## Truck and Dog trailer combinations over 42.5 tonnes



#### FACT SHEET

## Truck and Dog Trailer Combination Over 42.5 Tonnes

This information sheet provides guidance about the operation of truck and dog trailer combinations in NSW. It aims to assist owners/operators and drivers by outlining the rules and specifications that generally apply to truck and dog combinations as detailed in road transport legislation.

This fact sheet is intended to be a guide only. It is the responsibility of owners/operators/drivers to be aware of the laws which apply to a particular vehicle that is intended to be operated. NSW legislation can be accessed at www.legislation.nsw.gov.au .

The *Class 3 Truck and Dog Trailer Combination Notice 2010* applies to truck and dog trailer combinations with a hauling unit which has a gross combination mass (GCM) in excess of 42.5 tonnes (to a maximum of 50 tonnes).

To be eligible to load in excess of 42.5 tonnes, a vehicle must meet all of the requirements of the Notice

## OPERATING AND TRAVEL REQUIREMENTS

#### What documents must be carried

A copy of the *Class 3 Truck and Dog Trailer Combination Notice 2010* (the Notice), must be carried in the driving compartment of the vehicle when it is operating with a load in excess of 42.5 tonnes (to a maximum of 50 tonnes), The Notice must be produced when requested to do so by an authorised officer such as a RTA Inspector or Police Officer.

Owners/Operators/Drivers should also be aware of other heavy vehicle notices which also may apply to the vehicle. All heavy vehicle notices can be accessed on the RTA website, www.rta.nsw.gov.au/heavyvehicles.

The driver of a Class 3 truck and dog trailer combination must hold, and be able to produce, if requested by an authorised officer, a driver's licence authorising the driver to drive a combination of the gross combination mass specified.

All units used in a truck and dog trailer combination must be correctly registered in a State or Territory of the Commonwealth or under the Federal Interstate Registration Scheme. Different registration charges apply to different heavy vehicle configurations. It is the responsibility of the registered operator to provide the correct information to ensure the appropriate registration charge is applied.

To access a copy of the *Class 3 Truck and Dog Trailer Combination Notice 2010,* and for further information about heavy vehicle licensing and registration please visit www.rta.nsw.gov.au/heavyvehicles.

#### **Approved routes**

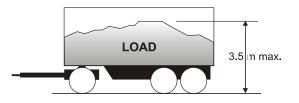
A Class 3 truck and dog trailer combination operating under the Notice may operate on all roads, except where prohibited by a load or dimension limit specified for a road, bridge or causeway by a sign or notice.

## MASS & DIMENSION LIMITS

#### Dimensions

A Class 3 truck and dog trailer combination must meet all the individual dimension requirements outlined in Schedule 2, *Road Transport (Vehicle Registration) Regulation 2007.* 

A **three axle** dog trailer must not be loaded higher than 3.5 metres unless the operator obtains written approval from the RTA.



The operator can load a **four axle** dog trailer to 4.3 metres high.

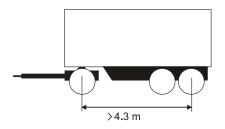
#### Gross mass limit

The gross mass of a truck and dog trailer combination cannot exceed the **lowest** of:

- the mass limits for axle spacings shown in the "Minimum axle spacings for combinations" section (below); or
- the sum of the axle and axle group mass limits shown in the "Maximum load the operator can carry - single axles and axle groups" section (below); or
- the sum of the Gross Vehicle Mass (GVM) limits for the truck and the trailer; or
- the Gross Combination Mass (GCM) limit for the truck; or
- 50 tonnes (7-axle combination), 48 tonnes (6-axle combination)

#### Minimum axle spacing for 3 axle dog trailers

For a **three axle** dog trailer the distance between the middle of the first axle and the middle of the last axle must be at least 4.3 metres.



If the trailer does **not** comply with this minimum axle spacing, the combined weight of the truck and dog trailer and load (gross mass of the combination) **must not exceed 42.5 tonnes**.

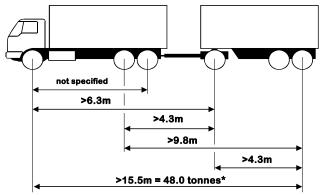
#### Minimum axle spacings for combinations

The driver/operator must make sure the combination has the required axle spacing **before** the vehicle is loaded. If the operator drives a truck and dog trailer combination and wants to carry a load up to 50 tonnes the operator **must** meet the axle dimension requirements set out below.

