

**NORTHERN TERRITORY OF AUSTRALIA**

**MOTOR VEHICLE (STANDARDS) REGULATIONS**

As in force at 1 July 1988

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# NORTHERN TERRITORY OF AUSTRALIA

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As in force at 1 July 1988

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## MOTOR VEHICLE (STANDARDS) REGULATIONS

### Regulations under the *Motor Vehicles Act*

#### Part I Preliminary

##### 1 Citation

These Regulations may be cited as the *Motor Vehicles (Standards) Regulations*.

##### 2 Commencement

These Regulations shall come into operation on the commencement of the *Motor Vehicles Amendment Act 1982*.

##### 3 Application

These Regulations shall not apply to a nonconforming vehicle within the meaning of Part VA of the Act.

##### 4 Interpretation

(1) In these Regulations, unless the contrary intention appears:

***aggregate mass***, in relation to a vehicle, means the maximum laden mass, permitted under these Regulations, of the vehicle.

***air brake test pressure***, in relation to a compressed air brake system, means a pressure of 650 kilopascals.

***articulated omnibus*** means a motor omnibus consisting of 2 rigid sections connected so as to allow:

(a) rotary movements about the vertical and horizontal axes; and

(b) passenger movement,

between the 2 rigid sections.

**Australian Standard** means a standard approved for publication on behalf of the Standards Association of Australia, being the association of that name incorporated by Royal Charter.

**axle** means that part of a vehicle consisting of one or more shafts, spindles or bearings in the same transverse vertical plane or between 2 parallel transverse vertical planes spaced not more than one metre apart, by means of which, in conjunction with wheels mounted on such shafts, spindles or bearings, the mass supported on an axle is continuously transmitted to the road.

**axle group** means:

- (a) a single axle;
- (b) a tandem axle group;
- (c) a triaxle group; or
- (d) a twin-steer axle group.

**axle group centre** means:

- (a) in the case of a single axle – the centre line of the axle;
- (b) in the case of a tandem axle group:
  - (i) where both axles are fitted with an equal number of tyres – a line located midway between those axles; and
  - (ii) where one axle is fitted with twice the number of tyres on the other axle – a line located one third of the way from the axle fitted with the greater number of tyres towards the axle fitted with the lesser number of tyres;
- (c) in the case of a twin-steer axle group – a line located midway between the 2 axles; and
- (d) in the case of a triaxle group – a line located midway between the extreme axles.

**axle spacing** means the distance between the centre of an axle of an axle group of a vehicle or vehicle combination and the centre of any other axle of the axle group.

**brake coupling** means a device used to connect the flexible sections of the lines of the brake system of a vehicle combination.

**brake system** includes all the mechanism by which the brakes on a vehicle are operated.

**converter dolly** means a pig trailer, consisting of a fifth wheel assembly, a drawbar and an axle group, designed and used to convert a semi-trailer to a dog trailer.

**coupling pin**, in relation to the tow coupling of a vehicle, means that part of the tow coupling used to connect the towing attachment of one vehicle to the drawbar of another vehicle.

**dog trailer** means a self-tracking trailer comprising:

- (a) a converter dolly to which is attached a semi-trailer; or
- (b) a trailer having a steerable axle group towards its front end and an axle group towards its rear end.

**drawbar** means that portion of the framework of a trailer provided for the purpose of enabling the trailer to be towed.

**drawbar length**, in relation to a trailer, means the horizontal distance from the centre line of the towing pivot of the trailer to the axle group centre of the foremost axle group of that trailer.

**fifth wheel** means a device fitted to a prime mover or converter dolly to provide for:

- (a) quick coupling and uncoupling of the prime mover or converter dolly to or from a semi-trailer; and
- (b) articulation between the prime mover or converter dolly and a semi-trailer to which it is attached.

**fifth wheel assembly** means the fifth wheel, and turntable, if any, of a prime mover or converter dolly and all the components necessary to fit fifth wheel and turntable to the prime mover or converter dolly.

**fifth wheel kingpin** means a pin attached to a semi-trailer and used for attaching the semi-trailer to the fifth wheel of a prime mover or converter dolly.

**gross combination mass**, in relation to a vehicle, means the mass recorded by the Registrar, whether by reference to the particulars recorded or kept by an officer having duties in connection with the registration of vehicles in a State or in another Territory of the Commonwealth or otherwise, as the maximum laden mass which the vehicle, in combination with one or more trailers attached to it, should carry and tow.

**gross vehicle mass**, in relation to a vehicle, means the mass recorded by the Registrar, whether by reference to the particulars recorded or kept by an officer having duties in connection with the registration of vehicles in a State or in another Territory of the Commonwealth or otherwise, as the maximum laden mass at which the vehicle should be operated.

**hauling unit**, in relation to a vehicle combination, means the rigid motor vehicle or prime mover of the vehicle combination, towing the other vehicles of that vehicle combination.

**height** means:

- (a) in relation to a vehicle – the vertical distance from a surface on which the vehicle is standing to the highest point on that vehicle and its load, if any; and
- (b) in relation to a lamp on a vehicle – the vertical distance from a surface on which the vehicle, at its tare mass, is standing to the centre of the lamp.

**hours of darkness** means:

- (a) any time during the period between sunset on one day and sunrise on the next following day; or
- (b) any other time when there is not sufficient daylight to render clearly visible a person or vehicle at a distance of 100 metres.

**identifying mark**, in relation to a vehicle or part of a vehicle, means a permanent mark placed on the vehicle or part, whether by embossing, indenting, plating or other means, by the manufacturer of that vehicle or part, or by the authority of that manufacturer, or in accordance with a direction of the Registrar or an approved person.

**independently braking**, in relation to a trailer, means equipped with brakes which are capable of being operated by the driver of a motor vehicle towing the trailer while that driver is sitting in the driving seat of that motor vehicle.

**inspection label**, in relation to a vehicle, means a label, issued by the Registrar or an approved person, specifying the gross vehicle mass or gross combination mass of, or such other approved particulars in relation to, the vehicle and affixed, in accordance with the Registrar's or the approved person's instructions in respect of such affixation, to that vehicle.



***inter-axle differential*** means a differential which provides for the transfer of energy from one driven axle to another driven axle and designed to allow the individual wheels on the axles to rotate at different speeds.

***loading space***, in relation to a vehicle, means the portion of the vehicle designed, constructed or adapted for the purpose of carrying goods.

***load sharing suspension system***, in relation to a vehicle, means a suspension system of an axle group of the vehicle which effects substantially equal sharing, by all the ground contact surfaces of the wheels attached to the axle group, of the total load carried by that axle group and which has effective damping characteristics on all the axles of that axle group.

***manufacturer's gross axle load limit***, in relation to an axle group, means the load recommended by the manufacturer of the axle group, by specification or otherwise, as being the maximum load at which that axle group should be operated.

***manufacturer's gross combination mass***, in relation to a vehicle, means the mass recommended by the manufacturer of the vehicle, by specification or otherwise, as the maximum laden mass which that vehicle, in combination with one or more trailers attached to it, should carry and tow.

***manufacturer's gross vehicle mass***, in relation to a vehicle, means the mass recommended by the manufacturer of the vehicle, by specification or otherwise, as the maximum laden mass at which that vehicle should be operated.

***manufacturer's maximum rim load***, in relation to the rim of a tyre, means the load recommended by the manufacturer of that rim, by specification or otherwise, as the maximum load at which that rim should be operated.

