

Agricultural vehicles guide

A guide for their safe and legal use on New Zealand roads

Updated April 2014



OUR PURPOSE

CREATING TRANSPORT SOLUTIONS FOR A THRIVING NEW ZEALAND



NZ Transport Agency

Published April 2014

ISBN 978-0-478-41917-7 (online)

Copyright: April 2014

NZ Transport Agency

If you have further queries, call our contact centre on 0800 699 000 or write to us:

NZ Transport Agency
Private Bag 11777
Palmerston North 4442.

NOTE: The content of this document represents the law at the time of publication.



CONTENTS

2

1. What vehicles and topics are included

3

2. Motor vehicle registration and licensing

6

3. Road user charges (RUC)

7

4. Vehicle equipment

29

5. Warrant of fitness requirements

32

6. Driver licensing

34

7. Transport service licence - agricultural vehicles

35

8. Work time requirements and fatigue management

38

9. Our roads and how you can improve things

39

10. Definitions

1. What vehicles and topics are included

Vehicles included:

- Agricultural tractors (including implements which are transported on tractors such as front-end loaders and mowers mounted on a three-point linkage).
- Agricultural trailers (including loader wagons, ploughs and rakes with their own road wheels).
- Self-drive agricultural machines (including combines, forage and grape harvesters, pea and corn harvesters, telescopic handlers, log harvesting equipment).

Vehicles not included:

- Trucks even if they are used for agricultural purposes (including ground spreaders and agricultural aviation loaders). These are treated just like other trucks that are used on the road.
- All terrain vehicles (ATVs).
- Trailers with integrated equipment such as log haulers and shredders.
- Tractors not used for agricultural purposes.

Topics covered:

- Vehicle registration and licensing.
- Road user charges (RUC).
- Key vehicle safety issues such as being a slow, large vehicle with projecting parts, towing connections and lighting.
- Warrants and certificates of fitness (WoF/CoF).
- Driver licensing.
- Transport service licence (TSL).
- Work time and logbook requirements.
- Fatigue management.

The guide applies to vehicles driven on a road – namely streets and highways, and also any place the public has access to, including bridges, beaches, riverbeds, carparks, reserve lands, wharves and road shoulders.

Refer to section 10: Definitions for more details on these vehicle types.



2. Motor vehicle registration and licensing

Unless they fall into one of the exempt classifications, all motor vehicles used on the road must be registered and licensed.

Registration is the process of adding a vehicle to the motor vehicle register and issuing it with a registration plate(s). Registration includes payment of a registration fee and a registration plate fee. Registration will remain current until either the Registration is cancelled or automatically lapses.

Vehicle licensing is often incorrectly called 'registration'. It is the payment of a fee to use a motor vehicle on public roads. The fee helps to pay for roading projects and road safety programmes. When the fee is paid, you receive a label indicating the expiry date of the vehicle licence.

MOTOR VEHICLES EXEMPT FROM REGISTRATION AND/OR LICENSING

Section 77 (3) of the Land Transport (Motor Vehicle Registration and Licensing) Regulations 2011 provides a defence for operating an unregistered and unlicensed motor vehicle. To claim this defence the operator must prove that the vehicle is being operated lawfully rather than the enforcement officer proving the vehicle is being operated unlawfully.

The following agricultural motor vehicles are covered by the defence and may not be required to be registered or licensed:

- A trailer attached to an agricultural tractor.
- A trailer designed exclusively for agricultural operations and used on a road only when proceeding to or from a farm or when being inspected, serviced, or repaired.

Refer to Factsheet 27: *Exempt vehicles from registration and licensing* for a comprehensive guide – www.nzta.govt.nz/resources/factsheets/27/index.html.

REGISTRATION AND LICENSING

To register: Agricultural motor vehicles can be registered at any Transport Agency registration plate agent by completing an *Application for registration of a VIN exempt vehicle (MR2B)* – no inspection of the vehicle is required. The person registering the vehicle is legally responsible to make sure the registration and the information provided on the form is correct. If there is any doubt as to whether the vehicle meets the agricultural motor vehicle definition, contact the Transport Agency for advice.

To re-license: Agricultural motor vehicles can be re-licensed at an agent of the Transport Agency or, if usage is not being changed, online at www.nzta.govt.nz/online.

To find agent locations please refer to: www.nzta.govt.nz/vehicle/registration-licensing/where.html.

NOTE: Motor vehicle registration and licensing of agricultural vehicles is currently under review.

When registering or re-licensing, the fees paid and the vehicle licence label produced are determined by the 'vehicle type' and the 'usage' that have been provided. To ensure the fees and the vehicle licence label are correct for your vehicle and its operation, please ensure you notify the correct 'vehicle type' and 'usage' for your vehicle.

Agricultural motor vehicles must be registered and licensed with the vehicle types and usages listed below as appropriate for the vehicle and its operation.

VEHICLE TYPE

CODE	VEHICLE TYPE	DESCRIPTION
03	Tractor	Designed principally for traction at speeds not exceeding 50km/h
04	Self-propelled agricultural machine	A motor vehicle (other than a trailer or a tractor) that is designed or adapted principally or exclusively for agricultural purposes, but does not include goods service vehicles
05	Trailer not designed for normal highway use	A trailer adapted principally or exclusively for agricultural purposes that is not used on a road
23	High speed agricultural tractor	Tractors with a maximum speed exceeding 50km/h

USAGE

CODE	USAGE	VEHICLE LICENCE LABEL WILL DISPLAY THE LETTER
16	EB and operated at speeds of 40km/h or less (and therefore WoF exempt)	X
17	EB and operated at speeds over 40km/h (and therefore WoF required)	B
18	Not EB and operated at speeds of 40km/h or less (and therefore WoF exempt)	N
19	Not EB and operated at speeds over 40km/h (and therefore WoF required)	G

If your vehicle has the incorrect vehicle type or usage, the Transport Agency's computer may apply the legislation for non-agricultural vehicles and the following problems may occur:

- A 12 month WoF may not be able to be issued.
- Re-licensing may be prevented as the computer expects a current WoF or CoF to be issued.
- Wrong fees may be paid.
- A wrong licence label may be issued.

The most common reasons for this are:

- Vehicle type has been notified as a mobile machine or trailer when it should be a self propelled agricultural machine or a trailer not designed for normal highway use.
- The usage notified is not one of the agricultural motor vehicle usages above.

CHANGE OF USE

Usage can be changed when re-licensing at agents of the Transport Agency by lodging an *Application to license motor vehicle form* (MR1B). You cannot change usage when re-licensing online. If the vehicle already has a current licence, the usage can be changed by lodging an *Application to change vehicle usage form* (MR14) at agents of the Transport Agency.

Vehicle type can be changed by lodging an *Application to change agricultural motor vehicle details form* (MR16A) online at www.nzta.govt.nz/resources/application-to-change-agricultural-motor-vehicle-details-mr16a/.

Corrections to other data such as gross vehicle mass can be notified by lodging an *Application to change motor vehicle details form* (MR16). Supporting documentation is required in most cases – see the form for more detail.

EB (EXEMPT CLASS B) USAGE

Exempt Class B vehicles are exempt from the payment of some ACC levies, and fuel excise and excise equivalent duty. See *Factsheet 14: Excise duty: who can get refunds and how* www.nzta.govt.nz/resources/factsheets/14/index.html.

Exempt Class B agricultural motor vehicles are:

1. Motor vehicles used on a road only for or solely in connection with agricultural operations:
 - i. A motor vehicle (not being a trailer) designed only or mainly for agricultural operations and used on a road only for agricultural operations, including mobile or movable huts, galleys, and similar motor vehicles used on a road solely in connection with such operations.
 - ii. Nothing in subclause (1) applies to:
 - a. a motor vehicle designed only or mainly for the spreading or cartage and spreading of lime or fertiliser if it is used on a road for the cartage of lime or fertiliser, or
 - b. a motor vehicle designed only or mainly as a weed sprayer on a truck chassis.
2. Farmers' vehicles used on a road only in connection with agricultural operations:
 - › A motor vehicle (not being a trailer) owned by a person carrying on business as a farmer and used on a road only in proceeding, in connection with the owner's agricultural operations, from one part of a farm to another part of the same farm or from one farm to another farm that is owned or managed by the same person.
3. Tractors used on a road only or mainly for agricultural operations:
 - › A tractor, or traction engine, if used on a road either:
 - a. only for agricultural operations, or
 - b. mainly for agricultural operations and otherwise solely in connection with the construction or maintenance of roads.
4. Farmers' tractors used on a road only for specified purposes:
 - i. A tractor and a motor vehicle adapted in its design mainly for use as a tractor, if the tractor or motor vehicle is owned by a person carrying on business as a farmer and is used on a road only for all or any of the following purposes:
 - a. for the owner's agricultural operations
 - b. for the cartage of milk, cream, or whey to or from a dairy factory
 - c. for the cartage of any other produce of a farm, farm implements, stock, or other requisites of any kind whatsoever for a farm if they are carried from a farm to another farm that is owned or managed by the same person or if they are taken during any 1 trip along not more than 21 km of public highway in going from the owner's farm or other place of garage and in returning to that farm or that place.
 - ii. A tractor does not cease to be a tractor for the purposes of subclause (1) merely because it is fitted with a readily detachable box or platform that is used for the carriage of goods.
5. Agricultural contractors' tractors used on a road only for cartage or haulage of farm implements:
 - › A tractor owned and used by a person carrying on business as an agricultural contractor and used on a road only for all or any of the following purposes:
 - a. the cartage by means of a trailer of farm implements if the tractor and trailer are not taken during any 1 trip for the cartage of farm implements along more than 21 km of public highway in going from the usual place of garage and in returning to that place:
 - b. the haulage on its own wheels of a farm implement or farm machine.

3. Road user charges (RUC)

3.1 GENERAL

The cost of using New Zealand's roads is recovered from road users via levies in the price of some fuels, ie petrol, CNG and LPG, or through RUC for diesel powered vehicles.

The majority of agricultural vehicles are however now exempt from payment of RUC. Information on those vehicles that are exempted can be found at:

www.nzta.govt.nz/vehicle/registration-licensing/ruc/exemptions.html.



4. Vehicle equipment

Before your vehicle goes on the road, make sure it meets regulatory requirements including signage, lighting and towing requirements.

4.1 WHAT VEHICLE EQUIPMENT MUST BE FITTED AND WHAT IS ALLOWED?

The law for vehicle equipment is set out in Land Transport Rules available at:

www.nzta.govt.nz/resources/results.html?catid=2.

Many of the requirements are the same for any vehicle that is used on the road, for example, you must be able to stop within 7 metres from a speed of 30km/h.

Cars, trucks and buses fit into specific vehicle classes. They must meet safety and emissions standards according to these classes. Tractors, agricultural trailers and agricultural machines do not fit into this requirement. If you want to find what requirements apply to your equipment, look in each rule under 'unclassified vehicles'.

