

# Tasmanian heavy vehicle driver's handbook



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This publication incorporated information to help heavy vehicle drivers drive safely and responsibly in Tasmania. It does not contain all of the road rules.

All enquiries regarding this publication should be directed to the Transport Enquiry Service on 1300 135 513 or the Department of State Growth, GPO Box 1002, Hobart, Tasmania, 7001.

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# Heavy vehicle handbook

This handbook is only a general interpretation of the law, made easy to understand by using plain English. Laws change often so make sure you have the most recent handbook.

## **IMPORTANT INFORMATION**

- *Tasmanian Road Rules Handbook*
- *Australian Road Rules*
- *Load Restraint Guide*

## **NATIONAL HEAVY VEHICLE LAW**

The National Heavy Vehicle Regulator issues national notices, State based notices and permit notices under the Heavy Vehicle National Law. These notices and the National Law relate to vehicle loading, dimensions, configurations and standards.

You can find these notices at [www.nhvr.gov.au](http://www.nhvr.gov.au) - compliance and enforcement.

For further information on vehicle registration and driver licensing please visit [www.transport.tas.gov.au](http://www.transport.tas.gov.au).

# Introduction

The *Tasmanian Heavy Vehicle Drivers Handbook* will help you understand the special rules and regulations that apply to you and your heavy vehicle. It is a useful guide outlining rules and regulations, skills and correct attitude required by professional drivers.

This publication must be read in conjunction with the *Tasmanian Road Rules handbook*, *Australian Road Rules* and *Load Restraint Guide* before undertaking a heavy vehicle driver knowledge test.

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# How to use this handbook

This handbook is divided into sections to make it easy to find what you need to know to operate a heavy vehicle safely on Tasmanian roads. At the end of each section is a summary of the information.

You will need to refer to this handbook, in conjunction with the *Tasmanian Road Rules and Load Restraint Guide*, if you are taking a heavy vehicle competency test or if you are undertaking a heavy vehicle training course. It is also helpful for experienced drivers who want to check current rules and practice. To find information on a specific topic, go to the Index at the back of the handbook where subjects are listed with page numbers. You will also find a glossary of terms in the back to explain the meaning of words used in the heavy vehicle industry.

## **SECTION 2 LICENCES EXPLAINS:**

The licensing system for drivers of heavy vehicles including the skills and qualifications you need to drive a particular vehicle.

## **SECTION 3 HEALTH AND SAFETY EXPLAINS:**

The need for professional drivers to be aware of their fitness, and their responsibilities, in particular the laws on alcohol, drugs, fatigue, record-keeping and seatbelts.

## **SECTION 4 SAFE DRIVING EXPLAINS:**

Important low risk driving behaviours such as observation, speed management, road positioning and crash avoidance space.

## **SECTION 5 HEAVY VEHICLE ROAD RULES EXPLAINS:**

A detailed coverage of the road rules that govern heavy vehicles and road users.

## **SECTION 6 KNOWING THE VEHICLE EXPLAINS:**

The requirements for keeping your vehicle roadworthy covering most vehicle components and functions such as checking, testing, maintenance and inspections. This section includes user friendly checklists.



Checklist icon

Checklists are provided to guide you through procedures and general checks. This icon will help you locate them.

### **SECTION 7 VEHICLE DIMENSIONS AND LOADING EXPLAINS:**

The dimensions of vehicles and allowable loads; ways to secure and distribute loads, types of loads such as dangerous goods and vehicle types.

### **SECTION 8 PENALTIES EXPLAINS:**

Penalties for traffic offences and offences directly related to driving heavy vehicles.

# Licences

You must have a heavy vehicle licence to drive heavy vehicles in Tasmania.

As a heavy vehicle licence holder, you have additional obligations and responsibilities to the people you share the road with. This handbook, in conjunction with the *Tasmanian Road Rules and Load Restraint Guide*, contains information that will guide you towards the skills and knowledge you need to hold a heavy vehicle driver licence.

For more information on your car driver licence, refer to the *Tasmanian Road Rules Handbook*.

## Heavy Vehicle Licensing Pathways

Must pass a heavy vehicle knowledge test prior to progressing through the required pathway to be issued a heavy vehicle licence:

- Undertake a Heavy Vehicle Accredited Training Course\* and a heavy vehicle driving final competency assessment with an approved External Service Provider.

or

- Undertake a heavy vehicle driving competency test (certain licensing requirements must be met and only applies to rigid categories) with an approved External Service Provider.

Both the final competency assessment and competency test are conducted in loaded vehicles.

For more information on both these heavy vehicle licence pathways, see the following pages in this section.

\*the training component contains formal training in conjunction with the Australian Qualification Skills Authority, training framework. The competency units were developed by the Transport and Industry Council (*licence to drive a heavy vehicle*) to support the National Heavy Vehicle Driver Competency Framework, implemented in Tasmania in March 2017.

Tasmania would like to acknowledge VicRoads and NSW RMS in their assistance in Tasmania implementing the National Heavy Vehicle Driver Framework. Including acknowledging NSW RMS as the original developer of the Rigid and Combination driver knowledge tests.

## Licence classes

The following diagram shows the National Hierarchy of Heavy Vehicle Licence Classes. You may drive any class of vehicle appearing below your licence category on the diagram.

### **Mutli-Combination (MC)**

Any motor vehicle or combination of vehicles, other than a motorcycle.



### **Heavy Combination (HC)**

Prime mover with a single semi-trailer and a dolly (or an unladen converter dolly); or a rigid motor vehicle towing a trailer with a GVM greater than 9 tonnes and an unladen converter dolly.



### **Heavy Rigid (HR)**

A motor vehicle (other than a motorcycle) including an articulated bus but not any other type of articulated vehicle, that has 3 or more axles and a GVM greater than 8 tonnes. Able to tow a trailer of no more than 9 tonnes GVM.



### **Medium Rigid (MR)**

A motor vehicle (other than a motorcycle) with a GVM greater than 8 tonnes and no more than 2 axles. Able to tow a trailer of no more than 9 tonnes GVM.



### **Light Rigid (LR)**

A motor vehicle (other than a motorcycle) with a GVM of 8 tonnes or less but greater than 4.5 tonnes, or has a GVM of 8 tonnes or less and seats more than 12 adults (including the driver). Able to tow a trailer of no more than 9 tonnes GVM.

## LR (LIGHT RIGID LICENCE)

### THE VEHICLE YOU WANT TO DRIVE

---



#### RIGID

Yes

#### NUMBER OF PASSENGERS INCLUDING THE DRIVER

May have more than 12 adults including the driver.

#### GVM

GVM not greater than 8t.

Any towed trailer must not have a GVM greater than 9t.

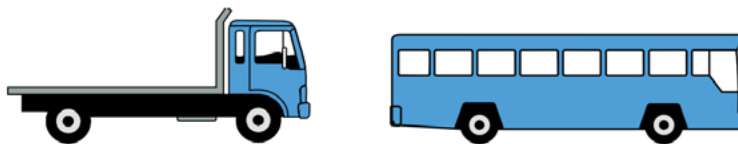
### WHAT YOU NEED TO GET THIS LICENCE

- Be at least 19 years old
- Have held an Australian car licence (other than a learner licence) for at least 12 months
- Go to a Service Tasmanian shop, show evidence of identity (this may be your driver licence) and pass a heavy vehicle rigid knowledge test
- Pass a light rigid competency test or training and final competency assessment with an approved External Service Provider (refer to page 25)
- Go to a Service Tasmania shop and –
  - complete an application form
  - show evidence of identify
  - pass an eyesight test
  - produce a Certificate of Competency to show that you've passed a competency test or completed training and a final competency assessment, and
  - pay the licence extension fee

## MR (MEDIUM RIGID LICENCE)

### THE VEHICLE YOU WANT TO DRIVE

---



#### RIGID

Yes

#### NUMBER OF AXLES

2

#### GVM

GVM greater than 8t.

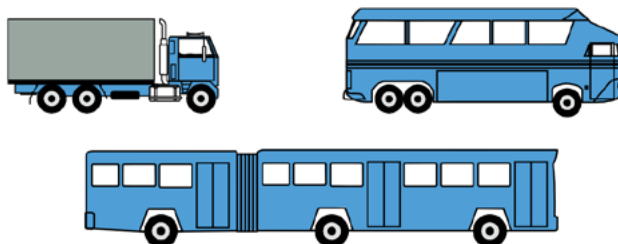
Any towed trailer must not have a GVM greater than 9t.

### WHAT YOU NEED TO GET THIS LICENCE

- Be at least 19 years old
- Have held an Australian car licence (other than a learner licence) for at least 12 months
- Go to a Service Tasmanian shop, show evidence of identity (this may be your driver licence) and pass a heavy vehicle rigid knowledge test
- Pass a medium rigid competency test or training and final competency assessment with an approved External Service Provider (refer to page 25)
- Go to a Service Tasmania shop and –
  - complete an application form
  - show evidence of identify
  - pass an eyesight test
  - produce a Certificate of Competency to show that you've passed a competency test or completed training and a final competency assessment, and
  - pay the licence extension fee

## HR (HEAVY RIGID LICENCE)

**THE VEHICLE YOU WANT TO DRIVE (note the number of axles)**



### RIGID

Yes

Note: articulated buses are treated as rigid vehicles.

### NUMBER OF AXLES

3 or more

### GVM

GVM greater than 8t.

Any towed trailer must not have a GVM greater than 9t.

## WHAT YOU NEED TO GET THIS LICENCE

- Be at least 20 years old
- Have held an Australian car licence (other than a learner licence) for at least 2 years and an LR or MR licence for at least 12 months
- If you currently hold a car or LR licence you must get an HR learner licence before doing a competency test or training and final competency assessment (see page 18)
- If you hold a car licence or you've held an LR or MR licence for less than 12 months you must successfully complete the training and final competency assessment
- If you've held an LR or MR licence for at least 12 months you must pass either a competency test or training and final competency assessment

- Go to a Service Tasmanian shop, show evidence of identity (this may be your driver licence) and pass a heavy vehicle rigid knowledge test (and pay the HR learner licence issue fee, if required - refer to page 18)
- Pass a heavy rigid competency test or training and final competency assessment with an approved External Service Provider (refer to page 25)
- Go to a Service Tasmania shop and –
  - complete an application form
  - show evidence of identify
  - pass an eyesight test
  - produce a Certificate of Competency to show that you've passed a competency test or completed training and a final competency assessment, and
  - pay the licence extension fee



## HC (HEAVY COMBINATION LICENCE)

### THE VEHICLE YOU WANT TO DRIVE (note the number of axles)



#### ARTICULATED VEHICLE OR HEAVY RIGID VEHICLE TRAILER COMBINATION INCLUDING UNLADEN DOLLY

Yes

#### NUMBER OF AXLES

3 or more

#### GVM

Any towed trailer with GVM of more than 9t.

### WHAT YOU NEED TO GET THIS LICENCE

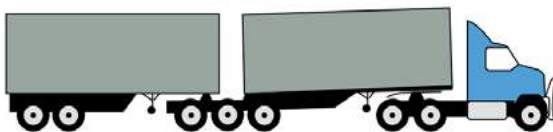
- Be at least 20 years old
- Have held an Australian car licence (other than a learner licence) for at least 2 years and an MR or HR licence for at least 12 months
- If you currently hold an MR licence or below you must get an HC learner licence before doing the heavy combination training and final competency assessment (see page 18)
- Go to a Service Tasmanian shop, show evidence of identity (this may be your driver licence) and pass a heavy vehicle combination knowledge test (and pay the HC learner licence issue fee, if required - refer to page 18)
- Successfully complete the heavy combination training and final competency assessment with an approved External Service Provider (refer to page 25)

- Go to a Service Tasmania shop and –
  - complete an application form
  - show evidence of identify
  - pass an eyesight test
  - produce a Certificate of Competency to show that you've successfully completed the training and the final competency assessment, and
  - pay the licence extension fee
  - pay the licence extension fee

## MC (MULTI-COMBINATION LICENCE)

### THE VEHICLE YOU WANT TO DRIVE

---



#### B-DOUBLE

Yes

#### WHAT YOU NEED TO GET THIS LICENCE

- Be at least 21 years old
- Have held an HR or HC licence for at least 12 months
- If you currently hold an HR licence you must get an MC learner licence before doing the training course (see page 18)
- Go to a Service Tasmanian shop, show evidence of identity (this may be your driver licence) and pass a heavy vehicle combination knowledge test (and pay the MC learner licence issue fee, if required - refer to page 18)
- Successfully complete the multi-combination training and final competency assessment with an approved External Service Provider (refer to page 25)
- Go to a Service Tasmania shop and –
  - complete an application form
  - show evidence of identify
  - produce a medical assessment that shows you are fit to drive at the commercial level
  - produce a Certificate of Competency to show that you've successfully completed the training and the final competency assessment, and
  - pay the licence extension fee

## Learning to drive heavy vehicles

### DO YOU NEED A HEAVY VEHICLE LEARNER LICENCE

You don't need to get a learner licence, if you're learning to drive –

- a heavy vehicle in the next licence class in the National Hierarchy of Licence Classes e.g. you have a medium rigid licence and you want to learn to drive a heavy rigid vehicle
- a medium rigid vehicle and you've got a car licence. In these cases, you can learn to drive a heavy vehicle on your existing licence.

You must get a learner licence if you're learning to drive a class of vehicle more than one class above your existing licence in the National Hierarchy of Licence Classes. For example, if you hold a car licence and you want a heavy rigid licence, you must get a heavy vehicle learner licence.

### HOW TO GET A HEAVY VEHICLE LEARNER LICENCE

To get a heavy vehicle learner licence, you must visit a Service Tasmania shop and—

- complete an application form
- show Evidence of Identity (this may be your driver licence)
- pass either the rigid or combination heavy vehicle driver knowledge test (there is no need to book for this test and it is free of charge)
- pass an eyesight test
- pay the learner licence fee

Your learner licence will be shown as a code on your driver licence.

Your heavy vehicle learner licence will be valid for the same time as your normal licence (they will expire at the same time). If you renew your normal licence, your heavy vehicle learner licence will also be renewed.



See page 110 for the heavy vehicle driver knowledge test questions and answers.

## WHAT REQUIREMENTS APPLY TO LEARNING TO DRIVE HEAVY VEHICLES?

When you're learning to drive a heavy vehicle (whether or not you're required to get a learner licence) you must -

- have a person sitting\* next to you who holds a licence of the same or higher class of the heavy vehicle you are learning to drive (not a learner or provisional) and has held that licence for at least 12 months
- have L-plates clearly displayed at the front and rear of the vehicle
- not drive faster than 90 km/h in a 90 km/h zone, 90 km/h in 100 km/h zone or 100 km/h in 110 km/h zone
- have zero blood alcohol in your body and not be affected by drugs.

These requirements apply whether or not you're required to hold a heavy vehicle learner licence.

\* if you're learning to drive a bus, this person must be seated in the seat nearest to you.

## P1 AND P2 LICENCE HOLDERS

If you are a P1 or P2 licence holder, you can apply for a heavy vehicle licence provided you meet the minimum age and experience criteria (see pages 10 to 17). This means that you must be the minimum age and have held an Australian licence of the relevant class (other than a learner licence) for the minimum amount of time required by law.

## EXEMPTIONS FROM THE ELIGIBILITY CRITERIA

If you don't meet the minimum age and experience criteria you can apply for an exemption. To apply for an exemption, you must

- be at least 17 years old
- have held an Australian car licence (other than a learner licence) for at least 12 months, and
- email [hvdlt@stategrowth.tas.gov.au](mailto:hvdlt@stategrowth.tas.gov.au) for an application form.

If you are granted an exemption, you will need to pass the training and final competency test pathway before you get your heavy vehicle licence.

## VISITING OR MOVING HERE FROM INTERSTATE OR NEW ZEALAND

You can drive in Tasmania on your interstate or New Zealand heavy vehicle

driver licence for up to 3 months.

When driving on your interstate or New Zealand licence -

- it must be current (it is not expired, suspended or cancelled)
- have your licence with you when driving
- only drive the type of vehicle you're licensed to drive
- obey all Tasmanian road rules and traffic law
- obey all conditions on your licence
- remember that if you commit a demerit point offence, the demerit points may be recorded against you in your home state or territory

After 3 months you must get a Tasmanian licence. If you don't you will be driving unlicensed.

To get a Tasmanian licence, go to a Service Tasmania shop and -

- complete an application form
- show Evidence of Identity (this may be your driver licence)
- hand in your interstate licence or show your New Zealand licence
- have your photo taken
- provide your signature

You'll get a free Tasmanian licence of the same class and type as your interstate licence. Generally, it will have the same conditions and expiry date as your interstate licence. You'll need to pay a fee to transfer your New Zealand licence.

## **VISITING OR MOVING INTERSTATE**

You can drive interstate on your Tasmanian heavy vehicle driver licence.

When driving interstate on your Tasmanian driver licence -

- it must be current (it is not expired, suspended or cancelled)
- have your licence with you
- only drive the type of vehicle you're licensed to drive
- obey all road rules and traffic law that are operational in that state or territory
- obey all conditions on your licence

- remember that if you commit a demerit point offence, the demerit points may be recorded against you in Tasmania

If you're in another state or territory for 3 months or more you must get a licence from that state or territory. Contact the transport authority in that state or territory to find out more information.

