

OFFICIAL

T.I.L.E Course

Heavy Combination

Module 1

Theory



Government of South Australia
Department for Infrastructure
and Transport

Build.
Move.
Connect.

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Publication details

Document information

Title	Heavy Combination (TILE) Module 1 Learner Guide
Owner	Transport, policy & regulation – Driver licensing standards
KNet reference	#20852137
Distribution	

Change history

Version number	Date changed	Nature of amendment
V1.0	8/11/2023	New document created
V2.0	22/06/2024	Updated with amendments

Approvals record

Approvers	Position	Date	Signature

We acknowledge the Traditional Custodians of the Country throughout South Australia and recognise their continuing connection to land and waters. We pay our respects to the diversity of cultures, significance of contributions and to Elders past, present and emerging.



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Purpose

This document is for the express purpose of instruction for future drivers of Heavy Combination (HC) vehicles via the Training in Lieu of Experience (T.I.L.E) modules.

The information contained within this document may change without notice and it is advised the user regularly check with [SA Department of Infrastructure and Transport's](#) website for current information.

This document does not represent the only source of information for your competency assessment. Please ensure you undertake all components of the relevant training including practical testing in the Pre-Course Learner Booklet prior to attending these training sessions.

You may notice some of this information was covered in your pre-course materials.

Graduated licences

Graduated Licences - the Heavy Vehicle Graduated Licence System was introduced in 1986 to allow applicants to gain experience on the smaller classes of vehicles before graduating to the larger classes.

Prior to this, a new driver on their first permit could learn to drive in a truck, or even a semi provided, they met the age requirements. Graduation allowed the drivers new to commercial vehicles, to gain experience in the smaller vehicles and work their way up to the larger vehicles. As it is necessary to gain experience over a number of years there are some people who need, or have good reason, to go onto the larger vehicles and do not have the necessary experience or who have not held the 'lower' classes of licence for sufficient time; for these people the TILE (Training in Lieu of Experience) course was put into place to fill in the missing experience and knowledge gaps.

The graduated licensing scheme in Australia is an upgrade system which requires the applicant to hold a driver's licence of a particular class for a period of time before becoming eligible for the new class.

Effectively this means that for class HC, an applicant cannot be issued an upgraded licence unless they are at least 19 years of age and have held a licence for a light or medium rigid vehicle for at least 12 months or Class C licence for at least 2 years.

The TILE course (which began in 1998) has been specifically designed to shorten the process of having to progress through the graduated licensing system and allows an applicant to move from Class C to HC before they would normally be eligible.

So that this outcome may be achieved, applicants are required to attend and pass a theory course of training which covers both the road law and transport industry aspects of driving heavy vehicles.

Applicants are required to undertake practical driving instruction before being eligible to undergo a practical driving assessment to prove their competency.

All TILE applicants are required to undertake the competency-based training and assessment (CBT&A) program after completing Module 2.

Mass definitions

It is a good idea to have an understanding of the acronyms and definitions used in the transport industry. The following table includes mass definitions and other useful acronyms.

Acronym	Definition
Unladen Mass (UL)	Weight of the vehicle without any cargo but does include fuel, oil, and tools. In the case of a combination, it means the prime mover only .
Gross Vehicle Mass (GVM)	The maximum loaded mass of the vehicle, as set by the motor vehicle manufacturer or the registration authority.
Gross Combination Mass (GCM)	The greatest possible sum of the maximum loaded mass of a motor vehicle and of any vehicles that may lawfully be towed by it, at one time, as specified by the motor vehicle manufacturer or the registration authority.
Gross Trailer Mass (GTM)	The mass transmitted to the ground by the axle or axles of the trailer when coupled to a drawing vehicle and carrying the maximum load recommended by the manufacturer. Uniformly distributed over the load bearing area.
Aggregate Trailer Mass (ATM)	The total mass through the axles and drawbar of the laden trailer when carrying the maximum load recommended by the manufacturer.
Heavy Vehicle (HV)	A vehicle with a gross vehicle mass (GVM) of 4.5 tonnes. A motor vehicle with GVM 4.5 tonnes classified as a truck. A motor vehicle built to carry more than 12 adults – bus.
Heavy Vehicle National Law (HVNL)	Specifies limits for height, width, length, and mass of vehicles which travel on public roads. This law is to establish a national scheme for the operation and regulation of heavy vehicles.
Independent Commissioner Against Corruption (ICAC)	A law enforcement body that investigates potential issues of corruption, misconduct or maladministration in public office or public administration.
Australian Road Rules (ARR)	Contains basic road rules for motorists, motorcyclists, cyclists, pedestrians, passengers and others in each Australian state and territory.
National Heavy Vehicle Regulator (NHVR)	Established in 2013 as a national statutory authority (except WA and NT) for the Heavy Vehicle National Law.
National Network System (Formerly - RAVNET)	Interactive online map system that displays approved heavy vehicle route networks in South Australia and Australia. Restrictions are included.

Registration Mass Check

When checking **registration is current**, ensure you **check each trailer/converter dolly** is registered too.

If the statutory axle mass limits are less than the registered mass, the lower figure is the maximum mass legally allowed on the road.

Plate Type	HEAVY VEHICLE
Plate Number	XS13BA
Make	FREIGHTER
Body Type	PRIME MOVER
Primary Colour	WHITE
VIN	*****5197
Registered Configuration	MU3 - 3 axle P/Mover + 2 or more trailers (MU3)
Registered GVM/GCM	26000/106000
Manufacturer GVM/GCM	26000/106000
Vehicle Condition 1	MV2 NHVR NOTICE
CTP Insurer	AAMI
Expiry Date	02/06/2019




You can now download the **EzyReg app** and enter the registration details to locate the information as per example above.






To download the Ezy Reg app complete the following:

1. Access the app store on your mobile device.
2. Download the **EzyReg app** onto your mobile device.
3. Click **Check Registration**
4. Enter the **plate number** at the top of the screen
5. Click **Check** – note the
 - Registered configuration
 - GVM/GCM
 - Expiry date

You should aim to check the registration of **any vehicle** you have been asked to drive, **prior** to getting behind the wheel.

Licence classes in South Australia.

Licence classes			
Class	Authorised to drive	Examples	Minimum age/ driving experience
C	<p>1. A motor vehicle with a gross vehicle mass (GVM) not greater than 4.5 tonne but not including:</p> <ul style="list-style-type: none"> a. A bus designed to carry more than 12 passengers: or b. A motor bike or motor trike <p>2. A motor vehicle included in 1 towing a single trailer, subject to the combination mass limits fixed under the <i>Road Traffic Act 1961</i>.</p> <p>For example: Small truck towing a horse float, trailer, or caravan. May tow: trailer, horse float, caravan, or farm implement.</p>		<p>Must be at least 17 years old.</p> <ul style="list-style-type: none"> • If you are under the age of 25 you must have held your learner's permit for at least 12 months. • If you are aged 25 or over, you must have held your learner's permit for at least 6 months.
LR	<p>1. A motor vehicle authorised to be driven by a licence of the preceding class</p> <p>2. A motor vehicle with a GVM greater than 4.5 tonne but not greater than 8 tonne (e.g. trucks, vans, tippers, special purpose vehicles, and buses designed to carry 13 or more seated passengers).</p> <p>3. A bus with a GVM not greater than 8 tonne</p> <p>4. A motor vehicle included in 2 or 3 towing a single trailer, subject to the combination mass limits fixed under the <i>Road Traffic Act 1961</i> or the <i>Heavy Vehicle National Law (South Australia)</i></p> <p>May tow: any farm implement. Any trailer provided the overall mass is within the gross combination mass (GCM) of the towing vehicle. <i>Driver's licence must be carried if driving a vehicle over 4.5 tonne.</i></p>		<p>Must have held a class C for at least one year.</p>
MR	<ul style="list-style-type: none"> • A motor vehicle authorised to be driven by a licence of a preceding class • A motor vehicle (other than a special purpose vehicle) with 2 axles and a GVM greater than 8 tonne (e.g. Two axle trucks, tippers and buses) • A motor vehicle included in 2 towing a single trailer (other than a semi-trailer) with a GVM not greater than 9 tonne, subject to the combination mass limits fixed under the <i>Heavy Vehicle National Law (South Australia)</i> • A special purpose vehicle with: <ul style="list-style-type: none"> a. 2 axles and GVM greater than 8 tonnes or b. 3 or more axles and a GVM not greater than 15 tonne <p>May tow: any farm implement. Any trailer with GVM not exceeding 9 tonne provided it is within the GCM of the towing vehicle.</p> <p><i>Driver's licence must be carried if driving a vehicle over 45 tonne</i></p>		<p>Must have held a class C for at least one year.</p>