There are many types of vehicles in this group and they have very different safety issues and usage characteristics compared to a car or truck. These include:

- large size and different handling performance
- weight – heavy axles that could damage roads and bridges
- functional but sometimes dangerous, projecting parts
- non-standard (and sometimes inadequate) lighting and signalling equipment
- non-standard towing connections – often with an unbraked trailer.

You can however drive your agricultural vehicle safely and legally if you follow the legal information and good practice guidance in this section.

4.2 PROJECTING PARTS

If the vehicle has a projecting part which has a functional purpose, you must minimise the risk to other road users when you drive the vehicle on road.

Applicable legislation

Land Transport Rule: External Projections, 2001.

Summary of the Rule

1. A vehicle may be fitted with a protruding functional object or fitting provided the part is not likely to injure a person.
2. A protruding object or fitting that has a functional purpose must be installed or positioned so that the risk of it causing injury to a person is minimised.
3. Components of a motor vehicle, including attached implements, must be such that the risk of them hooking a vehicle, or injuring a person, is minimised.
4. A protruding object or fitting must not adversely affect driver vision or driver control.

Good practice

Front mounted tines, forks, buckets etc are potentially dangerous if your vehicle is involved in a frontal crash.

Projections must be positioned to minimise the risk to other road users. Do an assessment based on the design of the vehicle, and the function and shape of the projecting parts. Work out a solution based on this assessment.

The pictures below show vehicles with buckets. When travelling, keep the bucket as low as possible. This maximises visibility for the driver and the stability of the vehicle. The leading edge of a front-mounted bucket can be rotated downward or upward so that it is safer on road.



If potentially dangerous forward-facing fittings such as headers can be readily removed, then they should be towed behind the vehicle on a trailer.

If available, protective covers should be fitted to projecting forward-facing fittings that cannot be towed behind. In the example below, a protective cover is fitted over the tines and is also used to correctly mount and position hazard panels.



4.3 VEHICLE SIZE

The legislation states the maximum allowed width, height and other dimensions for vehicles allowed on New Zealand roads. If your vehicle fits within this 'envelope' it is called a standard-size vehicle. If your vehicle exceeds any of these sizes, it is called 'overdimension' (OD) and must have the correct signage to warn other road users of this potential hazard.

Applicable legislation

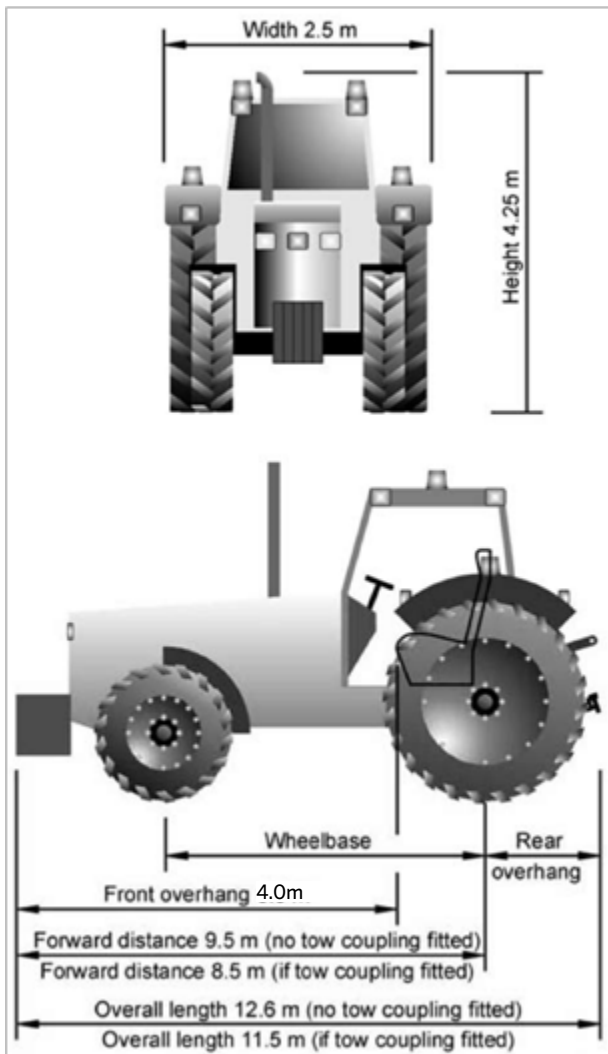
Land Transport Rule: Vehicle Dimensions and Mass, 2002.

Standard size vehicles

DIMENSION REQUIREMENTS FOR STANDARD SIZE VEHICLES		
DIMENSION	MAXIMUM DISTANCE	COMMENTS
Width	2.5m	<p>Measurement does not include:</p> <ul style="list-style-type: none"> ▪ collapsible mirrors which extend no more than 240mm from the body ▪ direction indicators and side marker lamps ▪ cab exterior grab rails that extend no more than 50mm from the side of the body ▪ ropes, lashings, straps, chains and related connectors and tensioning devices that extend no more than 25mm from either side, and that are not permanently or rigidly fixed to the vehicle ▪ the bulge towards the bottom of a tyre
Overall length	<p>12.6m Rigid vehicle (no tow coupling fitted)</p> <p>11.5m Towing vehicle (tow coupling fitted)</p> <p>12.5m Simple trailer</p> <p>19m Towing vehicle and semi-trailer</p> <p>18m Towing vehicle and semi-trailer with 2 steering axles within a quad axle set</p> <p>22m Towing vehicle and simple trailer</p> <p>20m Towing vehicle and full trailer or towing vehicle and 2 trailers</p> <p>Towing vehicle with a motor vehicle other than a trailer</p>	<p>Measurement does not include collapsible mirrors</p>

DIMENSION	MAXIMUM DISTANCE	COMMENTS
Height	4.25m	Measurement does not include load restraining devices (ropes, lashings, straps, chains, covers and related connectors and tensioning devices) that extend no more than 25mm above the vehicle, and that are not permanently or rigidly fixed to the vehicle
Forward distance	9.5m (no tow coupling fitted) 8.5m (including tow coupling if fitted)	Forward distance is measured from the rear axis to the front of the vehicle or any front overhanging load, whichever is the greatest Measurement does not include collapsible mirrors
Rear overhang	Vehicles gross vehicle mass (GVM) 3500kg or less: 4m Vehicles GVM greater than 3500kg with non-steering rear-most axle, the lesser of 4m from the rear axis or 70% of the fore-most axle to the rear axis. With steering rear-most axle, the lesser of 4.25m from the rear axis or 70% of the fore-most axle to the rear axis	Rear overhang is measured from the rear axis to the rear of the vehicle
Front overhang (of an agricultural motor vehicle)	4m	Front overhang is measured from the front edge of the driver's seat in the rear-most position to the front of the vehicle

Maximum permissible dimensions for standard-size vehicles



Rear axis: The rear axis is the axis about which the rear of the vehicle turns when cornering. In the above diagram, the rear axis is the rear axle.

Overdimension vehicles

If your vehicle exceeds any of the sizes in the 'envelope' of a standard-size vehicle, it is called 'overdimension' (OD) and must have signage to warn other road users of this hazard these vehicles may present to them. It is important to use the correct type of signage so that other road users know what to expect when they see it. This depends whether its size puts it in category 1 or category 2 or a higher category. Do not display OD signage unless your vehicle or combination is OD.

What do I do if my vehicle is overdimension?

If it is OD, your agricultural vehicle will probably fall into category 1 or category 2 and it must have the appropriate signage and operate according to specified conditions.

If your vehicle exceeds any of the dimensions of category 1 or 2, you must obtain an overdimension permit before you start your journey. These are available from the Overdimension Permit Issuing Agency (OPIA). Contact them by phoning 0800 OVERSIZE (0800 683 774) or fax (06 953 6313).

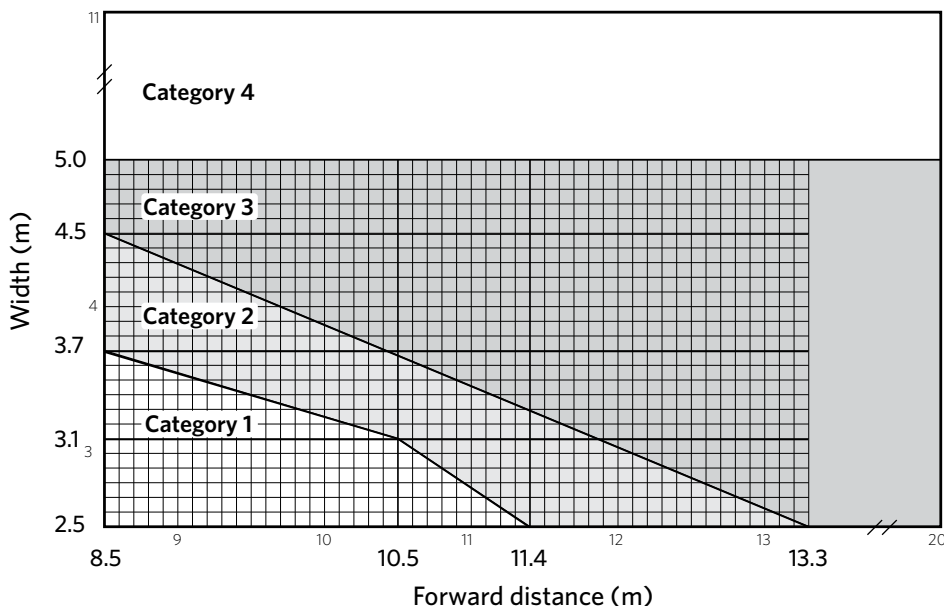
Vehicles over 4.25m high are overdimension. If your vehicle exceeds 4.25m in height, you need written permission to use it on the road from the authority or owners (eg the Transport Agency, road or rail controlling authorities, and power supply and network companies) that control any overhead obstruction such as power lines and bridges.

Is my OD vehicle category 1 or category 2?

The requirements for OD vehicles depend on five dimensions:

- width
- length
- forward distance
- front overhang
- rear overhang.

This graph shows which category your vehicle (and load) will fall into based on the combined effect of width and forward distance.



Reading the graph

Find the horizontal line on the graph that matches your vehicle's width, and the vertical line that matches your vehicle's forward distance. Where these two lines meet determines your category. Work out the category for each vehicle in a combination and follow the requirements for the highest category vehicle.

All five dimensions are shown in the following table for categories 1 and 2, with the maximum dimensions of a standard-sized vehicle for comparison. If any dimension is in the higher category, the vehicle belongs to the higher category.