## VISITING OR MOVING HERE FROM OVERSEAS

You can drive in Tasmania on your overseas heavy vehicle licence if you -

- are a visitor **OR**
- have a temporary visa **OR**
- have held a permanent visa for less than 3 months

When driving on your overseas licence -

- it must be current (not expired, suspended or cancelled)
- have your overseas licence with you

If your overseas licence is not in English, you must also carry -

- an official English translation of your overseas licence **OR**
- a current International Driving Permit

You must get a Tasmanian licence within 3 months of being issued a permanent visa. If you don't, you will be driving unlicensed.

To get a Tasmanian licence you must first pass a heavy vehicle driving test for the class of vehicle you are licensed to drive (rigid or combination). Then, go to a Service Tasmania shop and -

- complete an application form
- show Evidence of Identity
- show your overseas licence
- pass a driver knowledge test
- produce a Certificate of Competence to show that you've passed a driving test
- pay the licence fee
- have your photo taken
- provide your signature

## MEDICAL CONDITIONS

If you have a Light Rigid (LR) licence, you must meet the private medical standards.

If you have a Medium Rigid (MR) or above licence, you must meet the commercial medical standards.

If your existing medical condition changes, or if you get a medical condition that may affect your driving, you must ring 1300 135 513 as soon as possible. You are required by law to notify the Registrar of any medical condition that may affect your driving.

## COMPETENCY TEST AND FINAL COMPETENCY ASSESSMENT

### HOW MUCH DOES IT COST?

You will need to contact the External Service Providers to find out the cost of the competency test or training and final competency assessment pathways. The total cost will depend on whether you use an External Service Provider's vehicle or take your own.

Each External Service Provider may have a different cost.

### HEAVY VEHICLE DRIVER COMPETENCY FRAMEWORK (HVDCF)

Under the HVDCF you have to demonstrate that you can perform certain skills or criteria to an accredited heavy vehicle driving assessor. Refer to *A Guide to the Heavy Vehicle Driver Competency Framework*.

You must successfully complete a rigid or combination heavy vehicle driver knowledge test prior to undertaking a competency test or final competency assessment with an approved External Service Provider.

The knowledge test assesses what you know about the general road rules as well as rules which relate only to heavy vehicles. For more information on knowledge tests refer to below and see the Tasmanian Road Rules Handbook ([www.transport.tas.gov.au/licensing/publications/tasmanian\\_road\\_rules](http://www.transport.tas.gov.au/licensing/publications/tasmanian_road_rules)) or Load Restraint Guide (<https://www.ntc.gov.au/heavy-vehicles/safety/load-restraint-guide/>).

### COMPETENCY TEST AND FINAL COMPETENCY ASSESSMENT

To arrange a competency test or the training and final competency assessment pathway (depending on meeting certain eligibility criteria) you will need to contact and book and pay through an approved External Service Provider.



The test vehicle must be currently registered (NOT under the Federal Interstate Registration Scheme) and be roadworthy. All heavy vehicles (except buses and coaches used for driving tests) must have a complying (approved and in working condition) lap-sash retractable seatbelt fitted to the front left passenger seat for use by the authorised assessing officer.

The competency test and final competency assessment can be undertaken in private vehicle, which must comply to the same vehicle standards vehicles hired for training use through approved External Service Providers and must be relevant for the class you are applying for (LR,MR,HR,HC,MC).

Vehicles that do not meet the standards will not be accepted for driving tests. All heavy vehicles, except buses, presented for the heavy vehicle driving test must be loaded to at least 75 per cent of the maximum mass allowable for the vehicle to be driven on public roads (evidence of a weighbridge certificate must be presented to the assessing officer prior to commencing a driving test).

This is at least 75 per cent of the 'legal mass limit'.

Also, if you pass a driving test in a vehicle fitted with an automatic or synchromesh gear box you will be restricted to driving these types of vehicles. To have the condition removed you have to pass a driving test in a vehicle fitted with a non-synchromesh gear box.

Information on which vehicles can be used for testing is available on our website at [www.transport.tas.gov.au/licensing/getting-a-licence/heavy-vehicles/basic\\_driver\\_licence\\_-\\_heavy\\_vehicle](http://www.transport.tas.gov.au/licensing/getting-a-licence/heavy-vehicles/basic_driver_licence_-_heavy_vehicle)

### **Fail and immediate fail items**

During the test, you can be failed for doing anything that is unsafe or against the law. Including

### **Manoeuvres**

The competency test and final competency assessment assesses your ability to drive safely and competently. During the test you will be required to perform certain manoeuvres. The following chart shows which manoeuvres are conducted for the various licence classes and types.

### Test Manoeuvres by Licence Class and Type

	LR truck	LR bus	MR truck	MR bus	HR truck	MR bus	HC
Long reverse	X	X	✓	✓	✓	✓	✓
Reverse park	✓	✓	✓	✓	✓	✓	✓
U-turn (three-point turn)	✓	✓	X	X	X	X	X
Kerbide stop	✓	✓	✓	✓	✓	✓	✓
Pre-departure check	X	X	✓	✓	✓	✓	✓
Bus stop skills	X	X	X	✓	X	✓	X
Coupling or uncoupling	X	X	X	X	X	X	✓
Load restraint	✓	X	✓	X	✓	X	✓

### NATIONAL HEAVY VEHICLE DRIVER LICENCE

The National Heavy Vehicle Driver Licence was introduced in the interests of road safety. It provides a driver with a single licence for all states. Points accumulated for traffic offences in any state count against your home state record.

You will be given a national licence when you are licensed to drive one of the following vehicles:

- A truck over eight tonnes GVM with three or more axles.
- A bus over eight tonnes GVM with three or more axles.

### WHAT YOU SHOULD KNOW ABOUT LICENCES

After reading this section, you should know:

- Which vehicle type you are eligible to apply for on your current licence.
- What you must do to upgrade your driver licence.
- Alternate pathways of obtaining a HV licence.
- What manoeuvres you must perform in order to pass a heavy vehicle driving test.

**APPROVED TRAINING ORGANISATIONS** (External service providers)

The following organisations are authorised to deliver heavy vehicle driver licence training in Tasmania:

DECA [www.deca.com.au](http://www.deca.com.au)

OnRoad OffRoad Training [www.onroadoffroad.com.au](http://www.onroadoffroad.com.au)

TransTrain [www.transtrain.com.au](http://www.transtrain.com.au)



# Health and safety

This section of the Handbook covers the following topics:

- Health and safety for heavy vehicle drivers (including driver fatigue, alcohol and drugs)
- Hours of work and record keeping for drivers of fatigue regulated vehicles
- Seatbelts
- Entering and exiting a vehicle.

## Health and safety for heavy vehicle drivers

Heavy vehicle drivers are professionals. They usually drive further than car drivers and drive for longer hours. Driving a heavy vehicle is hard work, and it is tiring.

As a professional driver, you need to understand what causes fatigue and how to pick up on the early warning signs so that you can do something about it before it affects your driving.

## How do you know if you are fatigued?

There are some common signs that can indicate you are becoming fatigued:

- yawning
- poor concentration
- tired or sore eyes
- restlessness
- drowsiness
- making fewer and larger steering corrections
- missing road signs and taking wrong turns
- having difficulty staying in the lane
- microsleeps where you 'nod off' for a few seconds.

## WHAT CAUSES DRIVER FATIGUE?

Every person is different but there are some common things that can lead to fatigue.

- Sleep factors – including getting less sleep than you need.
- Time of day factors – such as working at night and in the early hours of the morning.
- Work factors – including long hours of driving, tight scheduling and driving in poor weather conditions.
- Physical factors – such as poor health and fitness.

Being fatigued makes it harder to concentrate and slows your reaction time.

## TIPS FOR MANAGING FATIGUE

Resting and sleeping are the two most important ways to combat fatigue. Have a good night's sleep before you start your trip, and have an afternoon nap before starting back on a night shift.

You can also take rest breaks early on in the trip – you may not feel fatigued at that point, but an early short rest break can reduce the likelihood of fatigue later on.

Be aware of the causes and effects of fatigue and recognise the early warning signs.

Make sure you stop and rest as soon as possible when you realised you are becoming fatigued. Do not try to push on, especially in those 'body clock' danger times of night/early morning and late afternoon.

Plan your trip ahead of time to allow for rest breaks. Rest areas are available 24 hours a day and are clearly signposted. You can also stop and take a break from driving at some service centres, petrol stations, parks and country towns.

Look after your health and fitness with regular exercise and a healthy diet.

Never drink alcohol before or during a trip.

Remember that maximum work limits are like speed limits. They state the maximum time allowed in ideal conditions, that is, when drivers are well rested and alert. If you are likely to be fatigued for any reason, you should not try to do the maximum time allowed.

The only safe way to reduce fatigue is to pull over and sleep. This will leave you feeling refreshed and able to continue safely on your journey.

## Fitness to drive

Driving any vehicle is a complex task, involving perception, good judgement, responsiveness and reasonable physical capacity.

As well as having these skills, professional drivers face extra demands including:

- the vehicle itself (cleaning, minor maintenance, refuelling, checking loads)
- responsibility to passengers
- requirements of schedulers
- additional requirements for some load types such as hazardous goods.

All drivers, including professional drivers, have certain legal responsibilities in terms of their fitness to drive.

Under Tasmanian law drivers must inform the Registrar of Motor Vehicles about any permanent or long-term illness that is likely to affect to their ability to drive.

Some medical conditions and treatments can reduce your ability to do your work safely, including:

- blackouts
- sleep disorders
- vision problems
- diabetes
- epilepsy and seizures
- psychiatric disorders
- heart disease.

If you develop an illness like this, you need to talk with your doctor straight away.

Reporting your illness doesn't necessarily mean that you will lose your licence, but it means the Registrar of Motor Vehicles can work with you and your doctor to ensure your fitness to drive.

## Alcohol and drugs

It is illegal to drive a heavy vehicle while under the influence of alcohol or drugs.

Your blood alcohol concentration must be zero when you drive the following vehicles:

- a heavy vehicle with a GVM of more than 4.5 tonnes
- a public passenger vehicle such as a bus or a coach
- a vehicle carrying a dangerous load.

Alcohol and other drug-related issues can occur in any industry, occupation or workplace. They can affect working relationships, work performance and occupational health and safety, including impairing a person's ability to drive a motor vehicle safely.

Even small amounts of alcohol and other drugs can impair concentration, coordination and other skills needed for safe driving.



## Driving and rest hours

Your vehicle is your workplace. Any vehicle used by employees in the course of their employment is defined as their workplace, including heavy trucks or buses.

As a professional driver, you must not drive when you are impaired by fatigue.

Your employer must not require you to drive when you are fatigued.

Managing fatigue becomes a more complex task and is subject to more regulations when driving certain types of heavy vehicles.

If you drive a fatigue regulated heavy vehicle, as listed below, you must comply with national fatigue management law:

- vehicles with a gross vehicle mass (GVM) of over 12 tonnes
- combinations where the total GVM is over 12 tonnes
- a truck or combination, including a truck, with a GVM of over 12 tonnes with a machine or implement attached to it
- buses over 4.5 tonne GVM with a seating capacity of more than 12 adults (including the driver).

Some heavy vehicles that meet the above criteria are not classed as fatigue regulated vehicles, including:

- motor vehicles modified to primarily operate as a machine or implement (for example agricultural machinery, bulldozers, tractors) off-road on a road related area or on a road under construction
- motor homes specifically modified for residential purposes (not just built with a sleeper berth).

## WORK AND REST HOURS UNDER NATIONAL FATIGUE LAW

National Heavy Vehicle law provides three options for managing fatigue in fatigue regulated heavy vehicles – standard hours, basic fatigue management and advanced fatigue management.

If you are driving a fatigue regulated vehicle you need to know which option is being used, so you can comply with the required work and rest hours.

Note that for the purpose of fatigue regulation your work includes any task associated with the vehicle:

- driving
- instructing another person to drive, or supervising another person driving, a fatigue-regulated heavy vehicle
- performing another task relating to the use of a fatigue-regulated heavy vehicle, including: loading and unloading; inspecting, servicing or repair; inspecting or attending to a load or passengers; cleaning or refueling; performing marketing tasks related to the use of the vehicle; helping another person to perform or supervising another person performing these tasks
- recording information or completing a document in relation to the use of the vehicle
- occupying the driver's seat of a fatigue-regulated heavy vehicle while its engine is running.

## STANDARD HOURS

Under this option, drivers can work for a maximum of 12 hours in a 24 hour period. The following table shows the maximum work and minimum rest hours over a 24 hour period.

### STANDARD HOURS (SOLO DRIVERS)

Time	Work	Rest
In any period of...	Maximum WORK	Minimum REST
5 hours 30 minutes	5 hours 15 minutes	15 minutes
8 hours	7 hours 30 minutes	30 minutes
11 hours	10 hours	60 minutes
24 hours	12 hours	12 hours (including 7 hours continuous rest)
7 days (168 hours)	72 hours	96 hours (including 24 hours continuous rest)
14 days	144 hours	192 hours, including 4 night rests (2 night rests must be consecutive)

## BASIC FATIGUE MANAGEMENT

Operators can apply to the National Heavy Vehicle Regulator for accreditation for basic fatigue management which gives more flexibility in work and rest hours. This system allows for up to 14 hours work in a 24 hour period.

Operators must comply with national standards including scheduling and rostering driver fitness for duty. You will need to check your work and rest hours with your employer if they are accredited for basic fatigue management.

## ADVANCED FATIGUE MANAGEMENT

Operators can apply to the National Regulator for accreditation for advanced fatigue management. This option involves a risk management approach to managing driver fatigue rather than prescribing work and rest hours. You will need to check your work and rest hours with your employer if they are accredited for advanced fatigue management.

## WORK AND REST HOURS IN THE BUS INDUSTRY

Operators can choose to work under standard hours as outlined above; or to adopt the standard hours (bus and coach sector) option.

The bus and coach sector option for standard hours (for solo drivers) allows days off to be 'banked' over 28 days for low risk bus operations. This option is limited to bus and coach operations where night work and total hours are low.

### STANDARD HOURS (BUS AND COACH OPTION)

Time	Work	Rest
In any period of...	Maximum WORK	Minimum REST
5 hours 30 minutes	5 hours 15 minutes	15 continuous minutes
8 hours	7 hours 30 minutes	30 minutes in blocks of 15 continuous minutes
11 hours	10 hours	60 minutes in blocks of 15 continuous minutes
24 hours	12 hours	7 hours continuous stationary rest
7 days		6 x night rest breaks #
28 days	288 hours	4 x 24 hours continuous hours stationary rest time

# Night rest breaks are 7 continuous hours stationary rest time taken between the hours of 10pm on a day and 8am on the next day (using the time zone of the driver's base) or a 24 continuous hours stationary rest break.

As with truck drivers, bus operators can apply to the National Heavy Vehicle Regulator for accreditation to operate under Basic Fatigue Management or Advanced Fatigue Management.

Again, if you are driving a fatigue regulated bus you will need to check with your employer to determine which work and rest hours option applies to you.

### RECORDING WORK AND REST HOURS

There are some variations to the way you record your work and rest hours, depending on the type of heavy vehicle you drive.

- If you drive a fatigue regulated vehicle for local work (less than 100km radius from your base) you still need to record your work and rest times to show that your fatigue is being managed and that you are undertaking only local work. You will need to talk with your employer about how they collect this information. For example, some employers may ask you to

complete a log book each day. Note that you can work a maximum of 12 hours in a 24 hour period , while complying with the maximum work time and minimum rest time requirements.

- If you drive more than 100km radius from your base, you will have to record your work and rest hours in your National Driver Work Diary. The National Diary is a comprehensive record of your activities for the day. You will have to use the National Diary whether you are working standard hours, basic or advanced fatigue management, if you drive more than 100km radius from base.

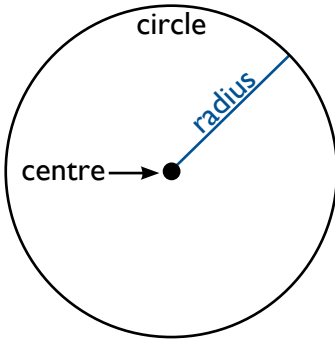


Note that there are some exemptions to the requirement to maintain a National Driver Work Diary – for example:

- emergency services personnel responding to an emergency or disaster situation
- drivers carrying out primary production work if driving in an area within a radius of 160 kilometres or less from the driver's base
- record keeping exemptions can also be approved by the National Heavy Vehicle Regulator if the driver has literacy problems.

Exemptions are issued by the National Heavy Vehicle Regulator. You can find out more information about applying for an exemption at the Regulator's website: [www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/fatigue-management-exemptions](http://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/fatigue-management-exemptions)

## RADIUS FROM DRIVER'S BASE



The centre point is the driver's base.

'Base' is the place a driver normally works from, for example:

- home address (if the vehicle is usually parked there overnight)
- depot or place of business
- hotel where the driver is staying.

The outer circle represents 100 km from the driver's base.

For local work, a driver can work at any point, up to 100 km or less, radius from their base.

For example, driving from Hobart to Geeveston and return is a total journey of @110 km; however, Geeveston is within 100 km radius from Hobart so the journey would be considered local work.

If your base was Launceston, and you were driving to Hobart, the journey would be more than 100km radius from your base and you would have to complete your National Driver Work Diary for the trip.