<p>HR</p>	<ol style="list-style-type: none"> 1. A motor vehicle authorised to be driven by a licence of a preceding class 2. A motor vehicle (other than an articulated motor vehicle or a special purpose vehicle) with 3 or more axles and a GVM greater than 8 tonne 3. A motor vehicle included in 2 towing a single trailer (other than a semi-trailer) with a GVM not greater than 9 tonne, subject to the combination mass limits fixed under the <i>Heavy Vehicle National Law (South Australia)</i> 4. An articulated bus with 3 or more axles and a GVM greater than 8 tonne 5. A special purpose vehicle with 3 or more axles and a GVM greater than 15 tonne <p>May tow: any farm implement. Any trailer with a GVM not exceeding 9 tonne provided it is within the GCM of the towing vehicle.</p> <p><i>Driver's licence must be carried if driving a vehicle over 4.5 tonne.</i></p>		<p>Must have held:</p> <ul style="list-style-type: none"> • Class C for at least two years • Class LR for at least one year
<p>HC</p>	<ul style="list-style-type: none"> • A motor vehicle authorised to be driven by a licence of a preceding class. • A prime mover to which is attached a single semi-trailer (whether or not any unladen converter dolly or low loader dolly is also attached) • A rigid motor vehicle to which is attached a single trailer with GVM greater than 9 tonne (whether to not any unladen converter dolly or low loader dolly is also attached) <p><i>Driver's licence must be carried if driving a vehicle over 4.5 tonne.</i></p>		<p>Must have held a class MR or HR for at least one year.</p>
<p>MC</p>	<ul style="list-style-type: none"> • Any motor vehicle or combination of motor vehicles except a motor bike or motor trike (includes B doubles, road trains) <p><i>Driver's licence must be carried if driving a vehicle over 4.5 tonne.</i></p>		<p>Must have held a class HR or HC for at least one year.</p>
<p>R-Date</p>	<ul style="list-style-type: none"> • A motor bike or motor trike that: <ul style="list-style-type: none"> ○ has engine capacity not exceeding 660 ml and a power weight ration not exceeding 150 KW per tonne and ○ is of a kind approved from time to time by the Registrar by notice in the Gazette. 		<p>17 years old and if no other licence is held:</p> <ul style="list-style-type: none"> • If under age of 25 must have held learner's permit for at least 12 months • Aged 25 or over must have held learner's permit for at least 6 months
<p>R</p>	<ul style="list-style-type: none"> • Any motor bike or motor trike 		<p>Must have held the R-Date for at least one year.</p>

*R-Date means the expiry date of the learner's permit or the date falling one year after class R-Date was endorsed on the licence. It indicates the date on which the holder may apply for a class R licence. The holder of a class R-Date licence remains restricted to a motorcycle with an engine capacity of up to 660ml with a power-to-weight ratio of 150kw/t until granted a class R licence despite the fact that the date included in the classification has passed.

Note: The class of licence required to drive a commercial vehicle is determined by the number of axles and /or the vehicles gross vehicle mass, not the load the vehicle is carrying.

Getting in and out

An area where you may cause yourself an injury and one of the first things you should learn, is getting in and out of the cab.

When climbing up and into the cab you need to ensure you have **3 points of contact**. That is, either 2 hands and 1 foot touching the truck or two feet and 1 hand **at any given time**. This makes sure you have **good contact** and are less likely to fall and injure yourself.

When getting down, out of the cab, the same rule applies, but you will **climb out** of the **cab facing the truck** so you will be **exiting backwards**. If you try to jump down from the cab facing forward, you are more likely to do yourself an injury

Australian Road Rules Definitions

Definitions and meanings related to road use in South Australia:

Note: ARR followed by a number in brackets (ARR #) = Australian Road Rule Number.

Give Way

To give way, for a driver or pedestrian, means:

- (a) if the driver or pedestrian is stopped—remain stationary until it is safe to proceed; or
- (b) in any other case—slow down and, if necessary, stop to avoid a collision.

(ARR12)—Definition of a road

A road is an area that is open to, or used, by the public and is developed for, or has as one of its main uses, the driving or riding of motor vehicles.

It does not include a reference to any shoulder of the road, which is:

- for a kerbed road—any part of the kerb; and
- for a sealed road—any unsealed part of the road, and any sealed part of the road outside an edge line on the road,

(ARR13)—Definition of a road-related area

A road-related area is any of the following:

- an area that divides a road.
- a footpath or nature strip adjacent to a road.
- an area that is not a road and that is open to the public and designated for use by cyclists or animals or for driving, riding, or parking vehicles.
- any shoulder of the road.

**In a road related area, normal road rules apply.*

An intersection

An intersection means the area where 2 or more roads (except any road related area) meet, and includes:

- (a) Any area of the roads where vehicles travelling on different roads might collide; and
- (b) The place where any slip lane between the roads meets the road into which traffic on the slip lane may turn but does not include any road-related area.

T-intersection

A T-intersection means an intersection, other than a roundabout, where 2 roads meet (whether or not at right angles) and one of the roads ends.

An oncoming vehicle

An oncoming vehicle, for a driver, means a vehicle approaching the driver travelling in the opposite direction to the direction in which the driver is driving. Any other vehicle would be approaching from a **different direction**. With vehicles approaching from different directions, one will be to the right of the other.

Slip lane

An area of road for vehicles turning left that is separated, at some point, from other parts of the road by a painted island or traffic island, but not by a median strip (a dividing strip designed or developed to separate vehicles travelling in opposite directions).

Give way

Knowing the **give-way rules** ensures all road users are safer. Never assume the other road user will know to give way to you. It is safer to slow down and stop if necessary to allow other traffic free thoroughfare. Be alert and aware of what your fellow road users are going to do.

The 'Give Way Hierarchy'

When the driver of a vehicle approaches any intersection, the requirements for giving way should be considered in this order:

Note: No one road user always has sole right of way. Take into consideration, conditions, and incidents in your vicinity. Always give way and stop in need if in doubt!

Direction given by	Your actions....
Police	Where police officers are directing traffic in any situation, obey all directions.
Traffic lights	Obey traffic light rules (Refer Pt 4 below)
Signs	Obey sign information
Terminating roads	Be aware of roads that are about to end

Traffic lights

When approaching traffic lights (especially when they have been green for a while)

1. Check your mirrors for other traffic.
2. Take your foot off the accelerator.
3. Cover the brake pedal.
4. Determine your decision points for stopping or going (Allow for the fact that more weight equals a longer stopping distance than what you may be familiar with).

If turning right and faced with a green light: Enter the intersection when safe to do so rather than staying behind the stop line. Ensure that you observe vehicles in all directions prior to entering the intersection.

Note: Consider the **size** and **weight** of your vehicle when crossing or entering intersections:

- A loaded vehicle will accelerate slower than an empty one.
- A driver must not enter an intersection if the driver cannot drive through the intersection, because the road is blocked beyond the intersection.

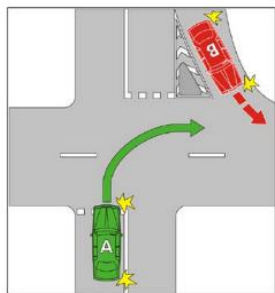
(ARR63)—Giving way when traffic lights not operating.

The driver must give way to vehicles and pedestrians **at or near** the intersection and should approach the intersection as if it had no lights (Refer ARR69 below)

Stop at any **Stop** sign, **Give-Way** sign or **Stop line** at the intersection or as indicated by authorised personnel at the intersection.

(ARR69) Give-way sign or line at intersection (except a roundabout)

- Unless the driver is turning left, using a slip lane, the driver must give way to a vehicle in, entering or approaching the intersection except:
 - An oncoming vehicle turning right at the intersection if a stop sign, stop line, give way sign, or give way line applies to the driver of the oncoming vehicle.
 - A vehicle turning left at the intersection using a slip lane.
 - A vehicle making a U-turn.
- If the driver is turning left, using a slip lane, the driver must give way to:
 - Any vehicle on the road the driver is entering, or turning right at the intersection into the road the driver is entering (except a vehicle making a U-turn at the intersection); and
 - Any other vehicle or pedestrian on the slip lane.



Green vehicle (A) turning right at the Give Way line does not have to give way to the red vehicle (B) turning left using a slip lane.

Note: For this rule, an oncoming vehicle travelling through a T-intersection on the continuing road is taken **not** to be turning.

(ARR114) Giving way entering or in a roundabout.

A driver entering a roundabout **must give way** to any vehicle on the roundabout. Special consideration should be given to riders going through the roundabout.

(ARR73)—Giving way at a T-intersection.

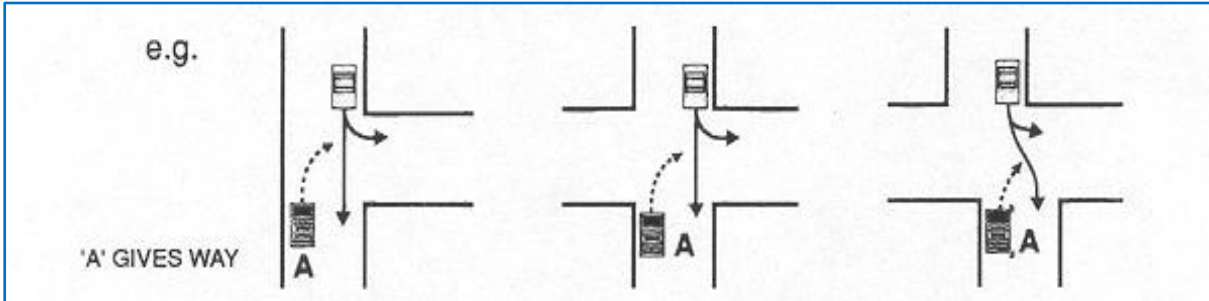
There must only be **one terminating road** at a 'T' intersection.