DIMENSION REQUIREMENTS FOR CATEGORY 1 AND CATEGORY 2			
	STANDARD SIZE VEHICLE	CATEGORY 1	CATEGORY 2
Width	2.5m	See graph for combinations of width/forward distance ranges from: 2.5/11.4m 3.1/10.5m 3.7/8.5m	See graph for combinations of width/forward distance ranges from: 2.5/13.3m 4.5/8.5m
Forward distance	9.5m (but 8.5m for vehicle with tow coupling)		

Overall length	12.6m Rigid vehicle (no tow coupling fitted) 11.5m Towing vehicle, full trailer, semi-trailer (tow coupling fitted) 18m Towing vehicle and semi-trailer 20m Towing vehicle and full trailer or simple trailer or towing vehicle and 2 trailers or towing vehicle with a motor vehicle other than a trailer	Up to 25m	Up to 35m
Front overhang (for an agricultural motor vehicle)	4m	Up to 7m	Up to 10m
Rear overhang		Up to 7m	Up to 10m

HAZARD WARNING REQUIREMENTS FOR CATEGORY 1 AND CATEGORY 2

VEHICLE CATEGORY	REQUIRED HAZARD WARNING EQUIPMENT	PILOTING REQUIREMENTS
Category 1	Day Flags or panels fitted on each side at the front and rear, headlights on low beam if more than 2.5m wide.	Day One class 2 pilot and OVERSIZE sign if width exceeds 3.1m and speed exceeds 40km/h.
	Night Hazard panels, amber beacon and OVERSIZE sign, front and rear, if more than 3.1m wide.	Night One class 2 pilot and OVERSIZE sign if width exceeds 3.1m.
Category 2	Day Panels fitted on each side at the front and rear, headlights on low beam and OVERSIZE sign, front and rear, if more than 3.1m wide and amber beacon if more than 3.7m wide.	Day One class 2 pilot and additional class 2 pilot if rear overhang exceeds 7m.
	Night Hazard panels, amber beacon and OVERSIZE sign, front and rear, if more than 3.1m wide.	Night One class 2 pilot and additional class 2 pilot if rear overhang exceeds 7m.

Required signage

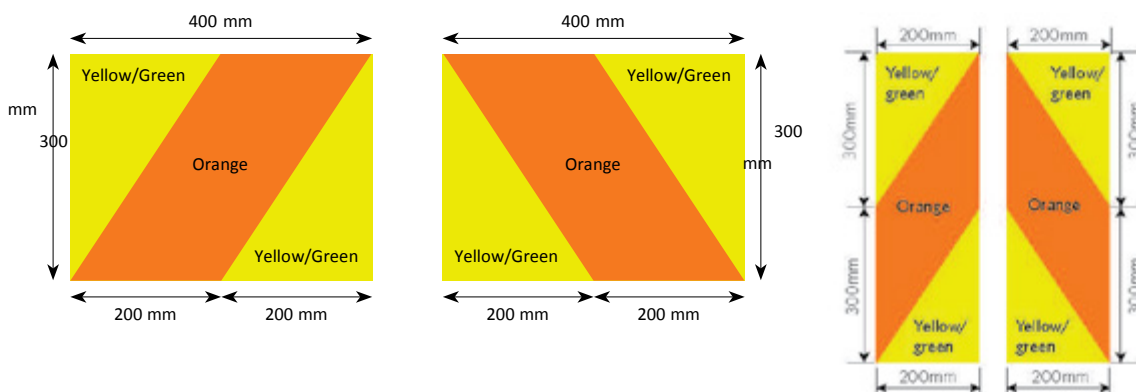
Flags:

- must be fluorescent yellow at least 400mm long × 300mm wide or 600mm long x 200mm wide
- must not be used at night
- must only be used if the vehicle is overdimension – take the flag off if the vehicle or load is no longer overdimension
- should be fitted in a way that indicates the overdimension part of the vehicle
- high visibility paint may be used to draw attention to excess front overhang, for example, the sides of the bucket of a front end loader. The use of paint in this way recognises that attaching flags or hazard panels to certain types of projecting equipment is not always practical.



Hazard warning panels:

- must be reflective yellow-green with a reflective orange diagonal stripe (see diagrams below)

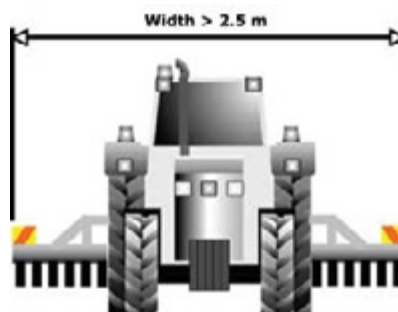


- are preferred over flags as the panels are more visible during both day and night
- only the New Zealand-style hazard panels are allowed. Red and white hazard panels must not be used
- only use hazard panels when required to – do not leave them displayed on the vehicle when the vehicle is only standard size.

See also *Factsheet 53, Overdimension vehicles and loads* at www.nzta.govt.nz/resources/factsheets/53/docs/53-overdimension.pdf for more detailed information including alternative styles of hazard warning panels.

Hazard panels

The following example shows the correct hazard panel location and orientation. Panels show the excess dimensions to other road users and are visible from the front and rear or to the side for front and rear overhang.



Oversize sign:

- must be black lettering on yellow-green background (see diagram below)
- may be in two parts: OVER and SIZE
- must be visible to both the front and the rear
- only use oversize signs when required to. Do not leave them displayed on the vehicle when the vehicle does not require them.

**Good practice: Oversize signs**

The oversize sign must be displayed on the oversize vehicle itself. Other road users must drive cautiously if they see it.

**Class 2 pilot requirements**

If your vehicle is very large, it may require a pilot vehicle with flashing yellow roof lights and a roof-mounted sign to warn other road users. The pilot vehicle will either say 'LONG LOAD FOLLOWS' or 'WIDE LOAD FOLLOWS'.

Becoming a class 2 pilot

To complete a class 2 load pilot training course you need:

- a current full class 1 New Zealand driver licence
- to prove you have good knowledge of the safe piloting practice outlined in the *Load pilot driver code*.

There is a class 2 pilot test in the back of the Load pilot driver code (available at www.nzta.govt.nz/resources/load-pilot-driver-code/index.html). The test is open-book and multi-choice. Sit the test in your own time at your own pace. Send the test assessment back to the OPIA for marking. If you have passed, the OPIA will send you your class 2 pilot certificate which is evidence that you have completed a load pilot course approved by the Transport Agency. Proof of holding this certificate must be carried and produced on demand as required by an enforcement officer

For more information, contact the OPIA (Private Bag 11777, Palmerston North 4442) or call 0800 683 774.

Key overdimension operating requirements

- If your oversize vehicle is going to use more than half of the available road width, you will need a pilot vehicle.
- Where it is safe to do so, an oversize vehicle must allow other vehicles to pass as soon as possible.
- During the day, all oversize vehicles must travel with their headlights on low beam; they must display a flashing amber light if they're more than 3.7 metres wide and if they're being escorted by a load pilot vehicle.
- At night, all oversize vehicles must use a flashing amber beacon and must be clearly visible (in clear weather) from at least 200 metres.
- Oversize vehicles must use designated routes if they are provided by the road controlling authority (the local council or the Transport Agency).

Travel time restrictions

Overdimension vehicles must meet certain travel time restrictions so that they do not cause unreasonable delay to other road users. Category 1 vehicles must not travel:

- between 7am and 9am, or 4pm and 6pm, on Monday to Friday inclusive, in any city area
- between 10am and 1pm, or 4pm and 7pm, on Saturday or Sunday
- at other times when there are unusually heavy traffic volumes.

Category 2 vehicles must not travel at these times and also must not travel on national or provincial public holidays or at times when travel is likely to cause significant delay to other road users. However it is possible to obtain permission to operate during these travel restrictions if the vehicle's swept path performance has been verified by a certifier appointed by the Transport Agency.

Note: An agricultural vehicle category 1 or 2, does not have to comply with these travel time restrictions **provided** the vehicle or any load or equipment it is carrying does not project outside the lane in which it is travelling.

Contact: The Transport Agency's contact centre at 0800 699 000 for further assistance.

4.4 VEHICLE WEIGHT LIMITS AND OVERWEIGHT PERMITS

There are strict controls on vehicle weights and axle loads. These limits are in place to protect New Zealand's roading infrastructure.

If your vehicle or combination exceeds the legal weight limits, it is overweight and would require an overweight permit to be driven on a road. However, if the vehicle is carrying a divisible load, or is extremely heavy, it will not qualify for an overweight permit. Extremely heavy vehicles cannot be driven on our roads, and will need to be transported rather than driven, so check this out before buying a vehicle.

Applicable legislation

Land Transport Rule: Vehicle Dimensions and Mass, 2002

On-road weight limits

The following mass limits indicate the maximum mass (weight) allowed on roads.

There are three road-imposed legal mass limits that you must not exceed:

1. The individual axle limit, and
2. The axle set limit, and
3. The combined axle set limit, which depends on the distance from the first axle in any set to the last axle in any other set.

Note: As well as not exceeding an individual axle limit you must also meet the axle set limit. This means that you may not be able to load each axle to its maximum legal limit, because this could overload the axle set above the legal limit.

Your tractor or agricultural machine also has structural mass limits that should not be exceeded. Those limits will be specified by the vehicle manufacturer and should be followed. Exceeding those limits may damage the vehicle or prevent the safe operation of the vehicle, eg it may not stop safely.

For many large tractors and agricultural machines, their structural limits exceed the allowable mass limits permitted on the road. These road limits are there to prevent road and bridge damage. For general road operation, a vehicle's mass must not exceed those specified in the following tables.

MAXIMUM MASS ON INDIVIDUAL AXLES	
TYPE OF AXLE	MASS (KG)
Single-standard tyred*	6000
Single large-tyred	7200
Twin-tyred (standard or large-tyred)	8200
MAXIMUM SUM OF AXLE MASS ON TWO AXLES IN A TANDEM AXLE SET	
TYPE OF AXLE	MASS (KG)
2 single standard-tyred axles	11,000
2 single large-tyred axles	13,000
2 twin-tyred axles:	
(a) spaced less than 1.3m from the first axle to the last axle	14,500
(b) spaced 1.3m or more but less than 1.8m from the first axle to the last axle	15,000
(c) spaced less than 1.8m from the first axle to the last axle	15,500

Maximum sum of mass on any two or more axles that together do not constitute a single tandem axle set, single tri-axle set or single quad-axle set, where the distance from the centre of the first axle to the centre of the last axle is 1.8 m or more (including maximum gross mass)	
TYPE OF AXLE	MASS (KG)
1.8m but less than 2.5m	15,500
2.5m but less than 3.0m	17,500
3.0m but less than 3.3m	19,000
3.3m but less than 3.6m	20,000
3.6m but less than 4.0m	21,000
4.0m but less than 4.4m	22,000
4.4m but less than 4.7m	23,000
4.7m but less than 5.1m	24,000
5.1m but less than 5.4m	25,000
5.4m but less than 5.8m	26,000
5.8m but less than 6.4m	27,000

*See section 10: Definitions

6.4m but less than 7.0m	28,000
7.0m but less than 7.6m	29,000
7.6m but less than 8.2m	30,000
8.2m but less than 8.8m	31,000
8.8m but less than 9.4m	32,000
9.4m but less than 10.0m	33,000

If your vehicle or combination exceeds the individual axle limit, the axle set limit, or the combined axle set limit, it is overweight and will require an overweight permit.