The difference in record keeping requirements relates to the level of risk of driver fatigue. For example, if you are doing local work, you are likely to have more frequent stops and more opportunities to rest than if you are doing long haul driving.

## WHERE TO GET YOUR NATIONAL DRIVER WORK DIARY

The National Diary is issued to individual drivers – not to owners or operators.

That means you have to personally buy the National Diary and produce your driver licence. You can buy your National Diary at Service Tasmania shops.

The serial number of your National Diary will be recorded with your details.

You generally need to have your National Diary with you whenever you are working. If you drive a different truck or bus, or switch to local work for a period of time, you should take your National Diary with you. Detailed instructions on how to count time and complete a National Driver Work Diary are contained in the front of each Diary. You should read these instructions carefully and ensure you comply with the requirements. Penalties may apply if your Diary is not completed accurately.



It is an offence to:

- let anyone else use or borrow your National Diary
- have more than one National Diary containing pages which have not been used or cancelled
- remove the application page or any original pages
- alter, deface or destroy any page
- make false entries.

## COUNTING TIME

If you are driving a fatigue regulated heavy vehicle you need to count your work and rest hours over a 24 hour period in a particular way.

This applies whether you do local work (100km or less radius from base) or distance work (more than 100km radius from base).

Time is counted in 15 minute intervals. Work is a maximum so it is always rounded up to the next 15 minute interval – for example:

- 10 minutes work is counted as 15 minutes of work time
- 40 minutes work is counted as 45 minutes of work time
- 2 hours and 21 minutes work is counted as 2 hours and 30 minutes of work time.

Rest is a minimum so it is always rounded down to the last 15 minute interval – for example:

- 12 minutes rest does not count as rest time
- Rest between 30 minutes and 44 minutes is counted as 30 minutes rest time
- 6 hours and 40 minutes rest is counted as 6 hours and 30 minutes of rest time.

Drivers must take a minimum 15 minute rest break within the first 5 hours and 30 minutes of work after a major rest break.

Remember – work includes other tasks you do, not only the time you spend driving.

## Chain of responsibility

Drivers and operators have traditionally been the focus of road laws, including those covering driving hours and fatigue management.

However, breaches of road laws can be caused by the actions of others.

Under chain of responsibility law, everyone in the supply chain – not just the driver or operator – is responsible for:

- preventing driver fatigue
- ensuring drivers are able to comply with the legal work/rest hours.

For example, this means that:

- drivers must stop the vehicle if feeling tired or fatigued
- operators and schedulers must plan when drivers can take a rest
- loading managers must take steps to ensure queuing is managed properly.

## Want more information?

Contact the National Heavy Vehicle Regulator (office located in Brisbane):

Phone: 1300 696 487

Fax: 07 3309 8777

Post: PO Box 492, Fortitude Valley QLD 4006

Email: [info@nhvr.gov.au](mailto:info@nhvr.gov.au)

Website: [www.nhvr.gov.au](http://www.nhvr.gov.au) follow the link to Safety, Accreditation and Compliance.

You can also sign up to the National Regulator's Facebook and Twitter pages, via the website. This may be a convenient way to keep up to date.



## Seatbelts

Truck and bus drivers must wear a seatbelt.

Any driver or passenger must wear a seatbelt properly adjusted and securely fastened wherever there is one available.

The driver will not be penalised if there is no seatbelt and the vehicle has been manufactured before the requirement for seatbelts commenced.

A vehicle that has been modified by installing a non-original seat (for example driver's suspension seat) must have suitable seatbelts in order to comply with the law and provide the driver with a suitable level of comfort.



It is an offence to remove a fitted seatbelt from a vehicle. If you do so, you may be fined. You may also be fined for not wearing a seat belt.

Drivers are responsible for all passengers, particularly children, being properly restrained in a seatbelt or approved child restraint where seat belts are fitted. There are fines and demerit points for a driver who is not wearing a seatbelt and who fails to ensure that passengers use seatbelts.

Passengers aged 16 years and over will be individually fined if they do not use a seatbelt if one is available.

## Entering and exiting a vehicle

For safety there is a procedure for entering and exiting a heavy vehicle.

To enter the vehicle the driver must check for traffic before moving out from the line of the vehicle and again before opening the door. When entering the vehicle the driver must use available steps and grab handles to climb into the vehicle, maintaining three points of contact at all times.

To exit the vehicle the driver must check again for traffic before opening the door. When exiting the vehicle the driver must exit facing the vehicle using available steps and grabs (not jumping) while maintaining three points of contact.





## Low risk driving

As a professional driver you should at all times display 'low risk' driving. Only drive when you are alert, respect other road users and know how to control your vehicle.

Driving is never risk free, but you should aim to drive 'low risk'. A low risk driver has good observation, speed management and road positioning skills.

### OBSERVATION

The key to good observation is scanning.

### SPEED MANAGEMENT

Drive at a speed that is within the speed limit and that will allow you to react and completely stop within the distance you can see is clear. When you see potential hazards, slow down and prepare to stop. If you cannot see at least five seconds ahead you must slow down. Slow down on wet, icy or gravel roads where it will take longer for your vehicle to stop.

### ROAD POSITIONING

Position your vehicle to maximise the distance from hazards (this is also referred to as buffering). For example, moving left at the crest of a hill to create space from oncoming vehicles, or moving away from a parked car to avoid doors opening and pedestrian movement.

### CRASH AVOIDANCE SPACE

A low risk driver maintains a crash avoidance space completely around the vehicle. The crash avoidance space is managed by adjusting the vehicle's speed and road position.

To determine the crash avoidance space to the front of the vehicle you need to take into account two key factors – reaction time and response time.

**Reaction time** is the time the driver needs to -

- see the information
- perceive what it means
- decide on a response
- instigate that response

A heavy vehicle driver who is fit, concentrating, and alert, and not affected by alcohol, drugs, fatigue or a distraction, will still require about 1.5 seconds to react.

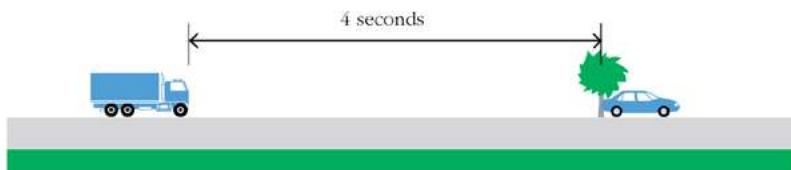
**Response time** is the time required to take action. Generally a minimum of two to three seconds is needed to respond. In many situations braking may be the only possible response. Swerving is rarely appropriate and can result in a more severe crash, for example a head-on collision.

A total of at least four seconds crash avoidance space is needed to react and respond to a situation in front of you. You may need even longer in poor conditions such as rain or darkness.

The four-second gap can be used when following another vehicle or if there is potential for something to move into your crash avoidance space.

## FOLLOWING ANOTHER VEHICLE

**Four-second crash avoidance space.** To calculate a four-second crash avoidance space when following another vehicle use this basic technique: as the rear of the vehicle in front of you passes an object at the side of the road such as a power pole, tree or sign, start a four-second count 'one thousand and one, one thousand and two, one thousand and three, one thousand and four'.



If your vehicle passes the object you picked before you finish the four-second count, you are following too closely. Your crash avoidance space is not large enough. Slow down, and repeat the count again until the four-second crash avoidance space is achieved.

In poor driving conditions, such as rain, night or gravel roads, it may be necessary to increase your crash avoidance space to five or more seconds.

## POTENTIAL FOR SOMETHING TO MOVE INTO THE CRASH AVOIDANCE SPACE

The four-second gap can also be used for situations where there is potential for something to move into the crash avoidance space, for example, a car in an adjacent street could fail to give way and pull out. Low risk drivers experienced in maintaining a four-second following distance are able to mentally judge a four-second crash avoidance space in front of their vehicle. If there is potential for a hazard to enter this crash avoidance space, reduce your speed and create a buffer. It is necessary to maintain the crash avoidance space for all potentially hazardous situations, including blind corners and crests.

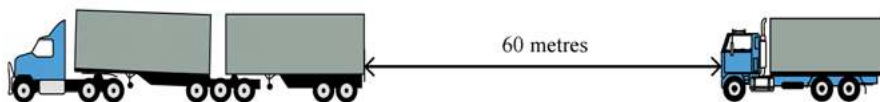
Many of the crashes that occur in Tasmania could be avoided if drivers actively maintained their crash avoidance space.

## LEGAL MINIMUM DISTANCES BETWEEN LARGE VEHICLES

All vehicles 7.5 metres or longer must keep the following minimum distances between long vehicles -

- 60 metres

This rule does not apply on multi-lane roads, in built-up areas or when overtaking.



**Legal requirements.** By law large vehicles must maintain the minimum or greater following distance.

## VEHICLE CONTROLS

### SPRING BRAKES OR 'MAXI-BRAKES'

Most fully air-braked vehicles on the road are equipped with spring-loaded parking brakes. These brakes rely on air pressure to hold them in the OFF position. See “brake failure” on page 46.

### TRAILER BRAKE

Some vehicles are fitted with a hand operated trailer brake. This is a separate valve operated by hand which applies the trailer brake independently of the footbrake. **The trailer brakes must not be used for normal braking** as they will wear, overheat or burn out, and lose their effectiveness completely. A trailer with ineffective brakes attached to a towing vehicle with effective brakes can cause it to jack-knife or rollover if it brakes heavily.



A trailer hand brake may be applied if necessary to prevent the vehicle from rolling backwards and to avoid transmission shock load when moving off on a hill. Trailer brakes are not parking brakes and should not be used as such.

### CONTROLLING SPEED

- Brake early and gradually.
- Where possible, brake when your vehicle is driving in a straight line.
- Allow for the weight of the load – a loaded vehicle takes far more braking effort to slow down than an unloaded one.
- Brake according to the road surface – allow more braking distance if the road is gravel, steep or slippery.
- Ease off the brakes as the vehicle slows down.
- Always test the brakes immediately after driving through deep water as wet brakes do not perform well.



The service brake should be used under all **normal** conditions.

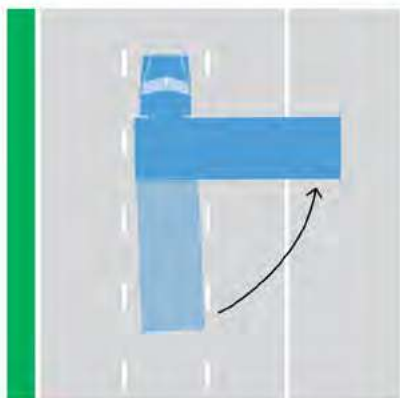
## BRAKE FAILURE

Brakes kept in good condition rarely fail. Most brake failures occur because of -

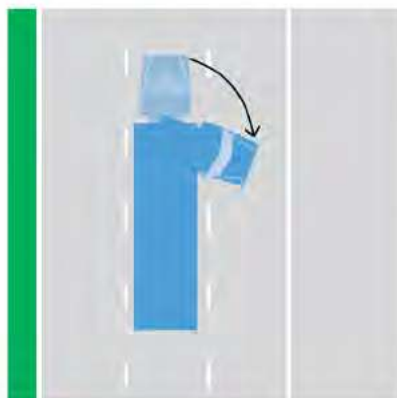
- loss of air pressure
- loss of hydraulic pressure
- brake fade (boiling of hydraulic fluid) continuous braking on long hill – bad driving practice
- poorly maintained brakes

## JACK-KNIFE AND TRAILER SWING

You can reduce the chances of jack-knife or trailer swing by making sure that all brakes and tyres are in good condition and that the load is evenly distributed between axle groups. You should be especially careful in wet weather.



Trailer swing is where the trailer slides dangerously.



A jack-knife is where the prime mover and trailer lock against each other.



## LOSS OF PRESSURE IN AIR BRAKES

Whenever you drive, make sure there is enough air pressure for at least five brake applications. Air brakes can fail because of a leak in the air lines or over-use. **Stop immediately** if the low air pressure warning device comes on. You should stop by gearing down until the vehicle is slow enough to apply the brakes.

Most vehicles fitted with full air system brakes are usually fitted with spring parking brakes, also known as maxi-brakes, where air pressure is required to keep them off.

On some older vehicles the spring brakes may come on when the air pressure is very low. You should monitor the air pressure gauges often as low air pressure can happen anytime. When the gauge shows low air pressure, release the brakes at least twice, so you can move the vehicle to a safe area.

## LOSS OF HYDRAULIC BRAKES

What to do if your hydraulic brakes fail -

- change gears down
- pump the brakes – sometimes pumping them can partially restore hydraulic brakes
- use the emergency parking brake

## Basic driving techniques

### HILLS

#### BEFORE GOING DOWN A HILL

Reduce speed and select the correct gear before beginning the descent.



If you try to gear down but you miss the gear, stop the vehicle with the brakes immediately, then select the correct gear. Attempting to coast while you struggle with the gears is very dangerous. Do not try to change gears while going downhill as you can lose control of the vehicle.

#### BRAKING GOING DOWN HILLS

Brake failure can be prevented by good driving techniques.

If you use the brakes to slow a vehicle travelling down hill it can cause overheating. This leads to brake fade, or brake burn-out in which the brake linings completely lose their grip and are no longer effective.

#### GOING DOWN HILLS

- Select a gear low enough to slow down the vehicle without the constant use of brakes.
- If you miss the gear when trying to gear down, stop the vehicle with the brakes immediately, then select the correct gear. It is very dangerous to coast while you struggle with the gears.
- Use auxiliary brakes to help control the vehicle speed.
- Reserve your service brakes for coping with emergencies, traffic conditions or sharp corners.
- Try to brake on straight sections of road where possible as this reduces the chance of skidding.
- Avoid fanning (repeatedly applying and releasing) the brakes as this leads to an increase in brake temperature and failure due to brake burn out. In air brake systems, fanning wastes compressed air, reducing the reserve available for an emergency.

## GOING UP HILLS

- Shift down early to prevent engine 'lugging'. Lugging is shuddering or excessive vibration in the engine.
- Use engine torque (the turning force available at the crankshaft) efficiently. Do not let engine revs fall below the maximum torque speed.
- Shifting down two or more gears at once may be necessary when going up a steep hill.

## BEFORE ENTERING A SHARP CURVE

Reduce speed and select the correct gear before you enter the curve. The gear you select should have the engine revs near the maximum torque level as specified by the engine manufacturer, allowing you to accelerate smoothly out of the turn.

## SLOWING AND STOPPING

When slowing or stopping a heavy vehicle it is best to use your brakes only. However, when driving down a steep hill it may be necessary to remain in a low gear to control the vehicle's speed.

Never drive out of gear. This is extremely dangerous and can lead to loss of vehicle control and overheated brakes.



You must select a low gear before commencing steep descents.

## ANIMALS AND VEHICLES

A driver or passenger must not lead an animal including by tethering while the vehicle is moving.

Animals that are being transported must be seated or housed in appropriate areas. Drivers must not drive with an animal in the drivers lap.



# Heavy vehicle road rules

As a professional driver it's your responsibility to know the road rules that apply to all vehicles, especially heavy vehicles.

## SPEED LIMITS

In Tasmania the maximum speed-limit applying to a driver for a length of road to which a speed-limit applies is the number of kilometres per hour indicated by the number on the speed-limit sign. This is the case for both light and heavy vehicle drivers.

However, if the number on the speed-limit sign is over 100 and the driver is driving a bus with a GVM over 5 tonnes or another vehicle with a GVM over 12 tonnes, the maximum speed limit applying to the driver for the length of road is 100 kilometres per hour.

NOTE: Driving to the road and weather conditions may mean driving at a speed slower than the maximum speed limit permitted.

## SPEED LIMITERS

Speed limiters are devices that limit a vehicle's maximum speed. If your vehicle falls into one of the following groups, it must be speed limited to a maximum of 100 kilometres per hour -

- a bus with a GVM over 14.5 tonnes that was built after 1 January 1988
- a heavy goods vehicle including prime movers, with a GVM over 15 tonnes that were built after 1 January 1988

## DRIVING IN WET CONDITIONS

Wet roads reduce tyre grip and can result in loss of control.

You should drive at a speed that allows you to brake gradually and stop within the distance you can see. The safe speed for your vehicle and its load may be much lower than the posted speed limit.



To avoid skidding, slow down when approaching corners and select an appropriate gear to maintain vehicle control without the need for braking.

## INTERSECTIONS

The Road Rules allow long vehicles to straddle an adjacent lane in order to make turns. However, the vehicle must be displaying a "Do not overtake turning vehicle" sign.

At intersections you may have to swing wide to make a left turn. At marked intersections -

- position your vehicle so that any vehicles behind cannot pass on your left
- position yourself to get the best view possible of the road you are turning into

Bus and truck drivers need to start a left turn further into the intersection than a car so that the back wheels do not run over the kerb.

### **CROSSING OR ENTERING TRAFFIC**

You must choose a suitably large gap in the traffic to get across an intersection, enter a new street or merge with traffic.

Consider the size and weight of your vehicle when crossing or entering intersections, changing lanes, and making other manoeuvres. Also remember that a loaded vehicle will accelerate slower than an empty one.



Before moving from a stationary position at the side of the road or a median strip parking area, you must signal for at least five seconds, check mirrors and blind spots.

### **TURNING**

Trucks and buses need more space to turn wide or cut into traffic so allow enough space on either side of your vehicle to avoid sideswiping other road users or objects.