- If the driver is turning left (unless the driver is using a slip lane) or right from the terminating road into the continuing road, the driver must **give way to any vehicle** travelling on the continuing road (except a vehicle making a U-turn on the continuing road at the T-intersection)
- If the driver is turning left from the terminating road into the continuing road using a slip lane, the driver must give way to any vehicle travelling on the continuing road (except a vehicle making a U-turn on the continuing road at the T-intersection).

(ARR72) Giving way at an intersection (except T-intersection or roundabout)

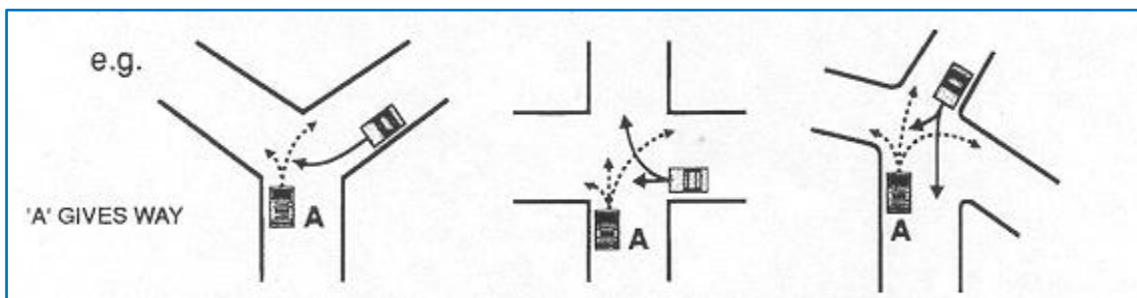
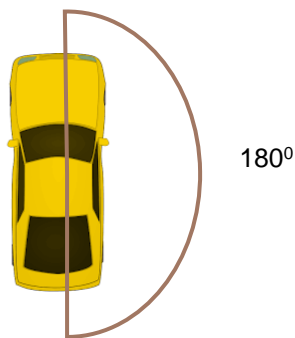
Vehicles turning **right** must give way to vehicles approaching from the **opposite** direction.



- If the driver is turning right, the driver must give way to any oncoming vehicle that is going straight ahead or turning left at the intersection, unless
 - a stop sign, stop line, give way sign, or give way line applies to the driver of the oncoming vehicle.
 - the oncoming vehicle is turning left using a slip lane.

In all other cases

Use the give way to the right ('D' rule). The driver makes an arc of 180 degrees from directly in front, through the right side of the vehicle and ending directly behind. If any vehicle is within that arc (Or the D-shape), it is to the right and must be given way too.

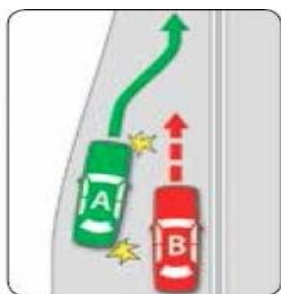


- If the driver is going straight ahead, the driver must give way to any vehicle approaching from the right, unless a stop sign, stop line, give way sign, or give way line applies to the driver of the approaching vehicle.
- If the driver is turning left (except if the driver is using a slip lane), the driver must give way to any vehicle approaching from the right, unless a stop sign, stop line, give way sign, or give way line applies to the driver of the approaching vehicle.
- If the driver is turning right, the driver must give way to any vehicle approaching from the right, unless a stop sign, stop line, give way sign, or give way line applies to the driver of the approaching vehicle.

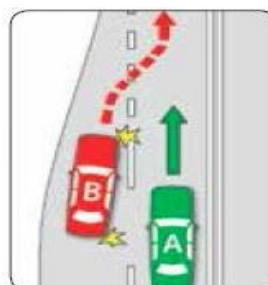
Note: If you are a turning vehicle at an intersection (both left and right) you must **give way to pedestrians** at or near the road you are about to enter.

Give Way Situations (Other than at intersections)

1. Moving away from the kerb – give way to all other vehicles travelling along the same road.
2. Approaching a **level crossing** – to all rolling stock (trams or trains).
3. At **pedestrian crossings** – to all pedestrians using the crossing, only while the lights are flashing or have been activated to allow pedestrians to cross.
4. Entering a road from private land – to all pedestrians and vehicles using the road.
5. Entering private land from a road – to all pedestrians and vehicles using the road.
6. When attempting a **'U' turn** – to all other vehicles and pedestrians.
7. When **merging** into traffic (zip merge) – where the road narrows, to any vehicle that is partly or wholly in front of your vehicle.
8. **Emergency vehicles** – allow a free passage by moving to the left or right or slowing down.



1. Road Merges from two lines to one, **zip merge applies.**



2. The lanes are marked in this example, so **zip merging does not apply.**

Give way S.T.O.D

A great way to remember when to give way is remembering STOD.

S.T.O.D. is an acronym for:

- **S**igns,
- **T**erminating road (T-intersection)
- **O**pposite direction and
- **D**-Rule give way.

When driving and approaching connecting roads or intersections consider the following:

- **Signs** – are there any signs which indicate you should stop or give way?
- **Terminating road** – is the road you are travelling on ending?
- **Opposite direction** – are there any vehicles coming toward you from the opposite direction?
- **D-rule** – if there are vehicles on your right, obey the ‘give way to your right rule.’

In the following example you are in the yellow car (B).

- There are no signs
- You are not on a terminating road
- There is a vehicle coming from the **opposite direction** – car (A)
- You need to give way to the vehicle driving toward you, wait for a clear space, before making your right-hand turn.



(ARR77) Giving way to buses.

- A driver driving on a length of road in a built-up area, in the left lane or left line of traffic, or in a bicycle lane on the far-left side of the road, **must give way to a bus** in front of the driver if—
 - the bus has stopped, or is moving slowly, at the far-left side of the road, on a shoulder of the road, or in a bus-stop bay; and
 - the bus displays a “give way to buses” sign and the right direction indicator lights of the bus are operating; and
 - the bus is about to enter or proceed in the lane or line of traffic in which the driver is driving.

Note: The driver of the bus must give the change of direction signal for long enough to give sufficient warning to other drivers and pedestrians.

Giving way to Trams

Tram tracks are positioned in the middle of the road in specially marked tram lanes. Unless specifically allowed, drivers **must not** drive on tram lanes.

Drivers must not drive past or overtake a tram to the right, unless allowed to do so by a traffic sign or road marking.

Additionally, drivers must not drive past or overtake a tram to the left if the tram is turning left, or signalling to turn left, unless the driver is also turning left and there is no danger of a collision.



(ARR78) Keep clear of police or emergency vehicles.

You must not move into the path of an approaching police or emergency vehicle that is displaying a **flashing blue** or **red light** or sounding an **alarm**.

If you are in the path of such vehicle, you must move out of the way as soon as it is safe to do so.

Section 83 of the Road Traffic Act (1961) You must not **pass** an emergency service vehicle, with flashing blue or red lights, at a speed exceeding **25km/h**.

This does not apply if the emergency vehicle is on the other side of a road divided by a median strip.



*For further information on Giving Way and Road Law, refer to:

- [Road Rules Pocket Guide](#)
- [Australian Road Law](#)
- [South Australian Road Rules](#)
- [Road Traffic Act 1961](#)
- Practice give-way and road law questions online via the RAA Website.

(ARR80) - Stopping at a children's crossing.

A driver approaching or at a children's crossing, must stop at the stop line at the crossing if a "handheld stop sign" is displayed or a pedestrian is on or entering the crossing. The driver must not proceed until the sign is no longer displayed or until there is no pedestrian on or entering the crossing.

(ARR81) - Giving way at a pedestrian crossing.

A driver approaching a pedestrian crossing must drive at a speed at which the driver can, if necessary, stop safely before the crossing and must give way to any pedestrian on the crossing.

(ARR82)—Overtaking/passing a vehicle at a children’s crossing or pedestrian crossing.

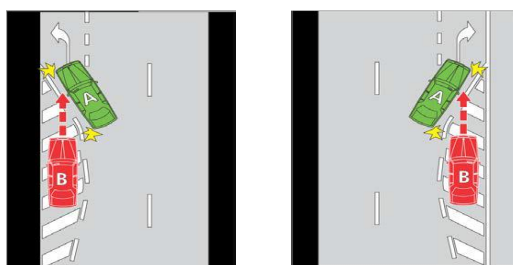
A driver approaching a children’s crossing or pedestrian crossing must not overtake or pass a vehicle that is travelling in the same direction as the driver and is stopping, or has stopped, to give way to a pedestrian at the crossing.

(ARR83)—Giving way to pedestrians in a shared zone.

A driver driving in a shared zone must give way to any pedestrian in the zone.

ARR85)—Giving way on a painted island.

A driver entering a turning lane from a painted island must give way to any vehicle in the turning lane or entering the turning lane from the marked lane or line of traffic immediately alongside the turning lane.



Speed Limits

Throughout Australia, the maximum default speed limit in a built-up area is **50km/h**. The maximum default speed limit outside a built-up area is **100km/h**.

A **built-up area**, in relation to a length of road, is an area that has buildings or streetlights not over 100 metres apart for a distance of at least 500 metres or, if the road is shorter than 500 metres, for the whole road.

Shared zones: The speed-limit for a driver for any length of road in a shared zone is the number of kilometres per hour indicated by the number on the shared zone sign on the road, or the road into the zone.