***manufacturer's maximum tyre load***, in relation to a tyre, means the load recommended by the manufacturer of the tyre, by specification or otherwise, as the maximum load at which that tyre should be operated.

***non-reactive load sharing suspension system***, in relation to a vehicle, means a load sharing suspension system of an axle group of the vehicle in which, due to the application of the brakes of that vehicle, there is no transfer of vertical loading from one axle of the axle group to another axle of that axle group.

**overall axle spacing** means, in relation to:

- (a) a rigid motor vehicle, articulated vehicle or component vehicle of a vehicle combination – the distance between the centre of the foremost axle and the centre of the rearmost axle of the rigid motor vehicle, articulated vehicle or component vehicle; and
- (b) axle groups which are adjacent to each other when any 2 component vehicles of a vehicle combination, including a rigid motor vehicle or an articulated vehicle, are coupled together – the distance between the centre of the foremost axle of the rearmost axle group of the leading vehicle and the centre of the rearmost axle of the foremost axle group of the trailing vehicle.

**pig trailer** means a trailer fitted with no other axle group other than one non-steerable axle group.

**point of articulation**, in relation to a vehicle, means the axis of a fifth wheel kingpin or the axis of rotation of a turntable in respect of the vehicle.

**polarized brake coupling** means a brake coupling designed so that the supply (emergency) brake line cannot be connected to the control brake line and the control (service) brake line cannot be connected to the supply line.

**pole-type trailer** means a trailer that is attached to the towing vehicle by means of a pole, or by an attachment fitted to the pole and that is ordinarily used for transporting loads such as logs, pipes or structural members capable, generally, of supporting themselves as beams between supports.

**positive locking type**, in relation to an inter-axle differential of a vehicle, means a manually operated device fitted to the inter-axle differential to provide for each axle of the tandem driven axle group of the vehicle to be positively driven.

**rear overhang**, in relation to a vehicle, means the distance measured horizontally and parallel to the longitudinal axis of the vehicle between the rearmost point of that vehicle and its loading and equipment, if any, and the axle group centre of the rearmost axle group of that vehicle, but where such an axle group includes:

- (a) a retractable axle; or
- (b) a steerable axle,

in association with axles which are not steerable or retractable, the axle group centre of the axle group shall be found without regard to the presence of the retractable axle or steerable axle.

**retractable axle** means an axle which has a means of adjustment to enable it to be raised or lowered to substantially vary the mass supported between the axles of an axle group.

**road train** means a vehicle combination longer than 17.5 metres in length and comprising:

- (a) a rigid motor vehicle hauling one or more trailers; or
- (b) an articulated vehicle hauling one or more trailers.

**safety locking system**, in relation to the coupling pin of a tow coupling, means a device which locks the coupling pin so as to prevent the involuntary disengagement of the tow coupling, and which device can, in its locked position, be verified by visual inspection.

**semi-trailer** means so much of an articulated vehicle that is not the prime mover of the articulated vehicle.

**side-car** means a car, box or other receptacle attached to the side of a motor cycle and for the support of which a third wheel is provided.

**single axle** means an axle group consisting of one axle, or 2 axles with axle spacing between transverse vertical parallel planes spaced less than one metre apart.

**single-pivot load sharing suspension system**, in relation to a tandem axle group, means a load sharing suspension system of the tandem axle group, designed to allow the springing medium of the 2 axles of that tandem axle group to pivot about a common centre of rotation.

**specification** includes a compliance plate, vehicle data plate, catalogue, handbook or other written matter issued by or on behalf of a manufacturer in respect of a vehicle or a component of a vehicle, or plant, machinery or equipment, manufactured by him.

**spring-actuated parking brakes**, in relation to a hauling unit, means a mechanical system for applying the parking brakes of the hauling unit through energy stored in springs.

**steerable axle** means an axle group fitted to a vehicle, but not connected to the steering mechanism of the vehicle, by means of which the course of that vehicle may be altered.

**steer axle** means an axle group connected to the steering mechanism of a motor vehicle and capable of being used, by the driver of the motor vehicle, to direct the course of that motor vehicle.

**tandem axle group** means an axle group of 2 consecutive axles, of which the axle spacing is included between 2 transverse vertical parallel planes spaced not less than one metre apart and not more than 2 metres apart.

**tandem driven axle group** means a tandem axle group of a motor vehicle in which both axles of the axle group are connected to, and driven by, the engine of the motor vehicle.

**tow coupling** means a mechanical assembly by means of which a flexible connection is effected between 2 component vehicles of a vehicle combination.

**tow coupling overhang**, in relation to a vehicle, means the horizontal distance from the axle group centre of the rearmost axle group of the vehicle to the centre line of the towing pivot of that vehicle, but where such an axle group includes:

- (a) a retractable axle; or
- (b) a steerable axle,

in association with axles which are not steerable or retractable, the axle group centre of the axle group shall be found without regard to the presence of the retractable axle or steerable axle.

**tow coupling pivot** means the centre about which the drawbar of a trailer is able to rotate about the towing attachment when the trailer is attached to the towing attachment of a vehicle.

**towing attachment**, in relation to a vehicle, means a device fitted to the vehicle to which the drawbar of a trailer may be attached.

**triaxle group** means an axle group of 3 consecutive axles, of which the axle spacing of those axles located at the extremities of the axle group is included between 2 transverse vertical parallel planes spaced not less than 2 metres apart and not more than 3.2 metres apart.

**turning circle**, in relation to a motor vehicle, means the diameter of the largest circle formed by the motor vehicle when it is being driven forward, under full lock, to the right or to the the left.

**turntable** means a coupling device used between a semi-trailer and a prime mover or converter dolly, and which includes upper and lower rotating elements, and a fifth wheel kingpin, if any.

**twin-steer axle group** means a tandem axle group consisting of 2 single-tyred steer axles connected to the same steering mechanism.

**tyre section width** means the nominal linear distance between the exteriors of the sidewalls of an inflated pneumatic tyre.

**urban route** means a route specified in a service licence within the meaning of the Motor Omnibus Regulations or a route specified in a permit granted under regulation 7 of those Regulations.

**vehicle combination** means a motor vehicle with one or more trailers attached.

**wide single tyre** means a single pneumatic tyre with a tyre section width of not less than 375 millimetres.

- (2) Unless the contrary intention appears, a reference in these Regulations to the visibility of a light, or to the capability of a light of illuminating and rendering a person in dark clothing easily discernable, is a reference to its visibility or that capability, under normal atmospheric conditions, during the hours of darkness.
- (3) In these Regulations:
  - (a) the expression **mass supported on a tyre** or similar expression means the total mass transmitted to the road by the tyre, including the mass of the tyre; and
  - (b) the expression **mass supported on an axle or on an axle group** (whether by reference to a single axle, a tandem axle group, a triaxle group, a twin-steer axle group, or one axle of an axle group) or similar expression, means the total mass transmitted to the road by the wheels attached to the axle or the axle group, including the mass of any wheels, tyres and other attachments or fittings attached or fitted to the axle or axles.

## **Part II                      Offences**

### **5                      Compliance with Regulations**

Subject to section 59 of the Act, a person shall not drive, or cause or permit to be driven, on a public street or in a public place, a vehicle which does not comply with a requirement of these Regulations applicable to it.

Penalty:            \$1,000 or imprisonment for 6 months.