#### **TURNING RIGHT FROM A ONE WAY STREET**

A vehicle (or vehicle and trailer) that is 7.5 metres or longer and has a “Do not overtake turning vehicle” sign displayed on the back, can turn right from the lane on the immediate left of the far right lane.

Plan your turn early so that you are in the correct part of the intersection and you have time to signal. Avoid turning too soon because the side of your vehicle may hit vehicles on your right as the back of your vehicle cuts in to the turn.

In a road with two right turn lanes, always use the turning lane on the far left.



A vehicle of 7.5 metres or longer may display the words **DO NOT OVERTAKE TURNING VEHICLE** on one of the rear marking plates.

If your vehicle (or vehicle and trailer) is under 7.5 metres long, you must not display this sign on the back, and you must turn within the lanes marked on the road at all times.



**DO NOT OVERTAKE TURNING VEHICLE**

## REVERSING

When reversing a heavy vehicle, you must -

- not reverse a vehicle unless the driver can do so safely
- avoid unnecessary reversing - you must not reverse the vehicle further than is reasonable in the circumstances
- use a helper to guide you whenever possible. You should be able to see the guide who should have a clear view of where your vehicle is going
- get out and have a look if you are not sure what is behind you
- always reverse your vehicle into position in a driveway or loading dock

Although you may need to hold up traffic while you reverse, it is much safer to drive forward into traffic as you leave.

## OVERTAKING

There are special problems associated with overtaking while driving a heavy vehicle.

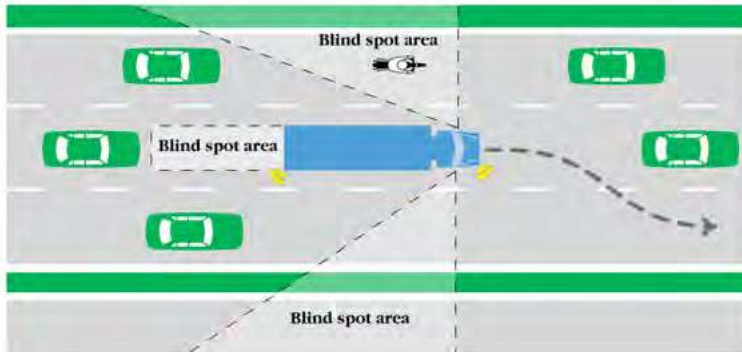
It is very important to watch for small vehicles, such as motorcycles. Before pulling out, check your mirrors and glance down to check for vehicles below your cabin. Air movement caused by a large vehicle travelling fast can force a small vehicle off the road, or draw it into the side of a larger vehicle.

## BEING OVERTAKEN

If it is safe, move into the left lane to allow faster moving traffic to overtake.

## LANE CHANGING

It is very important to check that the road is clear when you want to change lanes, or when lanes merge. You also need to check before leaving the kerb and before turning. You must look in the appropriate mirrors and do blind spot head checks before making any of these moves. In a heavy vehicle it is also essential to check down the side door in the cabin.



Before pulling out check mirrors, signal, check blind spot below cabin.

## RESTRICTED AREAS B-DOUBLE OPERATION

A B-Double more than 19 metres in total length may only operate on authorised routes or under a permit or exemption. Mass and dimension requirements for B-Doubles are prescribed in the Heavy Vehicle (Mass, Dimension and Loading) National Regulation. The National Heavy Vehicle Regulator provides the exemption for B-Doubles.

Refer to page 99 of this Handbook for additional classes of restricted access heavy vehicles.

## LIGHT TRAFFIC ROADS

You must not use any road with a load limit sign if the total weight of your vehicle is the same as, or heavier than, the weight shown on the sign.



## LOAD LIMIT SIGN

You must not drive past a bridge load limit (gross mass) sign or gross load limit sign if the total of the gross mass (in tonnes) of your vehicle, and any vehicle connected to it, is more than the gross mass indicated in the sign. This also applies to any sign that specifies a mass dimension lower than that of the vehicle.





## NO TRUCKS SIGN

Drivers of long or heavy vehicles except buses must not drive past a NO TRUCK sign unless the vehicle is equal to or less than the mass or length specified on the sign.

When the sign does not provide detailed information, no truck (ie GVM greater than 4.5 tonnes) is permitted to drive past the sign, unless the drivers' destination lies beyond the sign and it is the only route.

## TRUCKS MUST ENTER SIGN

Heavy vehicle (GVM over 4.5 tonnes) drivers must enter the area indicated by information on or with this sign.



## WHERE HEAVY VEHICLES CAN STAND OR PARK

Heavy vehicles (GVM of 4.5 tonnes or more) or long vehicles (7.5 metres long or longer) must not stop on a length of road outside a built up area, except on the shoulder of the road. In a built up area they must not stop on a length of road for longer than one hour (buses excepted). For more information on where vehicles can stand or park, refer to the *Tasmanian Road Rules Handbook*.

## BUS LANES

### BUS AND BUS ONLY LANES

Bus and bus only lanes are marked by the following signs, or by lane markings. Public buses constructed principally to carry persons, registered as a bus and used to convey passengers for hire or reward, or in the course of trade or business, may use these lanes.



### PRIORITY FOR BUSES

Other vehicle drivers should give way to a bus displaying the give way sign in a built-up area, when the bus is about to enter or proceed in the lane or line of traffic and the right hand indicator light of the bus is operating and the bus is in front of the driver.



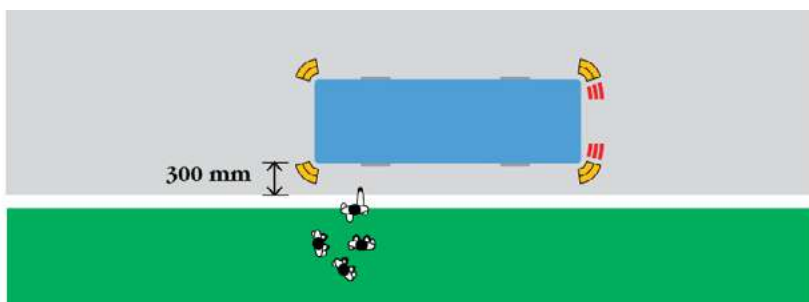
You are still required to obey the road rules when entering the traffic.

## BUSES

### STOPPING AT A BUS STOP

Bus drivers should pull up so the entrance and exit doors are as close as possible to the kerb at a bus stop.

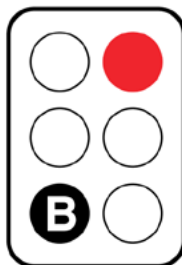
- Signal your intention.
- Stop the bus smoothly.
- Stop parallel with the kerb.
- Stop the bus without hitting the kerb.
- Apply the bus stop brake. If the bus does not have a bus stop brake then you must apply the normal parking brake.
- Indicate for at least five seconds before pulling out of a bus stop.



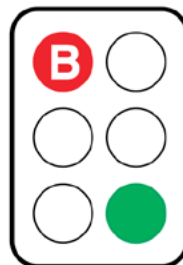
Stop within 300 mm of the kerb.

### BUS (B) SIGNALS

B signals separate buses and other vehicles at intersections with traffic lights. B signals are attached to the traffic lights and show a white B on a black background. Some traffic lights have a red, yellow and white signal attached. Shortly before the usual traffic signals change to green the B signal lights up white. Buses may proceed in any direction unless signs or markings indicate otherwise.



White B means buses only go.



Red B means buses stay. Green means other vehicles go.

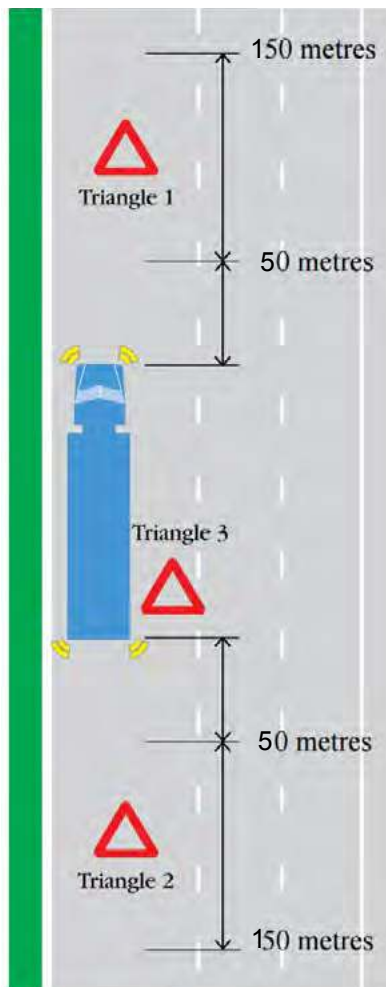
## WARNING TRIANGLES

A vehicle or a vehicle and trailer with a GVM of more than 12 tonnes, must carry three portable warning triangles to use if the vehicle breaks down.

If a vehicle required to carry warning triangles stops or the load being carried by the vehicle falls onto the road and is not visible for 200 metres in all directions, the driver must put:

- The first triangle between 50-150m from the front of the vehicle or fallen load.
- The second triangle between 50-150m from the rear of the vehicle or fallen load.
- The third triangle at the side of the vehicle, or fallen load, in a position that gives sufficient warning to other road users of the position of the vehicle or fallen load.

Requirements for placing warning triangles.



## FIRES

To minimise the risk of fire -

- make regular checks of the vehicle during your trip
- follow recommended vehicle operating rules (see section 7 Vehicle Dimensions and Loading)
- check the instruments and mirrors as part of your regular scanning routine

If there is a fire in your vehicle -

- stop it well away from anything else which may burn
- notify emergency services (dial 000)
- use the correct fire extinguisher
- if the trailer is on fire, and it is safe to do so, uncouple the prime mover and move it away
- if the engine is on fire, try not to open the bonnet any more than necessary. Spray the fire extinguisher through louvres, or from the underside of the vehicle.
- where the load is on fire in a van or box trailer, open the doors slowly and only far enough to let you use the extinguisher properly.



# Knowing the vehicle


Heavy vehicles come in a variety of configurations.

It's your responsibility to know your vehicle. Regular checks and services are required by law to minimise the risk of breakdown and ensure your vehicle is roadworthy.

## ROADWORTHINESS

The driver and the owner/operator are responsible for a vehicle's roadworthiness. A roadworthy vehicle is a safe one that offers advantages to both driver and operator as well as other road users. Unroadworthy vehicles can be heavily fined, especially if they are involved in a crash.

It is very important to check your vehicle is roadworthy. Pre-departure checks can save time and expense later on and reduce the chance of a crash resulting from mechanical failure.

To make sure that your vehicle remains roadworthy, you should carry out daily pre-departure checks and more 'in depth' weekly inspections. Refer to the checklists in this section as a guide. This icon  will help you locate them.

## BODY/CAB CONDITION

All door latches or hinges must be secure and working well. The cabin must be sealed from engine and fuel areas.

## BRAKES

### AIR BRAKE OPERATION

Most heavy vehicles have full air brakes. It is important that brakes are properly adjusted and well maintained.

When you apply the foot brake pedal you are opening a valve that allows pressurised air to flow to the brake chambers at each wheel. Therefore braking effectiveness depends on how far you depress the pedal, unlike a car where the braking effectiveness depends on how hard you depress the pedal.

It is very important to check your brakes properly and regularly, and to refer to the manufacturer's manual. Use the following procedure as a guide only and get a professional to service your brakes often.

## INSPECTION OF HYDRAULIC BRAKES

### Step 1: External check

- 1 Check for line damage and leaks.
- 2 Check wheel backing plates and brake hoses for any signs of leaks or damage, such as chafed hoses or pipes.
- 3 Check around the master cylinder and hydraulic oil reservoir for leaks. Also check that the reservoir is full.

### Step 2: System check

- 1 Check the feel of the brake pedal when you apply the foot brake. If the pedal sinks down further than usual or if it feels spongy, there may be a leak or air in the system.
- 2 Keep full pressure on the pedal – it should continue to be hard. If the pedal starts to sink, there may be a leak in the system.
- 3 Vacuum brakes – check booster retention with full vacuum and the engine off. When you apply the pedal it should stay down without resistance. The vacuum must be available soon after the engine is started with low vacuum available after 30 seconds and normal working vacuum after 60 seconds.
- 4 Check that the vehicle does not pull to one side when you brake with the vehicle moving, off road if possible.

## INSPECTION OF AIR BRAKES

### STEP 1: Secure the vehicle

- 1 Put on the parking brake.
- 2 Switch off the engine.
- 3 Where manual valves are fitted to air tanks, drain daily.

It is illegal to discharge fluid on the ground as it can be washed down drains and is an environmental hazard.

### Step 2: Drain all air tanks

On vehicles with a dual circuit braking system, drain one system first. Check to make sure that only one gauge indicates no pressure, then drain the other system. If both gauges show no pressure after draining one system, do not use the vehicle before your brakes have been checked by a professional.

### Step 3: Refill the system

- 1 Start engine and run at fast idle – do not race the engine.
- 2 Check that:
  - Any low air pressure warning signals (if fitted) are operating as a result of having no air in the system.
  - The low air pressure warning signals (if fitted) operate at about 410 kPa.
  - The time it takes for air pressure to build up from 0 to 80 per cent of maximum pressure limit (refer to manufacturer's specification) is not longer than five minutes.
- 3 Allow maximum pressure to build up and turn off engine.

### Step 4: System check

- 1 Chock the wheels and release the park brake.
- 2 Apply the foot brake fully and check the drop in air pressure on the gauge. The drop in pressure per minute should not exceed the following:
  - Truck 20 kPa.
  - Truck and trailer an extra 5 kPa per trailer.



- 3 Apply the foot brake another four times, holding it down on the fourth application. The pressure should not have fallen by more than half normal system operating pressure and the low warning signal should not have activated.

If it has, do not use the vehicle before your brake system has been checked by a professional.

- 4 Recharge air system.

### **Step 5: Trailer check**

- 1 Turn the engine off.
- 2 Disconnect the air hoses between the hauling unit and trailer (articulated vehicles and truck/trailer combinations). The trailer brakes must automatically come on and remain on for at least 15 minutes. This is to check if the breakaway system is operational.
- 3 Check the tractor protection system of the hauling unit after air has stopped being released from the hauling unit trailer air line fittings. If these fittings contain self-sealing devices, hold them open until no more air is released.
- 4 Check that the:
  - Air pressure is in excess of 300 kPa.
  - Service brakes still work.
  - Spring brakes (if fitted) have not come on.

### **Step 6: External check**

- 1 Re-connect air hoses.
- 2 Apply the park brake.
- 3 Walk around the vehicle and listen carefully for air leaks.

### **Step 7: Final check**

- 1 Start the engine to recharge the air system.
- 2 Release and re-apply the park brake and walk around the vehicle again and listen carefully for air leaks.

These 'general checks' do not replace the need for thorough inspections of the systems.

## ANTI-LOCK BRAKING SYSTEMS (ABS)

Many trucks have ABS, which is designed to stop wheel lock-up and improve steering under heavy braking.

Maximum braking occurs when the wheels are just on the point of locking. However, if a wheel does lock and skidding occurs, braking is not effective and you may lose control of the vehicle.

For best results when using an ABS-equipped vehicle in an emergency situation, press the brake pedal down fully and allow the ABS to regulate braking for you. This allows you to have full steering control at the same time as maximum braking.

If the ABS fails, the system reverts to normal brake operation.

## PARKING BRAKE

When applied a parking brake must be capable of holding the vehicle stationary on any slope up to a gradient of at least 15 degrees, or prevent it from moving under light throttle and must function by mechanical means such as springs.

## ENGINE/EXHAUST BRAKES OR SPEED RETARDERS

These devices may be fitted to medium and large vehicles to supplement the vehicle's service brake system. They will not stop the vehicle completely but may help to slow it down. They are not considered service brakes as they act on the engine or drive train.

Three most common types are -

- exhaust brake
- engine brake
- electric, magnetic or hydraulic retarder

Applying these brakes may cause a lightly loaded vehicle to skid or jack-knife on slippery roads.

Auxiliary brakes are generally noisier than the service brake. Try to reduce brake noise in urban areas by limiting the use of Auxiliary brakes.

## COUPLINGS

**Prime mover/semi-trailers** – Turntable mountings and other tow couplings must be secure and comply with Australian Standards for installation.

**Other vehicles** – All towbar, coupling and drawbar components must be in

good working condition. Steps on performing uncoupling and coupling are covered at the end of this section.

## **DRIVING CONTROLS**

All controls should function correctly and be regularly checked and maintained.

## **ELECTRICAL SYSTEM**

Electrical wiring and connections, both inside and outside the vehicle, must be secure, damage-free and not exposed to excessive heat.

## **ENGINE**

When running above idle speed, the engine must not discharge excessive crankcase fumes. See Smoke from engines in section 8.

## **EXHAUST SYSTEM**

The exhaust system must not have leaks due to damage, looseness or poor maintenance.

The exhaust system must not be too noisy. See Noise pollution in section 8.

## **FUEL SYSTEM**

The fuel tank and lines must be secure and not leak. The fuel tank cap must be properly fitted.

LPG fuelled vehicles must be fitted with an AUTOGAS plate near the LPG fuel tank and display the appropriate plates or stickers on the front and rear number plates.