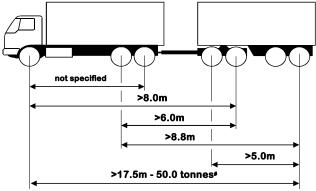
Distance (metres) – axle spacing Mass limit (tonnes)   Exceeding Not exceeding   - 3.7 23.0   3.7 3.8 23.5   3.8 4.0 24.0   4.0 4.2 24.5   4.2 4.3 25.0   4.3 4.5 25.5   4.5 4.7 26.0   4.7 4.8 26.5	
- 3.7 23.0   3.7 3.8 23.5   3.8 4.0 24.0   4.0 4.2 24.5   4.2 24.5 4.3   4.3 4.5 25.5   4.5 4.7 26.0   4.7 4.8 26.5	
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#### Axle spacings in relation to maximum load

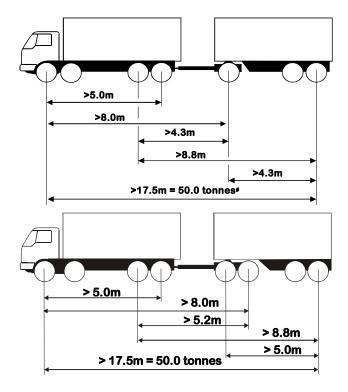
The diagrams below show the typical truck and dog trailer combinations that can be loaded above 42.5 tonnes, and the minimum axle spacings required to achieve the maximum load for each combination.



For a 48 tonne load, the extreme axle spacing must be more than 15.5 metres. Reduce the total load of the combination by 0.5 tonnes for each 0.5m reduction in extreme axle spacing.



For a 50.0 tonne load, the extreme axle spacing must be more than 17.5 metres. Reduce the total load of the combination by 0.5 tonnes for each 0.5m reduction in extreme axle spacing.





# Maximum load the operator can carry - single axles and axle groups

Description of single axle or axle group	Mass Limit
	(tonnes)
Single axles and single axle groups	
Single steer axle	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
Single axle or single axle group fitted with dual tyres	9.0
Twinsteer axle groups Twinsteer axle group without a load-sharing	10.0
suspension system	10.0
Twinsteer axle group with a load-sharing	11.0
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) 450 mm or more	14.0
Tandem axle group fitted with single tyres on one	13.0
axle and dual tyres on the other axle	
Tandem axle group fitted with dual tyres	16.5
Tri-axle groups	
Tri-axle group on a vehicle fitted with single tyres	15.0
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	20.0
Tri-axle group with either single tyres with section	20.0
width of at least 375 mm, dual tyres, or a	
combination of those tyres	

\* Vehicles may operate up to 6.5 tonnes subject to compliance with the conditions set out in the *Class 3 Single Steer Axle Mass Limit Exemption Notice 2006.* 

#### Loaded mass ratio

The total weight of the trailer (trailer plus its load) must not be more than 25% heavier than the weight of the truck (and any load). If the gross mass of the truck and dog trailer combination is not more than 42.5 tonnes the trailer (and its load) must not be heavier than the truck.

### CONSTRUCTION STANDARDS

#### Gradeability of combinations

A Class 3 truck and dog trailer combination must be capable of starting movement on a 12% gradient, and maintaining a constant speed of 70 km/h on a 1% gradient when operating at the nominated gross combination mass.

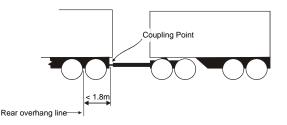
The approximate power to weight ratio required to meet the gradeability standard is 6.4 hp/tonne hp/tonne (4.8 kW/tonne)

#### Suspension systems

The truck and dog trailer combination must be fitted with an approved air suspension system on all axles or axle groups of the combination. The only exception is the steer axle or twin steer axle group of the truck.

#### Coupling rear overhang distance

The operator should keep the distance from the coupling point to the rear overhang line as short as possible. Ideally this distance should be less than 1.8 metres. This is important for safety reasons and to ensure maximum performance. If the operator has any doubt, get engineering advice. The RTA's Vehicle Standards Section has a list of approved engineering signatories.



#### **Driver training**

The operator needs to take special care driving truck and dog trailer combinations that are loaded heavier than 42.5 tonnes as they perform differently to lighter combinations. They are also different from prime mover and semi-trailer combinations. Before the operator drives one of the heavier truck and dog trailer combinations it is important the operator is trained suitably.

If the operator is driving a truck and dog trailer combination covered by the Notice the operator **must** have a driver license allowing the operator to drive a combination of this mass.

# TECHNICAL ENQUIRIES AND FURTHER INFORMATION

The Roads and Traffic Authority Technical Enquiries Section P O Box 1120 PARRAMATTA NSW 2124 Phone: 1300 137 302 Fax: 02 9843 3821 Email: tech-enq@rta.nsw.gov.au