



AUSTRALIAN CAPITAL TERRITORY
ROAD TRANSPORT (DIMENSIONS AND MASS) ACT 1990
DETERMINATION OF MASS LIMITS OF VEHICLES
INSTRUMENT NO. 303 OF 2000

Under subsection 57(2A) of the *Road Transport (Dimensions and Mass) Act 1990* (the Act) **I REVOKE** Determination No 202 of 1996, published in the Australian Capital Territory Gazette No S229 of 10 September 1996, and **I DETERMINE** that:

- a) for the purposes of paragraphs 24(1)(c) and 24(2)(c) of the Act, the gross mass of a vehicle, or of a motor vehicle and a trailer or semi-trailer coupled to it, shall not exceed the mass in tonnes set out in Schedule 1 in relation to the class of vehicles or class of combination;
- b) for the purposes of subsections 25(1), 25(2) and 25(3) of the Act, the mass carried by the wheel of an axle, the axle load of an axle, or the axle group load of an axle group of a vehicle shall not exceed the mass in tonnes set out in Schedule 2 in relation to the relevant class of wheels, axles or axle groups.

A diagram appearing in this determination is illustrative only.

Dated the 13th day of September 2000.

BRENDAN MICHAEL SMYTH
Minister for Urban Services

1. Mass limits for a single vehicle or combination

- 1.1 The total mass of a combination other than a road train or B-double, and any load, must not exceed 42.5 tonnes.
- 1.2 The loaded mass of a dog trailer or pig trailer must not exceed the loaded mass of the towing vehicle.
- 1.3 If the manufacturer of a motor vehicle forming part of a B-double has not determined the Gross Combination Mass of the vehicle, the total mass of the combination and any load must not exceed the number of kilograms worked out using the following formula:

$$\text{Mass in kilograms} = \frac{K \times M \times R \times T}{16}$$

where:

K - means:

- (a) 0.055 if a single drive axle is fitted to the motor vehicle, or
- (b) 0.053 if a single drive tandem axle group is fitted to the motor vehicle; or
- (c) 0.051 if a dual drive tandem axle group is fitted to the motor vehicle.

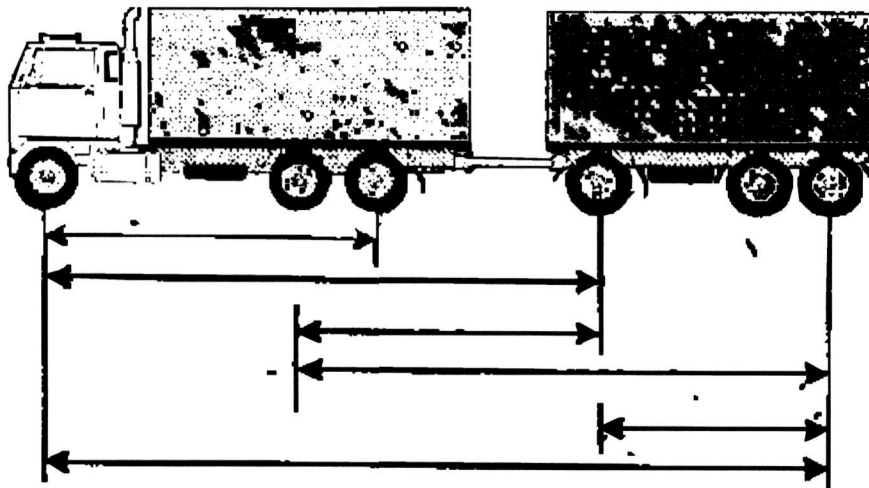
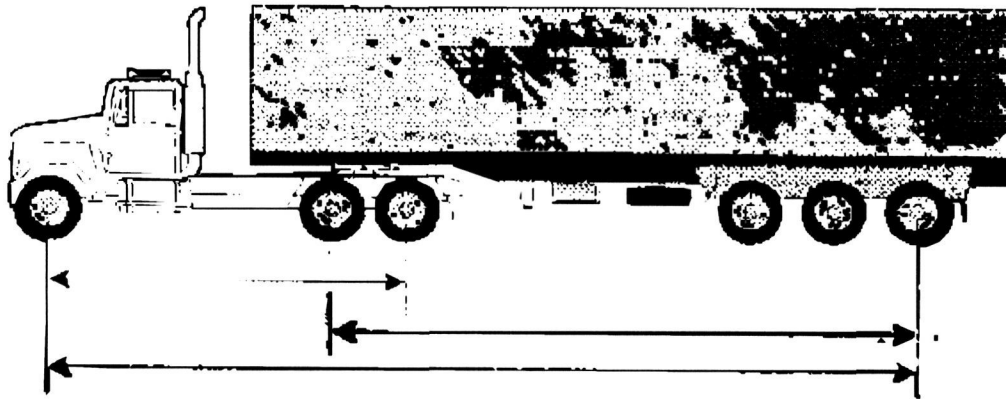
M - means the number of tyre revolutions per kilometre as specified by the tyre manufacturer for the tyres fitted to the driving axle or axles;

R - means the overall gear reduction between engine and drive wheels;

T - means the maximum engine net torque in newton metres.

2. Mass limits relating to axle spacing

- 2.1 If the total mass of a vehicle or a combination, and any load, cannot lawfully exceed 42.5 tonnes, the mass limits in the attached Table must not be exceeded in relation to the distances set out in the Table that apply to the vehicle or combination.
- 2.2 Each distance in the Table refers to:
- (a) the distance from the centre of any single axle to the centre of any other single axle, or
 - (b) the distance from the centre of any single axle to the centre of the furthest axle in any axle group; or
 - (c) the greatest distance between the centres of axles in any 2 axle groups.