Compressed Natural Gas (CNG) is an alternative fuel. CNG vehicle must display the appropriate plates or stickers, be fitted with a compliance plate and also be fitted with a refuelling information plate near the filler connection. CNG cylinders need to be periodically inspected.



LPG and CNG retroreflective identification labels must be in the shape of a square and mounted diamond-wise.

LIQUEFIED PETROLEUM GAS COMPLIANCE PLATE	
The autogas installation to which this notice is affixed complies with the requirements of Australian/New Zealand Standard AS/NZS 1425	
INSTALLATION DATE .....	STATE .....
COMPLIANCE No .....	
INSTALLED BY:	
NAME .....	LIC. No .....
WORKSHOP No .....	(REP. No) .....
VIN No .....	
CONTAINER SERIAL No .....	
CONTAINER TEST STATION STAMP DATE .....	

Example of a LPG Compliance plate.

## GEAR BOXES

Heavy vehicles greater than 4.5 tonnes GVM must use a gear low enough on roads where a sign displays TRUCKS & BUSES MUST USE LOW GEAR. The gear chosen by the driver must be able to control the speed of the vehicle without use of the brakes.

There are three types of gear boxes.



### SYNCHROMESH GEAR BOX

This type of gear box works in much the same manner as those in most modern cars. They are easy to use, as the synchronising of the gears is done by the gear box. Be aware that damage can be caused by forcing gear changes before the engine and road speeds are matched.

### AUTOMATIC GEAR BOX

These work in much the same manner as in modern automatic cars.

### NON-SYNCHROMESH GEAR BOX

In this type of gear box, the matching of engine and road speeds depends entirely on your judgement and skill as there are no synchronisers in the gear box to help you. Double-declutching is essential while you are learning to use this type of gear box. A non-synchromesh gear box may commonly be known as a crash gear box.

## DOUBLE-DECLUTCHING

Double-declutching means to change gear by moving the gear lever first into neutral and then into the desired gear, releasing the clutch pedal between each movement. You should learn this technique from someone who is experienced with the practice.

Double-declutching is not recommended for synchromesh gear boxes as it may cause long term damage.

## LIGHTS AND INDICATORS

All lights, and reflectors must work properly and their lenses must not be damaged. All rearward facing lights except number plate, reversing and indicator lights must be red.

### WARNING LIGHTS

Parking brake and brake failure warning lights, where fitted, must work.

### FLASHING LIGHTS

Flashing warning lights must be visible in normal daylight from a distance of 500 metres to drivers approaching from any direction. A flashing light can be distracting to the driver so must not be directly visible from the normal driving position of the vehicle to which it is fitted.

A flashing light displayed on a vehicle may only be white, blue, red or amber/yellow. Each of these colours or combination of colours is intended to convey a specific warning to road users. Their use is limited to particular types of vehicles and in particular circumstances.

The following vehicles are allowed to be fitted with the appropriate coloured flashing warning lights.

**Emergency vehicle** – one or more flashing red or white light.

Emergency vehicle means –

- an ambulance; or
- a vehicle built or permanently modified for fire fighting purposes; or
- a vehicle used by an electricity authority for carrying out emergency repairs to power lines;

**Exempt vehicle** – one or more flashing light of any colour.

Exempt vehicle means –

- a police vehicle; or
- an Australian Protective Service vehicle; or
- an Australian Customs Service vehicle; or
- an Airservices Australia vehicle; or
- an Australian Defence Force vehicle; or
- a vehicle operated under the Ambulance Service Act 1982 and authorised by the Director of Ambulance Services to respond to emergencies; or
- a vehicle operated, approved or authorised under the Fire Service Act 1979; or
- a vehicle operated, approved or authorised under the Emergency Management Act 2006; or
- a transport enforcement vehicle.

**Special-use vehicle** – one or more flashing yellow light.

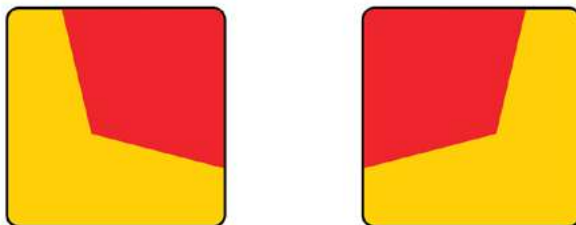
Special-use vehicle means –

- a vehicle built, fitted or used in hazardous situations on a public street; or
- a vehicle or combination that, because of its dimensions, is permitted to be driven or used on a public street only in accordance with a permit condition; or
- a vehicle built or fitted to accompany a vehicle or combination mentioned above; or
- a bus fitted with a sign telling road users that the bus carries children; or
- a vehicle built, fitted or used as an escort for, or in support of the competitors in, a cycling or foot race or other sporting event making use of public streets.

## REAR MARKING PLATES

All motor vehicles with a GVM exceeding 12 tonnes and trailers with a GTM over 10 tonnes must be fitted with retroreflective marking plates at the rear.

A prime mover and semi-trailer combination must display rear marking plates on the rear of the prime mover and the rear of the trailer.



Rear marking plates may also display **DO NOT OVERTAKE TURNING VEHICLE** in black letters 50 millimetres high as shown if the vehicle exceeds 7.5 metres in length. See section 5 Heavy vehicle road rules for details. Only use plates with approved retroreflective material. Do not modify or use alternative plates except those described previously.



Keep the plates clean and in good condition. Plates must not be covered or obscured by any vehicle equipment or load.

When a hauling unit vehicle is rated with a GCM exceeding 12 tonnes or the sum of the laden mass of the trailer and hauling unit exceeds 12 tonnes, rear marking plates must be fitted to the rearmost trailer being towed.

Rear marking plate rules do not apply to route buses used only in urban areas.

The marking plate shown on page 70 may be an acceptable alternative, if the first option is not practicable, provided it meets specific dimensions and locations. For further information refer to Standards Bulletin VSB12 – Rear Marking Plates.



Typical fitting of alternative style class 2 plate (type 1).

## **RUST AND CORROSION**

Any structure, chassis, frame etc must not have advanced rust. Any panel separating the driver or passenger from fuel or engine fumes must not have advanced rust – that is rust which would cause the metal to collapse in a crash.

## **SEATS AND SEATBELTS**

Seat frames or mountings must be structurally sound with all seatbelts undamaged and working properly.

## **STEERING**

The steering wheel must be undamaged and firmly attached to the steering column. All steering components must be secure, undamaged and not have excessive free play.

## **STRUCTURE**

Any structure, chassis, frame etc must not be distorted, cracked or damaged.

## **SUSPENSION**

Suspension springs must not sag or be modified and all suspension components must be aligned and undamaged.

## **WHEELS AND TYRES**

All wheels must be properly attached to the vehicle with the right number and type of nuts and studs and wheel rims must not be cracked or bent.

All tyres must have at least 1.5 millimetres tread depth over 75 per cent of tyre surfaces which normally contact the road. All tyres must have correct air pressure. Manufacturer's recommendations are a good guide.



Regrooved tyres are acceptable provided such tyres (or retreads) are marked by their manufacturers as being suitable for regrooving. This only applies to heavy vehicles. Regrooved tyres must be retreaded to meet the requirements of an appropriate version of Australian Standards AS 1973.

## WINDSCREEN AND WINDOWS

The windscreen directly in front of the driver or in the path of the windscreen wipers must not be cracked, scored or chipped.

Wiper blades, windscreen washers and demisters must be fitted and work well.

## Pre-departure checks

All drivers are legally responsible for the safety and roadworthiness of the vehicles they drive. Before driving any vehicle you must ensure it is safe and roadworthy.

### ENGINE COMPARTMENT

Engine oil level .....	<input type="checkbox"/>
Engine coolant level .....	<input type="checkbox"/>
Clutch fluid level .....	<input type="checkbox"/>
Brake fluid level .....	<input type="checkbox"/>
Power steering fluid level .....	<input type="checkbox"/>
Screen washer fluid level .....	<input type="checkbox"/>
Ancillary drive belts .....	<input type="checkbox"/>

### ELECTRICAL

Headlights: high and low beam .....	<input type="checkbox"/>
Driving and fog lights .....	<input type="checkbox"/>
Park lights .....	<input type="checkbox"/>
Indicators: left and right .....	<input type="checkbox"/>
Clearance lights .....	<input type="checkbox"/>
Tail lights and plate light .....	<input type="checkbox"/>
Brake lights .....	<input type="checkbox"/>
Hazard lights .....	<input type="checkbox"/>
School warning lights .....	<input type="checkbox"/>

## VEHICLE POSTURE, LEAKS AND LOAD

- Vehicle posture .....
- Fluid leaks .....
- Load properly secured (trucks) .....

## COUPLING

- Air hoses and cables .....
- Security .....

## VEHICLE BODY

- Body damage .....
- Mud flap(s) and guards – front and rear .....
- Cabin entry grab handles .....
- Door operation and locks .....
- Windows – operation and damage .....
- Bus rear window – Emergency Exit .....
- Cargo and luggage doors (if available) .....
- Mirror(s) – lens and security .....
- Plates and signs .....
- Fuel tanks .....
- Air tanks .....
- Toolbox(es) .....
- Other .....

## BRAKES

- Foot and hand controls correctly adjusted and not worn .....

### Hydraulic brakes

- Brake fluid reservoirs must be full .....
- Hoses, pipes and cylinders leak free .....
- Rigid pipes bracketed, free of rust and have grommets  
when passing through chassis frames .....

### Air brakes

- Compressors, drive belts, exhausters and reservoirs  
securely mounted and undamaged .....
- Brake air lines, hoses, valve drain cocks and plugs secure,  
functional and leak-free .....

## WHEELS AND TYRES

Rims (dents in flanges, loose lugs and nuts, rust trails, cracks in rim assembly) .....	<input type="checkbox"/>
Tyres (tread minimum legal depth of 1.5 millimetres).....	<input type="checkbox"/>
Tyre inflation correct.....	<input type="checkbox"/>
Tyre cuts, damage, dual tyres touching, rocks lodged between duals .....	<input type="checkbox"/>
Spare wheel(s)/tyre(s).....	<input type="checkbox"/>

## GENERAL

Registration label(s) current and attached .....	<input type="checkbox"/>
Windscreen wipers .....	<input type="checkbox"/>
Warning triangles.....	<input type="checkbox"/>
Fire extinguishers.....	<input type="checkbox"/>
In-cabin load security .....	<input type="checkbox"/>
Other.....	<input type="checkbox"/>

## PRE-DEPARTURE SAFETY CHECKS

It is very important to check your vehicle before you drive, particularly items that have been reported defective. These checks can save time and expense later on, reducing the chance of component failure and subsequent loss of vehicle control, which may result in an accident.

These inspections should be conducted prior to shift start (no matter what the time of day) and always following the manufacturer's recommendations. The areas you need to cover are listed in this section.

## DEALING WITH PROBLEMS

If the vehicle you are driving has a maintenance or mechanical problem, you must make a written report on a form supplied by the owner.

Keep a record of all repairs and check that the fault has been fixed. Take it back to the repairer if the problem persists.

## DEFECT REPORTING

If the vehicle you are driving has a maintenance or mechanical problem, inform the owner of all symptoms in a written report.

## Uncoupling and coupling

Uncoupling and coupling a prime mover and semitrailer is a task which can lead to serious accidents, injury and vehicle damage. Follow these steps to perform the task correctly.

### UNCOUPLING A SEMI-TRAILER

#### STEP 1 - SECURE THE VEHICLE

**1** Before uncoupling:

- Make sure your semi-trailer is parked on a level area.
- Ensure the vehicle is on a surface firm enough to support the trailer landing gear and its load.
- Make sure the prime mover and semi-trailer are in a straight line.

**2** You will then need to:

- Apply the parking brakes and tractor/trailer protection valve.
- Ensure trailer security by giving it a 'tug test' with the prime mover to see if the trailer moves or by chocking the trailer wheels.
- Always use chocks when you have to park a semi-trailer on a grade. It is best to chock the semi-trailer's front axle in case the landing legs collapse and the rear axle(s) lifts.
- When you uncouple on soft ground, put suitably strong timber or other flat supports under the landing gear.
- Large pressure drops during a static brake check may indicate that there is a problem. Always have this checked.

#### STEP 2 - TRAILER CHECK

**1** Lower the landing gear ensuring firm and even contact with the ground.

**2** Raise the trailer until a gap is visible at the fifth wheel (turntable).

**3** Secure the landing gear handle.

#### STEP 3 - UNCOUPLING THE TRAILER

**1** Release the turntable jaws. If the release handle cannot be moved, the jaws may be under load.

**2** Take the pressure off by gently rocking the prime mover forward and back and then try to release again.

- 3 Move forward slowly. Release the prime mover parking brake and slowly drive forward in a straight line until the fifth wheel is just clear of the trailer skid plate, making sure the trailer stays put, using the trailer brakes if necessary.
- 4 Apply prime mover park brake.

#### **STEP 4 - FINAL CHECK**

- 1 Disconnect the air hoses and electrical cables from the trailer.
- 2 Stow hoses and cables properly on the prime mover making sure that the connectors are kept free of dust and water, and that they cannot get caught on the tail shaft.
- 3 Drive away slowly. Ensure the driver's door is closed whenever the vehicle is moving.

### **COUPLING A SEMI-TRAILER**

#### **STEP 1 - POSITION THE VEHICLE**

- 1 Reverse the prime mover into position, lined up straight in front of the trailer, stopping the prime mover with the skid plate just touching the trailer.
- 2 Apply the parking brake.

#### **STEP 2 - TRAILER CHECK**

- 1 Check the trailer skid plate, kingpin, turntable jaws, airlines, leads and connections for damage.
- 2 Make sure the turntable jaws are open.
- 3 If the trailer:
  - Has a block welded to the skid plate about 30 cm behind the kingpin, make sure the top of the turntable is the type which turns and is unlocked.
  - Is without the block the turntable will need to be locked in position. Make sure the top of the turntable is well greased when it is used in the locked position.

#### **STEP 3 - SECURING THE TRAILER**

- 1 Ensure trailer is secure. Place chocks behind at least one wheel. If the trailer is equipped with spring brakes, the trailer brakes should already be on.

- 2 Check that the turntable and kingpin are lined up and that the prime mover will clear the trailer.
- 3 Check and adjust the height of the skid plate to the turntable. The height of the trailer skid plate should be slightly lower than the centre of the turntable. About five centimetres is ideal.

If the trailer is too low, the prime mover chassis or edge of the turntable can hit the trailer front instead of going under.

On a trailer that is too high, the turntable may not properly latch on to the kingpin, or the turntable could even pass beneath the kingpin, allowing the prime mover cab to hit the trailer.

#### **STEP 4 - TRAILER CHECK**

- 1 Connect air hoses and electrical cables (do not forget to twist lock ring on bayonet fittings)
- 2 Set tractor protection valve (if fitted) to normal.
- 3 Apply the trailer brake.
- 4 Check brake air pressure.

#### **STEP 5 - COUPLING THE TRAILER**

- 1 Reverse the prime mover slowly under the trailer until the turntable jaws lock around the kingpin.

You should hear the jaws close and lock into place.

- 2 Raise landing gear just clear of the ground.
- 3 Perform a 'tug test' to check the trailer is locked on by trying to move off in first gear with the trailer brakes on.

The prime mover should not move.

- 4 Repeat this check to be absolutely sure.
- 5 Check that the coupling release lever is in the locked position and there is no gap between the turntable and the trailer skid plate.

A visible gap between the turntable and the trailer skid plate may mean the trailer is set too high.

Try lowering the trailer on the landing gear slightly and the gap should close but if it does not check for any problems.

- 6 Check that the turntable jaws are closed correctly and have locked on to the kingpin.

Make sure that the head of the pin is not sitting on top of the jaws.

- 7 Fully raise the landing gear and stow the handle.

Check that there is enough clearance for normal movement between the prime mover (frame and wheels) and the trailer frame.

Check also that there is enough clearance between the landing gear and the back of the truck frame to allow for turning.

## **STEP 6 - FINAL CHECK**

- 1 Run the engine until the air pressure has reached its maximum in the air tanks.
- 2 Switch off the engine, apply the parking brakes, and turn on the hazard warning lights, side and tail lights.
- 3 Perform an inspection by walking around the truck and trailer listening for air leaks, and checking all trailer lights are operational.
- 4 Remove and stow wheel chocks.
- 5 Allow time for air ride systems to prime before moving off as substantial damage may occur if not in the full ride position – this may take time with some combinations eg B-double.

## **UNCOUPLING A TRUCK AND TRAILER**

### **STEP 1 - SECURE THE VEHICLE**

- 1 Before uncoupling:
  - Make sure your truck and trailer are parked on a level area.
  - Ensure they are on a surface firm enough to support the trailer drawbar support leg if fitted.
  - Make sure the truck and trailer are in a straight line.

### **STEP 2 - TRAILER CHECK**

- 1 Apply park brake and truck/trailer protection valve.
- 2 Ensure trailer security by 'tug test' or chocking wheels.

### **STEP 3 - UNCOUPLING THE TRAILER**

- 1 Lower drawbar support leg.
- 2 Disconnect and secure all hoses and cables.
- 3 Release towing connection.
- 4 Drive slowly forward.
- 5 Check mirrors to confirm disconnection.

## COUPLING A TRUCK AND TRAILER

Note: These procedures may need to be varied.