### **5A                    Regulatory offences**

An offence of contravening or failing to comply with a requirement of regulation 7, 8, 10, 11, 12, 13, 13A, 14, 15, 16, 17, 18, 19, 20, 21, 22 (subject to regulation 23), 24, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 47, 48 or 49 is a regulatory offence.

### **6                      Particulars recorded or kept by Registrar in relation to manufacturer's gross axle load limit, &c**

For the purposes of a prosecution for an offence against these Regulations, the particulars recorded or kept by the Registrar, whether by reference to the particulars recorded or kept by an officer having duties in connection with the registration of vehicles in a State or in another Territory of the Commonwealth or otherwise, purporting to be:

- (a) the manufacturer's gross axle load limit of an axle group;
- (b) the manufacturer's gross combination mass of a vehicle combination;
- (c) the manufacturer's gross vehicle mass of a vehicle;
- (d) the manufacturer's maximum rim load of a rim of a tyre; or
- (e) the manufacturer's maximum tyre load of a tyre,

shall, unless the contrary is proved, be deemed to be that limit, mass, or load, as the case may be.

**Part III                    Axle requirements of vehicles****7                    Axle requirements of rigid motor vehicles and trailers**

- (1) A rigid motor vehicle shall be supported by:
- (a) towards its front end:
    - (i) a single steer axle; or
    - (ii) a twin-steer axle group; and
  - (b) towards its rear end:
    - (i) a single axle;
    - (ii) a tandem axle group; or
    - (iii) a triaxle group.
- (2) A trailer shall be supported by:
- (a) where the trailer is a semi-trailer or pig trailer:
    - (i) a single axle;
    - (ii) a tandem axle group; or
    - (iii) a triaxle group,  
disposed, in the case of the semi-trailer, towards the rear end of that semi-trailer;
  - (b) where the trailer is a dog trailer:
    - (i) towards its front end:
      - (A) a single steerable axle; or
      - (B) a steerable tandem axle group; and
    - (ii) towards its rear end:
      - (A) a single axle;
      - (B) a tandem axle group; or
      - (C) a triaxle group; and

- (c) where the trailer is a converter dolly:
  - (i) a single axle; or
  - (ii) a tandem axle group.

**8 Axles in axle group to be related to each other through load sharing suspension system**

- (1) Subject to subregulations (2) and (3), each axle of an axle group of a vehicle shall be related to the other axles of the axle group through a load sharing suspension system and, for that purpose, each axle of that axle group shall use the same springing media.
- (2) An axle group which is a twin-steer axle group need not comply with subregulation (1).
- (3) A valve to isolate a section of a load sharing suspension system which is fully or partially an air suspension system shall not be fitted to or used in a motor vehicle or trailer other than where:
  - (a) the fitting or use of such a valve to or in the motor vehicle or trailer has been approved;
  - (b) the valve is for maintenance purposes only; and
  - (c) the control mechanism of that valve is not located in the driver's cabin of:
    - (i) the motor vehicle; or
    - (ii) the motor vehicle towing the trailer,

as the case may be, or within reach of the driver of such a motor vehicle when in his normal driving position.

**10 Axles on hauling units of certain road trains**

A hauling unit shall not be used in a road train with a gross combination mass in excess of 42 tonnes unless the hauling unit has a tandem driven axle group towards its rear end and, if an inter-axle differential is fitted to that hauling unit, the inter-axle differential is of the positive-locking type.



## **Part IV            Mass limits of vehicles**

### **11            Tyre and axle mass limits**

(1) On a vehicle, other than:

- (a) a motor omnibus referred to in subregulation (3); or
- (b) a pig trailer referred to in subregulation (4),

the allowable loads carried on a tyre or an axle group shall be the manufacturer's gross axle load limit, the manufacturer's maximum rim load and the manufacturer's maximum tyre load, as the case may be, for that tyre or axle group or the appropriate value specified in subregulation (2) for that tyre or axle group, whichever is the lesser.

(2) For the purposes of subregulation (1), the mass carried on:

- (a) a single tyre shall not exceed, where the tyre is fitted to:
  - (i) a single steer axle – 3 tonnes; or
  - (ii) an axle, other than a single steer axle, and the tyre is a wide single tyre – 3.35 tonnes;
- (b) a single axle shall not exceed, where the single axle is:
  - (i) a steer axle – 6 tonnes;
  - (ii) fitted with single tyres having a tyre section width of less than 375 millimetres – 6 tonnes;
  - (iii) fitted with wide single tyres – 6.7 tonnes; or
  - (iv) fitted with dual tyres or 4 or more single tyres – 9 tonnes;
- (c) a tandem axle group, not including a twin-steer axle group, shall not exceed where:
  - (i) both axles are fitted with dual tyres – 16.5 tonnes;
  - (ii) one axle is fitted with dual tyres and the other is fitted with single tyres – 13 tonnes;
  - (iii) both axles are fitted with single tyres – 11 tonnes; or
  - (iv) both axles are fitted with wide single tyres – 13.3 tonnes;

- (d) a twin-steer axle group shall not exceed:
    - (i) where a load sharing system is fitted – 11 tonnes; or
    - (ii) in any other case – 10 tonnes;
  - (e) a triaxle group shall not exceed, where each axle is fitted with:
    - (i) dual tyres – 20 tonnes;
    - (ii) wide single tyres – 20 tonnes; or
    - (iii) single tyres or a combination of single and dual tyres – 15 tonnes; and
  - (f) any other axle group not specifically referred to in this regulation – 20 tonnes.
- (3) For the purposes of this regulation, the mass carried on the single axle of a motor omnibus fitted with dual tyres operating on an urban route shall not exceed 10 tonnes.
- (4) In respect of a pig trailer, other than a converter dolly, the mass carried on:
- (a) a single tyre shall not exceed 2.7 tonnes;
  - (b) a tandem axle group shall not exceed, where:
    - (i) both axles are fitted with dual tyres – 16.5 tonnes;
    - (ii) one axle is fitted with dual tyres and the other is fitted with single tyres – 12 tonnes;
    - (iii) both axles are fitted with single tyres – 10 tonnes; or
    - (iv) both axles are fitted with wide single tyres – 12 tonnes; and
  - (c) a triaxle group shall not exceed, where each axle is fitted with:
    - (i) dual tyres – 20 tonnes;
    - (ii) single tyres or with a combination of single and dual tyres – 15 tonnes; or
    - (iii) wide single tyres – 18 tonnes.

- (5) For the purposes of this regulation, unless approved, a retractable axle shall not be taken into account in determining the maximum mass permitted under this regulation to be carried on an axle or axle group.

## **12 Laden mass of vehicles and vehicle combinations**

- (1) Subject to subregulation (2), the laden mass of a vehicle or vehicle combination shall not exceed the lesser of:
- (a) the sum of the masses permitted by regulation 11 to be carried by the tyre or axle groups of the vehicle or vehicle combination;
  - (b) in the case of:
    - (i) a rigid motor vehicle – the gross vehicle mass or the manufacturer's gross vehicle mass; or
    - (ii) an articulated vehicle or a vehicle combination – the gross combination mass or the manufacturer's gross combination mass or, in respect of a vehicle combination which is a road train, the mass determined by the use of the formula set out in Schedule 3; or
  - (c) in respect of:
    - (i) a rigid motor vehicle, an articulated vehicle or component vehicle of a vehicle combination, which has an overall axle spacing within a limit specified in Column 1 of the Table – the mass specified in Column 2 of the Table opposite the limit so specified; or
    - (ii) axle groups adjacent to each other where 2 component vehicles are coupled together which have an overall axle spacing within a limit specified in Column 1 of the Table – the mass specified in Column 2 of the Table opposite the limit so specified.