Measurement of distances for Table

- 2.3 The mass limits in the Table apply to the sum of the mass on each axle group or single axle in the distance referred to in the Table, including the axles between which the distance is measured.
- 2.4 The total mass of a vehicle or combination, and any load, must not exceed 15 tonnes if the distance between any 2 axles that are not part of the same axle group is less than 2.5 metres.

This is Page 3 of Schedule 1 to the Determination made under the *Road Transport (Dimensions and Mass) Act 1990* on the 13th day of September 2000

Table
MASS LIMITS RELATING TO AXLE SPACING

Distance (metres)		Mass Limit (tonnes)
Exceeding	Not exceeding	
0	3.7	23.0
3.7	3.8	23.5
3.8	4.0	24.0
4.0	4.2	24.5
4.2	4.3	25.0
4.3	4.5	25.5
4.5	4.7	26.0
4.7	4.8	26.5
4.8	5.0	27.0
5.0	5.2	27.5
5.2	5.3	28.0
5.3	5.5	28.5
5.5	5.7	29.0
5.7	5.8	29.5
5.8	6.0	30.0
6.0	6.2	30.5
6.2	6.3	31.0
6.3	6.5	31.5
6.5	6.7	32.0
6.7	6.8	32.5
6.8	7.0	33.0
7.0	7.2	33.5
7.2	7.3	34.0
7.3	7.5	34.5
7.5	7.7	35.0
7.7	7.8	35.5
7.8	8.0	36.0
8.0	8.2	36.5
8.2	8.3	37.0
8.3	8.5	37.5
8.5	8.7	38.0
8.7	8.8	38.5
8.8	9.0	39.0
9.0	9.2	39.5
9.2	9.3	40.0
9.3	9.5	40.5
9.5	9.7	41.0
9.7	9.8	41.5
9.8	10.0	42.0
10.0		42.5

This is Page 1 of Schedule 2 to the Determination made under the *Road Transport (Dimensions and Mass) Act 1990* on the 13th day of September 2000

1. Mass limits for tyres, wheels and axles

- 1.1 The mass on a wheel or axle must not exceed the limit set by its manufacturer.
- 1.2 The mass on a tyre must not exceed the greatest load capacity determined for the tyre by the manufacturer at a cold inflation pressure that does not exceed:
- (a) 825 kilopascals for a radial ply tyre; or
 - (h) 700 kilopascals for any other tyre.
- 1.3 The mass on an axle group or single axle must not exceed the limit provided for it in the Table.
- 1.4 The mass limit in the Table that applies to an axle group that includes a retractable axle must be calculated as if the axle did not exist, unless subclause 1.5 applies.
- 1.5 A retractable axle is part of an axle group for the purposes of the Table if, when the mass on the group exceeds:
- (a) 6 tonnes, in the case of a tandem axle group; or
 - (b) 11 tonnes, in the case of a tri-axle group, and
- the tyres on the axle are in contact with the ground and the load-sharing suspension system is operating on each axle (including the retractable axle) and tyre in each group.
- 1.6 The sum of the mass on the axle groups and single axles on a vehicle or combination must not exceed the sum of the mass limits of the axle groups and axles, as provided in the Table.

**Table
MASS LIMITS FOR SINGLE AXLES AND AXLE GROUPS**

Description of single axle or axle group	Mass limit (tonnes)
Single axles and single axle groups:	
Single steer axle on a motor vehicle	6.0
Single axle or single axle group fitted with single tyres with section width of:	
a) less than 375 mm	6.0
(b) at least 375 mm but less than 450 mm	6.7
(c) at least 450 mm	7.0

Table-continued
MASS LIMITS FOR SINGLE AXLES AND AXLE GROUPS

Description of single axle or axle group	Mass limit (tonnes)
Single axle or single axle group fitted with dual tyres on:	
(a) a pig trailer	8.5
(b) a bus licensed to carry standing passengers	10.0
(c) an ultra low floor bus licensed to carry standing passengers while retaining a Gross Vehicle Mass of 16.00 tonnes	11.00
(d) any other vehicle	9.0
Twinsteer axle groups:	
(a) Twinsteer axle group without a load-sharing suspension system	10.0
(b) Twinsteer axle group with a load-sharing suspension system	11.0
Tandem axle groups:	
Tandem axle group fitted with single tyres with section width of:	
(a) less than 375 mm	11.0
(b) at least 375 mm but less than 450 mm	13.3
(c) at least 450 mm	14.0
Tandem axle group fitted with single tyres on one axle and dual axles on the other axle	13.0
Tandem axle group fitted with dual tyres on:	
(a) a pig trailer	15.0
(b) any other vehicle	16.5

This is Page 3 of Schedule 2 to the Determination made under the *Road Transport (Dimensions and Mass) Act 1990* on the 13th day of September 2000

Tri-axle groups	
Tri-axle group on a vehicle fitted with single tyres with section width of less than 375 mm on all axles, or single tyres on 1 or 2 axles and dual tyres on the other axle or axles	15.0
Tri-axle group on a pig trailer with either single tyres with section width of at least 375 mm, dual tyres on all axles, or a combination of those tyres	18.0
Tri-axle group, on a vehicle other than a pig trailer, with either single tyres with section width of at least 375 mm, dual tyres, or a combination of those tyres	20.0
Quad-axle groups	
Quad-axle group fitted with single tyres with section width of less than 375 mm	15.0
Quad-axle group fitted with single tyres with section width of at least 375 mm or dual tyres	20.0