### STEP 1 - EXTERNAL CHECK ACCORDING TO ACTUAL VEHICLE CONFIGURATION AND MANUFACTURER'S RECOMMENDATIONS

- 1 Check coupling assembly including guide flange, towing and locking pins, and connections.
- 2 Check pin is in the coupling position.

### STEP 2 - SECURE THE TRAILER

- 1 Placing chocks behind at least one wheel or if the trailer is equipped with spring brakes, the trailer brakes should already be on.

### STEP 3 - COUPLING THE TRAILER

- 1 Reverse truck close to, but not touching, draw bar.
- 2 Check height and alignment of eye ring to coupling assembly, adjusting if necessary.
- 3 Reverse truck slowly until the towing system is locked or in position to be connected.
- 4 Perform a 'tug test'.
- 5 Look to check the connection.
- 6 Connect air hoses and cables.
- 7 Raise drawbar support leg and stow (if fitted).

### STEP 4: Final checks

- 1 Check brake air pressure.
- 2 Switch off engine and inspect by listening for air leaks, stowing chocks and checking all trailer lights are operational.
- 3 Remove and stow wheel chocks.





# Vehicle dimensions and loading

It is the responsibility of the driver to ensure the vehicle does not exceed dimension or mass limits and that the load is appropriately restrained.

## MINIMISING DIMENSIONS

A person must not use a vehicle or combination unless it is loaded so as to minimise its dimensions.

## STATUTORY LIMITS

Any vehicle that exceeds the following dimensions (Table 1) or mass limits (Table 2) MUST operate in accordance with an exemption or specific permit when used on a public street. See section following on permits.

**TABLE 1 VEHICLE DIMENSIONS**

Type of vehicle or combination	Dimension	Statutory Limit (m)
Any rigid vehicle	Length	12.5
	Width	2.5
	Height	4.3
	Rear overhang	4.4 double deck bus Lesser of 3.7m or 60% of the wheelbase
Any vehicle and trailer combination (including prime mover – semi trailers).	Length	19
	Width	2.5
	Height	4.3
	Rear overhang	4.6 Live stock carrier, or a vehicle carrying vehicles on more than one deck. Lesser of 3.7m or 60% of the wheelbase

**TABLE 2 AXLE MASS LIMITS**

Single Axle or Axle Group	Axle Description	General Access Mass Limit (tonnes)
Steer axle	2 tyres	6./6.5
Twin steer axle group	Non-load sharing suspension system	10.0
	Load sharing suspension system	11.0
Single axle	4 tyres	8.5 Pig Trailer
		9.0
Tandem axle group (load sharing)	8 or more tyres	15.0 Pig Trailer
		16.5
Tri-axle groups (load sharing)	12 or more tyres on a trailer (min 1.2 axle spacing)	18.0 Pig Trailer
		20.0
<b>GROSS MASS</b>		<b>42.5</b>

## MAXIMUM WIDTH

The width of a vehicle is to be measured without taking into account any of the following -

- anti-skid devices mounted on wheels
- central tyre inflation systems
- lights
- mirrors
- reflectors
- signalling devices
- tyre pressure gauges

## REAR OVERHANG

The rear overhang of a vehicle means the distance between the rear overhang line and the rear most point of the vehicle, inclusive of any load.

The rear overhang line of a vehicle is –

- the centre line of the rear axle if there is a single axle at the rear of the vehicle; or
- the centre line of the rear axle group if there is an axle group at the rear of the vehicle.

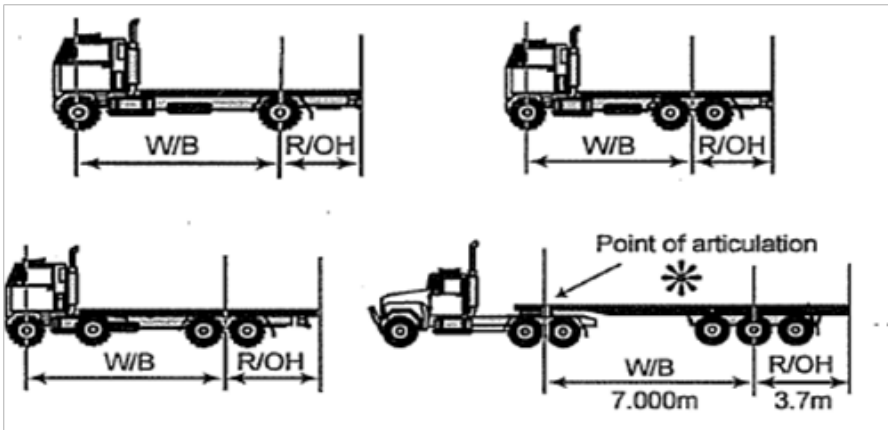
The maximum rear overhang of a rigid vehicle, including any load is the lesser of -

- 3.7 metres or
- 60% of the wheelbase.

The maximum length of a rigid vehicle, inclusive of any load carried is 12.5 metres.

The maximum length of a truck and trailer or prime mover and semi trailer, inclusive of any load carried is 19.0 metres.

If the load exceeds the allowable dimensions a more appropriate vehicle must be used.



W/B=Wheelbase

R/OH=Rear Overhang

m=Metres

Example:   WB - 7.00m  
               x 60%  
               = 4.20m

Maximum permitted 3.7m

## LOAD SHIFT

When moving, a vehicle's load can move from forces caused by changes of speed, braking, accelerating, cornering, travelling over uneven road surfaces, and slopes.

Loads must be secured to ensure the load does not move.

## HOW TO CARRY A LOAD SAFELY

To carry a load safely and prevent danger to any person, or damage to any property you must -

- choose a suitable vehicle
- position the load correctly
- use suitable and adequate restraint equipment
- use appropriate driving methods

## Loading

The *Heavy Vehicle (Mass, Dimension and Loading) National Regulation* stipulates the mass, and dimensions for all vehicles and loads used on a public street in Tasmania.

Vehicle manufacturers set the gross mass (GVM/GCM/GTM) limits for each vehicle model.

A vehicle must not be operated at a mass limit that will exceed the lesser of the -

- manufacturer's GVM/GCM/GTM
- manufacturer's individual component rating (ie axles, springs, tyres etc)
- statutory mass limits

It is the operator's responsibility to make sure these limits are not exceeded.



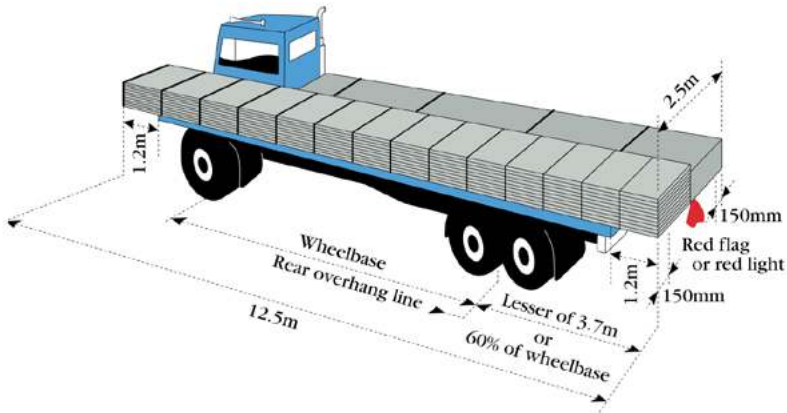
### THE COST OF OVERLOADING

Millions of dollars are spent every year to repair damaged roads and bridges.

Even a little overloading causes a lot of damage to roads and bridges, which everyone must pay for. It is very important for the future of Tasmanian roads and the heavy vehicle industry that you do not overload your vehicle.

## PROJECTING LOADS

This information applies to all vehicles. For details regarding loads on vehicles refer to the information bulletins the National Heavy Vehicle Regulator website [www.nhvr.gov.au](http://www.nhvr.gov.au)



This diagram shows the allowable projected load limits.

## DANGEROUS PROJECTIONS

A person must not use, or cause or permit the use of, a vehicle with a load that projects in a way that is dangerous to a person or property, even if the dimension limits and warning requirements specified in the regulations are complied with.

## WARNING REQUIREMENTS ON PROJECTIONS

During daylight, a person must not use, a vehicle carrying a load if the load projects more than -

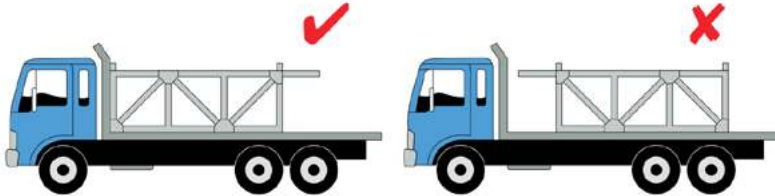
- 1.2 metres in front of the vehicle; or
- 1.2 metres behind the vehicle, unless a red, yellow or red and yellow flag at least 300mm square is affixed to the rear extremity of the load.

At night, a person must not use, a vehicle carrying a load if the load projects more than -

- 1.2 metres in front of the vehicle; or
- 1.2 metres behind the vehicle, unless a red light is affixed to the rear extremity of the load. The light must be visible for at least 200 metres.

## DANGEROUS PROJECTIONS

A load with any potentially dangerous projection should be placed to minimise risk to the driver and any other person.



The potentially dangerous projection is correctly positioned to minimise the risk of load shift.

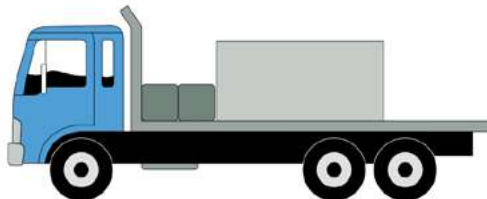
The load is incorrectly positioned and projections are potentially dangerous in the event of load shift.

## LOAD DISTRIBUTION AND ARRANGEMENT

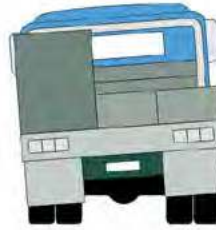
An overloaded vehicle is unsafe to drive, inefficient to operate and damages the road.

Poor load distribution can cause -

- loss of steering
- loss of traction under power
- wheel lock-up under braking resulting in a jackknife or trailer swing
- vehicle roll-over on a roundabout or when changing lanes



The weight of the load should be evenly distributed.



The weight of the load needs to be evenly distributed.



It is very important to have even distribution of maximum permitted weight because:

- Maximum permitted axle loads will not be exceeded.
- Driving control is improved through the wheels.
- The chassis frame will not be damaged by twisting or bending.

## POSITIONING THE LOAD

For stability, the load should be spread close to the centre line of the vehicle. You should stack the heavier things at the bottom. Loading a heavy item on one side may result in twisting and stress on the chassis frame, or overloading of axle housings, wheel bearings and tyres. This could be bad enough to -

- allow the brakes to lock on the wheels on the lighter side
- cause flat spots on the tyres
- skid on a wet surface

Problems may occur in a rigid vehicle, when a very heavy small load is placed against the headboard. This could cause -

- the chassis frame to bend, perhaps permanently
- overloading in the front tyres
- irregular tyre wear or even a blowout

Avoid these problems by placing any small heavy load just ahead of the rear axle.



If you need to place a load back from the headboard to distribute weight, the load should be blocked so that it cannot move forward. Unless it is blocked, even the heaviest load will move forward if you stop suddenly.

## SECURING THE LOAD

The following information is a guide only. Detailed information on securing your load is available in the *Load Restraint Guide*.

The way your vehicle is loaded is very important for your safety and for the safety of others. You are legally responsible for your load and any damage or injury it may cause.

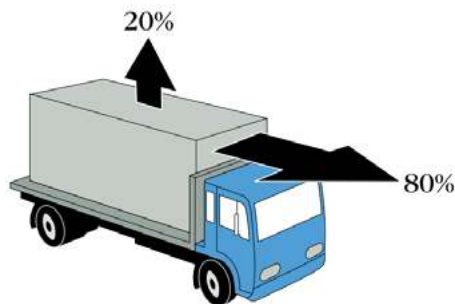
Driving over bumps in the road, around curves and corners, and accelerating and braking can cause your load to move. The force of an impact can move a load that is unstable or not properly secured and you can lose control of your vehicle.

The weight of your load should also be evenly distributed so you can control your vehicle properly.

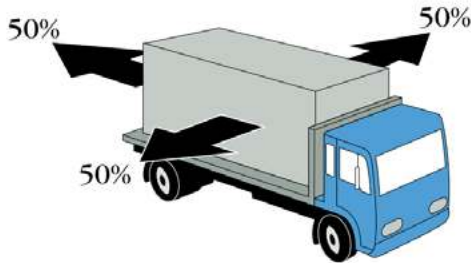
## Load restraints

A load restraint system on a vehicle should be capable of restraining the following percentages of the weight of the load from shifting -

- 20 per cent upward
- 80 per cent forward
- 50 per cent rearward
- 50 per cent sideways



20% upwards and 80% forward.



50% rearward and sideways. These limits are reviewed from time to time by the National Transport Commission and the National Heavy Vehicle Regulator. Drivers are encouraged to check these websites for updates: [www.ntc.gov.au](http://www.ntc.gov.au) and [www.nhvr.gov.au](http://www.nhvr.gov.au).

Loads must be secured to prevent -

- any part of the load hanging over or sticking out of the vehicle in a way which could hurt someone, damage property or cause a hazard to other road users
- any part of the load being dislodged or falling out of the vehicle

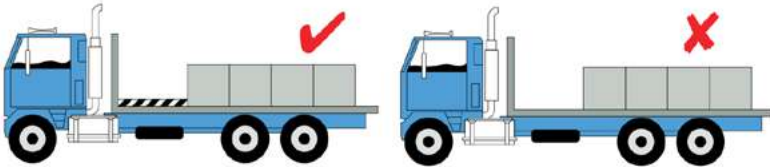
It is against the law to drive a vehicle where the load is not secured. You can stop your load from moving by -

- lashings secured to the vehicle chassis, including -
  - cross bearers
  - outriggers
  - tie rails and similar arrangements
- blocking arrangements such as
  - load racks
  - headboards
  - bulkheads
  - stakes in pockets
  - transverse beams
  - shoring bars
  - chocks, dunnage, etc

- containing the load by using a truck with solid sides and tailgate, a tanker or a shipping container
- covering loose loads such as sand or gravel with sheets or tarpaulins

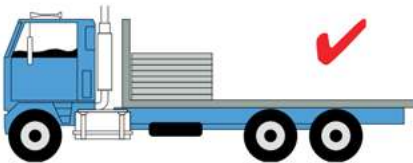
## BLOCKING

The most important part of the blocking is the headboard or bulkhead. It is best to put most loads right against the headboard to prevent the load acting like a battering ram if it moves forward. If other restraints fail in a sudden stop, the load might break the headboard. This could damage the cabin and leave you severely injured.



The headboard and extra blocking can be used to stop load shift.

The load is not secured and could shift.



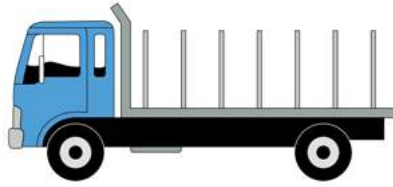
The load is correctly blocked against the headboard.

Many vehicles carry loads that could crush the driver's cab if the load shifted forward under sudden braking. If you carry loads such as coils, sheet steel, steel pipes, structural steel and timber, you should have a solidly constructed bulkhead instead of a normal headboard.

When carrying a load of metal bars, it is particularly important to ensure that all bars are secured and unable to move out of the stack. One bar that moves could go through the bulkhead.

## STAKES IN POCKETS

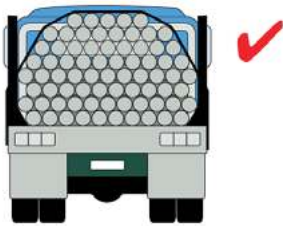
These or stanchions may be used in conjunction with lashings to prevent long rigid loads such as pipes, logs etc from moving sideways.



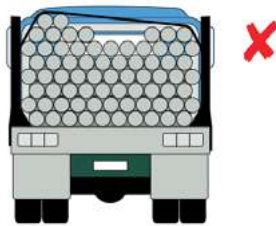
Stakes or stanchions should be used to prevent sideways movement.

### CROWNED LOADS

It is important that long rigid loads such as pipes, logs etc be crowned to ensure the load is lashed securely without 'gaps'. Gaps in the load may allow it to move and cause the lashings to become loose.



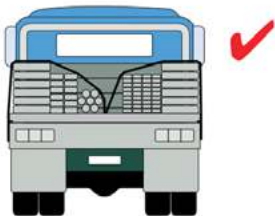
To restrain movement in loads such as pipes, they need to be crowned and have no gaps.



The gaps in this load can cause potentially dangerous load shift.

### DIVIDED CROWNED LOADS

In some cases it may be necessary to divide the load into two or more stacks to crown it effectively. This can be achieved by attaching the lashings along the middle of the deck.



A load that is divided to minimise the chance of movement.



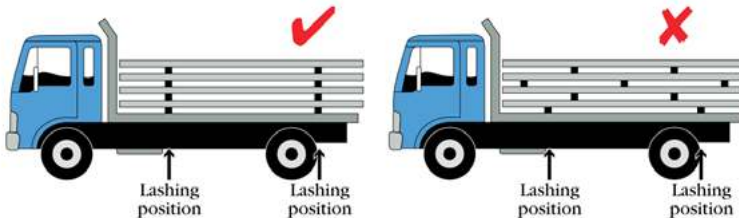
A load with substantial gaps that would allow potentially dangerous movement.