Pedestrian Crossings (3 types)

- **Emu** (part-time children's crossing within school zones when the red "children crossing" flags are displayed) **(25 km/h)**



- **Koala** (part-time children's crossing between the speed limit signs when the lights are flashing) **(25 km/h)**



- **Wombat** (full-time pedestrian crossing) **(40 km/h)**



School zones (which generally have zigzag lines painted on the road on approach to the zone). The speed limit applies 24 hours / 7 days per week. **(25 km/h)**



School bus (when passing in either direction a school bus that has stopped for the purpose of setting down or picking up children) **(25 km/h)**



Limits surrounding school crossings, zones or buses have a maximum speed limit of **25 km/h**.

In other jurisdictions it may be higher and may also be between particular times on certain days. *Be aware of this when travelling interstate.*

Road works (as indicated by speed restriction signs)

There must be speed restriction signs not just notification of workers or roadwork ahead. There must also be a return to speed limit sign, not just notification of the end of roadworks.









Passing emergency vehicles

Passing emergency vehicles (displaying blue or red flashing lights) that are stopped on a road. An emergency services vehicle includes ambulance, fire service, State Emergency Service, and police. **(25 km/h)**.

There are different speed limits in different jurisdictions so be aware of this when driving interstate.

Table: Areas and legal speed limits

Area	Sign	Speed Limit
Built up area leading into school or community zone		40 km/h
Built up area with no other limit sign posted		50 km/h
Metropolitan main roads as indicated by signs		60 km/h
Learner drivers or provisional conditions		100 km/h (max)
State speed limit (for vehicles not governed)		110 km/h
Heavy vehicles GVM > 1 t and Buses GVM > 5t		100 km/h

Speed restrictions applicable to certain vehicles (over width and over length and where a lower maximum speed limit is a condition of its permit of travel) refer to [Heavy Vehicle National Law](#) (South Australia). Refer to the [NHVR \(Mass, Dimension and Loading\)](#) for regulation for mass or dimension exemption.

A **maximum 60km/h** speed limit applies to **all trucks and buses** from the Crafers interchange to the bottom of the South-Eastern Freeway.

The maximum speed for a road-train, on any other road, within the road-train network. (South Australia) is 90km/h.

Refer to the NHVR website for further information on speed limits for **Road Trains** in each state:

[National Class 2 Road Train Authorisation Notice 2022 Operator's Guide | NHVR](#)

Speeds may be further reduced using the variable speed signs or other temporary limit signs at any time to maintain safe travel. This may include instances of inclement weather, reduced visibility, a crash, or roadworks.

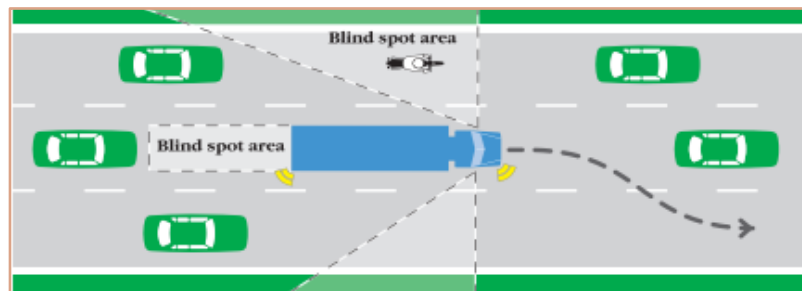
Area	Speed Limit
Metropolitan roads	60 km/h
Learners or Provisional licences	< 100 km/h
State speed limit	100 km/h
Heavy vehicles = GVM > 12 tonnes	100 km/h
Buses = GVM > 5 tonnes	100 km/h

Note: Always drive to the prevailing road and weather conditions. Consider your capabilities and the capabilities of the heavy vehicle you are driving to **operate safely** in any condition.

Overtaking and changing lanes

You need to be aware of traffic around you and watch for small vehicles, such as motorcycles, to ensure they are not affected by air movement caused by your heavy vehicle moving past them.

All vehicles have a blind spot where the driver loses sight of vehicles around them. The blind spot areas on heavy vehicle increase when the truck is turning. Blind spots are located beside each door, directly behind the truck and immediately in front of the heavy vehicle.



Both single and multi-lane overtaking involves risk and requires extreme care.

Before overtaking:

- Make sure you have a **clear view** of the road ahead and there is **sufficient space** for you to overtake safely (check side streets and scan for hazards to ensure nothing will enter this space while you are overtaking).
- **Signal** each change of position, long enough to give sufficient warning to others.
- **Check mirrors and blind spots**, for other vehicles or motorcycles, before changing your lane position.
- **Give way** to traffic already in the lane you are moving into.
- **Pass** the vehicle with sufficient space to avoid a collision.
- Do not go over the **speed limit**.

You must **not** overtake:

- When approaching a crest, curve, or any situation where you do not have a clear view.
- A vehicle has either stopped or is coming to a stop at a pedestrian crossing, intersection, or railway crossing. [m](#)



- Where a road narrows.
- Across an unbroken (continuous) line unless the line closest to you is broken or you are overtaking a bicycle rider or avoiding an obstruction (like a parked car).

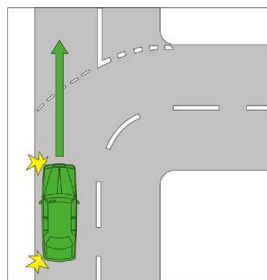
Overtaking lanes are provided on some rural highways, in particular **Dukes Highway (A8)**, **National Highway (A1)** between **Port Wakefield** and **Port Augusta** and the **Sturt Highway (A20)** They give drivers of faster vehicles the opportunity to safely pass slower moving vehicles.

When being overtaken by another vehicle you must:

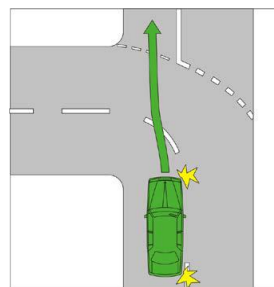
- **Not** increase your speed.
- **Keep left** and allow reasonable space for the overtaking vehicle to pass and move back into the lane.
- Keep within your lane.

(ARR46 & ARR48) Turn signals.

- A driver who intends to turn or merge his vehicle to the left or the right must give a clear signal for a reasonable distance or time to allow sufficient warning to be given to other road users.
- If the driver is about to change direction by moving from a stationary position at the side of the road or in a median strip parking area, the driver must give the change of direction signal for **at least 5 seconds** before the driver changes direction. This rule applies to bus drivers as well.
The driver must stop giving the change of direction signal as soon as the driver completes the change of direction.
- It is recommended that when changing lanes, you **check mirrors on both sides for traffic, signal** in the appropriate direction, then **recheck the mirrors** prior to safely and legally changing lanes. The signals should remain on until the lane change has been completed and the vehicle is fully within the lane.
- At a modified T-intersection where the continuing road curves to the right the driver must signal left when leaving the continuing road to proceed straight ahead onto the terminating road. (*Refer example on the right below*)
- At a modified T-intersection where the continuing road curves to the left, the driver must signal right when leaving the continuing road to proceed straight ahead onto the terminating road.



Indicate when leaving a continuing road you must indicate your intentions.

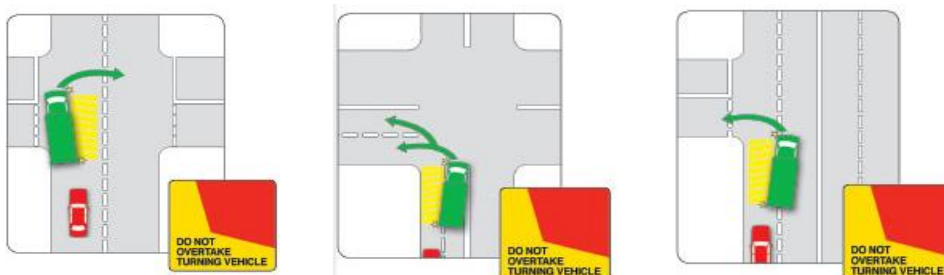


Indicate when leaving a continuing road and give way to people on the main road.

(ARR111) Enter a roundabout from multi-lane roads

- A driver may approach and enter the roundabout from the marked lane next to the left lane as well as (straddle), or instead of, the left lane if:
 - the driver's vehicle, together with any load or projection, is 7.5 metres long, or longer; and
 - the vehicle displays a do not overtake turning vehicle sign; and
 - any part of the vehicle is within 50 metres of the nearest point of the roundabout; and
 - it is not practicable for the driver to leave the roundabout less than halfway around it from within the left lane; and
 - the driver can safely occupy the next marked lane and can safely leave the roundabout less than halfway around it by occupying the next marked lane, or both lanes.
- A driver may approach and enter the roundabout from the marked lane next to the right lane as well as (straddle), or instead of, the right lane if:
 - the driver's vehicle, together with any load or projection, is 7.5 metres long, or longer; and
 - the vehicle displays a do not overtake turning vehicle sign; and
 - any part of the vehicle is within 50 metres of the nearest point of the roundabout; and
 - it is not practicable for the driver to leave the roundabout more than halfway around it from within the right lane; and
 - the driver can safely occupy the next marked lane and can safely leave the roundabout more than halfway around it by occupying the next marked lane, or both lanes.

Note: Even though this rule uses “**may**” when describing lane straddling, in most situations it is **vital** for road safety, to straddle lanes when approaching a roundabout.



ARR112)—Give a left signal entering a roundabout.