- (2) The laden mass of a trailer of a vehicle combination (not being a road train) comprising a rigid motor vehicle and the trailer shall not exceed the laden mass of the rigid motor vehicle.

Table

Column 1		Column 2
Overall axle spacing in metres		Maximum permitted laden mass in tonnes
Exceeding	Not exceeding	
3.0	3.25	18.0
3.25	3.5	18.9
3.5	3.75	19.8
3.75	4.0	20.7
4.0	4.25	21.6
4.25	4.5	22.5
4.5	4.75	23.4
4.75	5.0	24.3
5.0	5.25	25.2
5.25	5.5	26.1
5.5	5.75	27.0
5.75	6.0	27.9
6.0	6.25	28.8
6.25	6.5	29.7
6.5	6.75	30.6
6.75	7.0	31.5
7.0	7.25	32.4
7.25	7.5	33.3
7.5	7.75	34.2

Column 1		Column 2
Overall axle spacing in metres		Maximum permitted laden mass in tonnes
Exceeding	Not exceeding	
7.75	8.0	35.1
8.0	8.25	36.0
8.25	8.5	36.9
8.5	8.75	37.8
8.75	9.0	38.7
9.0	9.25	39.6
9.25	9.5	40.5
9.5	9.75	41.4
9.75	10.0	42.3
10.0		43.2

**Part V Maximum length, height and width of vehicles**

**13 Maximum length of vehicles**

- (1) The length of a vehicle or vehicle combination, or part thereof, specified in Column 1 of the Table to this subregulation, together with its load and equipment, if any, shall not exceed the figure specified opposite thereto in Column 2 of that Table.

Table

Column 1	Column 2
Vehicle or vehicle combination or part thereof	Length expressed in metres
Rigid motor vehicle other than a motor omnibus	12.2
Motor omnibus not otherwise specified in this Table	12.2

Column 1	Column 2
Vehicle or vehicle combination or part thereof	Length expressed in metres
Motor omnibus having a twin-steer axle group towards its front end and a tandem axle group towards its rear end	12.8
Articulated omnibus	18
Pig trailer	12.2
Articulated vehicle	17.5
Articulated vehicle to which is attached one trailer	33
Articulated vehicle or rigid motor vehicle to which are attached 2 or more trailers	50
Semi-trailer, excluding a projection contained within an arc centred at the point of articulation as determined in accordance with the diagram in Schedule 5	12.5
Rigid motor vehicle and trailer combination (not being a road train)	17.5
Dog trailer excluding the drawbar or projection contained within an arc centred at the point of articulation as determined in accordance with the diagram in Schedule 5	12.5

- (2) A trailer shall not be used in a road train where it varies in length by more than 3 metres in comparison with any other trailer also used in the road train.

### **13A Forward and other projections**

- (1) The forward projection of:
- (a) a rigid motor vehicle shall be not greater than 8.3 metres plus the amount, if any, by which the vehicle exceeds an overall length of 11 metres; and
  - (b) a dog trailer or semi-trailer shall be not greater than that determined in accordance with subregulation 2(b).

- (2) or the purposes of:
- (a) subregulation (1)(a), forward projection means the maximum distance from the axle group centre of the rearmost axle group of a rigid motor vehicle to the front end of the vehicle, including the load, if any, on the vehicle; and
  - (b) subregulation (1)(b), forward projection means that part of the loading space of a dog trailer or semi-trailer forward of the point of articulation and includes a projection beyond the loading space of the trailer contained within an arc having a radius, not longer than 1.9 metres, centred at the point of articulation.

#### **14 Maximum height and width of vehicles**

- (1) Subject to this regulation, the height of a vehicle shall not exceed 4.3 metres.
- (2) The height of a motor omnibus with double-decks shall not exceed 4.4 metres.
- (3) The height of a trailer with double-deck cattle crates shall not exceed 4.6 metres, or, in any case, 4.4 metres except where:
  - (a) the trailer is being towed by a hauling unit which has a tandem driven axle group towards its rear end and, where an inter-axle differential is fitted to that hauling unit, the inter-axle differential is of the positive-locking type;
  - (b) if the trailer is a dog trailer – it has a tandem axle group towards its front end and a triaxle group towards its rear end; and
  - (c) if the trailer is a semi-trailer – it has a triaxle group towards its rear end.
- (4) For the purposes of determining the height of a vehicle, a vertical exhaust pipe which is attached to the vehicle and which does not, when so attached, exceed 4.5 metres in height above ground level shall not be included in the measurement of the height of that vehicle.
- (5) The width of a vehicle shall not exceed 2.5 metres.

Part VI	Rear overhang, drawbar length, loading space, projecting loading and ground clearance requirements of vehicles
Division 1	Rear overhang and drawbar length

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## **Part VI            Rear overhang, drawbar length, loading space, projecting loading and ground clearance requirements of vehicles**

### **Division 1        Rear overhang and drawbar length**

#### **15            Rear overhang**

The rear overhang of a vehicle shall not exceed:

- (a) in the case of a rigid motor vehicle, but subject to paragraphs (d), (e), (f) and (g), or a trailer having a steerable axle at its front end – 60% of the distance from the centre line of the foremost axle to the axle group centre of the rearmost axle group;
- (b) in the case of a pig trailer – the length of the loading space forward of the axle group centre of the axle group or 3.7 metres;
- (c) in the case of a semi-trailer – 3.2 metres or 50% of the distance between the point of articulation of the semi-trailer and the axle group centre of that rearmost axle group of the semi-trailer;
- (d) in the case of a rigid motor vehicle having a length not greater than 9.5 metres – 3.2 metres;
- (e) in the case of a rigid motor vehicle having a length greater than 9.5 metres – 3.7 metres;
- (f) in the case of a motor omnibus not having 2 axles towards its rear end – 3.2 metres; and
- (g) in the case of a motor omnibus having 2 axles towards its rear end – 3.7 metres.

#### **16            Tow coupling overhang**

Subject to regulation 15, the tow coupling overhang of a vehicle shall not exceed:

- (a) in the case of a rigid motor vehicle used in a vehicle combination with an overall length longer than 17.5 metres – 30% of the distance from the centre of the foremost axle of the rigid motor vehicle to the axle group centre of the rearmost axle group of that rigid motor vehicle;



Part VI	Rear overhang, drawbar length, loading space, projecting loading and ground clearance requirements of vehicles
Division 1	Rear overhang and drawbar length

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- (b) in the case of a trailer, other than a semi-trailer – 30% of the distance from the axle group centre of the foremost axle group of the trailer to the axle group centre of the rearmost axle group of that trailer; and
- (c) in the case of a semi-trailer – 30% of the distance from the point of articulation of the semi-trailer to the axle group centre of the rearmost axle group of that semi-trailer.

#### **17 Location of tow coupling pivot**

The horizontal distance from the rearmost point of a vehicle to its tow coupling pivot shall not exceed 300 millimetres.

#### **18 Towing of pig trailers**

A pig trailer shall not have provision for a towing attachment at its rear end.

#### **19 Drawbar length**

The length of the drawbar of:

- (a) a converter dolly shall not exceed 5 metres or be less than 3 metres;
- (b) a dog trailer shall not exceed 5 metres or be less than 3 metres; and
- (c) a pig trailer – shall not exceed 8.5 metres.