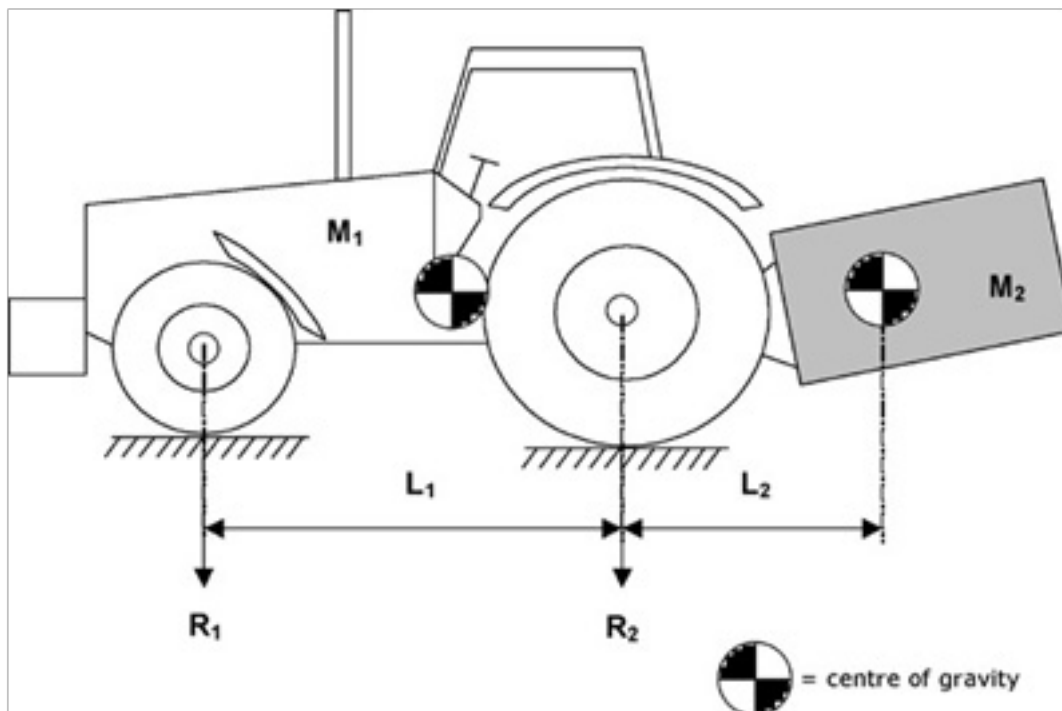
Additionally, to steer the vehicle safely, the mass on the steering axle of an agricultural vehicle must be at least 20% of the total mass of the vehicle at all times.

For a heavy agricultural vehicle towing a heavy trailer, except those operating under an overweight permit with a vehicle axle index (VAI) exceeding 1.1 or those restricted to an operating speed of 40km/h or less, the gross mass of the trailer must not exceed 1.5 times the gross mass of the towing vehicle. For more information on VAI, see 'Do you need an overweight permit?' on p19.

Weight distribution on agricultural vehicles

WORKING OUT AXLE WEIGHTS

The following diagram and equations allow you to estimate the approximate mass of the tractor axles when equipment is lifted on a rear three-point linkage. This could be used if you do not have access to a weighbridge but you want to find out if you might need an overweight permit. It is for assessment only. For accurate weights, you will need to visit a local weighbridge.



L = length (mm); M = mass (kg); R = mass (kg)

These equations assume the tractor mass (M_1) is split 40/60 between the front and rear axles before the implement mass (M_2) is fitted.

These equations require you to correctly estimate the centre of gravity of M_2 . This may or may not be at the centre of M_2 .

$$R_2 = 0.6M_1 + \frac{M_2(L_1 + L_2)}{L_1} \qquad R_1 = M_1 + M_2 - R_2$$

Note: After doing the calculations check that: $M_1 + M_2 = R_1 + R_2$ and $R_1 > 0.2 (M_1 + M_2)$.

Example: John Deere 6820 with a rear mounted mower:

Input data:	Output data:
$M_1 = 5,580\text{kg}$	$R_2 = (0.6 \times 5580) + (1200 \times (2650 + 1500))/2650$
$L_1 = 2650\text{mm}$	$R_2 = 5230\text{kg}$
$M_2 = 1200\text{kg}$	$R_1 = 5580 + 1200 - 5230$
$L_2 = 1500\text{mm}$	$R_1 = 1550\text{kg}$

Checks:

$M_1 + M_2 = 6780\text{kg} = R_1 + R_2$; and

$R_1 (1550\text{kg})$ is $> 0.2 (M_1 + M_2) (1356\text{kg})$

(ie at least 20% of mass on the steering axle)

DO I NEED AN OVERWEIGHT PERMIT?

The following diagram and equations allow you to calculate if your vehicle needs an overweight permit. They are based on the Vehicle Axle Index (VAI) which is defined as the maximum ratio of actual axle weight to the reference axle weight for that particular axle.

Because of their axle masses, many agricultural vehicles and agricultural vehicle combinations exceed the legal mass limits.

To overcome this road controlling authorities have agreed on overweight permits that allow you to operate legally on the road up to certain axle weights. Overweight permits are only issued to indivisible (ie non-divisible) loads.

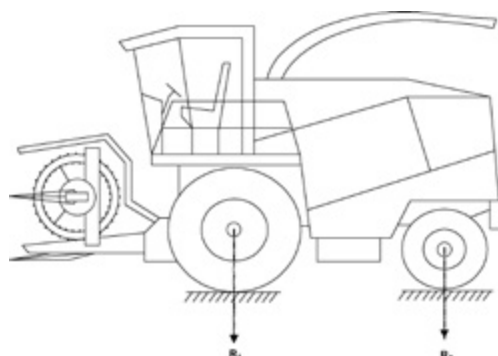
Road controlling authorities have agreed on maximum values for the VAI for different types of vehicles. These are detailed in the Transport Agency's *Overweight permit manual* (OPM), available at: www.nzta.govt.nz/resources/overweight-permit-manual/docs/overweight-permit-manual.pdf.

In regard to overweight permits, agricultural vehicles are regarded as mobile plant and have a maximum VAI of 1.20. Mobile plant is defined as vehicles that operate mainly off-road and do not carry a separate payload while on the road. The Transport Agency has made an exception to this definition to allow a tractor carrying equipment on a three-point linkage to be treated as mobile plant.

The reference axle weight is computed from the axle type and the tyre size fitted. The following example demonstrates a check for a typical agricultural vehicle.

STEP 1: DOES MY VEHICLE REQUIRE AN OVERWEIGHT PERMIT?

For example, the forage harvester shown below has issues in addition to its projecting parts (see section 4.2), and the weight distribution needs to be checked to see if it needs an overweight permit in order to drive on the road.





Input data (eg from weighbridge)

Actual mass on axle 1 (the front axle) $R1 = 11,000\text{kg}$

Actual mass on axle 2 (the rear axle) $R2 = 3000\text{kg}$

Distance between the axles is 3.0m

Tyres fitted are 800/65 R32 (front) and 540/65 R24 (rear). Both axles are single large-tyred.

There are three road-imposed legal mass limits that you must not exceed:

1. The individual axle limit, and
2. The axle set limit, and
3. The combined axle set limit, which depends on the distance from the first axle in any set to the last axle in any other set.

Note: As well as not exceeding an individual axle limit you must also meet the axle set limit. This means that you may not be able to load each axle to its maximum legal limit, because this could overload the axle set.

From the section On-road weight limits, the maximum mass permitted on a single large-tyred axle (irrespective of tyre size) is 7200kg. Since the vehicle has only two axles, and these are 3m apart, they are legally considered to be two individual axles, and not an axle set. Because of this, the second road-imposed legal mass limit (the axle set limit) doesn't apply here.

Check the following:

- Front axle: $R1 (11,000\text{kg}) > 7200\text{kg}$. Therefore this vehicle does exceed the individual axle limit on the front axle and the vehicle can only travel by road if it has an overweight permit.
- Rear axle: $R2 (3000\text{kg}) < 7200\text{kg}$. Therefore this vehicle does not exceed the individual axle limit on the rear axle.
- The mass limit for 3.0m is 19,000kg, therefore this vehicle does not exceed the combined axle set limit (it weighs only 14,000kg).

Because this vehicle exceeds one of the three road-imposed legal mass limits (exceeds 7200kg on the front axle) and it is therefore overweight, and can only travel by road if it has an overweight permit from the road controlling authority.

STEP 2: IS MY VEHICLE ELIGIBLE FOR AN OVERWEIGHT PERMIT?

The vehicle must not be carrying a divisible load, have a VAI less than or equal to the VAI limit, and not be operating in excess of any applicable manufacturers safe working load (including the manufacturer's vehicle ratings or the tyre ratings).

Actual axle weights are given above. Reference axle weights are found in the OPM in table R2(b). To calculate the axle index for each axle, use axle index = axle weight/ reference axle weight.

AXLE	FRONT	REAR
Actual axle weights (tonne)	11.0	3.0
Reference weights (tonne) (Table R2)	800/65 R32 = 9.5	540/65 R24 = 7.0
Vehicle axle index (VAI)	11.0/9.5 = 1.15	3.0/7.0 = 0.42

Note: The highest axle index (AI) is the vehicle axle index (VAI). Therefore, the VAI for this vehicle is 1.15, which is less than the 1.20 limit for mobile plant.

As the vehicle is not carrying a divisible load, it is eligible for an overweight permit from the road controlling authority as long as the permit would not exceed any applicable safety ratings.

WHERE TO APPLY FOR AN OVERWEIGHT PERMIT

Road controlling authorities issue overweight permits for roads under their control to complying vehicles. Apply to the road controlling authority for the roads you will be using. Overweight permit applications forms are available the following link: www.nzta.govt.nz/vehicle/your/over/index.html.

Simply fill out the application form and return it to the relevant road controlling authority. They will then issue you with your overweight permit once they have checked it for eligibility.

The Transport Agency's *Overweight permit manual* is available from www.nzta.govt.nz/resources/overweight-permit-manual/docs/overweight-permit-manual.pdf.

TYPES OF OVERWEIGHT PERMITS

The type of permit you can apply for depends on the number of trips you wish to make, and length of time for which you wish to operate the vehicle on the road. The following table provides the details of your choices.

TYPE OF PERMIT	THIS PERMIT IS ISSUED WHEN:	PERMIT PERIOD
Single trip permit	<ul style="list-style-type: none"> A single journey is planned, from a defined origin to a defined destination 	The permit period will generally not exceed 7 days.
Multiple trip permit	<ul style="list-style-type: none"> Multiple journeys are planned from a single origin to a single destination 	The permit period will not exceed 1 month. If external bridge supervision is required, the exact number of trips must be specified.
Continuous permit	<ul style="list-style-type: none"> the vehicle is to use a network of roads that is 100km or shorter in length, or the vehicle is to travel on roads within a 50km radius from the vehicle's normal operating base <p>Special conditions apply to these continuous permits. Refer to the Transport Agency's <i>Overweight permit manual (OPM)</i>, section 3.</p>	The permit period will not exceed 2 years. The vehicle's travel with this permit will be limited to the roads specified on the permit.
Area permit	<p>Travel is on a specified and documented network of roads.</p> <p>Special conditions apply to area permits.</p> <p>Refer to the Transport Agency's <i>Overweight permit manual (OPM)</i>, section 3.</p>	<p>The permit period will not exceed 2 years.</p> <p>The vehicle's travel with this permit will be limited to the network of roads specified on the permit.</p>

4.5 BRAKING

The ability to stop is critical to the safe operation of your vehicle, and even more so if you are driving a vehicle combination, ie towing a trailer which is possibly unbraked. There are various requirements for brake performance which your vehicle needs to meet. When driving on a road, be sure to lock the left and right brake pedals together if the vehicle has independent left and right wheel brakes.