- This rule applies to a driver entering a roundabout if:
 - the driver is to leave the roundabout at the first exit after entering the roundabout; and
 - the exit is less than halfway around the roundabout.
- Before entering the roundabout, the driver must give a left change of direction signal for long enough to give sufficient warning to other drivers and pedestrians.

(ARR113) Give a right signal entering a roundabout.

- This rule applies to a driver entering a roundabout if the driver is to leave the roundabout more than halfway around it.
- Before entering the roundabout, the driver must give a right change of direction signal for long enough to give sufficient warning to other drivers and pedestrians.
- The driver must continue to give the change of direction signal while the driver is driving in the roundabout unless the driver is about to leave the roundabout.

(ARR118)—Give a left change of direction signal when leaving a roundabout.

- If practicable, a driver driving in a roundabout must give a left change of direction signal when leaving the roundabout.
- The driver must stop giving the change of direction signal as soon as the driver has left the roundabout.

While many prime movers have indicator switches that need to be manually turned off, some will cancel automatically.

Turning

A driver needs to monitor road & traffic conditions, and the position of their own vehicle through constant mirror checks – especially on the left side.

When approaching and negotiating turns, forward planning becomes intense.

You will need to set-up the position early having regard for the amount of room needed and all the other hazards in the area. The basic errors that drivers of long vehicles make when turning is not allowing enough room and beginning the turn too early.

DO NOT OVERTAKE TURNING VEHICLE signs must be displayed on long vehicles. If incorporated on the rear marker plate, the wording must be displayed on the left side of the rear of the vehicle only or both left and right plates.

Definition of a long vehicle is a vehicle that, together with any load or projection, is **7.5 metres long**, or longer.

- *ARR28—Starting a left turn from a multi-lane road.*
- *ARR32—Starting a right turn from a multi-lane road.*



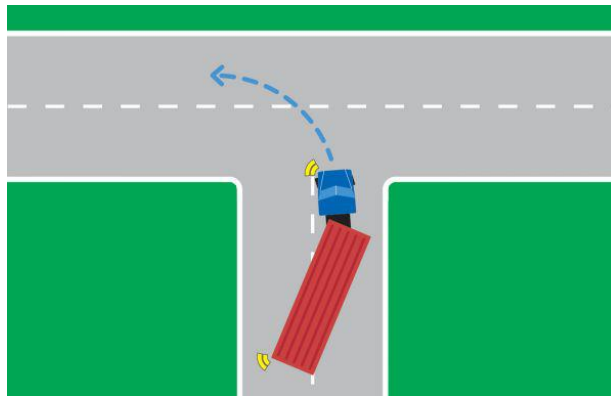
The plates must be kept clean and in good condition. Plates must not be covered or obscured by any vehicle equipment or load. Plates must be symmetrically mounted in pairs and at the same height from the ground.

Making left or right turns from a multi-lane road.

As a general rule, all heavy vehicles should **make turns as wide and gentle** as possible.

When approaching a multi-lane turn, always **select the outer (wider) lane** unless this will affect where you want to go next.

This way there will be more room between vehicles turning next to each other. Ensure that the mirror on the inside of the turn is monitored through the turn for accurate position especially when trailers are attached to ensure safety for all road users.



In many cases, intersections are large enough for heavy vehicles to make these turns safely from one lane only.

Note: The ARR **allows** the drivers of “long vehicles” to position their vehicles in what could be termed an illegal position by not obeying the lane markings on the approach to the turn.

Lane straddling would be the only option for an HC vehicle due to the limited space through the turn and to keep other road users safe.

More often than not, local knowledge is the only thing that will tell you this and if you are ever unsure of the road network you will be using, ask someone with experience to help you.

Some single lane left turns will need to be approached from partially in the lane to the right of the turning lane. For these types of turns, you will need to signal for long enough to inform other people of your intentions. If you are driving in the left lane and need to position your vehicle to the right before turning left, signal right for the re-position then signal left for the turn.

Road camber, the close proximity of stobie poles and other overhanging obstacles to the road edge must also be considered when deciding to position your vehicle wider out from the kerb.

For these types of turns, you will need to signal for long enough to let other drivers know your intentions.

(ARR121) Stop and give way at a level crossing stop sign.

A driver at a level crossing with a stop sign must:

- stop as near as practicable to, but before reaching, the stop line or, if there is no stop line, as near as practicable to, but before reaching, the stop sign; and
- give way to any train or tram on, approaching or entering the crossing.



(Courtesy: ABC)

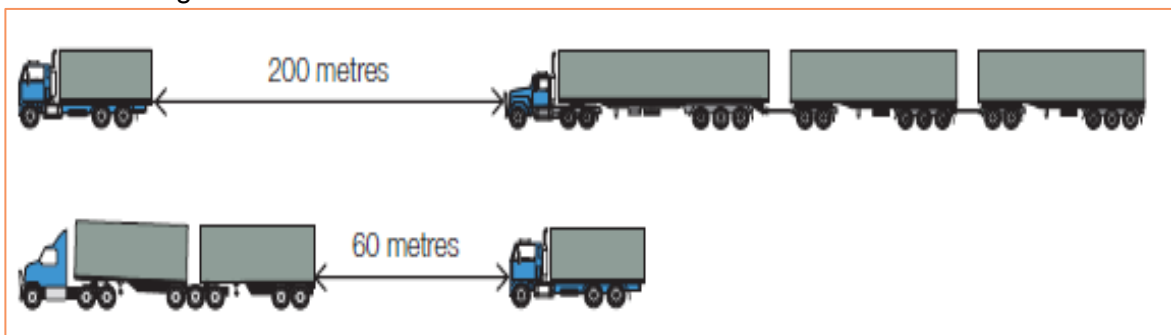
(ARR127)—Keeping a minimum distance between long vehicles

The driver of a long vehicle must drive at least the required minimum distance behind another long vehicle travelling in front of the driver, unless the driver is:

- driving on a multi-lane road or any length of road in a built-up area; or
- overtaking.

The following distance behind a long vehicle is:

- For a road train – 200 metres
- For a long vehicle other than a road train – 60 metres



Note: At **all times**, a good following distance equals good braking distance.
At speed, recommended elapsed time following distances are:

- 5 to 7 seconds for B-double
- 11 seconds for a double road train(A-double)
- Up to 14 seconds for a triple road train (A-triple)

Dividing lines

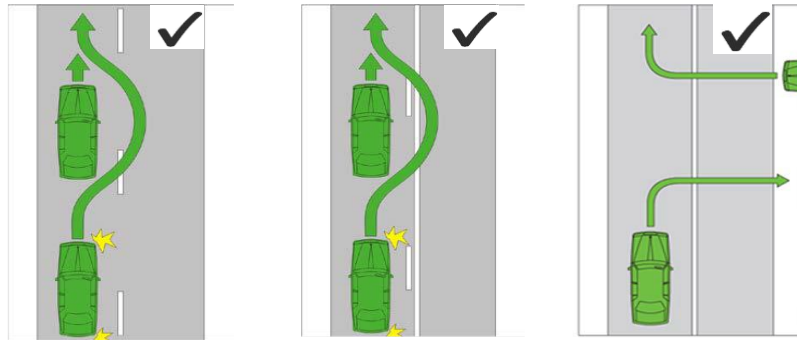
Dividing line means a road marking formed by a line, or 2 parallel lines, whether broken or continuous, designed to indicate the parts of the road to be used by vehicles travelling in opposite directions.

(ARR132) Keeping to the left of the centre of a road or the dividing line.

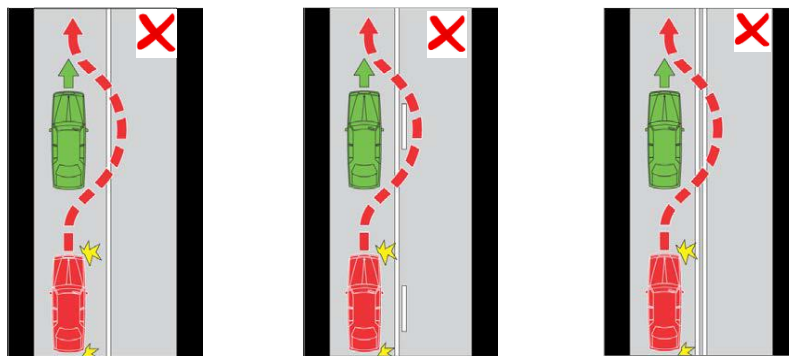
A driver on a road with a dividing line must drive to the left of the dividing line, except as permitted under rule (ARR) 134 or 139(2). (Refer explanations below)

(ARR134) Exceptions to keeping to the left of a dividing line.

- If the dividing line is a single broken dividing line only, or a broken dividing line to the left of a single continuous dividing line, or 2 parallel broken dividing lines, the driver may drive to the right of the dividing line if going —
 - to overtake another driver; or
 - to perform a U-turn, unless another rule would prohibit the driver performing the U-turn.
- If the dividing line is a single continuous or broken dividing line, or a broken dividing line to the left or right of a single continuous dividing line, or 2 parallel broken dividing lines, the driver may drive to the right of the dividing line if going —
 - to enter or leave the road; or
 - to move to or from another portion of the road (e.g. service road, parking lane, emergency stopping lane etc.).



A driver is **not** permitted to overtake on a road with a single continuous dividing line, a single continuous dividing line to the left of a broken dividing line, or with 2 parallel continuous dividing lines.



