additional headlights are fitted to a motor vehicle with 4 or more wheels, the additional headlights must as far as possible be fitted in pairs.

89 Performance of headlights

(1) When on, a headlight, or additional headlight, fitted to a vehicle must:

(a) show only white light, and

(b) project its main beam of light ahead of the vehicle.

(2) Headlights must be fitted to a vehicle so their light does not reflect off the vehicle into the driver's eyes.

90 Effective range of headlights

(1) This clause applies to a headlight that is on at night.

(2) A low-beam headlight must illuminate the road ahead of the vehicle for at least 25 metres.

(3) A high-beam headlight must illuminate the road ahead of the vehicle for at least 50 metres.

(4) However, a low-beam headlight fitted to a motor vehicle built before 1931, or a moped, need only illuminate the road ahead of the vehicle for 12 metres.

91 Changing headlights from high-beam to low-beam position

(1) A motor vehicle built after 1934 that can travel at over 60 kilometres an hour must be fitted with:

(a) a dipping device enabling the driver in the normal driving position:

(i) to change the headlights from the high-beam position to the low-beam position, or

(ii) simultaneously to switch off a high-beam headlight and switch on a low-beam headlight, and

(b) for a vehicle built after June 1953—a device to indicate to the driver that the headlights are in the high-beam position.

(2) A headlight fitted to a vehicle not fitted with a dipping device mentioned in subclause (1) (a) must operate in the low-beam position.

(3) When a headlight fitted to a vehicle is switched to the low-beam position, any other headlight on the vehicle must operate only in the low-beam position or be off.

Division 3 Parking lights

92 Parking lights

(1) A motor vehicle built after June 1953 must be fitted with:

(a) a pair of parking lights if it is a motor trike with 2 front wheels (except a moped) or a motor vehicle with 4 or more wheels, or

(b) at least 1 parking light if it is a motor bike with an attached sidecar, or a motor trike with 1 front wheel, (except a moped).

(2) A pair of parking lights fitted to a motor vehicle with 4 or more wheels must be fitted with the centre of each light:

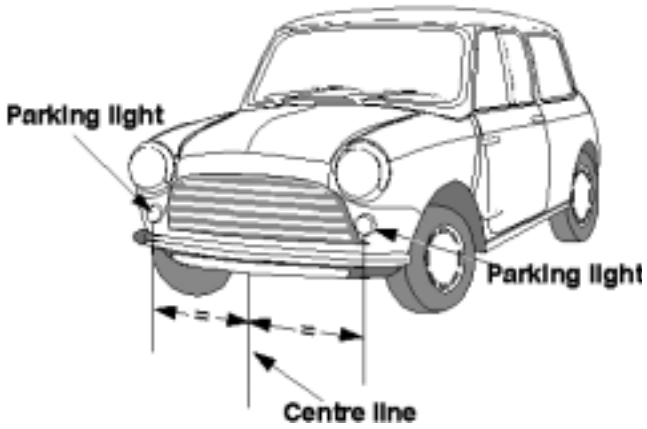
(a) at least 600 millimetres from the centre of the other light, and

(b) not over 510 millimetres from the nearer side of the vehicle.

(3) However, a pair of parking lights fitted to a motor vehicle under 1300 millimetres wide may be fitted with the centre of each light not under 400 millimetres from the centre of the other light.

(4) A parking light fitted to a motor trike with 2 front wheels must not be over 400 millimetres from the nearer side of the vehicle.

(5) A parking light fitted to a motor bike with a sidecar must be fitted not over 150 millimetres from the side of the sidecar furthest from the motor bike.



Location of parking lights on a vehicle

(6) When on, a parking light must:

(a) show a white or yellow light visible 200 metres from the front of the vehicle, and

(b) not use over 7 watts power.

(7) A parking light fitted to a motor vehicle built after 1969 must be wired so the parking light is on when a headlight on the vehicle is on.

(8) A parking light fitted to a sidecar attached to a motor bike must be wired to operate when a headlight, tail light or parking light on the motor bike is on.

(9) For subclause (3), the width of a vehicle is measured disregarding any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

Division 4 Daytime running lights

93 Daytime running lights

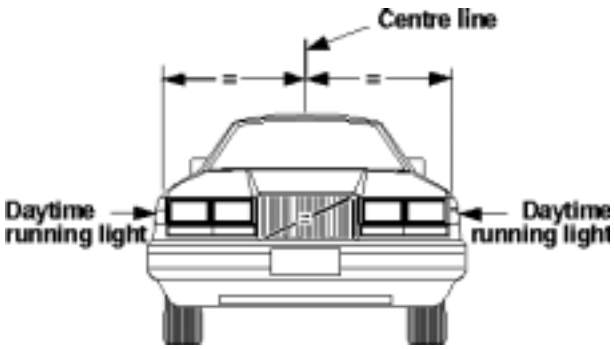
(1) A pair of daytime running lights may be fitted to a motor vehicle.

(2) A pair of daytime running lights fitted to a vehicle with 4 or more wheels must be fitted with the centre of each light:

(a) at least 600 millimetres from the centre of the other light, and

(b) not over 510 millimetres from the nearer side of the vehicle.

(3) However, a pair of daytime running lights fitted to a motor vehicle under 1300 millimetres wide may be fitted with the centre of each light not under 400 millimetres from the centre of the other light.



Location of daytime running lights on a vehicle

(4) When on, a daytime running light must:

(a) show a white or yellow light visible from the front of the vehicle, and

(b) not use over 25 watts power.

Note. The third edition ADRs only allow white daytime running lights.

(5) Daytime running lights must be wired so they are off when a headlight, except a headlight being used as a flashing signal, is on.

(6) For subclause (3), the width of a vehicle is measured disregarding any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

Division 5 Tail lights

94 Tail lights generally

(1) A vehicle must have at least 1 tail light fitted on or towards the rear of the vehicle.

(2) A motor trike with 2 rear wheels, or a motor vehicle with 4 or more wheels, built after 1959 must have at least 1 tail light fitted on or towards each side of the rear of the vehicle.

(3) A trailer built after June 1973 must have at least 1 tail light fitted on or towards each side of the rear of the vehicle.

(4) The centre of a tail light mentioned in subclause (1), (2) or (3) must not be over:

(a) 1.5 metres above ground level, or

(b) if it is not practicable to fit the light lower—2.1 metres above ground level.

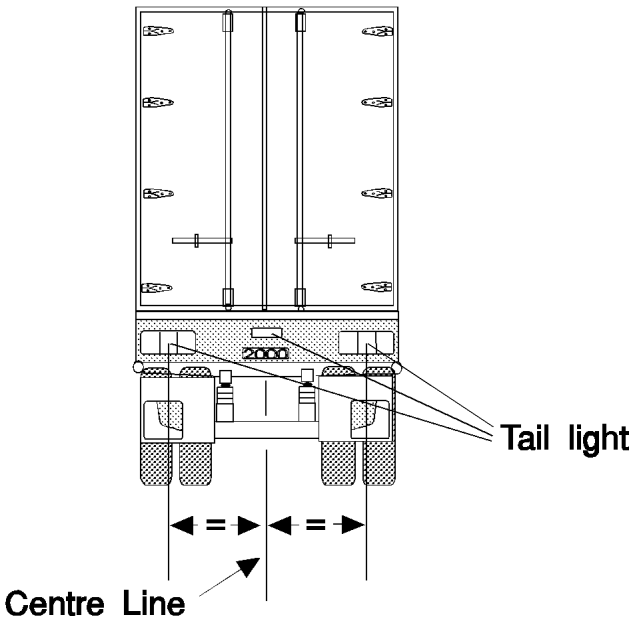
(5) A vehicle may have 1 or more additional tail lights at any height above ground level.

95 Pattern of fitting tail lights

(1) If only 1 tail light is fitted to a vehicle, it must be fitted in the centre or to the right of the centre of the vehicle's rear.

(2) Subclause (1) applies to a motor bike with an attached sidecar as if the sidecar were not attached.

(3) If 2 or more tail lights are fitted to a vehicle, at least 2 must be fitted as a pair.



Location of tail lights on a vehicle

(4) Tail lights fitted in accordance with this Division may also serve as rear clearance lights if they are fitted to a vehicle in accordance with clause 101 (3).

96 Performance of tail lights

(1) When on, a tail light of a vehicle must:

(a) show a red light visible 200 metres from the rear of the vehicle, and

(b) not use over 7 watts power.

(2) A tail light fitted to a street rod vehicle may incorporate a blue lens not over 20 millimetres in diameter.

(3) A ***street rod vehicle*** is a vehicle that has been modified for safe road use and that:

(a) has a body and frame that were built before 1949, or

(b) is a replica of a vehicle the body and frame of which were built before 1949.

97 Wiring of tail lights

A tail light of a motor vehicle must be wired to come on, and stay on, when a parking light or headlight on the vehicle is on, unless an external switch is fitted to operate the tail light.

Division 6 Number plate lights

98 Number plate lights

(1) At least 1 number plate light must be fitted to the rear of a vehicle.

(2) When on, the number plate light or lights must illuminate a number plate on the rear of the vehicle (other than a bicycle rack number plate) with white light, so the characters on the number plate can be read at night 20 metres from the rear of the vehicle.

(3) A number plate light:

(a) may be combined with another light, and

(b) must not project white light to the rear of the vehicle except by reflection, and

(c) must not obscure the characters on the number plate, and

(d) must be wired to come on, and stay on, when a parking light, headlight or tail light on the vehicle is on.

Division 7 Clearance lights

99 Front clearance lights

(1) Front clearance lights may only be fitted to a vehicle that is at least 1.8 metres wide.

(2) A pair of front clearance lights must be fitted to a motor vehicle that is at least 2.2 metres wide, or a prime mover.

(3) The centre of a front clearance light must be:

(a) not over 400 millimetres from the nearer side of the vehicle, and

(b) if the vehicle was built after June 1953:

(i) at least 750 millimetres higher than the centre of any low-beam headlight fitted to the vehicle, or

(ii) not lower than the top of the windscreen.

(4) However, a front clearance light may be mounted on an external rear vision mirror or a mirror support if, when the mirror is correctly adjusted, no part of the lens of the clearance light is visible to a person in the normal driving position.

(5) When on, a front clearance light must:

(a) show a yellow or white light visible 200 metres from the front of the vehicle, and

(b) not use over 7 watts power.

100 External cabin lights

(1) A motor vehicle fitted with front clearance lights may also have additional forward-facing lights on or above the roof of its cabin.

(2) The additional forward-facing lights must be spaced evenly between the front clearance lights, with their centres at least 120 millimetres apart.

(3) When on, an additional forward-facing light must:

(a) show a yellow or white light, and

(b) not use over 7 watts power.

101 Rear clearance lights

(1) Rear clearance lights may only be fitted to a vehicle that is at least 1.8 metres wide.

(2) A pair of rear clearance lights must be fitted to the rear of a vehicle that is at least 2.2 metres wide.

(3) The centre of a rear clearance light must be:

(a) not over 400 millimetres from the nearer side of the vehicle, and

(b) if practicable, at least 600 millimetres above ground level.

(4) When on, a rear clearance light must:

(a) show a red light visible 200 metres from the rear of the vehicle, and

(b) not use over 7 watts power.

Division 8 Side marker lights

102 Vehicles needing side marker lights

(1) A pair of side marker lights must be fitted towards the rear of the sides of a motor vehicle that is over 7.5 metres long and at least 2.2 metres wide.

(2) A pole-type trailer, and a motor vehicle built to tow a pole-type trailer, with at least 1 cross-bar or bolster must have a side marker light fitted to each side of the back or only cross-bar or bolster.