Applicable legislation

Land Transport Rule: Light Vehicle Brakes, 2002 Land Transport Rule: Heavy Vehicle Brakes, 2006

Service brake

- The service brake of a vehicle must be able to be applied by the driver from the driver's normal driving position in a controlled and progressive manner.
- Except as specified below, an agricultural vehicle, together with any trailer(s) towed, must be able to stop within a distance of 7m from a speed of 30km/h.
- An agricultural vehicle that was first registered in New Zealand before 1 February 1977 and was manufactured with a service brake acting on two wheels only, must be capable of stopping within a distance of 9m from a speed of 30km/h. This includes any trailers towed.

Parking brake

- The parking brake of any agricultural vehicle or any agricultural trailer being towed by an agricultural vehicle, must be able to be applied by the driver from the normal driving position using one control only.
- The parking brake of an agricultural vehicle must be capable of:
 - › stopping the vehicle within a distance of 18m from a speed of 30km/h, or
 - › holding the vehicle stationary on a slope of 1 in 5 whether facing uphill or downhill.

Stopping distances

Stopping distance is measured from the point at which movement of the brake control begins to the point at which the vehicle is brought to a complete stop.

4.6 LIGHTING AND SIGNALLING

Lighting equipment is required so that you can see and be seen, and so that you can communicate with other road users, eg when turning or stopping. Required lamps must be fitted and maintained in good condition and working order.

Applicable legislation

Land Transport Rule: Vehicle Lighting, 2004

MANDATORY LIGHTING EQUIPMENT FOR AGRICULTURAL MOTOR VEHICLES OPERATING AT NO MORE THAN 30KM/H

Vehicles that are operated at speeds not exceeding 30km/h require less lighting equipment than vehicles operated at higher speeds.

The table below specifies the lamps that must be fitted to agricultural tractors and machines operating at no more than 30km/h.

MANDATORY LIGHTING EQUIPMENT FOR TRACTORS AND MACHINES OPERATING AT NO MORE THAN 30KM/H

Headlamps	One pair of white or amber dipped-beam headlamps if operated during the hours of darkness. The light must be visible from 100m away.
Rear position lamps (tail lights)	At least 1 red rearward-facing position lamp if operated during the hours of darkness. The light must be visible from 100m away.
Registration plate illumination lamp	At least 1 lamp to illuminate the registration plate so that it is visible from 20m away during the hours of darkness.
Amber beacon	At least 1 amber beacon fitted to vehicles first registered anywhere from 1/6/2013. The light must be visible from 100m from the front and rear. See below for information about beacons.
Additional lighting equipment is required for certain overdimension vehicles, see section 4.3 for details.	

Many tractors and machines were originally fitted with additional permitted lamps, such as high-beam headlamps, direction indicator lamps, front and rear position lamps, stop lamps and rear reflectors. It is highly recommended that such lamps remain fitted, or even be retro-fitted, and be maintained in good condition and working order. For more details about the requirements for such lamps, please refer to the tractor WoF requirements <http://vehicleinspection.nzta.govt.nz/virms/in-service-wof-and-cof/tractors>.

Agricultural trailers do not require any lamps, but if operated during the hours of darkness, they require at least one red rear position lamp. Amber beacons may also need to be fitted, see below for more information about beacons.

MANDATORY LIGHTING EQUIPMENT FOR AGRICULTURAL MOTOR VEHICLES OPERATING AT MORE THAN 30KM/H

These vehicles have to meet normal WoF requirements for lighting equipment, please refer to the VIRM tractor section for specific requirements for these and other lamps fitted to the vehicle vehicleinspection.nzta.govt.nz/virms/in-service-wof-and-cof/tractors. The table below specifies the lamps that are required to be fitted to agricultural tractors and machines operated at more than 30km/h.

MANDATORY LIGHTING EQUIPMENT FOR TRACTORS AND MACHINES OPERATING AT MORE THAN 30KM/H

Headlamps	One pair dipped-beam headlamps which must illuminate the road ahead for 50m.
Rear direction indicator lamps	One or 2 pairs of rear direction indicator lamps. The light must be visible from 100m away. If first registered in NZ before 1/1/2006, must have 1 or 2 pairs of rear direction indicator lamps if the vehicle's construction, equipment or loading prevents driver's arm signals from being seen from behind the vehicle.
Front position lamps	If vehicle was first registered in NZ from 1/1/1978 or is more than 1.5m wide, must have one pair of forward-facing position lamps. During the hours of darkness the light must be visible from 200m away.
Rear position lamps	One or 2 pairs of rearward-facing position lamps. During the hours of darkness the light must be visible from 200m away. A vehicle first registered before 1/1/1978 or that is no more than 1.5m wide may, instead of a pair of lamps, have a single lamp fitted to the right of the vehicle's centreline.

Stop lamps	One or 2 pairs of stop lamps. The light must be visible from 100m away. If first registered in NZ before 1/1/1978, must have 1, 2 or 4 stop lamps if the vehicle's construction, equipment or loading prevents driver's arm signals from being seen from behind the vehicle.
Registration plate illumination lamp	At least 1 lamp to illuminate the registration plate so that it is visible from 20m away during the hours of darkness.
Red rear reflectors	One pair of red rear reflectors.
Amber beacon	At least one amber beacon fitted to vehicles first registered anywhere from 1/6/2013. The light must be visible from 100m from the front and rear. See below for information about beacons.
Additional lighting equipment is required for certain overdimension vehicles. See section 4.3 for details.	

Any trailers operated at more than 30km/h must meet full WoF or CoF requirements, please refer to the appropriate VIRM trailer section vehicleinspection.nzta.govt.nz/virms/in-service-wof-and-cof.

BEACONS, HAZARD WARNING LIGHTS AND WORK LAMPS

Agricultural vehicles are usually large and slow-moving and can therefore present a potential hazard on the road to other road users. Operating an amber beacon warns other road users that your vehicle may present a potential hazard.

Amber beacons are now mandatory on some vehicles. A tractor or machine first registered anywhere from 1/6/2013 must be fitted with an amber beacon that is clearly visible from the front and rear of the vehicle for at least 100m. If a trailer or implement obscures the beacon, then one or more beacons must be fitted to the trailer or implement to ensure that the required visibility is complied with.

It is recommended that agricultural tractors and machines first registered before 1/6/2013 be fitted with an amber beacon.

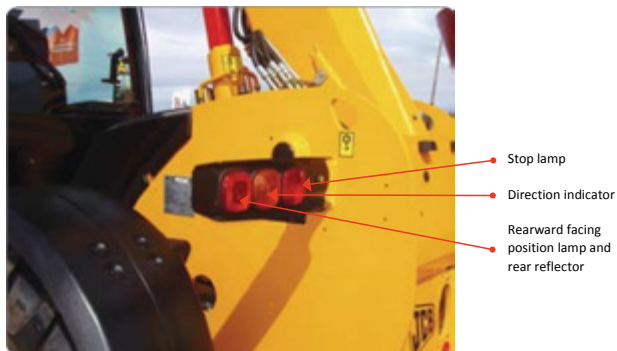
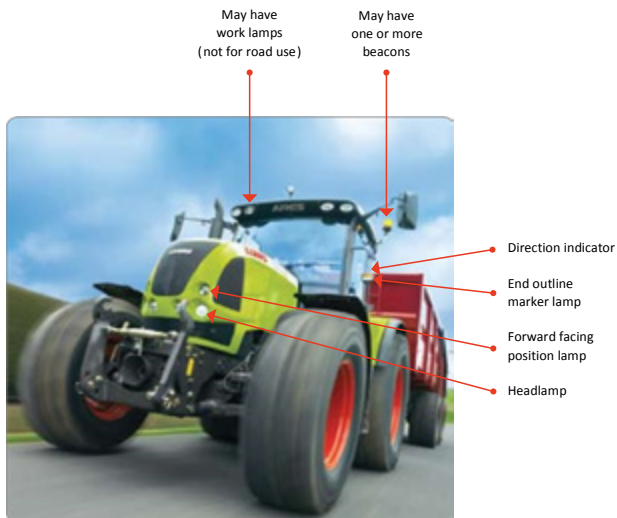
It is permitted to use direction indicator lamps as hazard warning lights while the vehicle is stationary or moving slowly to indicate a temporary hazard to traffic. The indicators must still be available to signal right or left turns.

Agricultural vehicles are often fitted with high intensity work lamps that light up work areas around the vehicle. These lamps must always be switched off when the vehicle is travelling on the road.

OBSCURED LAMPS

If a component, attachment, trailer or load obscures a mandatory lamp, then you must fit a replacement lamp in a position where the lamp complies and can be seen by other road users.

LIGHTS YOUR VEHICLE SHOULD HAVE SO YOU CAN SEE AND BE SEEN



4.7 TOWING

When you are towing a vehicle, it is essential that the combination can stop safely (within the required distance from a given speed). With agricultural vehicles, this is often critical because many agricultural trailers are unbraked. Towing speeds therefore need to be carefully controlled. Towing connections must be strong and secure. The hitch pin must be large enough, not worn, and must be well secured in position. A safety chain fitted between the vehicles must be of adequate strength.

COUPLINGS

Size

A coupling pin must be of a diameter appropriate for the diameter of the tractor or trailer coupling, whichever has the smaller diameter hole. The diameter of a coupling pin must not be smaller than 75% of the larger coupling hole.

Wear

Coupling pins and towing hooks must not be repaired or welded. The components must be replaced if they are damaged, deformed, fractured or worn at any one point to below 90% of the original diameter, or the manufacturer's wear tolerance, whichever is less.

Coupling pins must be securely retained by a locking mechanism. Tow-eyes must not be repaired. The tow-eye must be replaced if it is worn at any one point beyond 10% of the original diameter or the manufacturer's wear tolerance, whichever is less, or if it is damaged, deformed or fractured.

SAFETY CHAIN

A safety chain must be fitted between the tractor and any towed trailers/implements. Implements carried on a three-point linkage are excluded from this requirement. Safety chain tensile strength (load at which it breaks) must be equal to or greater than the gross mass towed.

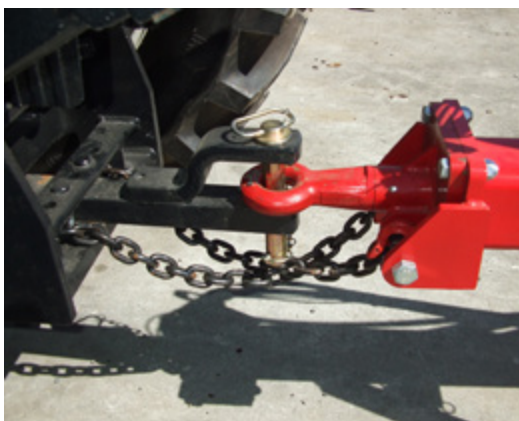
Chain length must be adjustable to eliminate a tight or loose chain and where practicable the chain must be attached to the chassis of the tractor, not the hitch. The tensile strength of the chain must be displayed on the chain via a plate or similar method.