ARR139(2) Exceptions for avoiding obstructions on a road

- A driver on a road with a dividing line may drive to the right of the dividing line to avoid an obstruction if:
 - the driver has a clear view of any approaching traffic; and
 - it is necessary and reasonable, in all the circumstances, for the driver to drive to the right of the dividing line to avoid the obstruction; and
 - the driver can do so safely.

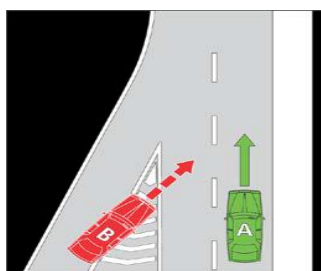
An obstruction may be cyclists, a fallen tree or road works but does **not** include a vehicle that is stopped in traffic or is travelling more slowly than other vehicles.

(ARR138) Keeping off a painted island

- A driver may drive on or over a single continuous line along the side of or surrounding a painted island for up to 50 metres—
 - to enter or leave the road; or
 - to enter a turning lane that begins immediately after the painted island; or
 - to enter a part of the road of one kind from a part of the road of another kind (for example, moving to or from a service road or emergency stopping lane).

This sub-rule does not apply in the case of a painted island:

- that separates a road that takes vehicles in one direction from another road that takes vehicles in the same direction at a place where the roads merge or
- that separates one part of a road from other parts of the road to create a slip lane.



A marked lane

A marked lane means an area of road marked by continuous or broken lines, or rows of studs or markers, on the road surface that is designed for use by a single line of vehicles.

(ARR146) Driving within a single marked lane

- A driver on a multi-lane road must drive so the driver's vehicle is completely in a marked lane, unless the driver is:
 - Entering a part of the road of one kind from a part of the road of another kind (for example, moving to or from a service road or a shoulder of the road); or
 - Entering or leaving the road; or
 - Moving from one marked lane to another marked lane; or

- Avoiding an obstruction; or
- Obeying a traffic control device applying to the marked lane; or
- Permitted to drive in more than one marked lane under another provision of the *Australian Road Rules* or under another law of this jurisdiction.

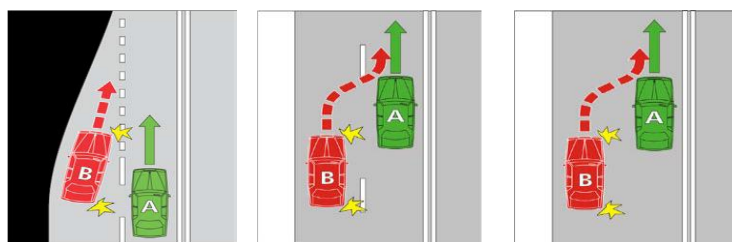
(ARR147) Moving from one marked lane to another marked lane across a continuous line.

A driver on a multi-lane road must not move from one marked lane to another marked lane by crossing a continuous line separating the lanes unless:

- The driver is avoiding an obstruction.
- The driver is obeying a traffic control device applying to the first marked lane.
- The driver is permitted to drive in both marked lanes under another provision of the *Australian Road Rules* or under another law of this jurisdiction.
- Either of the marked lanes is a special purpose lane in which the driver is permitted to drive under the *Australian Road Rules* and the driver is moving to or from the special purpose lane or
- Either of the marked lanes is a special purpose lane during specified times only and the driver:
 - is moving to or from that lane outside of the times during which it is a special purpose lane; and
 - is permitted to drive in that lane outside of the times during which it is a special purpose lane under the *Australian Road Rules*.

(ARR148) Moving from one marked lane to another marked lane.

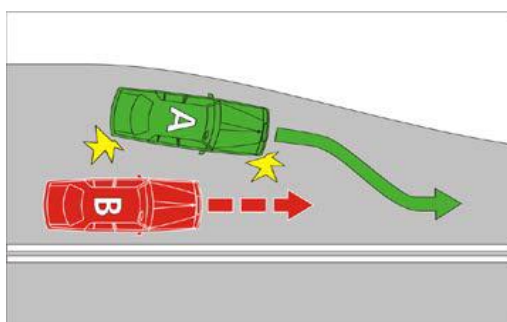
A driver who is moving from one marked lane (whether or not the lane is ending) to another marked lane must give way to any vehicle travelling in the same direction as the driver in the marked lane to which the driver is moving.



Note: Always check both mirrors and blind spot areas before, during and after changing lanes.

(ARR149)—Give way when lines of traffic merge into a single line of traffic.

A driver in a line of traffic that is merging with one or more lines of traffic travelling in the same direction as the driver must give way to a vehicle in another line of traffic if any part of the vehicle is ahead of the driver's vehicle.



(ARR150) Driving on or across, a continuous white edge line.

- A driver may drive on or over a continuous white edge line on a road if the driver is:
 - overtaking a vehicle that is turning right, or making a U-turn from the centre of the road, and is giving a right change of direction signal; or
 - driving a slow-moving vehicle, and it is necessary for the driver to drive on or over the edge line to allow the vehicle to be overtaken or passed by another vehicle
 - driving a vehicle that is too wide, or too long, to drive on the road without driving on or over the edge line; or
 - permitted to drive on or over the edge line under another law of this jurisdiction avoiding an obstruction.
- A driver may drive on or over a continuous white edge line on a road for up to 100 metres if the driver is:
 - turning at an intersection; or
 - entering or leaving the road; or

- entering a part of the road of one kind from a part of the road of another kind (for example, moving to or from a service road, a shoulder of the road or an emergency stopping lane); or
- stopping at the side of the road (including any shoulder of the road)

(ARR158) Exceptions to driving in special purpose lanes

- The driver of any vehicle may drive for up to the permitted distance in a bicycle lane, bus lane, tram lane, transit lane or truck lane if it is necessary for the driver to drive in the lane:
 - to enter or leave the road; or
 - to enter a part of the road of one kind from a part of the road of another kind (for example, moving to or from a service road, the shoulder of the road or an emergency stopping lane); or
 - to overtake a vehicle that is turning right, or making a U-turn from the centre of the road, and is giving a right change of direction signal; or
 - to enter a marked lane, or part of the road where there is room for a line of traffic (other than motor bikes, bicycles, motorised wheelchairs, or animals), from the side of the road.
 - to avoid an obstruction

For this rule **permitted distance** means:

- for a bicycle lane or a tram lane—50 metres; or
- for any other lane—100 metres.



DIT: Priority bus lane project

Passing bicycle riders with sufficient distance

To comply with regulations **11A and 11B of the Road Traffic (Road Rules—Ancillary and Miscellaneous Provisions) Regulations 2014**, a driver of a motor vehicle driving past on the right of a rider on a bicycle, travelling in the same direction as the driver, may do any of the following:

On a two-way road without a dividing line or median strip—drive to the right of the centre of the road, provided that the driver has a clear view of any approaching traffic and can do so safely.

1. On a road with a dividing line—drive to the right of the dividing line, provided that the driver has a clear view of any approaching traffic and can do so safely.
2. Drive:
 - On a dividing strip that is at the same level as the road; or
 - On or over a single continuous line, or 2 parallel continuous lines, along a side of or surrounding a painted island,
3. Provided that the driver has a clear view of any approaching traffic and can do so safely.
4. If driving on a multi-lane road—drive so that the driver's vehicle is not completely in a marked lane.
5. On a road with 2 or more lines of traffic travelling in the same direction as the driver, but without marked lanes—drive so that the driver's vehicle is not completely in a single line of traffic.
6. On a multi-lane road—move from one marked lane to another marked lane across a continuous line separating the lanes, provided that the driver can perform the movement safely.

Sufficient distance, from a bicycle that is being passed by the driver of a motor vehicle, means:

- if the speed limit applying to the driver for the length of road is not more than 60 kilometres per hour—a lateral distance from the bicycle of at least 1 metre; or
- if the speed limit applying to the driver for the length of road is more than 60 kilometres per hour—a lateral distance from the bicycle of at least 1.5 metres.



(Courtesy: NSW Bus)

Stopping

(ARR169) No stopping on a road with a yellow edge line.

A driver must **not stop** at the side of a road marked with a continuous **yellow edge line**.



(ARR176) No Stopping in a clearway.

A **clearway** is marked at the side of the road with a broken yellow edge line.

A driver must **not stop** on a length of road to which a **clearway sign** applies.

A clearway sign applies, for the days or times indicated on the sign, to a length of road beginning at the sign and ending at the nearest of the following:

- a clearway sign on the road that indicates different days or times.
- an end clearway sign on the road.
- the end of the road.



Built up area

In relation to a length of road, a built-up area means an area in which there are buildings on land next to the road or there is street lighting, at intervals not over 100 metres apart for a distance of at least 500 metres or, if the road is shorter than 500 metres, for the whole road.

(ARR200) Stopping on road - heavy and long vehicles.

- The driver of a heavy vehicle, or long vehicle, must not stop on a length of road that is not in a built-up area, except on the shoulder of the road.
- The driver of a heavy vehicle, or long vehicle, must not stop on a length of road in a built-up area for longer than 1 hour, unless the driver is permitted to stop on the length of road for longer than 1 hour by information on or with a traffic control device, or the driver is engaged in dropping off, or picking up, goods.