## DUNNAGE

This is packing placed under or between parts of the load. It is used to allow loading and unloading with forklifts or lifting slings. It is usually made of rectangular or square hardwood or softwood and must be strong enough to support the weight of the load placed upon it.

A load with multiple layers or rows must have all dunnage placed directly above the bottom dunnage. Tie-down lashings must only be placed at these positions along the load to ensure that the lashings do not loosen or overtighten if the vehicle chassis flexes.

Long rigid loads such as large diameter steel pipes must be supported in two positions to allow the vehicle to flex. Additional dunnage (and lashings) will need to be used along the lengths of more flexible loads such as plastic pipes etc.



Dunnage needs to be vertically aligned to minimise movement when under lashings. The dunnage is placed irregularly and could loosen or overtighten lashings when the vehicle is operating.

## GATES/FENCING

A load can also be secured with sidegates, tailgates and other blocks. The sidegates have to be strong enough not to be forced out by the weight of the load. Other blocks should be secured and braced. You should close and lock the tailgate of your vehicle unless the load is too long. Never carry any separate part of the load on the tailgate.

Where small pipes or logs are carried, suitable sidegates or other containment methods should be used to prevent sideways movement.



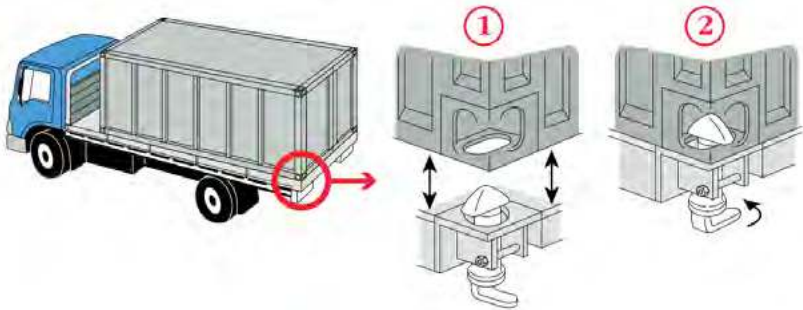
A load secured from sideways movement by gates and fencing.

A load not secured from sideways movement.

## CONTAINERS

Vehicles used to carry containers must be equipped with special devices known as 'twist locks'. Containers have special corner-pieces which fit into the twist-locks on the vehicle. They can then be locked into place. Sometimes frames with twist-locks can be attached to the vehicle. These frames need to be securely bolted to the chassis.

A container is not properly secured unless the twist-locks are used. This applies whether the container is full or empty. A vehicle without twistlocks should not be used to carry containers. Decommissioned containers (those not carrying a load) can be chained to a vehicle for transport.



A twist lock used to secure a container.

## LASHINGS

These and other fastening devices such as dogchains, cables, clamps, load binders must be in good condition. A chain is not good enough if even one link is deeply gouged, pitted or worn. Make sure the lashings are tight enough to stop any movement. Make sure the type of lashing you use is strong enough to fasten in place.

The lashings should be protected from any sharp edges on the load or on the vehicle. When using more than one lashing, secure them separately so if one line fails the others will hold.

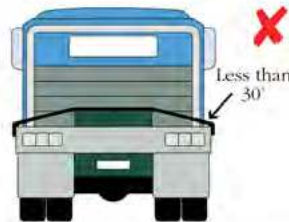
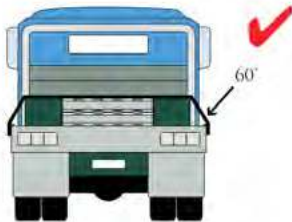
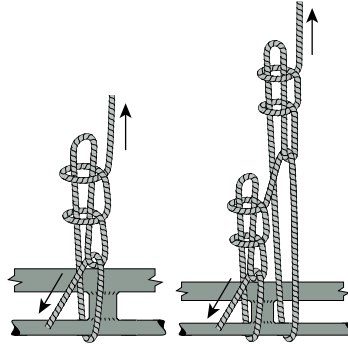


A correctly lashed and fastened load.

## ROPES

Ropes used for lashing loads should be tensioned by either a single or double 'truckies hitch'.

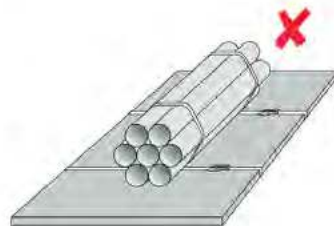
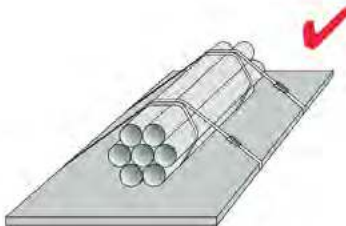
The greater the tie down angle of the lashing to the load, the greater the lashing tension will be on the load. Angles of less than 30 degrees are not recommended.



The greater the angle of the lashing to the load the greater the lashing tension will be. Angles less than 30° are not recommended.

## BELLY WRAPPING

Belly wrapping may be used to prevent large diameter pipes or bars from rolling. When belly wrapping, the lashings must be looped over the top of the load to provide tie-down. Lashings that are looped underneath a rounded load will not prevent the load from rolling.

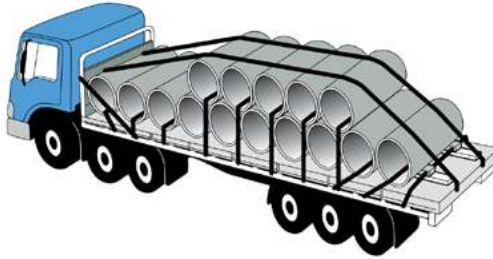


The lashings must be looped over the top to prevent rolling.

The load could roll dangerously.

## LARGE PIPE LOADS

When placed across the vehicle, all upper layer pipes in the load should be individually tied down so that all pipes in the load are positively clamped to prevent sideways movement.

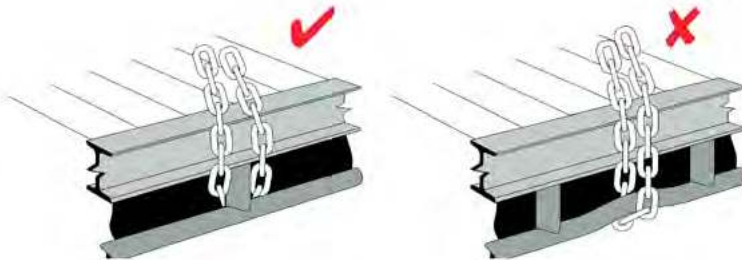


All pipes need to be clamped to prevent sideways movement.

## LOAD ANCHORAGE POINTS

You cannot rely on traditional rope hooks or rings to hold anything other than light loads.

Vehicles should have load anchorage points fixed to the vehicle so that the main chassis frame takes the force of the load.



The chassis frame should be used as an anchorage point.

You should not rely on non anchorage points to take anything other than light loads.

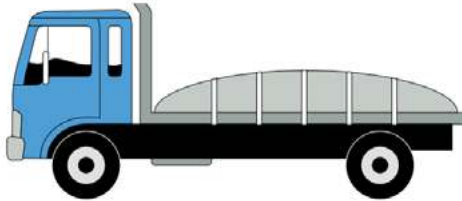
## FRICTION

Friction cannot stop your load from moving but it can be a great help. To make the best use of friction, the base of the load and the platform should be kept clean, dry and free from grease. A slippery platform surface is always dangerous.



## SHEETS AND TARPAULINS

Except in the case of very light bulk loads, sheets and tarpaulins are not strong enough to hold down loads, they only protect the load from the weather. Sand, gravel, etc. should always be covered.

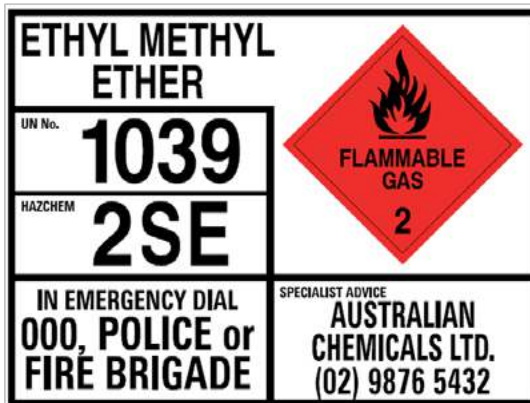


Secured sheets and tarpaulins can be used to protect loads from the weather.

## Dangerous goods

The Australian Code for the Transport of Dangerous Goods by Road and Rail (7th Edition) provides advice for drivers of vehicles transporting dangerous goods. This is commonly known as the Dangerous Goods Code, or ADG7.

You can download or purchase a copy of the Dangerous Goods Code from the National Transport Commission website at [www.ntc.gov.au](http://www.ntc.gov.au).



An example of an emergency information panel.

### IN THE EVENT OF A CRASH YOU MUST

- Call the police or fire brigade on 000.
- Not touch spilled chemicals and avoid breathing fumes and dust.
- Keep people away from the crash site.
- Follow any Emergency Action Code procedures.
- Show the transport documents and emergency procedure guide to the police or fire brigade when they arrive.

## THE CORRECT LICENCE

Any driver of a vehicle which carries dangerous goods must be licensed for that purpose. To find out if your vehicle is defined as carrying dangerous goods, contact WorkSafe Tasmania on 1300 366 322.

Dangerous goods vehicle drivers are subject to the Australian Code for the Transport of Dangerous Goods by Road and Rail administered in Tasmania by WorkSafe Tasmania.

The driver must -

- be at least 21 years old
- have held a driver licence for the class of vehicle, which is to carry the dangerous goods
- have successfully completed an approved training course
- submit a medical certificate
- have a satisfactory driving history

For details on dangerous goods, refer to the National Transport commission at [www.ntc.gov.au](http://www.ntc.gov.au) or contact WorkSafe Tasmania on 1300 366 322.



Dangerous goods vehicles are prohibited from travelling in certain areas at certain times. Please contact WorkSafe Tasmania for more information.

## RISKS

Many vehicles carry dangerous loads including substances which are flammable, toxic, infectious, radioactive or corrosive.

A crash, leakage or fire involving a vehicle carrying dangerous goods could cause extensive damage, death or serious injury to many people.

Vehicles carrying flammable loads must be fitted with a switch that isolates the battery and so reduces the risk of fire.



In the event of a leakage or accident follow the procedure outlined on your Emergency Action Code. The procedure varies for different materials so make sure you carry the right card.

WorkSafe Tasmania can provide you with professional, technical and scientific information and advice.  
Call 1300 366 322.



### CHECKLIST FOR DANGEROUS GOODS:

#### Consignment papers

Make sure you have these (transport documents) that show what you are carrying.

#### Proper labelling

Make sure your vehicle is properly labelled.  
For dangerous goods it should have:

- A hazard warning diamond at the front and rear.
- Information as required which should be shown on three emergency information panels, one at the rear of the vehicle and one on each side, and should include:
  - The name of the substance.
  - United Nations (UN) identification number.
  - Emergency action code.
  - Emergency telephone number.
  - Name and telephone number of the responsible company that can be contacted.

### ■ **Carry appropriate guides**

You must keep the Emergency Procedures Guide, a 'product' card which gives a guide to the emergency procedures that apply to the particular hazardous substance which you are carrying, together with the Vehicle Fire Card, on or near the inside of either cabin door. You are permitted to carry the Initial Emergency Response Guide instead of carrying both the product card and vehicle fire card as the guide provides similar information to the cards. The guide book and cards are published by Standards Australia.

### ■ **Tank inspections**

Inspect the tank or other containers before and after loading and frequently throughout the journey.

### ■ **Hatch inspections**

Inspect the hatches of the tanker and make sure the seals are in good condition. Make sure that all filling points are closed. If they are not, the tank could leak a lot in a rollover. The vapour from an open filling point could impair your driving.

### ■ **Protective clothing**

Carry sufficient protective clothing so that you will be able to attend to any small leaks. You may be able to stop them before they become serious problems.

## Oversize vehicle permits

If the dimensions or mass of a vehicle exceed current regulations then an exemption or permit is required. A permit application may be obtained by calling the National Heavy Vehicle Regulator on 1300 135 513, or can be downloaded from the Regulator's website at [www.nhvt.gov.au](http://www.nhvt.gov.au).

### GENERAL PERMIT TYPES

General permits are issued by the National Heavy Vehicle Regulator.

Check on the National Heavy Vehicle Regulator's website at [www.nhvr.gov.au](http://www.nhvr.gov.au) to obtain information on current permit notices.

These Notices include permits for the following -

- B-doubles
- truck and dog trailer combinations
- higher mass limits for vehicles with road-friendly suspension





## Traffic offences

Penalties for breaking the traffic laws include fines, disqualification from driving, licence cancellation or suspension. For a very serious offence like drink driving, you may be fined, disqualified from driving or even go to prison.

### DEMERIT POINTS

For certain traffic offences you will have demerit points recorded against you. There is a limit to the number of points you can build up before your licence is suspended.

This table shows the length of licence suspension depending on the number of demerit points recorded.

Driver	Number of demerit points	Period of suspension
Learner/provisional licence holder	4 in 12 months and/or 12 in 3 years	3 months
	12 - 14 in 3 years	
Unlicensed driver*	15 - 19 in 3 years	4 months
	20 or more in 3 years	5 months
Full licence holder	12 -14 in 3 years	3 months
	15 - 19 in 3 years	4 months
	20 or more in 3 years	5 months

\* An unlicensed driver has a period of ineligibility to hold a licence, instead of a suspension period.

### PERIOD OF GOOD BEHAVIOUR

If your full (not a learner or provisional) licence is about to be suspended because of demerit points, you can enter into a period of good behaviour for 12 months.

During your period of good behaviour if you get more than one demerit point recorded against you, your licence will be suspended for twice the original length of the licence suspension.



## EXCESSIVE SPEEDING OFFENCES

Automatic disqualification periods apply to drivers who commit a serious speeding offence -

- driving more than 45 km/h above the speed limit – 6 demerit points and a four-month disqualification
- driving between 38 km/h and 44 km/h above the speed limit – 6 demerit points and a three-month disqualification

As these offences also carry demerit points, they may result in you getting a demerit point suspension if you reach your demerit point limit. This suspension will normally start immediately after your excessive speed disqualification.

## ALCOHOL AND DRUG OFFENCES

It is against the law to drive while under the influence of alcohol and drugs, including prescribed medicines. If you are found to be driving under the influence of drugs or alcohol, for a first offence you may be fined up to \$3600, go to prison for up to 12 months.

It is an offence to drive certain vehicles (including one with a GVM in excess of 4.5 tonnes) with alcohol in your body. If you commit a drink driving offence, for a first offence you may be fined up to \$1200, go to prison for up to 3 months.

Depending on the breath or blood alcohol reading recorded a driver can be automatically disqualified (on the spot) from driving for 12 months.

Heavier penalties apply for second or subsequent offences.

It is against the law to drive with an illicit drug present in the blood. These drugs include THC (the active component of cannabis), methylamphetamine and ecstasy. For a first offence, you can be fined up to \$1200.



For more information on traffic offence and penalties, see the *Tasmanian Road Rules Handbook* or [www.transport.tas.gov.au](http://www.transport.tas.gov.au).

## SPEED LIMITER OFFENCES

A heavy vehicle operator commits a speed limiter offence when their heavy vehicle which is required by law to be speed limited travels more than 100 km/h.

National heavy vehicle law provides heavy penalties for offences related to infringement of speed limiters.

## HEAVY VEHICLE CHECKING STATIONS

Weigh bridges and Checking Stations are permanent Tasmanian facilities, located along major transport routes, where any vehicles may be stopped and inspected to see that they meet safety and roadworthiness standards and that their drivers are complying with road transport laws.

## TRUCKALYSER

Truckalysers are used by State Growth Transport Inspectors to help keep your vehicle in a safe condition. The truckalyser tests -

- brakes by measuring the brake force generated at each tyre and calculating the brake balance on each axle
- steering and suspension to determine any serious and potentially dangerous wear in any of the components.

## NOISE POLLUTION

Noise can affect your physical health, cause nervous stress and annoy others. It adds to fatigue, lowers productivity and can also increase the risk of heart disease.



Empty tipper trucks can be very noisy, so drive slowly over rough roads or get rubber lining fitted to the body.

## WHAT YOU CAN DO TO REDUCE NOISE

- Fit a good exhaust system -
  - beware of 'cheapies' – they can wear out faster and may not have a warranty. A noisy muffler does not mean higher performance or better fuel consumption. Tests conducted have shown that in many cases noisy systems were no better for backpressure or fuel consumption.

- buy quality replacement mufflers. The manufacturer's recommended part is usually the best for all-round performance as well as noise control.

### GET YOUR TRUCK OR BUS TESTED FOR NOISE

Ask the muffler fitter to check that your new muffler has a low noise level. The legal noise limits vary according to GVM, manufacture date, type of engine and whether the exhaust pipe is vertical or horizontal.

During testing, the fitting of raincaps and elbows may deflect the radiation of noise for dB(A) testing, however, the microphone can be placed at any suitable location so long as it is more than 1.0 metre from the centre of the exhaust outlet but not in the way of the gas flow.