#### **20 Drawbar angle**

The drawbar of a component vehicle of a road train shall be such that the longitudinal axis of that drawbar or, in the case of a drawbar with a pivot, that portion between the pivot and the towing attachment of the vehicle towing the component vehicle, does not exceed 5° from the horizontal when the road train, laden, is standing on a flat, level surface.

## **Division 2 Loading space**

### **21 Loading space**

- (1) Subject to subregulation (2), the length of loading space of a vehicle, rearward of the line from which the rear overhang is measured, shall not exceed:
  - (a) in the case of a vehicle having a tare mass exceeding half its aggregate mass – the length of loading space forward of the line from which the rear overhang is measured; and
  - (b) in any other case – 90% of the length of the loading space forward of the line from which the rear overhang is measured.
- (2) A vehicle shall be deemed to comply with the requirements of subregulation (1) where the tare mass of the vehicle is not more than 2 tonnes and the rear overhang of that vehicle does not exceed 50% of the distance from the centre line of the foremost axle of the vehicle to the line from which the rear overhang is measured.

## **Division 3 Projecting loading**

### **22 Projecting loading**

- (1) Subject to regulation 23, the loading or equipment of a vehicle or vehicle combination, other than a motor cycle, shall not project more than 1.2 metres to the front or to the rear of the vehicle or vehicle combination.
- (2) The loading or equipment of a motor cycle shall not project:
  - (a) beyond the extreme outer edge of the motor cycle;
  - (b) more than 150 millimetres to the front of the outer extremity of the front wheel of the motor cycle; and
  - (c) more than 300 millimetres to the rear of the outer extremity of the rear wheel of the motor cycle.
- (3) The loading or equipment of a motor cycle with a sidecar shall not project:
  - (a) beyond the extreme outer edge of the motor cycle and sidecar;

- (b) more than 600 millimetres to the front of the outer extremity of the front wheel of the motor cycle; and
  - (c) more than 900 millimetres to the rear of the outer extremity of the rear wheel of the motor cycle.
- (4) For the purposes of subregulation (1), **equipment** includes the pole of a pole-type trailer.

### **23 Exceptions to projecting loading requirements**

- (1) The loading or equipment of a vehicle or vehicle combination referred to in regulation 22(1) may project more than 1.2 metres to the front or to the rear of the vehicle or vehicle combination, where:
- (a) the overall length (including the loading or equipment) of the vehicle or vehicle combination does not exceed the limits specified by regulation 13 and applicable to that vehicle or vehicle combination;
  - (b) there is securely attached to the extreme rear of the projecting loading or equipment a red flag, or other suitable red object, not less than 300 millimetres square in size and clearly visible as a warning to other persons of the existence of that projecting loading or equipment; and
  - (c) in respect of the hours of darkness, there is securely attached to the extreme rear of the projecting loading or equipment:
    - (i) a lighted lamp showing a clear red light to the rear, visible at a distance of 200 metres; or
    - (ii) not less than 2 reflectors capable of projecting a red reflection of light from the lamp of a following motor vehicle.
- (2) Where the projecting loading or equipment of a vehicle referred to in regulation 22(1) complies with the requirements of that regulation, but that loading or equipment is not readily visible to a person driving a motor vehicle following immediately behind that vehicle, the driver of that first-mentioned vehicle shall, in respect of that loading or equipment, comply with the requirements of subregulation (1).

**Division 4          Ground Clearance****24          Ground clearance**

The ground clearance of a vehicle shall be not less than:

- (a) for a point along the width of the vehicle which is within one metre of an axle – 100 millimetres; and
- (b) for a mid-point between 2 adjacent axles of the vehicle – the resultant figure obtained by multiplying the distance in metres between the 2 axles by 33.33 millimetres.

**Part VII          Maximum mass and speed of certain vehicles****25          Vehicle having no rubber or pneumatic tyres**

- (1) A vehicle to any wheel of which neither a rubber tyre more than 30 millimetres thick nor a pneumatic tyre is fitted shall comply with the following requirements:
  - (a) the laden mass of the vehicle shall not exceed 3 tonnes;
  - (b) the mass supported on an axle of the vehicle shall not exceed 1.4 tonnes;
  - (c) the mass in kilograms for each 25 millimetres width of tyre, in contact with the ground on which the vehicle is standing, on a wheel of that vehicle shall not exceed the maximum mass in kilograms for each 25 millimetres width of tyre, as specified in Schedule 1, for a wheel having the diameter of that wheel; and
  - (d) the vehicle shall not be driven at a speed exceeding 15 kilometres per hour.
- (2) For the purposes of Schedule 1, the mass per millimetre width of a tyre shall be determined by dividing the number of kilograms comprised in the wheel load on a wheel by the number of millimetres comprised in the width of tyre on the wheel.

**26          Vehicle having some pneumatic tyres**

- (1) A vehicle to one or more of the wheels of which a rubber tyre is or rubber tyres are fitted and to the remaining wheels pneumatic tyres are fitted shall comply with the following requirements:
  - (a) the laden mass of the vehicle shall not exceed 4 tonnes;

- (b) the mass supported on an axle of the vehicle shall not exceed 1.8 tonnes;
  - (c) the mass in kilograms for each 25 millimetres width of tyre, in contact with the ground on which the vehicle is standing, on a wheel of that vehicle, which is not fitted with a pneumatic tyre, shall not exceed the maximum mass in kilograms for each 25 millimetres width of tyre, specified according to the thickness of the tyre, measured at its thinnest point, as set out in Schedule 2, or that specified in Schedule 1 for the diameter of the wheel;
  - (d) the mass in kilograms for each 25 millimetres width of tyre on a wheel of the vehicle shall not exceed the maximum mass in kilograms for each 25 millimetres width of tyre, as specified in Schedule 1, for a wheel having a diameter of that wheel; and
  - (e) the vehicle shall not be driven at a speed exceeding 25 kilometres per hour.
- (2) For the purposes of subregulation (1), a group of co-axial wheels on one side of the centre line of a vehicle shall be deemed to be one wheel.

## **27 Tyres filled with water**

Tyres which would otherwise be pneumatic tyres but which are filled or partly filled with water, whether with or without a chemical additive, shall be regarded for the purposes of this Part as rubber tyres.

## **28 Speed capability of road train**

- (1) A road train, whether loaded or unloaded, shall be capable, when running on a flat, level surface, of a sustained operating speed of 80 kilometres per hour but, in any case, not more than 85 kilometres per hour.
- (2) Subject to subregulation (3), for the purposes of determining the sustained operating speed, referred to in subregulation (1), of a road train, the formula set out in Schedule 4 shall be used.
- (3) Where an approved device is fitted to the hauling unit of a road train to govern, in accordance with subregulation (1), the maximum speed capability of the road train, the formula referred to in subregulation (2) need not be used for determining the sustained operating speed, referred to in subregulation (1), of that road train.