(3) A pole-type trailer with 2 or more cross-bars or bolsters may also have a side marker light fitted to each side of the front cross-bar or bolster.

(4) At least 2 side marker lights must be fitted to each side of:

(a) a trailer, except a pole-type trailer, that is at least 2.2 metres wide and not over 7.5 metres long, and

(b) a semi-trailer that is not over 7.5 metres long.

(5) At least 3 side marker lights must be fitted to each side of:

(a) a trailer, except a pole-type trailer, that is at least 2.2 metres wide and over 7.5 metres long, and

(b) a semi-trailer that is over 7.5 metres long.

(6) For subclauses (1), (4) and (5), the width of a vehicle is measured disregarding any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

103 Location of side marker lights

(1) The centre of a side marker light must not be over 150 millimetres from the nearer side of the vehicle.

(2) A front side marker light fitted to a motor vehicle must be towards the front of the side of the vehicle with no part of the lens visible to the driver.

(3) The centre of a front side marker light fitted to a trailer must be:

(a) within 300 millimetres of the front of the side of the trailer, or

(b) if the construction of the trailer makes it impracticable to comply with paragraph (a)—as near as practicable to the front of the trailer.

(4) The centre of a rear side marker light fitted to a vehicle must be:

(a) within 300 millimetres of the rear of the side of the vehicle, or

(b) if the construction of the vehicle makes it impracticable to comply with paragraph (a)—as near as practicable to the rear of the vehicle.

(5) Side marker lights fitted to a vehicle must, as far as practicable, be evenly spaced along the side of the vehicle.

(6) Subclauses (2) to (5) do not apply to side marker lights fitted to a cross-bar or bolster of a pole-type trailer.

(7) Only the side marker lights nearest to the rear need be fitted if complying with subclauses (3) and (4) would result in the front and rear side marker lights being under 2.5 metres apart.

(8) A side marker light fitted to a vehicle must be fitted so:

(a) its centre is not over:

(i) 1.5 metres above ground level, or

(ii) if it is not practicable to fit it lower—2.1 metres above ground level, and

(b) its centre is at least 600 millimetres above ground level, and

(c) it is, as far as practicable, in a row of side marker lights along the side of the vehicle.

(9) Subclause (8) (a) does not apply to a side marker light that is not required to be fitted to the vehicle by clause 102.

104 Performance of side marker lights

(1) When on, a side marker light fitted to a vehicle must:

(a) show a light visible 200 metres from the vehicle, and

(b) not use over 7 watts power.

(2) When on, a side marker light fitted to a vehicle must show:

(a) to the front of the vehicle—a yellow light, and

(b) to the rear of the vehicle:

(i) if the light also operates as a rear light or reflector—a red light, and

(ii) in any other case—a red or yellow light.

(3) However, if a pole-type trailer with 2 or more cross-bars or bolsters has the side marker lights permitted by clause 102 (3):

(a) the side marker lights fitted to the front cross-bar or bolster may comply with subclause (2) (a) only, and

(b) the side marker lights fitted to the back cross-bar or bolster may comply with subclause (2) (b) only.

105 Side marker lights and rear clearance lights

The side marker light nearest to the rear of a vehicle may also be a rear clearance light for clause 101.

Division 9 Brake lights

106 Fitting brake lights

(1) A brake light must be fitted to the rear of a vehicle built after 1934.

(2) A pair of brake lights must be fitted to the rear of:

(a) a motor vehicle built after 1 October 1991 that has 4 or more wheels, and

(b) a motor trike built after 1 October 1991 that has 2 rear wheels, and

(c) a trailer built after June 1973.

(3) The centre of a brake light must be:

(a) at least 350 millimetres above ground level, and

(b) not over:

(i) 1.5 metres above ground level, or

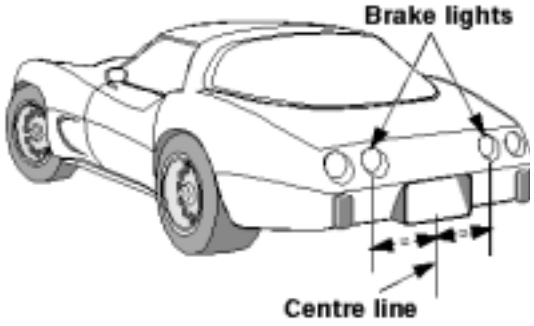
(ii) if it is not practicable to fit the light lower—2.1 metres above ground level.

(4) A vehicle may be fitted with 1 or more additional brake lights.

(5) The centre of an additional brake light must be at least 350 millimetres above ground level.

(6) If only 1 brake light is fitted to a vehicle, it must be fitted in the centre or to the right of the centre of the vehicle's rear.

(7) Subclause (6) applies to a motor bike with an attached sidecar as if the sidecar were not attached.



Location of brake lights on a vehicle

107 Performance and operation of brake lights

(1) When on, a brake light must show a red light visible 30 metres from the rear of the vehicle.

(2) A brake light fitted to a street rod vehicle may incorporate a blue lens not over 20 millimetres in diameter.

(3) A brake light fitted to a motor vehicle must come on, if it is not already on, when:

(a) for a vehicle with 4 or more wheels or built after 1974—a service brake is applied, or

(b) for another vehicle—the rear wheel brake is applied.

(4) Subclause (3) does not apply if the controls in the vehicle that start the engine are in a position that makes it impossible for the engine to operate.

(5) A brake light on a trailer must come on when:

(a) the brake light of the towing vehicle comes on, or

(b) a brake control on the towing vehicle, which independently activates the service brake on the trailer, is operated.

(6) A brake light may be operated by an engine brake, retarder, or similar device if the device does not interfere with the proper operation of the brake light.

(7) A ***street rod vehicle*** is a vehicle that has been modified for safe road use and that:

(a) has a body and frame that were built before 1949, or

(b) is a replica of a vehicle the body and frame of which were built before 1949.

Division 10 Reversing lights

108 Reversing lights

(1) One or more reversing lights may be fitted to the rear of a vehicle and on each side towards the rear of the vehicle.

(2) A reversing light must have its centre not over 1.2 metres above ground level.

(3) When on, a reversing light must show a white or yellow light to the rear or to the side and rear of the vehicle.

Note. Third edition ADRs only allow white reversing lights.

(4) A reversing light fitted to a motor vehicle must be wired so it operates only when the vehicle is reversing or in reverse gear.

(5) A reversing light fitted to a trailer must be wired so it operates only when a motor vehicle towing the trailer is reversing or in reverse gear.

(6) A yellow reversing light may also operate as a direction indicator light.

Division 11 Direction indicator lights

109 Direction indicator lights on motor vehicles

(1) A motor vehicle with 4 or more wheels that was built after August 1966 must have:

(a) a pair of direction indicator lights fitted on, or towards, its front that face forwards, and

(b) a pair of direction indicator lights fitted on, or towards, its rear that face backwards.

(2) A motor vehicle with less than 4 wheels that was built after June 1975 must have:

(a) a pair of direction indicator lights fitted on, or towards, its front that face forwards, and

(b) a pair of direction indicator lights fitted on, or towards, its rear that face backwards.

(3) A motor vehicle that is not required to have direction indicator lights may have:

(a) 1 or more pairs of direction indicator lights that are visible from both the front and rear of the vehicle, or

(b) both:

(i) a pair of direction indicator lights fitted on, or towards, its front that face forwards, and

(ii) a pair of direction indicator lights fitted on, or towards, its rear that face backwards.

110 Direction indicator lights on trailers

(1) A trailer built after June 1973 must have a pair of direction indicator lights fitted on, or towards, its rear that face backwards.

(2) A trailer that is not required to have direction indicator lights may have 1 or more pairs of direction indicator lights fitted on, or towards, its rear that face backwards.

111 Location of direction indicator lights

(1) A pair of direction indicator lights fitted to a vehicle must have the centre of each light at least:

(a) for a motor bike or the single wheel end of a motor trike—300 millimetres from the centre of the other light, and

(b) for lights fitted at the 2 wheel end of a motor trike—600 millimetres from the centre of the other light, unless the centre of each direction indicator light is not over 400 millimetres from the nearer side of the vehicle, and

(c) for another vehicle with a width of not over 1300 millimetres—400 millimetres from the centre of the other light, and

(d) for another vehicle with a width of over 1300 millimetres—600 millimetres from the centre of the other light.

(2) The centre of each direction indicator light must be at least 350 millimetres above ground level.

(3) The centre of each light in a pair of direction indicator lights required to be fitted to a vehicle must not be over:

(a) 1.5 metres above ground level, or

(b) if it is not practicable for the light to be fitted lower—2.1 metres above ground level.

(4) For subclause (1), the width of a vehicle is measured disregarding any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

112 Operation and visibility of direction indicator lights

(1) A direction indicator light fitted to a motor vehicle must:

(a) when operating, display regular flashes of light at a rate of not over 120, and:

(i) for a motor vehicle with 4 or more wheels—at least 60, flashes a minute, and

(ii) for another motor vehicle—at least 45, flashes a minute, and

(b) be able to be operated by a person in the normal driving position, and

(c) be wired to an audible or visible device in the vehicle that tells the driver that the direction indicator light is operating, and

(d) flash at the same time and rate as any other direction indicator lights fitted on the same side of the vehicle.

(2) A direction indicator light fitted to a side of a trailer must, when operating, flash at the same time and rate as the direction indicator light or lights fitted to the same side of the motor vehicle towing the trailer.

(3) The flashes of light displayed by a direction indicator light must be:

(a) if the light faces forward—white or yellow, and

(b) if the light faces backwards:

(i) yellow, or

(ii) for a vehicle built before July 1973—yellow or red, and

(c) if the light faces out from the side of the vehicle:

(i) white or yellow towards the front and side, and

(ii) for a vehicle built before July 1973—yellow or red towards the rear and side, and

(iii) for a vehicle built after June 1973—yellow towards the rear and side.

Note. The ADRs only allow yellow direction indicator lights.

(4) If a motor vehicle's direction indicator lights display only yellow light, the vehicle may be equipped to allow the lights to operate simultaneously on both sides of the vehicle, if a visible or audible signal tells the driver when the lights are operating simultaneously.

(5) When on, a direction indicator light must be visible 30 metres from:

(a) if the light faces forwards—the front of the vehicle, or

(b) if the light faces backwards—the rear of the vehicle, or

(c) if the light faces out from the side of the vehicle—that side of the vehicle.

(6) When on, each direction indicator light in at least 1 pair of lights fitted on or towards the front of a prime mover, or a motor vehicle over 7.5 metres long, must be visible at a point:

(a) 1.5 metres at right angles from the side of the vehicle where the light is fitted, and

(b) in line with the rear of the vehicle.

Division 12 Fog lights

113 Front fog lights

(1) A pair of front fog lights may be fitted to a motor vehicle with 4 or more wheels.

(2) A pair of front fog lights, or a single front fog light, may be fitted to a motor bike or trike.

(3) A pair of front fog lights fitted to a motor vehicle with 4 or more wheels must have the centre of each light not over 400 millimetres from the nearer side of the vehicle unless the centres of the lights are at least 600 millimetres apart.

(4) If the top of the front fog light is higher than the top of any low-beam headlight on the vehicle, the centre of the fog light must not be higher than the centre of the low-beam headlight.

(5) A front fog light must:

(a) when on:
(i) project white or yellow light in front of the vehicle, and
(ii) be a low-beam light, and

(b) be able to be operated independently of any headlight, and

(c) be fitted so the light from it does not reflect off the vehicle into the driver's eyes.

114 Rear fog lights

(1) A vehicle may have fitted to its rear:

(a) a pair of rear fog lights, or

(b) 1 rear fog light fitted on, or to the right, of the centre of the vehicle.