Safety chains may not always share the load evenly.

GOOD PRACTICE

While a single safety chain is the minimum requirement, two crossed safety chains means improved directional control of the trailer should the coupling fail. Each safety chain must have a tensile strength equal to or greater than the gross mass towed as the chains will not always share the load evenly.

The following photos show examples of safety chains and the plates containing the necessary information about the tensile strength of the chains.

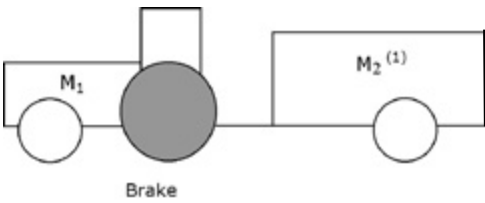
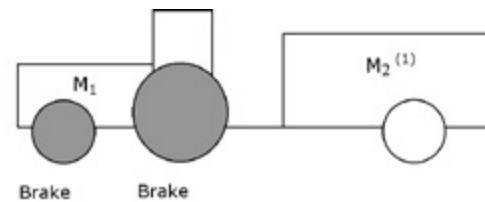
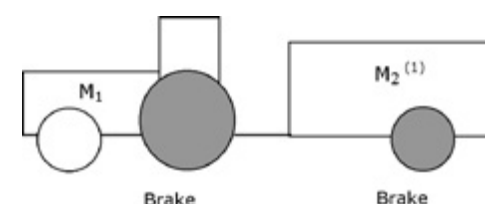
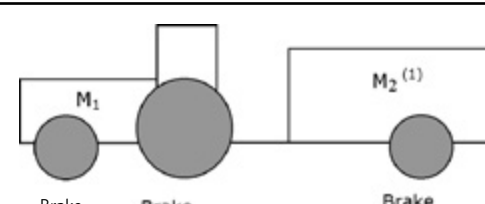


BRAKING

The speed you can travel on the road depends on the braking performance of the towing vehicle and the trailer(s).

Follow the guidelines in the table below to ensure you can stop safely.

Note: M1 is the tractor weight and M2 the trailer weight.

OPERATING SPEEDS WHEN TOWING TRAILERS			
AXLES WITH SERVICE BRAKE SHOWN IN GREY	M1 ≥ M2	M1 < M2	NOTES
	30km/h (2)	15km/h (2)	1. M2 may comprise 1 or 2 trailers. 2. Speeds may also be limited by tyre speed ratings. Refer tyre side wall. 3. These speeds must not be exceed 45km/h if 1 or more axles have no suspension.
	40km/h (2)	30km/h (2)	
	40km/h (2)	30km/h (2)	
	90km/h (2) (3)	90km/h (2) (3)	

You must take extra care when towing a trailer or another vehicle. This is because, with the extra weight behind the towing vehicle, your combination vehicle may be less stable while cornering and may take longer to stop.

4.8 GENERAL BODY REQUIREMENTS

Other than those already covered in this section, there are a number of other component requirements that apply to agricultural tractors and machines, including those that do not require a WoF. These requirements are outlined in the table below. For specific details, please check the VIRM Tractor section vehicleinspection.nzta.govt.nz/virms/in-service-wof-and-cof/tractors.

EQUIPMENT	REQUIREMENTS
Driver's sun visor	If vehicle has a windscreen and it is practical to fit a sun visor.
Windscreen wipe & wash	If fitted with a windscreen, must have wipers, and if vehicle is manufactured from 1/1/2001, must have a wash system.
Rear-view mirror	Required if the vehicle has a permanent cab.
Speedometer	Required if the vehicle is capable of exceeding 50km/h.
Horn	Required
General body condition	ROPS must be securely fitted to the vehicle. No damage, cracking, deformation or corrosion that affects the load-bearing structure or structural integrity of the vehicle. Seats securely fitted. Glazing must be secure and not unreasonably impair driver's vision. Doors must be securely attached. Exhaust and fuel systems in good condition.
Steering/suspension	Must be in serviceable condition
Tyres, wheels, hubs, axles, mudguards	Securely attached, in serviceable condition

5. Warrant of fitness requirements

Warrant of fitness (WoF) inspections are carried out periodically to ensure the vehicle meets relevant safety requirements. Generally, a WoF is required for agricultural motor vehicles operated at more than 40km/h. Trailed agricultural implements do not need to be inspected but they must be safe on the road. Agricultural motor vehicles no longer need a certificate of fitness (CoF).

APPLICABLE LEGISLATION

Land Transport Rule: Vehicle Standards Compliance 2002 (the Compliance Rule)

5.1 DOES YOUR VEHICLE REQUIRE A WARRANT OF FITNESS?

The requirement to obtain a WoF generally depends on the speed the agricultural motor vehicle is operated at.

The following vehicles do not need a WoF:

- An agricultural tractor or machine operated at no more than 40km/h.
- A trailed agricultural implement towed at any speed.
- A goods trailer used principally for agricultural purposes towed:
 - › at no more than 40km/h, or
 - › at no more than 50km/h by a tractor that is not capable of exceeding 50km/h, or
 - › by an agricultural machine at any speed.

The following vehicles need a WoF:

- An agricultural tractor or machine operated at more than 40km/h
- A goods trailer used principally for agricultural purposes towed at more than 40km/h (such a trailer is no longer an agricultural motor vehicle) by:
 - › a tractor that is capable of exceeding 50km/h (if the trailer has a GVM exceeding 3500kg, then the trailer needs a CoF), or
 - › a vehicle that is not an agricultural tractor or machine (if the trailer has a GVM exceeding 3500kg, then the trailer needs a CoF).

Note: The above requirements apply regardless of whether the operator is a farmer or an agricultural contractor.

A WoF issued to any agricultural motor vehicle will have a 12 month expiry, regardless of the vehicle's age. The vehicle will need to be licensed correctly to ensure the 12 month WoF expiry is applied.

Because the vehicle registration, licensing and inspection requirements are closely linked, we have provided the table below which summarises the requirements for agricultural tractors and machines and the trailers they tow.

5.2 WHAT ARE THE WOF REQUIREMENTS FOR AGRICULTURAL TRACTORS AND MACHINES?

Agricultural tractors and machines must meet WoF requirements as far as practicable for their design and type.

The WoF inspector will check that the vehicle and its components and systems, such as brakes, steering, lights, tyres, over-dimension equipment, protruding objects and towing connections, are fitted and in good condition and working order.

For detailed information about the applicable WoF requirements for agricultural tractors and machines, please refer to the tractor section of the NZ Transport Agency's *Vehicle inspection requirements manual (VIRM): In-service certification*, which can be viewed on the Transport Agency's vehicle inspection portal, link vehicleinspection.nzta.govt.nz/virms/in-service-wof-and-cof/tractors.

5.3 WHAT ARE THE SAFETY REQUIREMENTS FOR VEHICLES THAT DO NOT NEED A WOF?

Vehicles not requiring a WoF still have to be in good condition and safe to use on the road. This means that generally they need to meet the same requirements as vehicles on a WoF. However, there are some exceptions, especially regarding lighting equipment, see section 4 for further details.



Agricultural trailer



Goods trailer

A summary of the WoF and CoF requirements for agricultural vehicles follows:

AGRICULTURAL TRACTORS AND MACHINES AND THEIR TRAILERS: REGISTRATION, LICENSING AND INSPECTION REQUIREMENTS

All agricultural vehicles that do not exceed 40km/k are exempt from in-service inspections.

IMPORTANT NOTE: In the table below, the shaded boxes refer to vehicles that require inspection, but we will not enforce it because the vehicle is not required to be registered, or because inspection is not the intended policy. Further law changes will be made in future to remove these inconsistencies between inspection and registration/licensing requirements.

TRACTOR MAX TOWING SPEED CAPABILITY	TRACTOR OPERATING SPEED	TRACTOR REGISTRATION / LICENSING (TYPE/ USAGE/LABEL)	TRACTOR INSPECTION	AG IMPLEMENT REGISTRATION/ LICENSING	AG IMPLEMENT INSPECTION	GOODS TRAILER REGISTRATION/ LICENSING	GOODS TRAILER INSPECTION
50km/h or less	40km/h or less	Farmer: 3/16/X Contractor: 3/18/N	Not required*	Not required	Not required	Not required	Not required
	41-50km/h	Farmer: 3/17/B	WoF	Not required	Not required	Not required	Not required
		Contractor: 3/19/K/G	WoF	Not required	Not required	Not required	Not required
		Farmer: 23/16/X Contractor: 23/18/N	Not required*	Not required	Not required	Not required	Not required
51km/h or more	40km/h or less	Farmer: 23/16/X Contractor: 23/18/N	Not required*	Not required	Not required	Required	Not required
	41km/h or more	Farmer: 23/17/B	WoF	Not required	Not required	Required	Light: WoF Heavy: CoF
		Contractor: 23/19/G	WoF	Not required	Not required	Required	Light: WoF Heavy: CoF
		Farmer: 4/16/X Contractor: 4/18/N	AG MACHINE INSPECTION	AG IMPLEMENT REGISTRATION/ LICENSING	AG IMPLEMENT INSPECTION	GOODS TRAILER REGISTRATION/ LICENSING	GOODS TRAILER INSPECTION
Any speed	40km/h or less	Farmer: 4/16/X Contractor: 4/18/N	Not required	Not required	Not required	Not required	Not required
	41km/h or more	Farmer: 4/17/B	WoF	Not required	Not required	Not required	Not required
		Contractor: 4/19/K/G	WoF	Not required	Not required	Not required	Not required

Registration types	Registration usages	Registration labels
3 = Tractor (max 50km/h speed capability) 4 = Agricultural machine 23 = Ag tractor capable of more than 50km/h	16 = Ag vehicle (EB) operating at 40km/h or less 17 = Ag vehicle (EB) operating at more than 40km/h 18 = Ag vehicle operating at 40km/h or less 19 = Ag vehicle operating at more than 40km/h	X = EB not requiring inspection N = other vehicle not requiring inspection B = EB requiring inspection K/G = other heavy/light vehicle requiring inspection

- Under vehicle registration and licensing regulations, a tractor is still defined as a vehicle designed for traction at speeds not exceeding 50km/h.
 - To find out if a vehicle qualifies for EB registration and licensing, please refer to Transport Agency Factsheet 27.
 - WoF requirements for tractors and machines can be viewed on the Transport Agency vehicle inspection portal, <http://vehicleinspection.nzta.govt.nz/virms/in-service-wof-and-cof/tractors>.
 - For other information about agricultural vehicles, please visit the Transport Agency website, <http://www.nzta.govt.nz/vehicle/your/agriculture-forlifts.html>.
- * A WoF is not required but the vehicle must be maintained in a safe and roadworthy condition at all times.