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**Part VIII            Brake requirements for certain vehicles****29            Service brakes of road train**

- (1) Subject to subregulation (4), a wheel on a component vehicle of a road train shall be braked by a pneumatic brake system, which brake system shall be activated by one foot-operated control valve.
- (2) The brake system of a road train shall be such that:
  - (a) a trailer of the road train is supplied by not less than one air reservoir tank and relay valve, and the air reservoir tank shall have an air capacity which is not less than 4 times or, for a trailer manufactured on or after 1 January 1985, not less than 8 times, the sum of the air capacities of all of the brake activation chambers supplied by that air reservoir tank;
  - (b) the hauling unit of the road train shall be supplied by an air reservoir tank which has an air capacity that is not less than 8 times or, for a hauling unit manufactured on or after 1 January 1985, not less than 12 times, the sum of the air capacities of all of the brake activation chambers supplied by that air reservoir tank;
  - (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;
  - (d) 15 minutes after the air compressor of the brake system has fully pressurized 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;
  - (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 a brake chamber of an axle of the road train shall, 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) Where a road train has equipment fitted to it which is operated by the air compressor of the brake system of the road train, the air

compressor shall be of such capacity that that brake system complies with the requirements of subregulation (1) irrespective of whether that air compressor is, at the time of operating that brake system, also operating that equipment.

- (4) A brake system other than a brake system referred to in subregulation (1) shall not be used in a road train unless it is approved.

### **30 Brake line couplings of road train**

- (1) A brake line between 2 component vehicles of a road train shall not be connected other than by means of a polarized brake coupling.
- (2) The brake coupling and the brake coupling arrangement of the supply (emergency) and control (service) brake lines of 2 component vehicles of a road train shall comply with Australian Standard "D8 – Hose Couplings for Use with Vacuum and Air Pressure Braking Systems on Prime Movers, Trailers and Semi-Trailers".

### **31 Parking brakes**

- (1) A hauling unit shall be fitted with spring-actuated parking brakes, or other approved 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 subregulation (1) shall 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 its immediate re-application, except by the use of tools at its brake actuator.
- (3) A trailer with a tare mass in excess of 500 kilograms shall be provided with wheel chocks, or an approved mechanical parking brake.

Part IX	Requirements for tow couplings, fifth wheel assemblies, turntables, fifth wheel kingpins and converter dollies
Division 1	Tow couplings, fifth wheel assemblies, turntables and fifth wheel kingpins

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## **Part IX                    Requirements for tow couplings, fifth wheel assemblies, turntables, fifth wheel kingpins and converter dollies**

### **Division 1                Tow couplings, fifth wheel assemblies, turntables and fifth wheel kingpins**

#### **32                    Tow couplings**

A tow coupling used to connect 2 component vehicles of a road train shall be such that:

- (a) where the coupling pin of the tow coupling is inserted into the eye bush of the drawbar to which it is connected, the clearance between the coupling pin and the eye bush, in any position, is not more than 4 millimetres;
- (b) the coupling pin of the tow coupling has a safety-locking system; and
- (c) it complies with the requirements of Australian Standard 2213 "50 mm Pin-Type Couplings for Trailers", as in force from time to time.

#### **33                    Fitting of towing attachment**

- (1) The fitting of a towing attachment to a component vehicle of a vehicle combination shall be in accordance with the manufacturer of the towing attachment's instructions, by specification or otherwise, in respect of such fitting.
- (2) The height of a towing attachment, when attached to a component vehicle of a vehicle combination, shall be in accordance with Australian Standard 2213 – 1978 "50 mm Pin-Type Couplings for Trailers", as in force from time to time.

#### **35                    Strength of fifth wheel assemblies of vehicle combinations**

A fifth wheel assembly of a component vehicle of a vehicle combination shall:

- (a) where the gross combination mass of the vehicle combination does not exceed 80 tonnes – comply with Australian Standard 1773 – 1975 "Test Requirements and Criteria for Fifth Wheel and Turntable Assemblies", as in force from time to time, in so far as that Australian Standard is applicable to 50 mm kingpins referred to in Part 1 of Australian



Part IX	Requirements for tow couplings, fifth wheel assemblies, turntables, fifth wheel kingpins and converter dollies
Division 1	Tow couplings, fifth wheel assemblies, turntables and fifth wheel kingpins

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Standard 2175–1978 "Fifth Wheel Kingpins for Semitrailers and Lowloaders", as in force from time to time; and

- (b) where the gross combination mass of the vehicle combination exceeds 80 tonnes – be certified by the manufacturer of the fifth wheel assembly, by specification or otherwise, to be of sufficient strength for the gross combination mass of that vehicle combination.

### **36 Installation of fifth wheel assemblies on road trains**

- (1) A fifth wheel assembly of a component vehicle of a road train shall be installed in accordance with Australian Standard 1771 – 1975 "Recommendations for Installation of Fifth Wheel and Turntable Assemblies on Truck Chassis", as in force from time to time.
- (2) The point of articulation on the hauling unit of a road train shall, in accordance with Australian Standard 2174 – 1978 "Recommendations for Positions and Heights of Fifth Wheels for Articulated Vehicles", as in force from time to time, be located forward of the axle group centre of the rearmost axle group of that hauling unit.

### **37 Types of fifth wheels and turntables used in vehicle combinations**

- (1) Subject to subregulation (2), a fifth wheel or turntable shall not be fitted to or used in a component vehicle of a vehicle combination unless the fifth wheel or turntable is of a type recommended in Australian Standard 1772 – 1975 "Recommended Applications for Common Types of Fifth Wheel and Turntable Assemblies", as in force from time to time.
- (2) A turntable shall not be fitted to or used in a component vehicle of a road train unless it is a plate-type turntable (hollow centre), a ball bearing turntable, or, where approved, a plate-type turntable (centre boss), as illustrated in Australian Standard 1771 – 1975 "Recommendations For Installation of Fifth Wheel and Turntable Assemblies on Truck Chassis", as in force from time to time.

### **38 Marking of fifth wheels and turntables used in vehicle combinations**

A fifth wheel or turntable shall not be fitted to or used in a component vehicle of a vehicle combination unless the fifth wheel or turntable has an identifying mark which specifies, or from which can be determined, the strength rating for that fifth wheel or turntable as recommended, by specification or otherwise, by the

manufacturer of that fifth wheel or turntable.

**39 Strength of fifth wheel kingpin used in component vehicle of road train**

A fifth wheel kingpin shall not be fitted to or used in a component vehicle of a vehicle combination unless:

- (a) where the gross combination mass of the vehicle combination does not exceed 80 tonnes – it complies with Part 1 of Australian Standard 2175 – 1978 "Fifth Wheel King Pins for Semitrailers and Lowloaders", as in force from time to time; and
- (b) where the gross combination mass of the vehicle combination exceeds 80 tonnes – it is certified by its manufacturer, by specification or otherwise, to be of sufficient strength for the gross combination mass of that vehicle combination.

**Division 2 Converter Dollies**

**40 Converter dollies used in road trains**

A converter dolly shall not be used in a road train except where the converter dolly is so constructed:

- (a) that:
  - (i) the torque reaction generated in that converter dolly by braking forces is carried through that converter dolly's fifth wheel assembly into the semi-trailer to which that converter dolly is attached;
  - (ii) the drawbar of that converter dolly is attached to the chassis of the dolly converter through a flexible coupling which allows the drawbar to pivot vertically about a transverse horizontal axis; and
  - (iii) where that converter dolly has a tandem axle group – the tandem axle group has an approved non-reactive load sharing suspension system;
- (b) that:
  - (i) the torque reaction generated in that converter dolly by braking forces is transmitted, through a tow coupling designed for the purpose, into the semi-trailer towing that converter dolly;

- (ii) the drawbar and chassis of that converter dolly are an integral unit and that converter dolly's fifth wheel assembly is able to pivot about a horizontal axis; and
  - (iii) where that converter dolly has a tandem axle group – the tandem axle group has an approved single-pivot load-sharing suspension system; or
- (c) that:
- (i) where that converter dolly has a tandem axle group – the torque reaction generated in that converter dolly by braking forces is carried through an approved suspension system fitted to the tandem axle group; and
  - (ii) that converter dolly complies with the requirements of paragraph (a)(ii).