(2) Subclause (1) (b) applies to a motor bike with an attached sidecar as if the sidecar were not attached.

(3) A rear fog light must:

(a) have its centre:
(i) not over 1.5 metres above ground level, and
(ii) at least 100 millimetres from the centre of a brake light, and

(b) when on, project red light behind the vehicle, and

(c) not use over 27 watts power, and

(d) be wired to a visible device in the vehicle that tells the driver that the rear fog light is operating.

Division 13 Interior lights

115 Interior lights

A vehicle may be fitted with interior lights that illuminate any interior part of the vehicle.

Division 14 Reflectors generally

116 General requirements for reflectors

(1) A reflector fitted to a vehicle must show a red, yellow or white reflection of light when light is projected directly onto the reflector at night by a low-beam headlight that:

(a) is 45 metres from the reflector, and

(b) complies with this Schedule.

(2) The reflection must be clearly visible from the position of the headlight.

(3) A reflector may be in the form of reflecting sheeting or tape or other efficient reflecting material.

Division 15 Rear reflectors

117 Rear reflectors

(1) A motor vehicle with 4 or more wheels, and a trailer, must have a rear-facing red reflector towards each side of its rear.

(2) A motor bike, a sidecar attached to a motor bike, and a motor trike, must have a rear-facing red reflector.

(3) The centre of each reflector must be:

(a) at the same height above ground level, and

(b) not over 1.5 metres above ground level.

(4) However, subclause (3) does not apply to a reflector fitted to a sidecar attached to a motor bike.

(5) A reflector fitted to a motor vehicle with 4 or more wheels, or a trailer, must not be over 400 millimetres from the nearer side of the vehicle.

(6) A vehicle fitted with rear-facing red reflectors in accordance with subclause (1) or (2) may be fitted with additional red reflectors at any height above ground level or at any distance from the side of the vehicle.

Division 16 Side reflectors

118 Compulsory side reflectors on pole-type trailers

(1) Yellow or red side-facing reflectors must be fitted to the pole of a pole-type trailer so:

(a) 1 reflector is fitted to the middle third of the left and right faces of the pole, and

(b) the front reflector is not over 3 metres from the front of the trailer, and

(c) the other reflectors are not over 3 metres apart.

(2) Additional side-facing reflectors may be fitted to a pole-type trailer in accordance with clause 119.

119 Optional side reflectors

(1) A vehicle may be fitted with side-facing reflectors.

(2) A side-facing reflector:

(a) towards the front of the vehicle must be yellow or white, and

(b) towards the rear of the vehicle must be yellow or red, and

(c) on the central part of the vehicle must be yellow.

Division 17 Front reflectors

120 Compulsory front reflectors on trailers

(1) A front-facing white or yellow reflector must be fitted towards each side of the front of:

(a) a semi-trailer, except a pole-type trailer, and

(b) the front cross-bar or bolster of a pole-type trailer, and

(c) a trailer that is at least 2.2 metres wide.

(2) Each reflector must have its centre:

(a) at the same height above ground level, and

(b) not over 1.5 metres above ground level, and

(c) not over 400 millimetres from the nearer side of the vehicle.

(3) Additional front-facing reflectors may be fitted to a trailer mentioned in subclause (1) in accordance with clause 121.

121 Optional front reflectors

(1) A motor vehicle with 4 or more wheels, or a trailer, may have 1 or more front-facing white or yellow reflectors fitted towards each side of its front.

(2) A motor vehicle with less than 4 wheels may have 1 or more front-facing white or yellow reflectors.

(3) The centre of at least 1 reflector on each side of the front of the vehicle must be:

(a) at the same height above ground level as the centre of the other reflector, and

(b) the same distance from the longitudinal axis of the vehicle as the centre of the other reflector, and

(c) at least:

(i) for a vehicle with a width under 1300 millimetres—400 millimetres from the centre of the other reflector, and

(ii) for another vehicle—600 millimetres from the centre of the other reflector.

(4) For subclause (3) (c), the width of a vehicle is measured disregarding any anti-skid device mounted on wheels, central tyre inflation systems, lights, mirrors, reflectors, signalling devices and tyre pressure gauges.

Division 18 Spot and search lights

122 Spot and search lights

A motor vehicle may be equipped with a spot or search light.

Division 19 Other lights, reflectors, rear marking plates or signals

123 Other lights and reflectors

(1) A vehicle may be fitted with any light or reflector not mentioned in this Schedule.

(2) However, unless subclauses (3) or (4) apply, a vehicle must not display:

(a) a light that flashes, or

(b) a light or reflector that:

(i) shows a red light to the front, or

(ii) shows a white light to the rear, or

(iii) is shaped or located in a way that reduces the effectiveness of a light or reflector that is required to be fitted to the vehicle under this Schedule.

(3) Despite any requirement of a third edition ADR, an emergency vehicle or police vehicle may be fitted with any light or reflector.

(4) Despite any requirement of a third edition ADR, the following vehicles may be fitted with a light or lights, at least one of which must be mounted on top of the vehicle, capable of displaying a flashing or rotating light:

(a) ambulances,

(b) police vehicles,

(c) fire fighting vehicles,

(d) mines rescue or other rescue vehicles,

(e) Red Cross vehicles used for conveyance of blood for urgent transfusions,

(f) public utility service vehicles,

(g) tow-trucks,

(h) motor breakdown service vehicles,

(i) vehicles used for the delivery of milk that are required to stop at frequent intervals,

(j) buses used solely or principally for the conveyance of children to or from school,

(k) vehicles exceeding the length, width and height limits of this Schedule,

(l) vehicles frequently used to transport loads that exceed the maximum length, width and height limits of this Schedule,

(m) vehicles used to escort vehicles referred to in paragraph (k) or (l),

(n) vehicles used by the Authority,

(o) vehicles used by an employee of a council of a local government area for the purposes of enforcing excess weight limits legislation (within the meaning of clause 56 (2) of the *Road Transport (Safety and Traffic Management) (Road Rules) Regulation 1999*),

(p) such other vehicles as are approved by the Authority.

(5) Any such light must be capable of displaying:

(a) in the case of an ambulance, fire-fighting vehicle, mines rescue or other rescue vehicle or Red Cross vehicle—a red light, or

(b) in the case of a police vehicle—a blue light or a blue and a red light, or

(c) in the case of a vehicle used by the Authority or a vehicle used by a council of a local government area for the purposes of enforcing excess weight limits legislation (within the meaning of clause 56 (2) of the *Road Transport (Safety and Traffic Management) (Road Rules) Regulation 1999*)—a crimson light, or

(d) in the case of fire brigade emergency site command vehicle—a green light, or

(e) in the case of any other vehicle—a yellow light unless otherwise approved by the Authority.

(6) The lens of any such light must not be visible, either directly or indirectly, to the driver of the motor vehicle or trailer to which it is fitted when that driver is seated in the normal driving position.

(7) The light from any such light mounted on the top of the vehicle must be visible in normal sunlight from a distance of at least 200 m to a driver approaching that vehicle from any direction.

124 Flashing direction indicator lights

(1) A motor vehicle that:

(a) is specified in clause 123 (4), and

(b) has direction indicator lights that show yellow light to the front,

may be equipped with a device that will cause the direction indicator lights fitted to the front and rear and on both sides of the vehicle, and any trailer connected to the vehicle, to flash simultaneously and regularly at a rate of not less than 60 and not more than 120 flashes per minute.

(2) When all such lights fitted to a motor vehicle and trailer (if any) are flashing simultaneously, there must be an indicator that will inform the driver, by visible and audible means, that the lights are flashing.

125 Flashing lights on other vehicles—street vending vehicles

Street vending vehicles must be fitted with a flashing warning light mounted on the roof of the vehicle. Any such light must:

(a) be capable of displaying a rotating, flashing, yellow coloured light, and

(b) commence to emit light within 1 second of being switched on, and

(c) when switched on, flash regularly at a rate of not less than 60 times per minute, and

(d) be connected to an indicator that will inform the driver, by visible and audible means, that the light is flashing, and

(e) emit light that is visible in normal sunlight from a distance of at least 200 m to a driver approaching the vehicle from any direction.

126 Rear marking plates

(1) In this clause:

rear marking plate means a rear marking plate complying with rule 13.6.101 of third edition ADR 13.

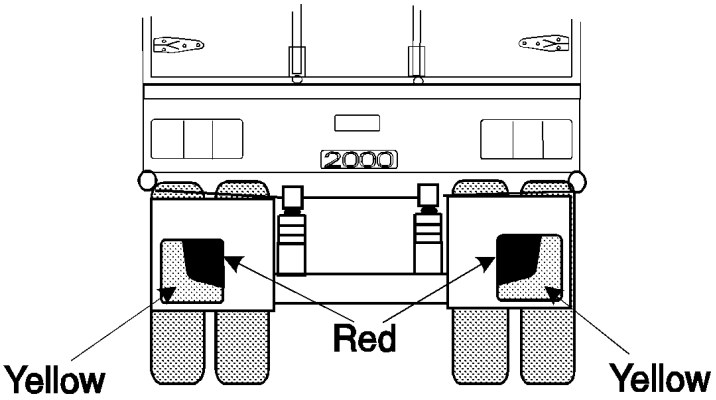
(2) Rear marking plates must be fitted to:

(a) a motor vehicle with a GVM over 12 tonnes, except a bus fitted with hand grips or similar equipment for standing passengers to hold, and

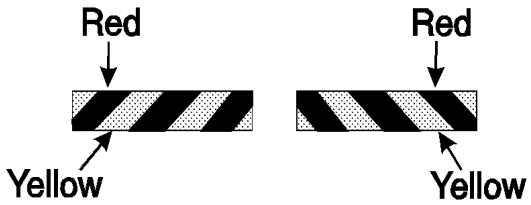
(b) a trailer with a GTM over 10 tonnes.

(3) Subclause (2) applies to a vehicle even if it was built before the date stated in the ADR.

(4) Rear marking plates may be fitted to a motor vehicle with a GVM not over 12 tonnes or a trailer with a GTM not over 10 tonnes.



An example of rear marking plates



An alternative pattern for rear marking plates

127 Signalling devices

(1) This clause applies to a motor vehicle if:

(a) the vehicle is not fitted with a brake light or direction indicator light mentioned in Division 9 or 11, and

(b) the construction of the vehicle would otherwise prevent the driver from hand signalling an intention:

(i) to turn or move the vehicle to the right, or

(ii) to stop or suddenly reduce the speed of the vehicle.

(2) The vehicle must be fitted with a mechanical signalling device or a pair of turn signals.

128 Mechanical signalling devices

(1) A mechanical signalling device must:

(a) be fitted to the right side of the vehicle, and

(b) be able to be operated by the driver from a normal driving position, and

(c) consist of a white or yellow representation of an open human hand at least 15 centimetres long, and

(d) be constructed so that the driver of the vehicle can keep the device:

(i) in a neutral position so it is unlikely that the driver of another vehicle or anyone else would regard it as a signal, and

(ii) in a horizontal position with the palm of the hand facing forwards and the fingers pointing out at a right angle to the vehicle to signal an intention to turn or move right, and

(iii) with the palm of the hand facing forwards and the fingers pointing upwards to signal an intention to stop or reduce speed suddenly.

(2) When the mechanical signalling device is in a position mentioned in subclause (1) (d) (ii) or (iii), the complete hand must be clearly visible from both the front and the rear of the vehicle, at a distance of 30 metres.