6. Driver licensing

6.1 THE OFFICIAL NEW ZEALAND ROAD CODE

The road code is based on legal requirements in various acts, regulations and rules (mostly in the Land Transport (Road User) Rule 2004). It is the basic guide to safe, legal and considerate road user behaviour in New Zealand.

The road code (and the Rule itself) can be purchased in bookshops and is available online at: www.nzta.govt.nz/roadcode.

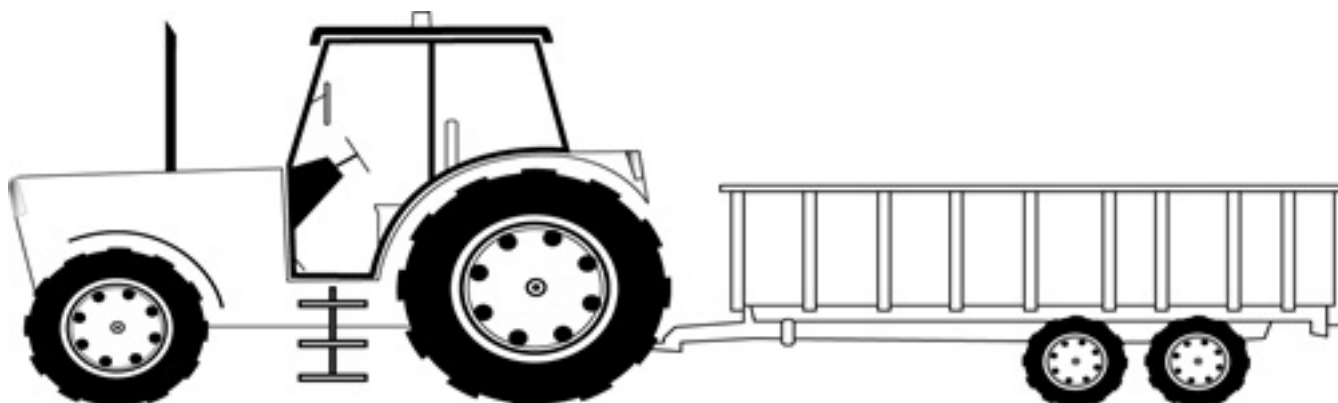
Driver licences issued overseas

When a person arrives in New Zealand, and the only driver licence or permit they hold entitles them to drive an agricultural motor vehicle (eg a tractor) they are deemed to hold a class 1 New Zealand driver licence. This licence entitles them to only drive an agricultural motor vehicle (eg agricultural tractor). This licence entitles them to drive (subject to the conditions below) for up to 12 months from their date of arrival in New Zealand or until their overseas driver licence or permit is no longer valid, whichever occurs first.

6.2 WHAT CLASS OF LICENCE DO I NEED?

AGRICULTURAL TRACTORS AND AGRICULTURAL TRAILERS

Both speed on the road and gross weight limits determine the class of driver licence you must hold.



You can drive an agricultural tractor up to and including 18,000kg gross laden weight or an agricultural tractor and agricultural trailer up to and including 25,000kg gross combined weight as shown in the tables below.

CLASS AND/OR ENDORSEMENT	NOT EXCEEDING 40KM/H ON THE ROAD	EXCEEDING 40KM/H ON THE ROAD
UK or similar overseas tractor endorsement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1 Restricted	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1 Full	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1 Full plus wheels 'W' endorsement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
An agricultural tractor that exceeds 18,000kg gross laden weight		
Class 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
An agricultural tractor and agricultural trailer that exceeds 25,000kg gross combined weight		
Class 5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

SELF-PROPELLED AGRICULTURAL VEHICLES (OTHER THAN TRACTORS)

Speed and weight determine the class of driver licence you must hold.

CLASS AND/OR ENDORSEMENT	NOT EXCEEDING 40KM/H ON THE ROAD	EXCEEDING 40KM/H ON THE ROAD
Class 1 and 'W' endorsement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Class 2 without 'W' endorsement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Class 2 with 'W' endorsement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Agricultural harvester that exceeds 18,000kg gross laden weight		
Class 2 with 'W' endorsement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

If the agricultural vehicle has more than 2 axles and/or exceeds 18,000kg gross laden weight then you would need a class 4 driver licence.

- The concession allowing these larger agricultural tractors to be driven on a class 1 restricted or full licence applies only if they are driven at a speed not exceeding 40km/h.
- Please note that the increased allowed speed limit to 40km/h only applies to agricultural vehicles. If you are driving a tractor that is not involved in agriculture (eg towing a boat trailer) then you will be restricted to 30km/h on your class 1 driver licence.

6.3 DRIVER LICENCE TRAINING

You can progress quicker through the driver licence classes by completing an approved driver licence course. Approved course providers can help you with this process.

Contact details for course providers can be found on the Transport Agency website at www.nzta.govt.nz/licence/getting/course-providers/index.html.

6.4 DO I NEED AN ENDORSEMENT?

If you're a tractor driver, you only need to hold the right class of licence for the weight of the tractor. Tractors are not special type vehicles. You don't need any other endorsement on your licence to drive a tractor although holding them may give you some advantages.

What is a 'special-type vehicle'?

Tractors when fitted with conventional tyres, ATVs, agricultural trailers etc are not special type vehicles.

Special type vehicle means any motor vehicle that:

- is a fork-lift (F endorsement), or
- runs on rollers (R endorsement), or
- runs on self-laying tracks (T endorsement), or
- runs on wheels (W), but is not a passenger vehicle, a trade vehicle, a tractor, a fire engine or a vehicle recovery service vehicle.

This means that machines such as combine harvesters, seed spreaders, grape pickers or any other agricultural machine that can be driven on a road and has wheels including vehicles with pivot and all-wheel-steering, require the driver to hold a W endorsement. A machine designed primarily to lift a load rather than carry it, is normally classed as a forklift.

FOR MORE INFORMATION

NZ Transport Agency *Factsheet 70: Heavy vehicle driver licences*

www.nzta.govt.nz/resources/factsheets/70/docs/70-heavy-vehicles.pdf.

NZ Transport Agency *Factsheet 11: Driver licence classes*

www.nzta.govt.nz/resources/factsheets/11/docs/11-driver-licence-classes.pdf.

Call the Transport Agency's contact centre on 0800 822 422.

Use Driver Check to monitor the licence status of employees' driver licences (www.nzta.govt.nz/drivercheck/about.html) or if you hold a transport service licence you can use TORO (transport organisation register online) to monitor the status of driver licences for your employees including demerits points (www.nzta.govt.nz/toro/about.html).

7. Transport service licence – agricultural vehicles

7.1 WHO NEEDS A TRANSPORT SERVICE LICENCE?

Whether you're an individual or a company, you must hold a transport service licence (TSL) if you carry goods on any road, whether or not for hire or reward, by means of a goods service vehicle whose gross laden weight (GLW) is 6000kg or more. This includes carrying the goods in an agricultural trailer that has a GLW of 6000kg or more towed behind a tractor. When operated by itself, the tractor is not required to be operated under a TSL but the combination of tractor and trailer becomes a combination vehicle and a TSL is required.

7.2 HOW TO GET A TSL?

You need to fill out and submit an application form available at www.nzta.govt.nz/resources/transport-service-licence-application/docs/goods-service-licence-application.pdf. You can also get one by calling our contact centre on 0800 822 422.

In special circumstances, you may not have to complete the certificate of knowledge, law and practice, for example if you are a farmer who only moves goods between properties. Contact the Transport Agency to see if these circumstances apply to you.

Send your completed application form to the Transport Agency. Make sure you have provided everything necessary for the application.

7.3 WHAT DO I HAVE TO PROVIDE?

You need to provide:

- the application fee
- a certificate of knowledge of law and practice relevant to the transport licence you are applying for – if required
- the personal details required in the application form, including a statement asserting that the information supplied in the application form is correct and that you are not disqualified from holding or obtaining a transport service licence.

8. Work time requirements and fatigue management

You shouldn't be driving any vehicle when you are fatigued. Watch out for any of the symptoms of fatigue so that you can avoid a crash.

There are regulatory controls that aim at preventing fatigued drivers, such as the Work Time and Logbooks Rule. Work time is a legal term meaning the maximum time the driver of a commercial or heavy motor vehicle may work, including driving, before taking a rest.

Compliance with work time rules does not mean you are not fatigued and therefore safe to drive.

Applicable legislation

Land Transport Act 1998

Land Transport Rule: Work Time and Logbooks 2007

Health and Safety in Employment Act 1992

8.1 FATIGUE MANAGEMENT

Driving while fatigued can have devastating consequences including fatal crashes. Driving when fatigued puts you at high risk of falling asleep at the wheel. Fatigue is often the cause in many single vehicle crashes involving agricultural vehicles.

The Health and Safety in Employment Act 1992 requires employers to manage hazards in the workplace. Under the Act, employers are required to identify, eliminate, isolate or minimise hazards. Fatigue is one of the hazards that employers are required to manage. Vehicles are included in the definition of a workplace.

Drivers are also responsible to ensure they do not drive while fatigued.

If you are fatigued, your driving deteriorates, your judgement is severely impaired, your decision-making is hindered and your reaction times increase. All of these can have fatal consequences.

Loss of alertness means you:

- cannot respond quickly and safely to an emergency
- may not spot dangers
- may be less efficient at controlling your vehicle, eg changing gears, braking in time and safely
- may have difficulty keeping left and staying within your lane.

One of the major symptoms of fatigue is a reduced ability to judge your own level of tiredness. However, there are many warning signs which can alert you to fatigue so that you can take action.

When driving, get off the road immediately if any of these happen:

- you find yourself weaving in your lane or drifting into another lane
- your eyes start to play tricks on you
- your vision becomes blurry
- you lose mental focus and can't concentrate
- your eyelids become heavy
- your head nods or falls towards your chest
- you become drowsy or overly complacent
- falling asleep is an extreme form of fatigue.

These warning signs must not be ignored. Once fatigue has set in, the only answer is sleep.

8.2 WHO HAS TO COMPLY WITH WORK TIME LAW?

Work time obligations apply to anyone driving a motor vehicle on a road that requires a class 2, 3, 4, or 5 driver licence. To determine the class of licence applicable to your tractor and agricultural trailer please refer to the Driver Licensing section of this guide. This law can also apply to the driver of a motor vehicle that requires a class 1 driver licence, such as a motor vehicle used to carry goods for hire or reward, or any vehicle used in a transport service (such as a taxi).

There are exceptions, such as a goods vehicle requiring a class 1 or class 2 driver licence that is not being used to carry goods for hire or reward, and that is used within a 50km radius of the vehicle's normal base of operations.

If you would like more information or a guide to work time and logbooks, refer to the Transport Agency's *Factsheet 2: Work time and logbooks* at www.nzta.govt.nz/resources/factsheets/02/index.html.

8.3 WHAT ARE THE WORK TIME OBLIGATIONS?

Work time is a legal term meaning the maximum time the driver of a commercial or heavy motor vehicle may work, including driving, before taking rest.