## **Part X Identification of road trains**

### **41 Identification of hauling unit of road train**

- (1) A hauling unit shall not be used in a road train except where it has marked on it, adjacent to its compliance plate, if any, or at some other position specified by the Registrar or an approved person, the following particulars:
- (a) the gross vehicle mass; and
  - (b) the gross combination mass,
- of that hauling unit.
- (2) A hauling unit shall not be used in a road train except where it has an inspection label which is in force.

### **42 Identification of trailers used in road train**

A trailer shall not be used in a road train unless it has marked on its chassis:

- (a) the name or trademark of the manufacturer of the trailer; and
  - (b) a distinguishing serial number,
- and has an inspection label which is in force.

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**43 Road train signs**

- (1) A road train shall have affixed both to its front end and rear end a warning sign consisting of the words "Road Train", which sign:
  - (a) may be in 2 parts, one part consisting of the word "Road" and the other part consisting of the word "Train";
  - (b) shall be not less than 1,200 millimetres in length and 250 millimetres in width or, where, the sign is in 2 parts, each part shall be not less than 600 millimetres in length and 250 millimetres in width;
  - (c) shall have a yellow reflective background on which the words "Road Train" shall appear in legible black letters not less than 180 millimetres in height;
  - (d) shall not, in respect of its affixation to the front end of the road train, be below the bumper bar of the hauling unit of that road train;
  - (e) shall not, in respect of its affixation to the rear end of the road train, be more than 3 metres above ground level; and
  - (f) shall not be affixed so as to obscure a light, registration plate or safety device of the road train.
- (2) A reflective sign of the same size and colours as a sign referred to in subregulation (1) shall not, unless otherwise permitted under a law in force in the Territory, be affixed to the front or rear end of a road train.
- (3) A warning sign referred to in subregulation (1) shall not be affixed to a trailer unless the trailer is being used as a component vehicle of a road train.

**Part XI Miscellaneous****44 Defence where excess loading within certain limits**

- (1) It shall be a defence to a prosecution for an offence, to or in relation to a matter the subject of regulation 11, 12, 25 or 26, against regulation 5 if the person charged with the offence proves that he made or caused to be made all reasonable efforts to comply with the requirements of that regulation and that the respective load limits specified in that regulation:

- 
- (a) have not exceeded the manufacturer's recommendations, by specification or otherwise, of the safe working load for any component; and
  - (b) have not exceeded by more than the lesser of:
    - (i) in the case of a single steer axle – .25 tonnes;
    - (ii) in the case of a single axle other than a single steer axle – .5 tonnes;
    - (iii) any other axle group – one tonne; or
    - (iv) 10% of the gross vehicle mass or gross combination mass specified in that regulation.
- (2) Notwithstanding subregulation (1)(b)(iii), but subject to subregulation (3), where the offence referred to in subregulation (1) is in respect of a vehicle combination being used solely to carry livestock reference to one tonne in subregulation (1)(b)(iii) shall, in the case of a triaxle group, be read as 2.6 tonnes.
- (3) Subregulation (2) does not apply:
- (a) where the laden mass of a dog trailer of the vehicle combination in respect of which the offence relates exceeds that permitted by regulation 11 by more than, where the trailer is fitted with:
    - (i) a triaxle group and a tandem axle group – 3.6 tonnes; or
    - (ii) a triaxle group and a single axle group – 3.1 tonnes;
  - (b) where the laden mass of an articulated vehicle forming part of the vehicle combination in respect of which the offence relates exceeds that permitted by regulation 11 by more than, where the semi-trailer is fitted with a triaxle group and the prime mover is fitted with:
    - (i) single axles – 3.35 tonnes;
    - (ii) a single steer axle and tandem axle group – 3.85 tonnes; or
    - (iii) a twin-steer axle group and a tandem axle group – 4.6 tonnes;
  - (c) where the laden mass of the vehicle combination in respect of which the offence relates exceeds that permitted by regulation 11 and the sum of the additional mass limits

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specified in subregulation (1) in respect of each axle group of the vehicle combination; or

(d) in respect of an offence committed after 1 July 1993.

#### **45 Turning circle of motor vehicles**

- (1) A rigid motor vehicle, articulated vehicle or a vehicle combination, other than an articulated omnibus or a road train, shall not have a turning circle greater than 25 metres.
- (2) An articulated omnibus, excluding mirrors and signalling devices attached to it, shall be capable of moving within a circular track having an inner radius of 5.3 metres and an outer radius of 12 metres.

#### **46 Inflation pressure of pneumatic tyres**

Where a vehicle is equipped with a pneumatic tyre, the pneumatic tyre shall not be inflated to a pressure greater than:

- (a) in the case of a pneumatic tyre bearing the mark "radial" – 825 kPa; and
- (b) in any other case – 700 kPa.

#### **47 Rear marker plates**

- (1) A motor vehicle with a manufacturer's gross vehicle mass greater than 12 tonnes shall have, in accordance with Schedule 6, securely affixed to each side of the rear of the motor vehicle a rear marking plate as prescribed in:
  - (a) paragraph (1); or
  - (b) where approved, paragraph (4),of that Schedule.
- (2) Subregulation (1) does not apply to a motor omnibus operating solely on public streets on which street lighting is installed.

#### **48 Electrical connectors for vehicle combinations**

A vehicle combination shall be fitted with electrical connectors which comply with Australian Standard 2513 "Electrical Connectors for Trailer Vehicles".

**49 Maximum projection of mirrors**

- (1) Subject to subregulation (2), a rear vision mirror affixed to the side of a vehicle shall not project more than 150 millimetres beyond the maximum permitted width of the vehicle.
- (2) A rear vision mirror affixed to the side of the vehicle which has a manufacturer's gross vehicle mass of 8.5 tonnes or more may project more than 150 millimetres beyond the maximum permitted width of the vehicle provided the mirror:
  - (a) does not project more than 230 millimetres beyond; and
  - (b) is capable of retracting to less than 150 millimetres of, the maximum permitted width of the vehicle.

**Schedule 1**

regulations 25 and 26

Diameter of wheel in metres	Maximum mass in kilograms for each 25 millimetres width of tyre in contact with the ground	
	For other than pneumatic tyres and solid rubber tyres 30 mm thick	For solid rubber tyres not less than 30mm thick
Less than 0.3 of a metre	136	227
Not less than 0.3 of a metre and less than 0.6 of a metre	181	272
Not less than 0.6 of a metre and less than 0.9 of a metre	227	318
Not less than 0.9 of a metre and less than 1.2 metres	272	363
Not less than 1.2 metres and less than 1.5 metres	318	363
1.5 metres or more	363	363



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**Schedule 2**

regulation 26

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Thickness of tyre in millimetres	Maximum mass in kilograms per 25 millimetres width of tyre in contact with the ground
Not less than 30 millimetres and less than 40 millimetres	272
Not less than 40 millimetres and less than 45 millimetres	295
Not less than 45 millimetres and less than 50 millimetres	318
Not less than 50 millimetres and less than 55 millimetres	340
55 millimetres or more	363

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### Schedule 3

regulation 12(b)(ii)

The maximum mass at which a road train, fully loaded, should start from rest on a 1 in 20 grade, is calculated by the formula:

$$RTM = \frac{K \times R \times M \times T}{G + 1}$$

Where –

RTM = road train mass in kilograms;

K = drive efficiency constant for the type of drive axle fitted to the hauling unit, being:

for a single driven axle – 0.055

for a single driven tandem axle group – 0.053

for a tandem driven axle group – 0.051

for a tri-driven triaxle group – 0.047;

R = overall gear reduction between engine and drive wheels;

M = tyre revolutions per kilometre determined from the table to this Schedule, which table gives the standard number of revolutions per kilometre to be adopted for tyre size used in a component vehicle of a road train;

T = maximum engine net torque in Newton metres; and

G = maximum grade expressed as a percentage (starting ability 10% + operating grade 5% = 15%).