129 Turn signals

A turn signal must:

(a) consist of a steady or flashing illuminated yellow sign at least 15 centimetres long and 25 millimetres wide that:

(i) when in operation—is kept horizontal, and

(ii) when not in operation—is kept in a position so it is unlikely that the driver of another vehicle or anyone else would regard it as a signal, and

(b) be fitted to the side of the motor vehicle at least 50 centimetres and not over 2.1 metres above ground level, in a position so the driver of the vehicle, from the normal driving position, can see whether the signal is in operation, and

(c) be able to be operated by the driver from the normal driving position, and

(d) when in operation, be visible from both the front and rear of the vehicle at a distance of 30 metres.

Division 20 Vehicles not required to have lights or reflectors

130 Certain vehicles used in daylight

This Part does not apply to a vehicle built before 1931 that is used only in the daylight.

131 Certain vehicles used for exhibition purposes

This Part does not apply to a vehicle built before 1946 that is used mainly for exhibition purposes.

Part 6 Braking systems

Note. This Part sets out the braking system requirements for vehicles to ensure that they can be reliably slowed or stopped even if a part of a braking system fails, and to ensure that a vehicle can be prevented from rolling away when parked.

The Part also includes special requirements for braking systems on B-doubles and road trains to ensure that the braking systems on the component vehicles are compatible. The special requirements do not apply to a road train that is 19 metres long or less.

Division 1 Brake requirements for all vehicles

132 Parts of a braking system

(1) A brake tube or hose fitted to a vehicle must:

(a) be manufactured from a material appropriate to its intended use in the vehicle, and

(b) be long enough to allow for the full range of steering and suspension movements of the vehicle, and

(c) be fitted to prevent it being damaged during the operation of the vehicle by:

(i) a source of heat, or

(ii) any movement of the parts to which it is attached or near.

(2) Each component of the braking system of a vehicle must comply with the design and performance requirements of:

(a) a relevant Australian Standard or British Standard as in force when this subclause commenced, or

(b) a relevant standard approved by any of the following bodies, and as in force when this subclause commenced:

- American Society of Automotive Engineers
- American National Standards Institute
- Japanese Standards Association

- Deutsches Institut für Normung
- International Organisation for Standardisation.

133 Provision for wear

The braking system of a vehicle must allow for adjustment to take account of normal wear.

134 Supply of air or vacuum to brakes

(1) If air brakes are fitted to a vehicle:

(a) the compressor supplying air to the brakes must be able to build up air pressure to at least 80% of the governor cut-out pressure in not over 5 minutes after the compressed air reserve is fully used up, and

(b) for a vehicle with a GVM over 4.5 tonnes—the air storage tanks must have sufficient capacity to allow 5 applications of the service brakes before the air pressure drops below half the governor cut-out pressure, and

(c) there must be an automatic or manual condensate drain valve at the lowest point of each air brake reservoir in the system, and

(d) any spring brake fitted to the vehicle must not operate before the warning mentioned in clause 138 (4) (a) or 141 (3) (a) has been given.

(2) If vacuum brakes are fitted to a vehicle, the vacuum supply must be able to build up vacuum:

(a) to the level when the warning signal mentioned in clause 138 (4) (a) or 141 (3) (a) no longer operates within 30 seconds after the vacuum reserve is fully used up, and

(b) to the normal working level within 60 seconds after the vacuum reserve is fully used up.

135 Performance of braking systems

(1) One sustained application of the brake of a motor vehicle built after 1930, or a combination that includes a motor vehicle built after 1930, must be able to produce the performance mentioned in subclauses (2) to (7):

(a) when the vehicle or combination is on a dry, smooth, level road surface, free from loose material, and

(b) whether or not the vehicle or combination is loaded, and

(c) without part of the vehicle or combination moving outside a straight path:

(i) centred on the longitudinal axis of the vehicle or combination before the brake was applied, and

(ii) 3.7 metres wide.

(2) The braking system of a motor vehicle or combination with a gross mass under 2.5 tonnes must bring the vehicle or combination from a speed of 35 kilometres an hour to a stop within:

(a) 12.5 metres when the service brake is applied, and

(b) 30 metres when the emergency brake is applied.

(3) The braking system of a motor vehicle or combination with a gross mass of at least 2.5 tonnes must bring the vehicle or combination from a speed of 35 kilometres an hour to a stop within:

(a) 16.5 metres when the service brake is applied, and

(b) 40.5 metres when the emergency brake is applied.

(4) The braking system of a motor vehicle or combination with a gross mass under 2.5 tonnes must decelerate the vehicle or combination, from any speed at which the vehicle or combination can travel, by an average of at least:

(a) 3.8 metres a second a second when the service brake is applied, and

(b) 1.6 metres a second a second when the emergency brake is applied.

(5) The braking system of a motor vehicle or combination with a gross mass of at least 2.5 tonnes must decelerate the vehicle or combination, from any speed at which the vehicle or combination can travel, by an average of at least:

(a) 2.8 metres a second a second when the service brake is applied, and

(b) 1.1 metres a second a second when the emergency brake is applied.

(6) The braking system of a motor vehicle or combination with a gross mass under 2.5 tonnes must achieve a peak deceleration of the vehicle or combination, from any speed at which the vehicle or combination can travel, of at least:

(a) 5.8 metres a second a second when the service brake is applied, and

(b) 1.9 metres a second a second when the emergency brake is applied.

(7) The braking system of a motor vehicle or combination with a gross mass of at least 2.5 tonnes must achieve a peak deceleration of the vehicle or combination, from any speed at which the vehicle or combination can travel, of at least:

(a) 4.4 metres a second a second when the service brake is applied, and

(b) 1.5 metres a second a second when the emergency brake is applied.

(8) The parking brake of a vehicle or combination must be able to hold the vehicle or combination stationary on a 12% gradient.

Division 2 Motor vehicle braking systems

136 What braking system a motor vehicle must have

(1) In this clause:

independent brake, for a vehicle, means a brake that is operated entirely separately from any other brake on the vehicle, except for any drum, disc or part, on which a shoe, band or friction pad makes contact, that is common to 2 or more brakes.

(2) A motor vehicle with 4 or more wheels built, or used, mainly for transporting goods or people by road must be fitted with:

(a) a braking system that:

(i) consists of brakes fitted to all wheels of the vehicle, and

(ii) has at least 2 separate methods of activation, arranged so effective braking remains on at least 2 wheels if a method fails, or

(b) 2 independent brakes, each of which, when in operation, acts directly on at least half the number of wheels of the vehicle.

(3) The braking system of a motor vehicle mentioned in subclause (2) that was built after 1945 must have a service brake operating on all wheels that, when applied:

(a) acts directly on the wheels and not through the vehicle's transmission, or

(b) acts on a shaft between a differential of the vehicle and a wheel.

(4) The braking system of a motor vehicle with 4 or more wheels must have a parking brake that:

(a) is held in the applied position by direct mechanical action without the intervention of an electrical, hydraulic or pneumatic device, and

(b) is fitted with a locking device that can hold the brake in the applied position, and

(c) has its own separate control.

(5) The parking brake may also be the emergency brake.

(6) If 2 or more independent brakes are fitted to a motor vehicle with 4 or more wheels, the brakes must be arranged so brakes are applied to all the wheels on at least 1 axle of the vehicle when any brake is operated.

(7) A motor bike or motor trike must be fitted with:

(a) 2 independent brakes, or

(b) a single brake that acts directly on all wheels of the vehicle and is arranged so effective braking remains on at least 1 wheel if a part of the system fails.

(8) Subclause (7) applies to a motor bike with a sidecar attached as if the sidecar were not attached.

(9) A motor trike must have a parking brake that is held in the applied position by mechanical means.

137 Operation of brakes on motor vehicles

The braking system on a motor vehicle must be arranged to allow the driver of the motor vehicle to apply the brakes from a normal driving position.

138 Air or vacuum brakes on motor vehicles

(1) If a motor vehicle has air brakes, the braking system of the vehicle must include at least 1 air storage tank.

(2) If a motor vehicle has vacuum brakes, the braking system of the vehicle must include at least 1 vacuum storage tank.

(3) An air or vacuum storage tank must be built so the service brake can be applied to meet the performance standards of clause 135 at least twice if the engine of the vehicle stops or the source of air or vacuum fails.

(4) An air or vacuum storage system must:

(a) be built to give a visible or audible warning to the driver, while in a normal driving position, of a lack of air or vacuum that would prevent the service brake from being applied to meet the performance standards of clause 135 at least twice, and

(b) be safeguarded by a check valve or other device against loss of air or vacuum if the supply fails or leaks.

(5) However, subclause (4) (a) does not apply to a vehicle with a GVM of 4.5 tonnes or less that is fitted with an air or vacuum assisted braking system.

(6) If air or vacuum brakes are fitted to a motor vehicle equipped to tow a trailer, the brakes of the vehicle must be able to stop the vehicle, at the performance standards for emergency brakes under clause 135 if the trailer breaks away.

(7) The braking system of a motor vehicle equipped to tow a trailer fitted with air brakes must include protection against loss of supply line air or brake control signal air.

(8) The protection mentioned in subclause (7) must:

(a) operate automatically if a brake supply line hose connecting the motor vehicle and a trailer fails, and

(b) maintain enough air pressure to allow the brakes to be applied to meet performance standards for emergency brakes under clause 135, and

(c) include a visible or audible warning to the driver.

Division 3 Trailer braking systems

139 What brakes a trailer must have

(1) A trailer with a GTM over 750 kilograms must have brakes that operate on at least 1 wheel at each end of 1 or more axles of the trailer.

(2) A semi-trailer or converter dolly with a GTM over 2 tonnes must have brakes that operate on all its wheels.

140 Operation of brakes on trailers

(1) The braking system of a trailer with a GTM over 2 tonnes must allow the driver of a motor vehicle towing the trailer to operate the brakes from a normal driving position.

(2) However, subclause (1) does not apply to an unloaded converter dolly that weighs under 3 tonnes if the motor vehicle towing the converter dolly has a GVM over 12 tonnes.

(3) The brakes on a trailer with a GTM over 2 tonnes must:

(a) operate automatically and quickly if the trailer breaks away from the towing vehicle, and

(b) remain in operation for at least 15 minutes after a break-away, and

(c) be able to hold the trailer on a 12% grade while in operation after a break-away.

141 Air or vacuum brakes on trailers

(1) If a trailer has air brakes, its braking system must include at least 1 air storage tank.

(2) If a trailer has vacuum brakes, its braking system must include at least 1 vacuum storage tank.

(3) An air or vacuum storage system must:

(a) be built to give a visible or audible warning to the driver of the towing vehicle, while in a normal driving position, of a lack of air or vacuum that would prevent the brakes from meeting the performance standards of clause 135, and

(b) be safeguarded by a check valve or other device against loss of air or vacuum if the supply fails or leaks.

(4) Subclauses (1), (2) and (3) do not apply to a trailer with a GTM of 2 tonnes or less.

Division 4 Additional brake requirements for B-doubles and long road trains

142 Application of Division to certain road trains

This Division does not apply to a road train, or a vehicle used in a road train, if the road train has a length of 19 metres or less.

143 Braking system design for a prime mover in a B-double

(1) A prime mover used in a B-double must comply with second edition ADR 35A or third edition ADR 35.

(2) A prime mover used in a B-double must also have an anti-lock braking system complying with third edition ADR 64, if the prime mover:

(a) was built after 1989, or

(b) was first used in a B-double after 1993, or

(c) is used in a B-double that includes a road tank vehicle carrying dangerous goods.

144 Braking system design for motor vehicles in road trains

The performance of the service, secondary and parking brake systems of a motor vehicle used in a road train must comply with second edition ADR 35A or third edition ADR 35 if the vehicle would not otherwise be required to comply with an ADR about braking.

145 Braking system design for trailers in B-doubles or road trains

(1) The performance of the service, secondary and parking brake systems of a trailer used in a B-double or road train must comply with second edition ADR 38 or third edition ADR 38 if the trailer would not otherwise be required to comply with an ADR about braking.