In summary, the work time requirements are:

- most drivers subject to work time requirements are required to take at least a 30 minute break after 5½ hours work time – no matter what type of work or driving is undertaken in that period
- in any cumulative work day, a driver may not exceed 13 hours of work time and must have at least 10 hours of continuous rest time – to enable the 10 hour break the driver must complete his 13 hours work in a 14 hour window from when work started
- in any cumulative work period no driver may exceed 70 hours of work time.

8.4 VARIATION OF WORK TIME HOURS FOR A CRITICAL AGRICULTURAL OPERATION

A person who is in business as a farmer or an agricultural contractor may apply to the Transport Agency for a variation of allowable work time or required rest breaks for the purpose of a critical agricultural operation. Email agvariation@nzta.govt.nz.

8.5 LOGBOOK EXEMPTIONS

The Work Time and Logbooks Rule includes exemptions from logbook use specifically for farm vehicles and agricultural harvesters. However, you must still comply with the work time hours even if you don't have to keep a logbook.

FARM VEHICLES

The driver of a vehicle that is registered to the farm owner or manager, or a farm employee, does not have to keep a logbook, provided the vehicle is used only within a 50 kilometre radius of that farm and is used:

- in an agricultural operation directly related to the management of the farm, or
- on a road to carry farm products, implements, stock or farm requisites of any kind.

OTHER AGRICULTURAL VEHICLES

The driver of an agricultural motor vehicle (which includes a tractor) does not have to maintain a logbook.

8.6 WHEN LOGBOOK EXEMPTIONS DO NOT APPLY

The position changes if normally exempt drivers do a job (eg drive a large truck) within a cumulative work period that requires them to keep a logbook. In that case, the logbook must be kept for the period covering the time it takes to do that job, and also for the entire cumulative work period – refer to section 4.1(1) of the Work Time and Logbooks Rule. Note a cumulative work period includes any work performed between two 24-hour rest breaks by a driver subject to work time.

8.7 CHAIN OF RESPONSIBILITY

Compliance with regulated work time hours will help in the management of driver fatigue, both for your safety, as the driver, and from the point of view of employer responsibility.

Traditionally drivers and operators have been the focus of compliance enforcement authorities, but breaches are often caused or influenced by the actions of others. Chain of responsibility recognises that all the people who influence drivers' behaviour and compliance must be held accountable. This includes directors of companies.

Under chain of responsibility, responsibility is shared – it is not transferred.

Under chain of responsibility there is a fine of up to \$25,000 if you are convicted of causing or influencing a driver to:

- exceed speed limits
- work outside work time limits
- exceed maximum gross weight limits
- skip or cut short rest times or fail to complete accurate logbook entries.



9. Our roads and how you can improve things

The movement of agricultural vehicles can increase risk on New Zealand roads. This is particularly so when the vehicle is overweight or oversize, has dangerous projecting parts, an unbraked trailer, or has to operate more slowly than other traffic, at night, or in bad weather.

In the period 1997–2006 (inclusive), there were 190 crashes involving tractors on New Zealand roads. Eighteen of these were fatal crashes involving one or more deaths and 53 were serious injury crashes; and the number of crashes per year is relatively constant (not trending up or down).

The following table highlights areas of identified risk and what you can do to reduce that risk.

RISK	WHAT YOU CAN DO TO REDUCE RISK
Not being seen	<ul style="list-style-type: none"> Make sure the vehicle has all the reflectors, lights and signage you need, especially if it is overdimension. Lights and signage need to be functional and clean.
Slow moving vehicle	<ul style="list-style-type: none"> Drive considerately and make sure your vehicle is conspicuous. Use a flashing amber beacon to indicate that the presence of the slow moving vehicle is a hazard. Recommended practice is to use a slow-moving vehicle sign if travelling below 40km/h.
Collisions while turning	<ul style="list-style-type: none"> Make sure you have correct signalling equipment, that it is visible to other road users and that it works and is used properly. Check to make sure that other road users have seen you before making the turn. Turn carefully and safely, consider the speed and size of your vehicle and the speed of the traffic around you.
Dangerous projections	<ul style="list-style-type: none"> If your vehicle has dangerous projections make sure you remove, cover or position those projections so they will not cause injuries in the event of a crash.
Ejected from vehicle during a crash	<ul style="list-style-type: none"> If safety belts (including those used as part of a roll-over protection structure) are fitted, make sure they are worn.
Inexperienced driver	<ul style="list-style-type: none"> Make sure drivers have a licence and that it is the correct class of licence for the vehicle being operated. Make sure that your drivers have adequate training in the use of the vehicles that they are driving. Make sure the driver is familiar with the handling of the vehicle and any special features that it may have.
Fatigue	<ul style="list-style-type: none"> Take regular rest breaks. Avoid alcohol. Don't take drugs, prescription or otherwise, that can cause drowsiness. Learn the warning signs that indicate you may be becoming fatigued.

10. Definitions

Adjoining means contiguous, or contiguous except for a separation by a river, stream, drain, canal, or other watercourse, or by a road or railway.

Agricultural motor vehicle means a motor vehicle that is designed, constructed or adapted for agricultural purposes and includes an agricultural trailer, an agricultural tractor – but does not include any vehicle that is of a class specified in Table A of Part 2 of Land Transport Rule: Vehicle Standards Compliance 2002 and designed or constructed for general road use.

Agricultural operation means any operation concerned directly with the management of a farm and includes the transport on a road of the produce of a farm, farm implements, stock, or other requisites of any kind whatsoever for a farm, if they are transported:

- from a part of a farm to another part of the same farm or from a farm to another adjoining farm that is owned or managed by the same person, or
- from a farm to another farm owned or managed by the same person if the motor vehicle carrying the goods is not taken during any 1 trip along more than 21 km of public highway in going from the owner's farm or other place of garage and in returning to that farm or place.
Reference: Land Transport Management (Apportionment and Refund of Excise Duty) Regulations 2004.

Agricultural purpose includes land cultivation, growing and harvesting crops (including horticulture and viticulture); rearing livestock; any land management operation undertaken in connection with the operation or management of a farm but does not include forestry, or any land management operation not referred to.

Agricultural tractor means a vehicle that is designed and constructed principally for the purposes of:

- towing an agricultural trailer or
- drawing, or powering, an implement ordinarily used for an agricultural purpose.

Agricultural trailer

- means a trailer that is used principally for agricultural purposes, and
- includes a wheeled agricultural implement, the wheels of which are in contact with the road when the implement is being towed, but:
- does not include:
 - › a trailer that is:
 - i. designed principally for the carriage of goods, and
 - ii. operated at a speed exceeding 40km/h, or
 - › a logging trailer.

All terrain vehicle (ATV) means a special purpose vehicle (with or without motorcycle controls and equipment) that:

- is principally designed for off-road use, and
- has 3 or more wheels, and
- has an engine capacity exceeding 50ml, and
- has a gross weight of less than 1000kg.

Cumulative work day means a period:

- during which work occurs, and
- that:
 - › does not exceed 24 hours, and
 - › begins after a continuous period of rest time of at least 10 hours.

Cumulative work period means a set of cumulative work days between continuous periods of rest time of at least 24 hours.

Farm means:

- a dairy farm, cattle farm, pig farm, or sheep farm, or
- a market garden, orchard, plant nursery, forest, or any other area of land on which trees or plants of any description are cultivated, or
- an apiary, or
- a poultry farm or egg producer's farm.

Garage means any place, whether a building or other structure or not, in which a motor vehicle is usually kept when not in use.

Goods trailer means a trailer constructed to transport goods on a road.

Gross combined weight (GCW) is the sum of the gross laden weights of the vehicles that make up a combination vehicle.

Gross laden weight (GLW) is the greatest of the following:

- any weight specified (following the latest modification, if applicable) as a vehicle's gross laden weight by the vehicle's manufacturer
- any weight specified as the gross laden weight of a particular vehicle (or a vehicle of its kind) by the Transport Agency
- the weight of a vehicle together with any load it is carrying, including any equipment and accessories.

Gross vehicle mass (GVM) is the greater of:

- the mass specified as the gross vehicle mass of a particular vehicle by the vehicle's manufacturer
- the mass specified as the gross vehicle mass of a particular vehicle (or a vehicle of its kind) by the Transport Agency.

Gross weight means the weight of a rigid or combination vehicle, together with any load it is carrying (including equipment and accessories).

Hours of darkness means:

- any period of time between half an hour after sunset on one day and half an hour before sunrise on the next day, or
- any other time when there isn't sufficient daylight for a person or vehicle to be clearly visible at a distance of 100 metres.

Mass means the quantity of material contained in or on that vehicle which, when subjected to acceleration due to gravity, will exert downwards on a level surface a force that can be measured as the weight of the vehicle.

Mobile plant means vehicles that operate mainly off road and do not carry a separate payload while on the road.

On-road weight means the total weight of the vehicle and load at any particular time.

OPM means the *Overweight permit manual* produced by the NZ Transport Agency.

Parking brake means a brake that is designed for keeping the vehicle stationary, and that is capable of remaining applied for an indefinite period without further attention.

Road includes a street; and also includes any place to which the public have access, whether as of right or not; and also includes all bridges, culverts, ferries, and fords forming part of any road, street, or place to which the public have access.

Service brake means a brake for intermittent use that is designed for the purpose of slowing down and stopping the vehicle.

Single large-tyred axle means a single-tyred axle that is not a single standard-tyred axle.

Single standard-tyred axle means a single-tyred axle fitted with tyres smaller than:

- a manufacturer's designated tyre section width of 330 mm and a rim diameter of 24 inches at the bead seat, or
- a manufacturer's designated tyre section width of 355 mm and a rim diameter of 19.5 inches at the bead seat.

Tare weight means the weight of the vehicle without any load.

Tractor means a motor vehicle (other than a traction engine) constructed principally for towing an agricultural trailer or powering agricultural implements.

Trailer means a vehicle without motive power that is capable of being drawn or propelled by a motor vehicle from which it is readily detachable; but does not include:

- a side car attached to a motor cycle, or
- a vehicle normally propelled by mechanical power while it is being temporarily towed without the use of its own power.

Vehicle axle index (VAI) means the maximum ratio of actual axle weight to the reference axle weight for that particular axle.

Vehicle licensing is paying a fee to use a motor vehicle on public roads. When the fee is paid you receive a label indicating the licence's expiry date after which it must be renewed. This licence label must be displayed on the vehicle.

Vehicle registration is when a vehicle is added to the Motor Vehicle Register and given registration plates.

Work time includes (but is not limited to) all the time spent:

- driving a vehicle to which section 30ZB(1) of the Land Transport Act 1998 applies:
- performing work-related duties, including (but not limited to):
 - › loading and unloading
 - › maintenance and cleaning of vehicles (other than unpaid cleaning outside working hours)
 - › administration or recording
- in any paid employment (other than paid leave or paid breaks of at least 30 minutes' duration), whether or not related to transport activities.



If you have further queries, call our contact centre on 0800 699 000 or write to us:

NZ Transport Agency
Private Bag 11777
Palmerston North 4442.