(ARR165) Stopping in an emergency

A driver may stop at a particular place, or in a particular way, to comply with another provision of the *Australian Road Rules* or a provision of another law and must not stop for no longer than is necessary to comply with the other provision.

Example

If a driver stops at an intersection at a stop line, stop sign, or traffic lights, or to give way to a vehicle, in accordance with the *Australian Road Rules*, the driver does not contravene **Rule 170** (Stopping in or near an intersection).

If a driver is at an intersection controlled by traffic lights and the lights are showing green, the driver must **not** remain stationary behind the line unless the road the driver wants to enter is blocked.

Signs and Road Markings

We see many road signs and markings on Australian roads, these signs and markers can be divided into the following groups:

- Regulatory signs (Stop signs, give way signs, Including Truck & Bus Low Gear signs)
- Warning signs (advisory only)
- Hazard Markers (warning, roadside hazards)
- Temporary signs (road works etc.)
- Road Markings (painted arrows etc.)

Regulatory signs




Regulatory signs also include road markings (painted arrows etc) and must be obeyed. Usually, the road markings are in red or white, and the sign message is black on white.



The following signs are **regulatory**:

Sign	Meaning	Graphic
Stop	A continuous solid line marked across a portion of a road, is usually accompanied by a stop sign. Octagonal shape. You MUST stop your vehicle at the stop line or as near as practical before entering an intersection.	
Give way	A broken line across a portion of road (at a place other than a pedestrian crossing) usually accompanied by a give way sign. Triangular shape. You MUST slow down and if necessary, stop your vehicle to give way to all other road users.	
Roundabout	At a roundabout give way to other road users on the roundabout.	
Speed Limit	Speed limit signs have a distinctive red circle with a black number, indicating legal maximum speed in kilometres per hours.	
No Entry	No entry sign indicates you CANNOT drive beyond the sign. It may be the entrance to an exit-only driveway or a one-way road with traffic coming towards you	
Red line through sign	If a sign has a red slash/or line through a diagram that action or vehicle is prohibited.	

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Clearway	A clear way indicates no vehicle can park in this area between the specified times.	
Steep descent – Trucks & Buses use low gear	When driving a truck or bus on a road where this sign is displayed, you must drive in a gear low enough to limit your speed without using your foot brake.	
Clearance height for bridges, tunnels, and underpasses	Know the height of your truck and load. These heights are legislated e.g. 4.3 m for a rigid truck, bus, or articulated vehicle. Low clearance signs are also warning signs .	

An example of what can happen when you do not obey a 'Low Clearance' sign below, you **must** know the height of your vehicle!



There are **temporary signs** which can also be **regulatory**, such as road work signs or water over a road.




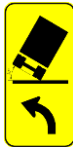



The following sign informs you of the maximum speed, to obey the traffic controller and give way to any workers.







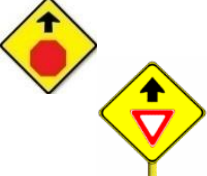



Warning signs


Warning signs indicate hazards on the road ahead that may not be obvious to the driver. Warning signs are mostly a diamond shape with a black legend or symbol on a yellow background.

The following signs are **warnings**:

Sign	Meaning	Graphic
Advance warning	Warning of oncoming traffic control devices (traffic lights, lights for train crossings, and stop/give way signs ahead)	
Winding road	Some bends may be sharper than you anticipate, slow down and take care	
Curves and bends with speed limit	Warning signs on curves or bends have safe speed advice signs mounted below. This is the maximum speed it is safe for your vehicle to negotiate the bend or group of bend. If your vehicle is larger, and your load heavier you may have to reduce your speed further. Loads such as fuel or livestock need to take more caution.	
Warning trucks slow down	This sign indicates that trucks should slow down for the upcoming bend, or they may tip over. There may be less camber than you expect.	
A sharp bend or hairpin bend	This sign indicates a very sharp bend and warns you to slow down.	
Advisory signs	Advisory signs warn drivers of various hazards, how long the hazard extends and the effect of the hazard. Other advisory signs indicate may indicate livestock on the road.	
Side road	This sign indicates that a side road meets the road on which you are travelling. You need to be aware of approaching traffic entering from the side road.	




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<p>T- intersection</p>	<p>This sign indicates the road you are travelling on ends, so prepare to stop your vehicle, give way to all traffic approaching from your left or right. Turn when it is safe to do so.</p>	
<p>Crossroads</p>	<p>Warns of a crossroad ahead, you will need to check for approaching traffic and may need to give way.</p>	
<p>Narrow bridge or road</p>	<p>These signs warn you of a narrowing of the road or a narrow bridge ahead. Be aware of pedestrians and traffic approaching. Give way where two vehicles are unable to pass.</p>	
<p>Road feature changes</p>	<p>These signs warn of changing road features. A hump or speed bump in the road ahead or a dip or depression in the road. Both of these can damage your vehicle if hit at speed, be prepared to slow down. A crest approaching might mean you cannot see a safe distance in front of you, do not try to overtake.</p>	
<p>Slippery when wet</p>	<p>Slippery when wet sign – indicates that rain will cause the road surface to be slippery in areas. This might be in areas where there is a build-up of oil, tyre rubber or road grime. If you go too fast, you are more likely to skid.</p>	
<p>Advance notice</p>	<p>Advanced notice signs let drivers know if there is a stop or give way sign ahead. The intersection may be concealed but prepare to give way and possibly stop.</p>	
<p>Children or pedestrians</p>	<p>Each of these signs warn of children or pedestrians crossing ahead. It may be near a school, swimming pool, shopping centre or other public amenity.</p>	
<p>Bike riders</p>	<p>This sign indicates an area where there may be more bicycle riders. Bike riders can be difficult to see, be vigilant.</p>	
<p>Road works</p>	<p>Signs warn that road workers may be on the road ahead. Road repairs can cause the road to be slippery, lanes may be closed, lines not marked, loose stones, or a traffic controller may be holding a stop sign.</p>	

Steep hill	Either up or down there is a steep ascent (up) or descent (down) ahead. You should slow down and change down gears allowing your vehicle's engine to manage some of your speed instead of completely relying on your brakes.	
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Guide Signs

The following signs are referred to as **guide signs**:

Indicator	Description	Graphic
Direction	Usually green in colour and indicate routes, distance of towns, and major roads.	
Points of interest	Usually brown in colour and indicate points of interest or tourist attractions.	
Roadside facilities	Usually blue in colour and indicate public toilets, shopping centres, parking, and caravan parks.	

You can refer to the Australian Road Rules (ARR) or the [My Licence - The Driver's Handbook - Signs](#)

Freeway signs

- Erected on **freeways** and **expressways**.
- Drivers must **pay particular attention** to signs on these roads as the information can be **critical**.



Road markings

Stop line (solid)

- Is a continuous line marked across a portion of a roadway (at a place other than a pedestrian crossing) and is usually accompanied by a stop sign.

Give way line (broken)

- Is a broken line marked across a portion of a roadway (at a place other than a pedestrian crossing) and is usually accompanied by a give way sign.

Bicycle storage area

- A bicycle storage area is a safety feature at an intersection to allow bicycle riders to be more visible to drivers. It is represented on the road with a white bicycle symbol. The area will generally be painted green.



(ARR60A)— Bicycle storage area before a red traffic light or arrow

If there is a bicycle storage area before traffic lights that are showing a red traffic light, a driver of a motor vehicle **must not** allow any part of the vehicle to enter the bicycle storage area.

If there is a bicycle storage area before traffic arrows that are showing a red traffic arrow, and a driver of a motor vehicle is turning in the direction indicated by the arrow, the driver **must not** allow any part of the vehicle to enter the bicycle storage area.

Audio Tactile Line Marking

Driver fatigue is a major factor in crashes where a vehicle has run off the road.

The purpose of Audio Tactile Line Marking (ATLM) is to reduce **rural road crashes** by providing a noise (audio) and vibratory (tactile) warning to road users whose vehicle may have strayed due to fatigue or poor visibility because of rain or fog.

Drivers tend to focus on the edge line for guidance when traffic is approaching at night to avoid being dazzled by headlights.

For curves and other road alignment, black and yellow chevron alignment markers have been shown to be most effective when there is reduced visibility.

The markers are at similar height, so they also show gradient variations. White posts at the side of the road show which way the road curves. The tighter the bend, the closer the posts.

Mobile Phones

(ARR300) Use of mobile phones

Road transport in Australia is a **high-risk industry**, according to SafeWork SA. Work related road crashes incur a greater time lost in worker absences than any other work injury claim.

Driving is a complex activity performed in an environment that is constantly changing. Despite this, drivers often engage in additional activities that can take both their mind and their eyes off the road. A distracted driver is not only a risk to themselves, but they also endanger other road users.

Up to **71% of truck crashes** (and 46% of near crashes) involve distraction from non-driving related activities as a contributing factor. The **biggest distraction** while driving is using a **mobile phone**. This distracts you in several ways:

- **Physical distraction** – as the driver’s hand is moved from the steering wheel to pick up the phone, answer or end the call, or type a message.
- **Visual distraction** – as the driver’s eyes are diverted from the road to seek the phone, view buttons, read a message etc.
- **Cognitive distraction** – even the best drivers have difficulty processing two or more pieces of information at the same time.

Talking on a mobile phone while driving, even if on blue tooth, may cause lapses of attention, concentration and judgement as the driver’s attention is divided between the driving task and conversation.