(2) A road train trailer to which subclause (1) applies need not be fitted with a mechanical parking brake if it carries wheel chocks that provide a performance equal to the performance standard required for a parking brake system.

(3) A semi-trailer, regardless of when it was built, must have an anti-lock braking system that complies with third edition ADR 38/01, if:

(a) it is being used in a B-double that includes a road tank vehicle, whether or not the semi-trailer is itself a road tank vehicle, and

(b) the road tank vehicle is carrying dangerous goods.

146 Air brakes of motor vehicles in B-doubles or road trains

(1) If a B-double or road train is fitted with brakes that operate using compressed air, the braking system of the motor vehicle must comply with subclauses (2) and (3) when:

(a) the pressure is measured in an 800 millilitre vessel connected by a 2 metre pipe with a bore of approximately 13 millimetres to the coupling head of the braking system, and

(b) the air pressure before the brakes are applied is not under:

(i) the average of the maximum and minimum pressures in the operating pressure range specified by the vehicle's manufacturer, or

(ii) if there is no manufacturer's specification—650 kilopascals.

(2) The pressure must reach at least 420 kilopascals within 400 milliseconds after the rapid and complete application of the foot-operated brake control.

(3) After the brakes have been fully applied, the pressure must fall, within half a second after the release of the foot-operated brake control, to 35 kilopascals.

147 Air brakes in a B-double or road train: least favoured chamber

(1) In this clause:

least favoured chamber means the brake chamber with the longest line to the treadle valve in the prime mover.

(2) The pressure in the least favoured chamber of the braking system of a B-double or road train with brakes that operate using compressed air must comply with subclauses (3) and (4) when the air pressure before the brakes are applied is not under:

(a) the average of the maximum and minimum pressures in the operating pressure range specified by the vehicle's manufacturer, or

(b) if there is no manufacturer's specification—650 kilopascals.

(3) The pressure must reach at least 420 kilopascals within:

(a) for a B-double—1 second after the rapid and complete application of the foot-operated brake control, or

(b) for a road train—1.5 seconds after the rapid and complete application of the foot-operated brake control.

(4) After the brakes have been fully applied, the pressure must fall to 35 kilopascals, or the pressure at which the friction surfaces cease to contact each other, within:

(a) for a B-double—1 second after the release of the foot-operated brake control, or

(b) for a road train—1.5 seconds after the release of the foot-operated brake control.

148 Recovery of air pressure for brakes in B-doubles and road trains

The air pressure in each air brake reservoir in a B-double or road train must recover to at least 420 kilopascals within 1 minute after 3 full brake applications have been made within a 10 second period if, before the 3 brake applications have been made:

(a) the engine is running at maximum speed, and

(b) the governor cut-in pressure is no higher than:

(i) the pressure specified by the vehicle's manufacturer, or

(ii) if there is no manufacturer's specification—550 kilopascals, and

(c) the air pressure in the storage tanks of the vehicle is not under:

(i) the average of the maximum and minimum pressures in the operating pressure range specified by the vehicle's manufacturer, or

(ii) if there is no manufacturer's specification—650 kilopascals.

149 Air supply for brakes in B-doubles and road trains

A B-double or road train that uses compressed air to operate accessories must have:

(a) sufficient air compressor capacity and air receiver volume to ensure that the operation of the accessories does not adversely affect brake performance, and

(b) a compressed air system built to ensure that the brake system is preferentially charged.

150 Brake line couplings

(1) Brake line couplings on the same part of a vehicle in a B-double or road train must not be interchangeable.

(2) The couplings must be polarised in accordance with Australian Standard AS D8–1971 *Hose Couplings for Use with Vacuum and Air-Pressure Braking Systems on Prime Movers, Trailers and Semi-trailers* if the hoses used with the brake couplings are used for the same purpose as the hoses mentioned in the standard.

151 Simultaneous parking brake application

(1) If the parking brake of a motor vehicle in a B-double or road train is applied, the parking brakes of any attached trailer must be applied automatically.

(2) This clause does not apply to a trailer carrying wheel chocks complying with clause 145 (2).

152 Capacity of air reservoirs

(1) The capacity of the air storage tanks of a motor vehicle used in a B-double or road train must be at least 12 times the volume of all the brake activation chambers on the motor vehicle.

(2) The capacity of the air storage tanks of a trailer used in a B-double or road train must be at least 8 times the volume of all the brake activation chambers on the trailer.

Part 7 Control of emissions

Note. This Part sets out requirements to ensure that motor vehicles do not emit too much smoke or noise and that exhaust gases cannot enter the passenger compartment of a vehicle.

Division 1 Crank case gases and visible emissions

153 Crank case gases

(1) This clause applies to a motor vehicle with 4 or more wheels that is powered by a petrol engine and was built after 1971.

(2) The vehicle must be built to prevent, or fitted with equipment that prevents, crank case gases from escaping to the atmosphere.

154 Visible emissions

(1) This clause applies to a motor vehicle that is propelled by an internal combustion engine and was built after 1930.

(2) The vehicle must not emit visible emissions for a continuous period of at least 10 seconds.

(3) However, this clause does not apply to emissions that are visible only because of heat or the condensation of water vapour.

Division 2 Exhaust systems

155 Exhaust systems

(1) The outlet of the exhaust system fitted to a motor vehicle with a GVM over 4.5 tonnes (except a bus) must extend:

(a) behind the back seat, and

(b) at least 40 millimetres beyond the outermost joint of the floorpan that is not continuously welded or permanently sealed, and

(c) to the edge of the vehicle, if:

(i) the body of the vehicle is permanently enclosed, and

(ii) the vehicle is not fitted with a vertical exhaust system, and

(d) no further than the edge of the vehicle at its widest point.

(2) The outlet must discharge the main exhaust flow to the air:

(a) if the vehicle is fitted, or required under a law of this jurisdiction to be fitted, with an exhaust system with a vertical outlet pipe:

(i) at an angle above the horizontal, and

(ii) at least 150 millimetres above the cab of the vehicle, and

(iii) rearwards or to the right of the vehicle, and

(b) in any other case:

(i) horizontally or at an angle of not over 45° downwards, and

(ii) under 750 millimetres above ground level, and

(iii) rearwards or to the right of the vehicle.

(3) An exposed section of a vertical exhaust system fitted to a motor vehicle (except a bus) with a GVM over 4.5 tonnes must be positioned or shielded to prevent injury.

(4) The outlet of the exhaust system fitted to a bus with a GVM over 4.5 tonnes must:

(a) be as near as practicable to the rear of the vehicle, and

(b) extend no further than the edge of the bus at its widest point.

(5) The outlet must discharge the main exhaust flow to the air:

(a) if the bus is fitted, or required under a law of this jurisdiction to be fitted, with an exhaust system with a vertical outlet pipe:

(i) behind the passenger compartment, and

(ii) at an angle above the horizontal, and

(iii) upwards or rearwards, and

(b) in any other case:

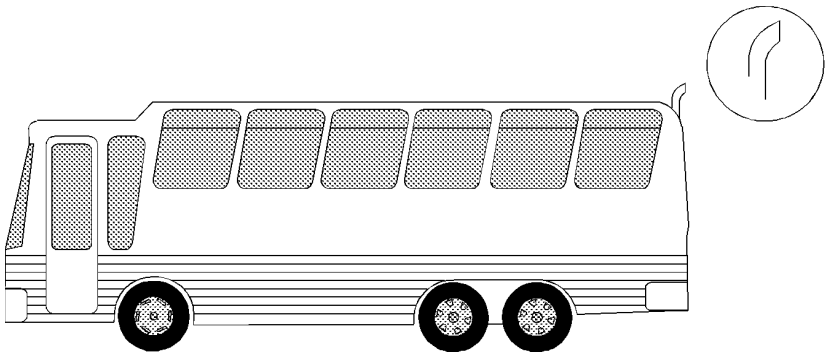
(i) horizontally or at an angle of not over 45° downwards, and

(ii) rearwards or to the right of the vehicle.

(6) A vertical exhaust system fitted to a motor vehicle with a GVM over 4.5 tonnes must:

(a) if the vehicle is fitted with an exhaust system with a vertical outlet pipe that does not direct the main exhaust flow straight up—direct the flow rearwards at an angle within 0° to 45° of the longitudinal centre line of the vehicle, and

(b) if a rain cap is fitted to the outlet pipe—be installed so the hinge of the cap is at an angle of 90° (plus or minus 10°) to the longitudinal centre line of the vehicle when viewed from above.



Bus exhaust outlet pipe

Division 3 Noise emissions

156 Silencing device for exhaust systems

A motor vehicle propelled by an internal combustion engine must be fitted with a silencing device through which all the exhaust from the engine passes.

157 Stationary noise levels—car-type vehicles and motor bikes and trikes

(1) In this clause:

car-type vehicle means:

(a) a car, or

(b) a utility truck, panel van, or another motor vehicle derived from a car design, or

(c) another motor vehicle with 4 or more wheels that is built mainly to carry not over 9 people including the driver.

(2) The stationary noise level of a car-type vehicle, or motor bike or trike, must not exceed:

(a) for a car-type vehicle built after 1982—90 dB(A), or

(b) for another car-type vehicle—96 dB(A), or

(c) for a motor bike or trike built after February 1985—94 dB(A), or

(d) for another motor bike or trike—100 dB(A).

(3) However, this clause does not apply to a car-type vehicle built after 1982 for 2 years after the commencement of this clause, if:

(a) the stationary noise level of the vehicle does not exceed 96 dB(A), and

(b) the stationary noise level limit applying to the vehicle under the law of the State or Territory where the vehicle is registered, or otherwise authorised to be driven on a road or road-related area, by a vehicle registration authority is not 90 dB(A) or less.

158 Stationary noise levels—other vehicles with spark ignition engines

(1) This clause applies to a motor vehicle (except a motor vehicle to which clause 157 applies) with a spark ignition engine.

(2) The stationary noise level of the motor vehicle must not exceed the noise level applying to the vehicle under the table.

Column 1	Column 2	Column 3	Column 4	Column 5
Item	**GVM (t)**	**Exhaust height (mm)**	**When vehicle built**	**Noise level (dB(A))**
1	<3.5	<1500	before July 1983 after June 1983	92 89
2	>3.5	<1500	before July 1983 after June 1983	98 95
3	<3.5	>1500	before July 1983 after June 1983	88 85
4	>3.5	>1500	before July 1983 after June 1983	94 91

159 Stationary noise levels—other vehicles with diesel engines

(1) This clause applies to a motor vehicle (except a motor vehicle to which clause 157 applies) with a diesel engine.

(2) The stationary noise level of the motor vehicle must not exceed the noise level applying to the vehicle under the table.

Column 1	Column 2	Column 3	Column 4	Column 5
Item	**GVM (t)**	**Exhaust height (mm)**	**When vehicle built**	**Noise level (dB(A))**
1	<3.5	<1500	before July 1980	105
			after June 1980 but before July 1983	102
			after June 1983	99
2	>3.5 but <12	<1500	before July 1980	107
			after June 1980 but before July 1983	104
			after June 1983	101
3	>12	<1500	before July 1980	109
			after June 1980 but before July 1983	106
			after June 1983	103
4	<3.5	>1500	before July 1980	101
			after June 1980 but before July 1983	98
			after June 1983	95
5	>3.5 but <12	>1500	before July 1980	103
			after June 1980 but before July 1983	100
			after June 1983	97
6	>12	>1500	before July 1980	105
			after June 1980 but before July 1983	102
			after June 1983	99

160 Measurement of stationary noise levels

For this Division, the stationary noise level of a motor vehicle is to be measured in accordance with the test method mentioned in the *Roadworthiness Guidelines* that are approved by the Ministerial Council and current at the commencement of this clause.