Table

Nominal tyre size	Revolutions per kilometre	Nominal tyre size	Revolutions per kilometre
9" x 20"	320	10" x 22"	293
10" x 20"	310	11" x 22"	286
11" x 20"	300	12" x 22"	278
12" x 20"	290		

Schedule 3

Nominal tyre size	Revolutions per kilometre	Nominal tyre size	Revolutions per kilometre
13" x 20"	280	11" x 24"	275
14" x 20"	265	12" x 24"	266
		14" x 24"	225
9" x 22.5"	335		
10" x 22.5"	320		
11" x 22.5"	310		
12" x 22.5"	300		
15" x 22.5"	290		

## Schedule 4

regulation 28(2)

The sustained operating speed of a road train shall be calculated by the use of the following formula:

$$85 \text{ km/h} = \frac{60 \times L}{A \times M}$$

where:

L = maximum revolutions per minute at which maximum engine power is developed in the hauling unit of the road train;

A = overall gear reduction between engine and drive wheels giving highest road speed of road train; and

M = tyre revolutions per kilometre determined from the table to Schedule 3.

**Schedule 5**

regulation 13

## Schedule 6

regulation 47

- (1) A rear marking plate shall:
  - (a) subject to paragraph (4), be in or to the effect of the form in the Diagram A in this Schedule;
  - (b) subject to paragraph (6), have dimensions which shall not vary by more than 5 millimetres or 5 degrees, as the case may be, from the dimensions specified in that diagram;
  - (c) bear the name of the manufacturer of the plate and a statement identifying the class of material used in its manufacture and the standard to which the material has been manufactured; and
  - (d) have a surface which is retroreflective and has a photometric performance and a durability not less than the standard level specified for class 2 retroreflective material by Australian Standard 1906 "Retroreflective Materials and Devices for Road Traffic Control Purposes" Part 1 "Retroreflective Materials".
- (2) A rear marking plate referred to in paragraph (1) shall be affixed to each side of the rear of a motor vehicle so that:
  - (a) it faces rearwards of the vehicle;
  - (b) the lower edge and the outermost edge of the plate are yellow in colour;
  - (c) no part of the plate extends beyond the outside extremity of the vehicle;
  - (d) the lower edge of the plate is horizontal and, where practicable, not more than 1.5 metres nor less than 400 millimetres from the ground and is the same height above the ground as that of the rear marking plate affixed to the other side of the motor vehicle;
  - (e) the outermost edge of the plate is, where practicable, within 150 millimetres of the outside extremity of that side of the motor vehicle to which the plate is affixed; and
  - (f) it is within 20 degrees of a transverse vertical plane at a right angle to the vertical plane through the longitudinal axis of the motor vehicle.

- (3) A rear marking plate may have displayed on it words which are permitted to be displayed on a sign under the *Traffic Regulations*.
- (4) Where the Registrar is satisfied that it is not practicable for a rear marking plate of a type referred to in paragraph (1) to be affixed to a motor vehicle, the Registrar may, subject to such conditions as the Registrar thinks fit, approve the affixing of a rear marking plate in or to the effect of one of the forms in Diagram B in this Schedule.
- (5) Where, under paragraph (4), the Registrar approves the affixing of a rear marking plate to a motor vehicle, the plate shall be affixed to the rear of and to face rearwards of the vehicle and shall be affixed to the motor vehicle in accordance with such conditions, if any, as the Registrar thinks fit.
- (6) The Registrar may approve, subject to such conditions as the Registrar thinks fit, the affixing to a motor vehicle of a rear marking plate with dimensions which vary from those permitted in paragraph (1)(b) and, notwithstanding that subparagraph, a rear marking plate with the dimensions so approved may be affixed to a motor vehicle in accordance with the conditions, if any, of the Registrar.

DIAGRAM A

(See hard copy)

DIAGRAM B

(See hard copy)

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**ENDNOTES**
**1****KEY**

Key to abbreviations

**amd = amended**  
**app = appendix**  
**bl = by-law**  
**ch = Chapter**  
**cl = clause**  
**div = Division**  
**exp = expires/expired**  
**f = forms**  
**Gaz = Gazette**  
**hdg = heading**  
**ins = inserted**  
**lt = long title**  
**nc = not commenced**

**od = order**  
**om = omitted**  
**pt = Part**  
**r = regulation/rule**  
**rem = remainder**  
**renum = renumbered**  
**rep = repealed**  
**s = section**  
**sch = Schedule**  
**sdiv = Subdivision**  
**SL = Subordinate Legislation**  
**sub = substituted**

**2****LIST OF LEGISLATION*****Motor Vehicles (Standards) Regulations (SL No. 74, 1982)***

Notified	23 December 1982
Commenced	1 January 1983 (r 2 and s 2 <i>Motor Vehicles Amendment Act 1982</i> (Act No. 69, 1982))

***Criminal Law (Regulatory Offences) Act 1983 (Act No. 68, 1983)***

Assent date	28 November 1983
Commenced	1 January 1984 (s 2 s 2 <i>Criminal Code Act 1983</i> (Act No. 47, 1983), <i>Gaz G46</i> , 18 November 1983, p 11 and <i>Gaz G8</i> , 26 February 1986, p 5)

***Amendments of Motor Vehicles (Standards) Regulations (SL No. 31, 1988)***

Notified	1 July 1988
Commenced	1 July 1988

**3****LIST OF AMENDMENTS**

r 4	amd No. 31, 1988, r 2
r 5A	ins Act No. 68, 1983, s 86
	amd No. 31, 1988, r 3
r 7	amd No. 31, 1988, r 4
r 9	rep No. 31, 1988, r 5
r 11	sub No. 31, 1988, r 6
r 12	amd No. 31, 1988, r 7
r 13	amd No. 31, 1988, r 8
r 13A	ins No. 31, 1988, r 9
r 15	amd No. 31, 1988, r 10
r 16	amd No. 31, 1988, r 11
rr 17 – 18	sub No. 31, 1988, r 12
r 19	amd No. 31, 1988, r 13
r 20	amd No. 31, 1988, r 14
r 23	amd No. 31, 1988, r 15
r 30	amd No. 31, 1988, r 16



## ENDNOTES

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pt IX hdg	amd No. 31, 1988, r 17
r 32	amd No. 31, 1988, r 18
r 34	rep No. 31, 1988, r 19
pt IX	
div 2 hdg	sub No. 31, 1988, r 20
r 40	amd No. 31, 1988, r 21
r 44	amd No. 31, 1988, r 22
r 45	amd No. 31, 1988, r 23
rr 47 – 49	ins No. 31, 1988, r 24
sch 2	amd No. 31, 1988, r 25
sch 5 – 6	ins No. 31, 1988, r 26