### SMOKE FROM ENGINES

Excessive smoke from vehicles is illegal, unpleasant and at times dangerous. It is also a sign of mechanical damage and can lead to expensive engine repairs and time off the road.

Blue smoke normally indicates engine wear or damage. Black and grey smoke results from incomplete combustion and may be caused by a number of factors. These examples can usually be fixed during routine maintenance -

- blocked air filter
- obstruction of fuel filters or water traps with dirt, grit or fuel wax
- incorrect fuel pump timing
- engine speed too high
- incorrect valve or tappet adjustment
- poor cylinder compression indicating leakage past valves or piston rings
- excessive back-pressure in exhaust system
- injectors misfiring or leaking
- faulty turbo chargers where fitted



You may be penalised if your vehicle blows smoke for more than 10 seconds while under load.

## Defect notices

Defect notices are issued by Department of State Growth Traffic Inspectors and Tasmania Police and WorkSafe Tasmania. There are two categories of defects – minor and major (which includes major grounded). These officers may also issue formal warnings.

### FORMAL WARNING

#### TYPE OF VEHICLE DEFECT

These are faults that are non-safety related and are relatively simple to repair. Owners should be advised that it is not necessary to return a Formal Warning Category Vehicle Defect Notice for clearance to State Growth.

#### HOW IT AFFECTS YOU

Your vehicle may continue to be used but any necessary repairs or adjustments must be made by the time specified on the notice.

### MINOR DEFECT

#### TYPE OF VEHICLE DEFECT

This includes faults in a vehicle's safety related systems that are not likely to cause the vehicle to become unsafe during the time specified on the notice. The vehicle may continue to be used until the expiry of time specified.

#### HOW IT AFFECTS YOU

Your vehicle may continue to be used up until the time specified on the notice of repair. These categories of vehicle defects are of a more technical nature and require inspection and clearance of the vehicle defect notice by either self clearing, an authorised AIS examiner at an authorised inspection station or an authorised officer of The Department of State Growth.

### MAJOR DEFECT

#### TYPE OF VEHICLE DEFECT

'Major' category vehicle defects are serious defects in a vehicle's safety related systems that would constitute an imminent and serious safety risk if the vehicle is operated beyond the time allowed for use – generally this is not more than 24 hours. A yellow coloured defective vehicle label may be attached to the vehicle and a traffic infringement notice issued.

## HOW IT AFFECTS YOU

Once repairs are completed the vehicle is to be inspected by an authorised officer of State Growth or an authorised AIS examiner at an authorised inspection station for the vehicle defect notice to be cleared.



It is against the law to drive or stand a vehicle with an uncleared defect notice on a public street beyond the time stipulated in the notice, or use a vehicle contrary to any conditions endorsed on the defect notice.

## MAJOR DEFECT – USE PROHIBITED

### TYPE OF VEHICLE DEFECT

Vehicles with dangerous category defects must not be driven from the point of inspection unless the dangerous faults are repaired immediately or the vehicle is towed or carried to a place of repair.

### HOW IT AFFECTS YOU

A yellow coloured defective vehicle label is attached to the vehicle. The issuing officer will explain the clearance procedures and where the vehicle may be inspected. In most cases the clearance procedures are the same as for major defects.

## DEPARTMENT OF STATE GROWTH TRANSPORT INSPECTORS

The job of a Transport Inspector is to ensure the safety of drivers and vehicles using Tasmanian roads. The inspectors enforce regulations for all vehicles, with special emphasis on:

- driver behaviour
- vehicle roadworthiness
- driving hours
- weight limit compliance
- dimension limit compliance
- noise and exhaust emissions
- registration and licensing matters

They also check the performance and standard of Authorised Inspection Stations and examiners.

Transport Inspectors are easily recognised by their uniform and all Inspectors carry identification cards.



# Driver knowledge test questions

Question	Answer
What is the maximum height allowed for heavy vehicles other than those operating under permit arrangements?	4.3 metres (livestock carriers - 4.6 metres) (double decker bus - 4.4 metres)
What is the maximum width allowed for heavy vehicles other than those operating under permit arrangements?	2.5 metres. Items such as rear vision mirrors and clearance lights are not included in the measurement.
What is the GVM (Gross Vehicle Mass) or GCM (Gross Combination Mass) of a vehicle?	The GVM or GCM is based on the vehicle manufacturer's rating as indicated on the compliance plate fitted to the vehicle.
When do you require a permit to carry your load?	When the vehicle or its load does not meet the statutory length, width, height or mass limits. Information can be obtained from the National Heavy Vehicle Regulator via their website - <a href="http://www.nhvr.gov.au">www.nhvr.gov.au</a> or by phoning 1300 696 487.
When are you required to carry portable warning triangles? How many? Where should warning triangles be placed when a vehicle stops on a road and the vehicle is not visible at any time for at least 200 metres in all directions?	Vehicles over 12t GVM must always carry them. A minimum of three. 1 each at least 50m (no more than 150m) in front and at the rear of the vehicle, and 1 at the side of the vehicle.
What is the total work time under Standard Hours allowable in a 24 hour period for heavy trucks (GVM over 12t, or forming part of combination in aggregate over 12t) and fatigue regulated buses (bus over 4.5t with seating capacity of more than 12 adults, carrying passengers for reward or other business purposes)?	12 hours
When are rear marker plates required?	On all motor vehicles over 12t GVM, and all trailers over 10t GTM.
What is the maximum speed for heavy vehicles over 12t GVM?	100 km/h or as per lesser posted speed limit.
What is the maximum speed for buses over 5t GVM?	100 km/h or as per lesser posted speed limit
What is the maximum speed limit for heavy vehicles under 12t GVM and buses under 5t GVM?	110 km/h or as per lesser posted speed limit.
Does your heavy vehicle extension allow you to carry bulk dangerous goods?	No



Question	Answer
What is the maximum time you can park a heavy or long vehicle on a road in a built-up area?	1 hour except when displaying an exemption permit issued by the Transport Commission.  Buses may occupy a Bus Zone for longer than one hour but must comply with signed restrictions.
When can you carry passengers?	A Heavy Vehicle Licence does not permit you to carry paying passengers. You require a Ancillary Certificate to Drive a Public Passenger Vehicle.  Non paying passengers are not permitted to be carried in heavy vehicles that are not equipped to carry passengers. Eg trailers and the backs of trucks.
What does the braking distance of a heavy vehicle depend on?	On the mass of the load, the speed of the vehicle, road conditions, and on the type and combination of the vehicle.
When do you need to enter a weighbridge?	When instructed by Transport Inspectors, Police or when a TRUCKS MUST ENTER sign is displayed.
When travelling in good weather conditions and on a highway what time gap should you leave between your heavy vehicle and the vehicle in front?	At least 4 seconds.
What is the maximum speed limit for heavy vehicle learner drivers?	90 km/h in a 90 km/h zone, 90 km/h in 100 km/h zone and 100 km/h in a 110 km/h zone
A heavy vehicle is any motor vehicle greater than?	4.5t GVM
What is the maximum speed limit (unless signposted otherwise) for heavy vehicles in a built-up area?	50km/h
Can the licensed driver of a multiple combination vehicle legally drive a heavy rigid vehicle?	Yes.
Is a Learner Licence required to drive the next class of heavy vehicle up from my current licence?	Not if you meet the age and experience criteria and you are progressing one class in the hierarchy.
What is the minimum driving age for a driver of a medium rigid vehicle?	19 years of age

Question	Answer
To obtain a light rigid or medium rigid licence you must have held a car licence for?	12 months.
What is the maximum G.V.M. of a trailer that you can tow with a heavy rigid vehicle?	9 tonnes.
What is a heavy rigid vehicle?	Any rigid vehicle with 3 or more axles, including trucks and buses, greater than 8 tonnes G.V.M
To obtain a heavy rigid licence you must have held a car and a light rigid/medium rigid licence for?	Car licence for 2 years and a light rigid/medium rigid for 12 months.
What is the minimum age to obtain a heavy combination licence?	20 years of age
What is a heavy combination vehicle?	Prime mover/single semi or heavy rigid vehicle with trailer greater than 9 tonnes G.V.M
To obtain a heavy combination licence how long must you have held a car and a medium rigid/heavy rigid licence for?	Car for 2 years, medium rigid/heavy rigid for 12 months.
What is the required minimum distance between long vehicles?	The required minimum distance between long vehicles is 60 metres, driving on a multi-lane road or any length of road in a built-up area.
What is the maximum G.V.M. of a trailer that you can tow with a medium rigid vehicle?	9 tonnes.
Do I need to display L Plates when learning to drive a heavy vehicle?	Yes.
When are you required to carry your licence?	At all times when driving.
Do you need a licensed driver, who holds the appropriate licence you are learning to drive, sitting next to you when you are learning to drive this class of heavy vehicle?	Yes.
Is it compulsory to wear seat belts in heavy vehicles?	Yes, if they are fitted.
When do you need to inspect the vehicle you are driving?	Prior to departing on any trip you should inspect the vehicle for basic roadworthiness. eg lights and tyres.

# Industry glossary

**ABS** – An abbreviation for anti-lock braking systems.

**ADR** – Australian Design Rule. A set of National Standards governing vehicle design.

**Aggregate mass** – Maximum allowable loaded mass of a particular vehicle or combination.

**Aggregate trailer mass (ATM)** – The total mass of a trailer carrying the maximum load as specified by the trailer manufacturer. It includes the mass imposed onto the drawbar as well as the mass on the axles. See also GVM.

**Air suspension** – A suspension system in which the weight of the vehicle is supported by air bags containing compressed air and the axles are held in position longitudinally and laterally by bushed rods.

**Articulated vehicle** – A motor vehicle and trailer. The trailer is pivoted to and superimposed on the motor vehicle. Usually a “prime mover” and “semi-trailer”. Does not include pole or drawbar type trailers.

**Anchor point** – Fitting or attachment on a vehicle or load to secure lashings.

**Automatic tow coupling** – A “coupling” used to connect a trailer “drawbar” to the motor vehicle with a self-engaging pin and locking mechanism.

**Auxiliary gearbox** – A secondary gearbox that may be located before or after the main gearbox to provide additional overdrive or reduction ratios.

**Axle** – One or more shafts positioned in a line across a vehicle, on which one or more wheels intended to support the vehicle turn.

**Axle group** – Means a “Single Axle”,

“Tandem Axle Group” “Tri-axle Group” or “Quad Axle Group”.

**Baffles** – Barriers fitted crosswise and lengthwise inside tanks to limit surging of fluids (or loads which behave like fluids) during acceleration, braking and cornering.

**B-Double** – A combination of vehicles consisting of a prime mover towing two semi-trailers.

**Bolster** – A rigid support base commonly used to support logs on jinkers, may also be fitted with chocks and stanchions.

**Bulkhead** – Also known as a Cab Guard refers to the frame work at the front of the tray body or flat top trailer.

**Cab chassis** – A motor vehicle with only the cab fitted with no cargo or load carrying capacity.

**Chassis** – A vehicle frame includes all running components but no body or cabin.

**Chocks** – Wedge shaped blocks used to prevent movement of the load.

**Combination vehicle** – Means a motor vehicle connected to one or more trailers.

**Constant mesh transmission** – A transmission in which all gears remain in mesh at all times.

**Contained load** – A load prevented from dislodging from the vehicle by the vehicle structure, gates, sides, racks, headboards, stanchions or other parts of the load.

**Converter dolly** – Means a trailer with one axle group or single axle fitted with a “Fifth Wheel Coupling” and designed to convert a semi-trailer to a “dog trailer”.

**Corner protectors** – Material used to protect lashings and the exposed edges of

loads and vehicles, and to allow lashings to slide freely when being tensioned.

**Coupling** – A mechanical assembly that provides connection between a drawing vehicle and trailer.

**Cradle** – A frame shaped to support an object or load.

**Daylight** – Means the hours between sunrise and sunset.

**Deck** – The load carrying platform of a vehicle.

**Dog** – A chain tensioner incorporating an over-centre locking action with a fixed or pivoting lever.

**Dog trailer** – A trailer with two axle groups, the front group being steered by a drawbar coupled to a towing vehicle.

**Drawbar length** – The distance from the centre line of the towing pivot to the centreline of the leading axle group of the trailer.

**Drawbar stand** – A leg that permits a trailer drawbar to remain clear of the ground when uncoupled usually at coupling height to allow for easier hook-up.

**Drive shaft** – See ‘Tail shaft’.

**Driveline** – The motor, clutch, gearbox, drive shafts, diff(s) and axle(s).

**Drive Train** – The vehicle components that transmit engine power to the drive wheels.

**Dual wheels** – A matched pair of wheels attached to each end of an axle.

**Dunnage** – Packing material (eg pieces of timber, plywood, mats) placed between the cargo and the truck platform, or between items of cargo to level the load and/or

increase friction so the load is less likely to move during journey. It is also used to leave a gap between a load and the load deck, or different parts of the load, to enable forklifts tynes to be placed under for lifting.

**Flat rack** – A steel base used to support loads, fitted with receptacles for twist locks and provision for forklift operation.

**Flat top** – A truck, trailer or semi-trailer that has flat goods carrying area without sides.

**Forward control vehicle** – A motor vehicle with the steering wheel in the forward quarter of the vehicles total length.

**Freight container** – Means a box like goods receptacle, or load platform, provided with specified corner fittings.

**Gates** – Permanent or removable vertical frames used at the front, side or rear of a vehicle’s loading deck to contain its load.

**Gross combination mass (GCM)** – For a motor vehicle, means the greatest possible sum of the maximum loaded mass of the motor vehicle and of any vehicles that may be towed by it at the same time as specified by the manufacturer of the motor vehicle.

**Gross trailer mass (GTM)** – Means the mass transmitted to the ground by the axles of a trailer when the trailer is loaded to its GVM and connected to a towing vehicle.

**Gross vehicle mass (GVM)** – For a vehicle, means the maximum loaded mass of the vehicle as specified by the manufacturer of the vehicle.

**Lashings** – Fastening devices, chains, cables, ropes or webbing used to restrain loads.

**Lashing capacity (LC)** – The maximum force (in kilograms) that a lashing system is designed to sustain in use.

**Load Binder** – A device used for tensioning a lashing.

**Load capacity** – The difference between the GVM or GTM of a vehicle and its tare mass.

**Load limit** – The maximum load that may be carried in, or on any motor vehicle upon the road.

**Log book** – Driver's record of hours driven and rest periods taken.

**Night** – Means the hours between sunset and sunrise.

**Pallet** – A portable platform or tray onto which loads are placed for mechanical handling.

**Pawl** – A lever or lock which protects reverse rotation on a winch.

**Pole-type trailer** – Means a trailer that is attached to a towing vehicle by a pole or an attachment fitted to a pole and is usually used for transporting loads such as logs, pipes or other long objects that can support themselves like beams between supports.

**Prime mover** – A motor vehicle built and constructed to tow a semi-trailer.

**Quad axle group** - Means a group of at least four axles with the extreme axle centres at least 3.2 metres apart but not more than 4.9 metres apart.

**Rear marker**– Means a rear marking plate designed and fitted in compliance with ADR 45.

**Rear overhang** – Means the distance between the rear overhang line and the

rear of the vehicle inclusive of any load.

**Rear overhang line** – Of a vehicle means; for a vehicle with a single axle at the rear of the vehicle the centreline of that axle or, for a vehicle with an axle group at the rear of the vehicle the centreline of that group.

**Semi-trailer** – Means a trailer (including a pole-type trailer) that has one axle group towards the rear and a means of attachment that would result in some of the load being imposed upon the prime mover.

**Speed limiter** – A device that prevents a vehicle from being driven on a level road at more than 100 kilometres an hour.

**Shackle** – A metal coupling link closed by a bolt which can be used for attaching chain fittings.

**Shackle** – Also is a link attaching a suspension spring to the vehicle chassis.

**Single axle** – Means an axle not part of an axle group.

**Sling** – A length of hemp-core rope, webbing or steel-wire rope with eyes formed at each end.

**Spreader** – A transverse spar or frame used to support tarpaulins and side gates.

**Stanchion** – A large upright fixed to the side of a vehicle for sideways restraint.

**Synchromesh transmission** – A transmission in which the speeds of the gears are matched or 'synchronised' by means of in-built synchronising clutches before they are meshed.

**Tachograph** – A trip recorder incorporating a clock, speedometer and often a rev counter that inscribes a record of a journey on circular paper graph.

**Tachometer** – An instrument for measuring engine revolutions.

**Tandem axle group** – Means a group of at least two axles with the extreme axle centres not more than 2m apart.

**Tare mass** – Means the unladen mass of the vehicle.

**Tarpaulin (tarp)** – A waterproof material used to cover and protect goods from the weather or prevent the load from blowing off the vehicle.

**Tie rail** – A round rail which skirts the perimeter of the loading deck below the coaming rail.

**Trailer** – A vehicle that is built to be towed, or is towed by a motor vehicle, does not include a vehicle used on rails or another motor vehicle being towed.

**Trailer coupling** – A device that attaches a trailer to a towing vehicle.

**Tri-axle group** – Means a group of at least three axles with the extreme axle centres at least 2 metres apart but not more than 3.2m apart.

**Twist lock** – Means a device fitted to, or forming part of, a vehicle and designed to secure the corner fittings of a freight container.

**Unladen mass** – The mass of a motor vehicle without a load, but including all tools, fixed cranes, oil and fuel in the tanks.

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