Note. The *Roadworthiness Guidelines* are published by the National Road Transport Commission and available from AusInfo Bookshops.

Part 8 LPG fuel systems

Note. This Part sets out requirements to ensure that LPG fuel systems are safely installed in motor vehicles and that vehicles with LPG installed can be identified as LPG-powered vehicles.

161 LPG-powered vehicle

(1) A motor vehicle equipped to run on LPG must comply with the requirements for the use of LPG in vehicles in:

(a) the version of Australian Standard AS 1425 in force at the commencement of this clause, or

(b) if an earlier version of the standard was current when the vehicle was first equipped to run on LPG—that version.

(2) A vehicle equipped to run on LPG must have fixed conspicuously to the front and rear number plates a label that is:

(a) made of durable material, and

(b) at least 25 millimetres wide and 25 millimetres high, and

(c) reflective red conforming to Australian Standard AS 1742–1975 *Manual of Uniform Traffic Control Devices*, Appendix C, Class 2, and

(d) marked "LPGAS" or "LPG", or with words or acronyms to similar effect, in capital letters at least 6 millimetres high.

Part 9 Maximum road speed limiting

Note. This Part requires certain heavy vehicles built after 1987, but before July 1991, to have a restricted top speed. However, emergency vehicles and certain 2-axle prime movers owned by farmers and used in primary production are exempt.

162 Speed limiting

(1) A bus with a GVM over 14.5 tonnes that was built after 1987 must comply with third edition ADR 65.

(2) A prime mover with a GVM over 15 tonnes that was built after 1987 must comply with third edition ADR 65.

(3) For third edition ADR 65, the maximum road speed capability of a motor vehicle used in a road train is 90 kilometres an hour.

Note. Vehicle Standards Bulletin 2 (VSB 2) contains the requirements of third edition ADR 65. The Bulletin is available from the Federal Office of Road Safety.

163 Exemptions from speed limiting

Clause 162 does not apply to:

(a) an emergency vehicle or police vehicle, or

(b) a bus fitted with hand grips or similar equipment for standing passengers to hold, or

(c) a 2-axle prime mover if:

(i) it was built after 1987 but before July 1991, and

(ii) its owner is a person who uses it for agriculture, horticulture, or other primary production activities (except forestry, fishing and mining).

Part 10 Mechanical connections between vehicles

Note. This Part sets out various requirements to ensure that the couplings used when operating motor vehicles and trailers in combinations are strong enough to hold them together. The requirements in this Part about the mechanical connections between vehicles in a road train do not apply to a road train 19 metres long or less.

Division 1 Couplings on all types of vehicles

164 General coupling requirements

(1) A fifth wheel coupling, the mating parts of a coupling, a kingpin or a towbar must not be used for a load more than the manufacturer's load rating.

(2) A kingpin must be used only with a fifth wheel coupling that has a corresponding jaw size.

Example

An adaptor must not to be used to fit a kingpin to a fifth wheel coupling.

(3) The mating parts of a coupling used to connect a semi-trailer to a towing vehicle must not allow the semi-trailer to roll to an extent that makes the towing vehicle unstable.

165 Drawbar couplings

(1) A coupling for attaching a trailer, except a semi-trailer or pole-type trailer, to a towing vehicle must be built and fitted so:

(a) the coupling is equipped with a positive locking mechanism, and

(b) the positive locking mechanism can be released regardless of the angle of the trailer to the towing vehicle.

(2) A coupling fitted to a trailer first registered on or after 1 August 1963 must have clearly and permanently stamped, moulded or otherwise branded on its main component:

(a) means of identifying its manufacturer, and

(b) the maximum gross weight of the trailer it is designed to tow.

(3) If the trailer is in a combination and is not fitted with breakaway brakes in accordance with clause 140 (3), it must be connected to the towing vehicle by at least 1 chain, cable or other flexible device, as well as the coupling required by subclause (1).

(4) Any such safety connection must be as short as practicable and be so connected and affixed that:

(a) it is not liable to accidental disconnection but is readily detachable from the towing vehicle, and

(b) it permits all normal angular movements of the coupling without more slack than is necessary, and

(c) it will prevent the forward end of the drawbar from striking the ground in the event of accidental disconnection of the coupling, and

(d) if it consists of more than one chain or wire rope, the chains or wire ropes are in a crossed-over position.

(5) Any chain or wire rope in such a safety connection must:

(a) if a chain be of welded iron links, and

(b) if a wire rope have a strength of at least that of a chain of the same diameter, and

(c) be of a size specified in the following table:

Table

Gross weight of trailer	Minimum size of chain or wire rope
Up to 500 kg	6.3 mm diameter
Exceeding 500 kg but not exceeding 1.3 tonnes	9.5 mm diameter
Exceeding 1.3 tonnes	12.6 mm diameter

Division 2 Additional coupling requirements for B-doubles and long road trains

166 Application of Division to road trains

This Division does not apply to a vehicle, coupling, or part of a coupling, used in a road train not over 19 metres long.

167 Couplings for B-doubles and road trains

(1) A fifth wheel coupling used to connect a towing vehicle to a semi-trailer used in a B-double or road train must not be built with a pivot that allows a semi-trailer to roll relative to the towing vehicle.

(2) However, subclause (1) does not apply to a fifth wheel coupling if:

(a) the semi-trailer design requires torsional stresses to be minimised, and

(b) the roll axis of the fifth wheel coupling is above the surface of the coupler plate, and

(c) the degree of rotation allowed around the roll axis of the fifth wheel coupling is restricted to prevent roll instability.

(3) A trailer with only 1 axle group, or a single axle, (except a semi-trailer or a converter dolly) that is used in a road train must not have a coupling fitted at its rear.

168 Selection of fifth wheel couplings for B-doubles and road trains

(1) A fifth wheel coupling used in a B-double or road train must have a D-value complying with Australian Standard AS 1773–1990 *Articulated Vehicles—Fifth Wheel Assemblies*.

(2) A turntable used in a B-double or road train must have a D-value complying with Australian Standard AS 1773–1990 *Articulated Vehicles—Fifth Wheel Assemblies*.

(3) If a fifth wheel coupling used in a B-double or road train is built for a 50 millimetre or 90 millimetre kingpin, the coupling must:

(a) meet the dimension requirements in Australian Standard AS 1773–1990 *Articulated Vehicles—Fifth Wheel Assemblies*, and

(b) not be worn away more than recommended by the standard.

(4) If a fifth wheel coupling used in a B-double or road train is built for a 75 millimetre kingpin, the coupling must:

(a) be compatible with the kingpin mentioned in clause 172 (3), and

(b) not be worn away so that it does not comply with clause 169.

169 D-value of a fifth wheel coupling

In testing a fifth wheel coupling built for a 75 millimetre kingpin used in a B-double or road train to decide whether its D-value complies with clause 168 (1), the longitudinal movement (after readjusting the jaws of the coupling using a kingpin built to the dimensions mentioned in clause 172 (3) (a)) must not be over 4 millimetres.

170 Mounting of fifth wheel couplings on B-doubles and road trains

A fifth wheel coupling must be mounted on a prime mover, or a semi-trailer used in a B-double or road train, in accordance with Australian Standard AS 1771–1987 *Installation of Fifth Wheel and Turntable Assemblies*.

171 Branding of fifth wheel couplings and turntables on B-doubles and road trains

(1) A fifth wheel coupling on a vehicle built after June 1991 forming part of a B-double or road train must be clearly and permanently marked in accordance with Australian Standard AS 1773–1990 *Articulated Vehicles—Fifth Wheel Assemblies* with:

(a) the name or trademark of its manufacturer, and

(b) its D-value rating, and

(c) its nominal size.

(2) A turntable used in a vehicle built after the commencement of this clause that forms part of a B-double or road train must be marked with:

(a) the name or trademark of the turntable's manufacturer, and

(b) the D-value rating of the turntable in accordance with Australian Standard AS 1773–1990 *Articulated Vehicles—Fifth Wheel Assemblies*.

172 Selection of kingpins for B-doubles and road trains

(1) A kingpin used in a B-double or road train must:

(a) be a 50, 75 or 90 millimetre kingpin, and

(b) have a D-value complying with Australian Standard AS 2175–1990 *Articulated Vehicles—Kingpins*.

(2) A 50 or 90 millimetre kingpin used in a B-double or road train must:

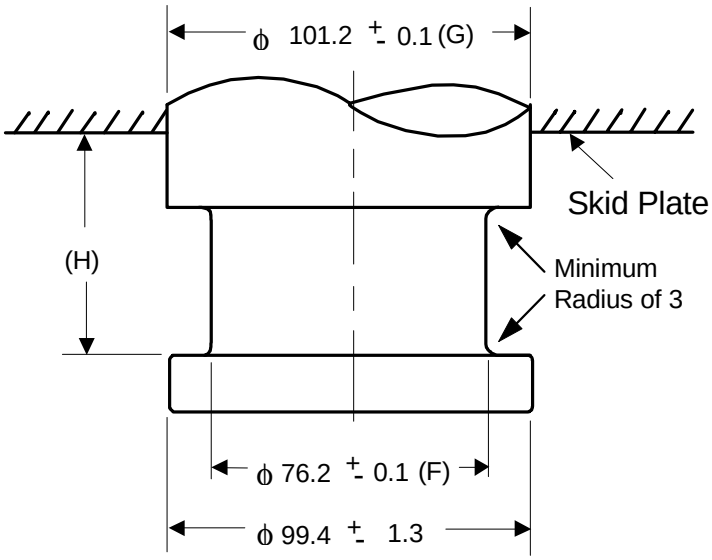
(a) be built to meet the dimension requirements in Australian Standard AS 2175–1990 *Articulated Vehicles—Kingpins*, and

(b) not be worn away more than recommended by the standard.

(3) A 75 millimetre kingpin used in a B-double or road train must:

(a) be built to meet the dimensions in the following essential diagram, and

(b) not be worn away more than mentioned in subclause (4).



(All Dimensions in Millimetres)

Dimensions of a 75 millimetre kingpin

(4) In testing a 75 millimetre kingpin mentioned in the essential diagram in subclause (3) to decide whether its D-value complies with subclause (1) (b):

(a) diameter F must not wear more than 3 millimetres, and

(b) diameter G must not wear more than 2 millimetres, and

(c) height H must not wear more than 2.3 millimetres.

173 Attachment of kingpins on B-doubles and road trains

A kingpin used in a trailer that forms part of a B-double or road train must be attached in accordance with:

(a) the manufacturer's specifications and instructions, or

(b) the guidelines detailed in Australian Standard AS 2175–1990 *Articulated Vehicles—Kingpins*.

174 Branding of kingpins on B-doubles and road trains

A kingpin used in a trailer built after June 1991 that forms part of a B-double or road train must be clearly and permanently marked on the lower circular face of the kingpin in accordance with Australian Standard AS 2175–1990 *Articulated Vehicles—Kingpins* with:

(a) the name or trademark of its manufacturer, and

(b) its D-value rating, and

(c) its nominal size.

175 Selection of couplings and drawbar eyes for road trains

A drawbar-type coupling, or drawbar eye, used in a road train must:

(a) be a 50 millimetre pin type, and

(b) have a D-value complying with Australian Standard AS 2213–1984 *50mm Pin Type Couplings and Drawbar Eyes for Trailers*, and

(c) be built to the dimensions mentioned in the standard, and

(d) not be worn away more than is recommended in the standard.

176 Attachment of couplings and drawbar eyes on road trains

A drawbar-type coupling, or drawbar eye, used in a road train must be built and positioned so:

(a) when the road train is moving, the drawbar can move at least 15° upwards or downwards from the position it occupies when the road train is parked on level ground, and

(b) the pivot point of the coupling is not over 300 millimetres forward of the rear of the trailer to which it is attached, and

(c) it is at a height of at least 800 millimetres, but not over 950 millimetres, when the road train is unloaded and parked on level ground.

177 Branding of couplings and drawbar eyes on road trains

A drawbar-type coupling, or drawbar eye, used on a vehicle built after June 1991 that forms part of a road train must be clearly and permanently marked in accordance with Australian Standard AS 2213–1984 *50mm Pin Type Couplings and Drawbar Eyes for Trailers* with:

(a) the name or trademark of its manufacturer, and

(b) its D-value rating.

178 Tow coupling overhang on road trains

(1) In this clause:

tow coupling overhang, of a vehicle, means the horizontal distance from the centre of the axle group, or the centre line of the single axle, at the rear of the vehicle to the pivot point of the coupling near the rear of the vehicle.

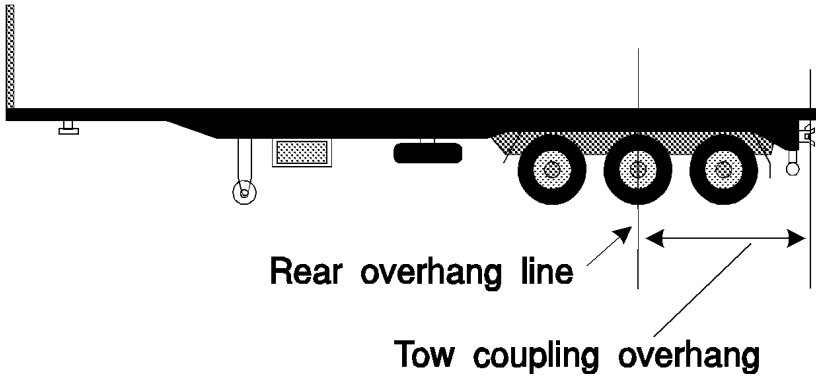
(2) The tow coupling overhang of a motor vehicle, except a prime mover, used in a road train must not be more than the greater of:

(a) 30% of the distance from the centre of the front axle to the centre of the axle group or single axle at the rear of the vehicle, and

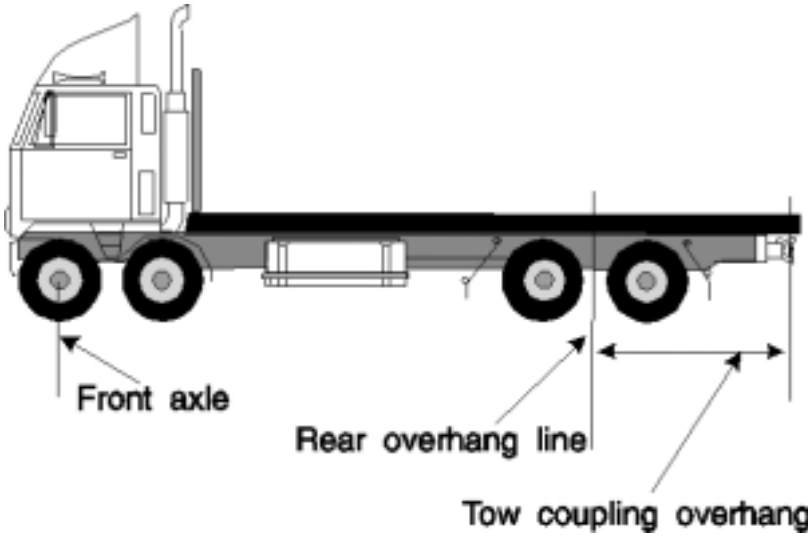
(b) 2.7 metres.

(3) The tow coupling overhang of a semi-trailer, or a dog trailer consisting of a semi-trailer and converter dolly, used in a road train must not be more than 30% of the distance from the point of articulation to the centre of the axle group or single axle at the rear of the vehicle.

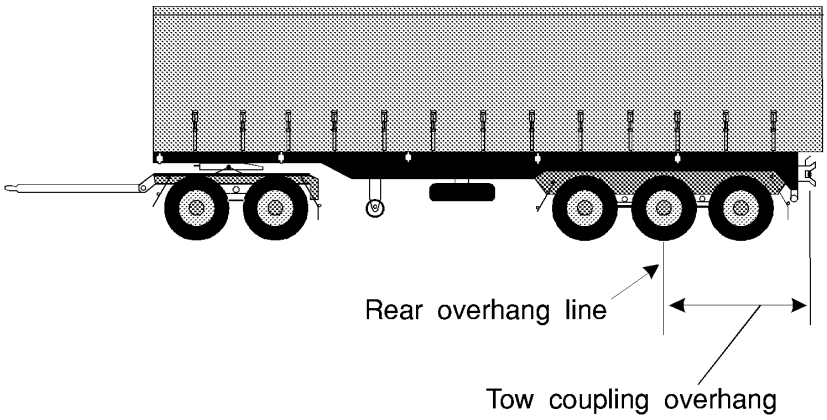
(4) The tow coupling overhang of another dog trailer used in a road train must not be more than 30% of the distance from the centre of the front axle group or single axle to the centre of the axle group or single axle at the rear of the vehicle.



Tow coupling overhang—semi-trailer with extra coupling at rear



Tow coupling overhang—motor vehicle



Tow coupling overhang—dog trailer

Part 11 Other matters

179 Restored vehicles

(1) For this Schedule, a restored vehicle is taken to have been built when it was originally built and not when it was restored.

(2) In this clause:

restored vehicle means a vehicle that is being, or has been, restored to its manufacturer's specifications, so far as it is practicable to meet the specifications.

180 Retractable axles

(1) For this Schedule, a retractable axle is taken to be an axle only when it is in the lowered position.

(2) In this clause:

retractable axle means an axle with a means of adjustment enabling it to be raised or lowered relative to the other axles in the axle group.

181 Measurement of distance between parallel lines

For this Schedule, a distance between 2 parallel lines is measured at right angles between the lines.

182 Interpretation of certain second edition ADRs

The words "left" and "right" in the following second edition ADRs have the opposite meaning in the application of the ADRs, in accordance with this Schedule, to a motor vehicle with a left-hand drive:

- ADR 8 Safety Glass
- ADR 12 Glare Reduction in Field of View
- ADR 14 Rear Vision Mirrors
- ADR 16 Windscreen Wipers and Washers
- ADRs 18 and 18A Location and Visibility of Instruments
- ADRs 35 and 35A Commercial Vehicle Braking Systems.

Note. The following table contains a list of some terms used in the third edition ADRs and the corresponding term used in this Schedule.

Third edition ADRs	This Schedule
dipped-beam headlamp	low-beam (for a headlight)
front fog lamp	front fog light
rear fog lamp	rear fog light
wheelguard	mudguard
main-beam headlamp	high-beam (for a headlight)
reversing lamp	reversing light
direction indicator lamp	direction indicator light
stop lamp	brake light
rear registration plate lamp	number plate light

Third edition ADRs	This Schedule
front position (side) lamp	parking light
rear position (side) lamp	tail light
end-outline marker lamp	front or rear clearance light
external cabin lamp	external cabin light
internal lamp	interior light
side marker lamp	side marker light
daytime running lamp	daytime running light
rear reflex reflector, non-triangular	rear reflector
front reflex reflector, non-triangular	front reflector
side reflex reflector, non-triangular	side reflector

Part 12 Special provisions for buses not subject to third edition ADRs

Division 1 General

183 Application of Part

This Part applies to all buses except those buses required by this Schedule to be constructed and equipped so as to comply with the third edition ADRs.

184 Requirements of this Part additional to other provisions of Schedule

(1) In addition to complying with the other provisions of this Schedule, a bus must be constructed or equipped with the items of equipment set out in this Part.

(2) The Authority may approve of a modification of all or any of the provisions of Division 2 in the case of a bus equipped to seat not more than 12 adults including the driver and used or intended to be used for the conveyance of school children or children with disabilities or employees of the owner or for a similar purpose if the Authority is satisfied that it is so constructed and equipped that it is safe to be used for that purpose.

Division 2 Additional requirements for buses

185 Driver's guard-rail

Where necessary, there must be a suitable guard-rail or panel fitted to a bus:

(a) that will prevent any passenger from accidentally coming into contact with the driver or the control levers of the vehicle, and

(b) that will prevent any passenger from obstructing the driver's view.

186 Inside mirror

A mirror must be suitably affixed to the inside of a bus that has such dimensions and is so affixed that it will reflect to the driver, while retaining his or her normal driving position, a view of doors and door approaches of the vehicle.

187 Fuel tank

(1) The fuel tank and the fuel tank filler pipe must not be located in the interior of the bus, in the engine compartment, or in any separate compartment for the driver.

(2) The fuel tank filler pipe must be situated so that it is not less than 900 mm from either side of any exit (including any emergency exit) and must be arranged so that any overflow or leakage of fuel cannot accumulate.

188 Emergency exits for single-deck buses

(1) In the case of a single-deck bus not provided for in subclause (2), there must be:

(a) at least one emergency exit at the extreme rear of the passenger compartment measuring not less than 1.3 m by 530 mm, or

(b) at least one emergency exit fitted in the roof of the rear half of the passenger compartment having a minimum area of 7000 square centimetres and no dimension less than 530 mm and, in the case of a bus first registered on or after 1 January 1963 that does not have a door accessible to passengers fitted in each side of the vehicle, there must be located in the rear half of the passenger compartment on the side on which a door is not fitted, an emergency exit measuring not less than 600 mm by 530 mm.

(2) In the case of a single-deck bus with its engine or any other obstruction at its rear, there must be emergency means of exit as prescribed in subclause (1) (b) near the centre of the passenger compartment.

(3) At the rear of a double-deck bus there must be at least two emergency exits, one situated above and the other below the level of the floor of the upper deck. Any such exit must measure not less than 1.3 m by 530 mm.

(4) However, it is sufficient compliance with subclause (3) if:

(a) the bus is fitted with a rear platform, and

(b) access from outside the vehicle to the platform extends transversely across the rear of the bus for a distance of not less than 450 mm, and

(c) there is at the rear of the bus at least one emergency exit situated above the level of the floor of the upper deck complying in other respects with the requirements of subclause (3).

(5) Any emergency exit:

(a) must be clear of any obstruction, and

(b) must, where necessary, be equipped inside and outside with a suitable opening and closing device, and

(c) must be indicated by a prominent notice inside and outside the bus displaying the words "Emergency Exit".

189 Fire extinguishers

(1) Every bus must be equipped with the number of fire extinguishers required by the Authority, being fire extinguishers of a type and capacity approved by the Authority.

(2) A fire extinguisher with which a bus is equipped:

(a) must be maintained in good order and condition, and

(b) must be kept in a position where it is readily available for use.

190 Removable and opening interior fittings

Every hatch, cover, interior door and other removable or opening panel in the interior of a bus must be adequately secured to prevent the likelihood of accidental opening or dislodgment.

Part 13 Construction and equipment requirements for vehicles manufactured on or after 1 January 1989

Division 1 General

191 Application of Part

This Part applies to motor vehicles and trailers manufactured on or after 1 January 1989 and applies in addition to the provisions of the third edition ADRs.

Division 2 Specific purpose vehicle requirements—road trains

192 20 metre double combinations

(1) In the case of a 20 metre double combination:

(a) the distance from the point of articulation of the articulated vehicle to the foremost extremity of the rear overhang must not exceed 5.5 m, and

(b) the distance from the point of articulation of the trailer to the foremost extremity of the rear overhang must not exceed 5.5 m, and

(c) the length of the drawbar must not be less than 2 m.

(2) For the purpose of this clause, where an axle referred to in paragraph (b) (ii), (iii) or (iv) of the definition of ***rear overhang*** in the Dictionary at the end of this Regulation is a retractable axle or a steerable axle, that axle must, if it is the foremost axle of the 2 axles or of the group referred to in the relevant paragraph of the definition, be disregarded in determining the point referred to in that paragraph of the definition.

193 Service brakes

(1) Subject to subclause (4), every wheel on a component vehicle of a road train must be braked by a pneumatic brake system, which must be activated by one foot-operated control valve.

(2) The brake system of a road train must be such that:

(a) each axle group of every trailer of the road train is supplied by not less than one air reservoir tank and relay valve, and the air reservoir tank must have an air capacity that is not less than 8 times the volume of all the brake actuation chambers supplied by that air reservoir tank, and

(b) the hauling unit of the road train must be supplied by an air reservoir tank that has an air capacity that is not less than 12 times the volume of all of the brake actuation chambers supplied by that air reservoir tank, and

(c) it is capable, within one minute after 3 full brake applications have been completed within a 10 second period, of increasing the air pressure in each air reservoir tank of the brake system to not less than 75% of the air brake test pressure of that brake system, and

(d) 15 minutes after the air compressor of the brake system has fully pressurised that brake system, and without that air compressor again working during that period, the air pressure of the brake system is not less than 90% of the air brake test pressure of that brake system, and

(e) the pressure within a brake chamber of an axle of the road train is, not later than 1.5 seconds after a rapid application of the foot-operated control valve of that brake system has been completed, not less than 65% of the air brake test pressure of that brake system, and

(f) the pressure within the brake chamber of each axle of the road train must, not later than 1.5 seconds after the release of the foot-operated control valve of that brake system, fall from 95% to 5% of the air brake test pressure of that brake system.

(3) Any tap-in device that is installed in the brake system for the purpose of any demonstration that the road train has a brake system that complies with the requirements of subclause (2) (c), (d), (e) and (f) must not be installed except by or at the direction of the owner of the vehicle in which it is installed.

(4) With the approval of the Authority, the wheels of any road train may be braked by a brake system other than a brake system referred to in subclause (1) but only if that brake system complies with subclauses (2) and (3).

194 Brake line couplings

A brake line between any 2 component vehicles of a road train must not be connected otherwise than by means of a polarized, clear-bore brake coupling.

195 Parking brakes on hauling units

(1) The hauling unit of any road train must be fitted with spring-actuated parking brakes to not less than:

(a) in the case of a hauling unit with 2 axles—one of those axles, and

(b) in the case of a hauling unit with more than 2 axles—2 of those axles.

(2) A spring-actuated parking brake referred to in subclause (1) must be such that:

(a) when it is applied it remains applied, irrespective of the leakage or exhaustion of air from the brake system of the hauling unit to which it is fitted, and

(b) it cannot be released, unless there is a means available for the immediate reapplication of the parking brake or the service brake system, except by the use of tools at the brake actuator of such parking brake.

Division 3 Exemptions

196 Exemption by operation of clause 90

(1) The limits prescribed by this Part for the dimensions of motor vehicles and trailers do not apply to a vehicle that is exempted from the dimension limits by the operation of clause 90 of this Regulation.

(2) Except where otherwise provided in this Part or in the third edition ADRs, such limits refer to the motor vehicle or trailer together with any loading or equipment on the vehicle.

197 Vehicle dimensions

(1) The distance from the point of articulation of an articulated vehicle to the foremost extremity of the rear overhang of its semi-trailer must not exceed 9.5 m.

(2) The distance from the point of articulation of a low-loader float to the foremost extremity of the rear overhang may exceed 9.5 m.

(3) The distance from the point of articulation of a low-loader float to the rearmost extremity of the rear overhang may exceed 12.3 m.

198 Dimensions of certain buses

If a bus exceeds 12.5 m because of the operation of clause 90 of this Regulation, the rear overhang of the bus must not exceed 70% of the distance between the centre of the foremost axle and the foremost extremity of the rear overhang, or 4.9 m, whichever is the shorter length.

[6] Dictionary

Insert "as in force from time to time" after "Commonwealth" in the definition of ***ADR*** in clause 1 of the Dictionary.

[7] Dictionary, clause 1

Omit the following definitions:

approved material
Australian Standard
bus
centre of an axle group
centreline
combination
daylight
driver
motor bicycle
motor cycle
motor tricycle
motor car
multi-purpose vehicle

personally imported vehicle

rear overhang

second edition ADR

third edition ADR

[8] Dictionary, clause 1

Insert the following definitions in appropriate order:

adopted standard—see clause 18 of Schedule 4.

Administrator of Vehicle Standards means the Administrator of Vehicle Standards referred to in section 22 of the *Motor Vehicle Standards Act 1989*.

Australian Motor Vehicle Certification Board means the body:

(a) known under that name,

(b) consisting of representatives of the Commonwealth, each of the States and Territories, and

(c) having, as one of its objectives, to ensure that vehicles supplied for use in, manufactured in, or imported into, Australia are designed and manufactured so as to:

(i) comply with the requirements of Australian Design Rules, or

(ii) provide a level of safety that is equivalent to that provided by Australian Design Rules.

British standard means a standard approved for publication on behalf of the British Standards Institution.

Note. Copies of British Standards are available from offices of the Standards Office of Australia.

bus means a motor vehicle built mainly to carry people that seats over 9 adults (including the driver).

car means a motor vehicle built mainly to carry people that:

(a) seats not over 9 adults (including the driver), and

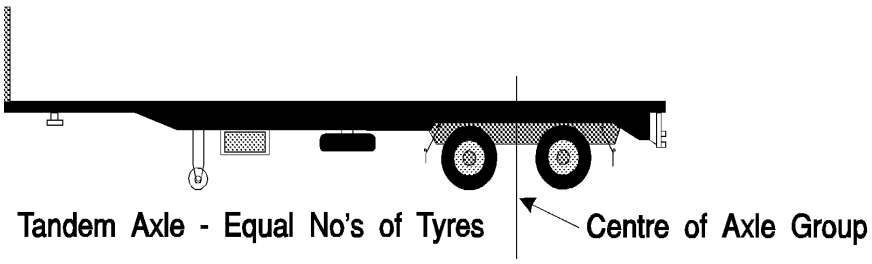
(b) has a body commonly known as a sedan, station wagon, coupe, convertible, or roadster, and

(c) has 3 or more wheels.

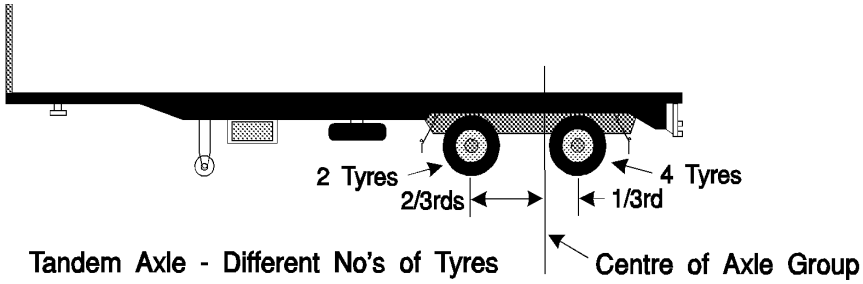
centreline, of an axle group, means:

(a) if the group consists of 2 axles, one of which is fitted with twice the number of tyres as the other axle—a line located one third of the way from the centre line of the axle with fewer tyres, and

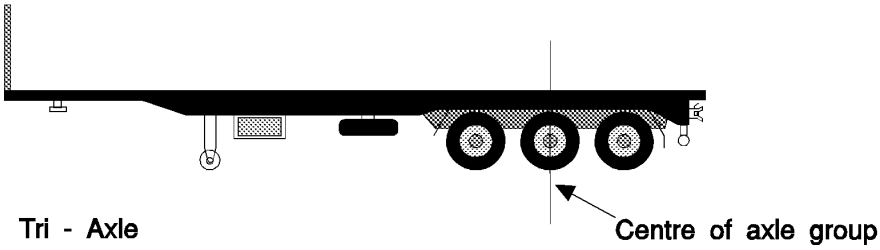
(b) in any other case—a line located midway between the centre lines of the outermost axles of the group.



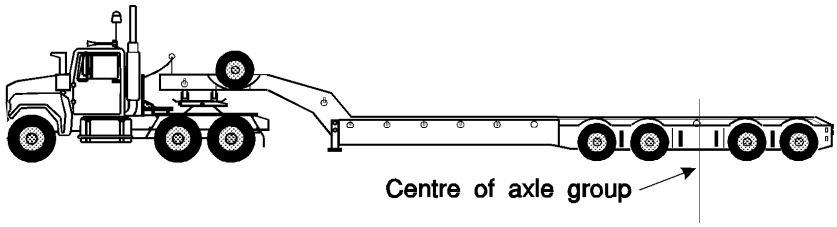
Centre line of a tandem axle group fitted with an equal number of tyres on each axle



Centre line of a tandem axle group fitted with a different number of tyres on each axle



Centre line of a tri axle group



Centre line of a quad axle group

combination means a group of vehicles consisting of a motor vehicle connected to 1 or more vehicles.

daylight means the period in day from sunrise to sunset.

drive includes be in control of.

driver, of a vehicle, means the person driving the vehicle.

Ministerial Council means the Ministerial Council for Road Transport established by the Heavy Vehicles Agreement, a copy of which is set out in Schedule 1 to the *National Road Transport Commission Act 1991* of the Commonwealth.

moped means a motor bike or trike with an engine cylinder capacity of not over 50 millimetres and a maximum speed of not over 50 kilometres an hour.

motor bike means a motor vehicle with 2 wheels, and includes a 2 wheeled motor vehicle with a sidecar attached to it that is supported by a third wheel.

motor trike means a motor vehicle with 3 wheels, but does not include a 2 wheeled motor vehicle with a sidecar attached to it that is supported by a third wheel.

national standard means a national standard under the *Motor Vehicle Standards Act 1989* of the Commonwealth.

personally imported vehicle means a vehicle that is imported into Australia by a person who:

(a) owned and used the vehicle for the period determined in accordance with the *Motor Vehicle Standards Act 1989* of the Commonwealth before it was imported into Australia, and

(b) when the vehicle was imported into Australia, was:
  (i) an Australian citizen or permanent resident or a person who had applied to become an Australian citizen or permanent resident, and
  (ii) old enough to hold a licence or permit to drive the vehicle, and

(c) with the previous 12 months, had not imported into Australia another vehicle owned by the person.

rear overhang, of a vehicle, means the distance between the rear overhang line and the rear of the vehicle.

road tank vehicle means has the same meaning as in the sixth edition of the *Australian Code for the Transport of Dangerous Goods by Road and Rail*.

second edition ADR means a national standard incorporated in the document described as the *Australian Design Rules for Motor Vehicle Safety, Second Edition* originally published by the then Commonwealth Department of Transport.

third edition ADR means a national standard incorporated in the document described as the *Australian Design Rules for Motor Vehicle and Trailers, Third Edition* published by the Federal Office of Road Safety of the Commonwealth Department of Transport and Regional Development.

[9] Dictionary, clause 1, definitions of "forward-control passenger vehicle", "motor car derivative" and "station waggon"

Omit "motor car" wherever occurring.
Insert instead "car".

[10] Dictionary, clause 1, definition of "point of articulation"

Insert after paragraph (d) of the definition:

, or

(e) the coupling pivot point of a semi-trailer.

[11] Dictionary, clause 1, definition of "rear overhang line"

Omit "determined" from paragraph (b) of the definition.
Insert instead "decided".