Note: Using a mobile phone whilst driving increases your risk of a crash four-fold, irrespective of whether a hands-free kit is used.

Evidence demonstrates **inexperienced drivers** already have a **higher crash risk** and the risk **increases with distractions**.

It is difficult to have a simple conversation in complex driving situations such as driving at peak hour, on unfamiliar roads, at night and in wet weather. Similarly, it is difficult to have a complex conversation whilst performing a simple driving task as the conversation task demands a greater amount of the driver’s attention.

The most common types of crashes associated with mobile phone usage are “**run off the road**” and “**rear end**” crashes.

Research shows that dialing, texting, and talking on a mobile phone while driving can lead to:

- **Riskier decision making** – with attention and concentration diverted, a driver’s ability to judge distances, speed, space, and environmental conditions may be affected. You may misjudge gaps or speed of oncoming vehicles.
- **Slower reactions and speed variations** – You may take longer to respond to traffic signals or completely miss them. At the onset of a yellow light at an intersection, you may take the riskier action of driving through it.
- **Less controlled braking** – with reaction times slowed, the driver will tend to brake later, with more force and less control.
- **Fluctuations in speed and wandering out of your lane** - your ability to maintain speed and position on the road may be affected.
- **Reduced awareness of the surroundings** – when deep in conversation, the driver will tend to spend less time checking mirrors, monitoring traffic, and the road environment. You may have a reduced awareness of other road users.

It is wise to carry a mobile phone for emergency use. The best advice regarding mobile phones is:

- Pull over to park your vehicle safely and legally then use your mobile for calls or texting.
- Use voicemail and return calls when you reach your destination.
- Plan breaks in your trip to contact others and advise them not to call when you will be driving.
- Never read or send text messages while driving. It is obvious your eyes are not on the road!
- Never look up phone numbers or addresses while driving.

In South Australia, **Australian Road Rule (ARR) 300 (Use of Mobile Phones)** details what is and is not legally acceptable use of a mobile phone while driving. ARR 300 states:

- If a person wishes to make or receive a call, including dialing a number, and needs to touch any part of the phone to do so, that **phone must be mounted** (in a mounting commercially designed and manufactured for that purpose).
- If the phone is being used via blue tooth, a headset, or earphones without touching, holding, or resting the phone on their body, the phone may be located anywhere in the vehicle, including in the driver's pocket or pouch they are wearing (the driver may touch the earpiece or headphone to operate the phone).
- This does not affect the driver's freedom to hold the phone to make or receive calls or use any other function of the phone if the **vehicle is legally parked** (but not stationary in a traffic queue or at lights).
- It is **an offence** to create, send or look at a text, video message or email on a **mobile phone**.

Police and emergency services are exempt from this mobile phone rule.

Drivers who have a Learner's permit or P1 Licence are not allowed to use **any** type of mobile phone function while driving, including hands-free/blue tooth. Mobile phones can also function as a driver's aid (e.g., for navigation or directions, speed advisor app etc.) these must still be:

- Mounted properly in a cradle,
- Not obscure the view of the road,
- Set up (especially typing any text) while safely and legally parked prior to commencing your trip,
- Not be touched while driving.

While you cannot do much about distractions from outside your vehicle when you are driving, you can reduce sources of distraction inside your vehicle. This will help reduce your crash risk. Further driver distractions can be minimised by:

- Only enter text into devices, i.e., GPS, mobile phone etc. when you are safely and legally parked.
- Turn off the radio or stereo, particularly in new or challenging traffic situations.
- Collect loose items inside the vehicle and put them in a bag or box behind the seat.
- Unless a passenger can do this for you, only adjust the radio, digital devices, or loud music when you are stopped.

Be aware that South Australia is introducing mobile phone detection cameras, and you will be fined and lose demerit points.

Accidents

Crashes—Legal Obligations

Stop immediately at the scene of the crash site.

Failing to stop at a crash you are involved in, is an offence. Use your hazard warning lights to alert other road users to possible danger.

Assist anyone who is injured.

Telephone **000 for emergency assistance** when:

- There is danger (dangerous goods or fire),
- People are injured or killed,
- Where a driver is believed to be under the influence of alcohol or drugs.

Provide as much help as possible, including first aid, to anyone involved in the crash. Unless it is essential, **avoid** moving the seriously injured or unconscious person/people until trained help arrives.

Under the [Road Traffic Act 1961](#) (*Part 3, Division 2, Section 43 – Duty to stop and give assistance*) - A driver involved in a crash who fails to stop immediately at the scene:

- Who does not provide all possible assistance to those involved (this includes providing details and first aid),
- Who refuses to answer police questions, and
- Refuses to undertake a breath or drug test at the scene:

Can face criminal charges and penalties of up to **5 years imprisonment** and/or a driving disqualification **of at least 1 year**.

**** Move vehicles to the roadside or away from traffic, if possible.**

Duties of drivers who are involved in a crash – (ARR287 and Section 43 (RTA)).

This applies where there is a crash that results in injury to a person or animal, or which causes damage to property.

- **Stop the vehicle immediately** then check to see if anyone is injured, if so, then **render assistance**, (e.g. call ambulance, organise help),
- Give your details to anyone having reasonable grounds to require them (i.e. other party, police)
- Report to Police **within in 90 minutes** (but no later than 24 hours exceptional circumstances) if
 - any person is **killed or injured**
 - If for any reason you were not able to give your details to the other party,
 - If the other party were unable to give their details to you, if a fair estimate of the value of the total damage is more than **\$3000**, and
 - If any person is killed or injured give notice to the Compulsory Third Party Insurer.
- For personal safety **do not** stand on the roadway, move to the footpath or to a place of safety.
- It may be in your interest to obtain details of any witnesses together with full details of :
 - The day
 - Time
 - Place of the crash,
 - Description of the damage and injuries,
 - Photos and diagrams



Note: Use of mobile phone camera recordings or dash cam, following a crash, may provide additional information.

***Take as much photographic evidence as possible to reinforce the details.*

Avoiding a crash

No road user has absolute right of way. The rules for giving way are there to allow for structured traffic flow. If a driver becomes aware of a hazardous situation arising, they must slow down and, if necessary, stop to avoid a crash.

Procedure for reporting crashes and damage

All drivers must be aware of their responsibilities to their company before driving.

A driver who is involved in a crash, whether it is his/her fault or not, should consider the following questions which may be asked by their employer:

- **Name, address, and phone numbers** (if appropriate) of the owner and the drivers of the vehicles involved
- **Registration** numbers of other vehicles involved.
- Name of **the insurance companies** covering the other vehicles.
- **Time, place, and weather conditions** where the crash occurred.
- **Approximate speed** and position on the road just prior to the accident.
- Type and **extent of damage** to company vehicle.
- Was there any damage to other vehicles or property?
- Name and address of **witnesses** to the crash.
- Describe fully how the crash occurred, give a sketch diagram of the crash scene.
- Have you had any previous crashes or traffic convictions?
- Have you had an insurance policy cancelled, declined or special conditions imposed?
- Was the crash reported to the Police? If 'yes' which police station?

Your employer and insurance company will want to know if a Police Report was made, the reference number, date/time it was lodged and at what station (if it was made in person) or online.



Lights

(ARR215) Using lights when driving at night or in hazardous weather conditions.

A driver must not drive at night, or in hazardous weather conditions and reduced visibility unless the headlights, taillights and number plate light fitted to the vehicle are operating effectively and are clearly visible. If the vehicle is fitted with clearance lights or side marker lights, those lights are also operating effectively and are clearly visible.

During the day, in fog, or other hazardous weather conditions, a driver may substitute fog lights for the headlights.

Night-time is taken to mean the time between sunset and sunrise and hazardous weather conditions is where there is reduced visibility due to rain, dust, or fog.

It is an offence to drive a vehicle displaying parking lights only during the period of sunset to sunrise.



Following are some simple rules for **driving safely at night**:

- **Do not 'out-drive' your headlights.** If, you are travelling at a speed, it will take 100 metres or more to stop and your lights are only showing you 80 metres ahead, then you are going too fast. Always drive within your headlight beam so that you are able to safely stop within the distance you can clearly see.
- **Do not look directly at on-coming headlights.** Look to the left side of the road and if necessary, follow the edge line, slow down or stop if you are unable to see. It may take several seconds to recover from being blinded by oncoming lights so keep your speed down until your eyes recover.
- **High beam must be dipped if an on-coming vehicle is within 200 metres.** Consider dipping your headlights earlier, if possible, as this rule was written many years ago when headlights were poor quality. A good guide is to dip your headlights,

when you first see headlights approaching, otherwise you will blind the other driver with your lights.

- **Keep your windscreen clean, inside, and outside and do not forget the headlights.** Make sure the washer/wipers are in good condition and do not forget your mirrors. The dazzle of oncoming traffic through a dirty windscreen makes it difficult to see and cause eye strain and fatigue.
- **Avoid using dark or tinted glasses at night** as these cut down the available light to the eyes.
- **Stop and rest if you feel tired or drowsy, even a short break can be beneficial.** When driving at night there is an increased risk of fatigue due to the natural inclination of the body to shut down in response to biological rhythms. The risk is greatest in the early hours of the morning.
- **Avoid smoking** – it depletes the brain of oxygen and reduces alertness.
- **Allow for reduction of night vision** as you get older.
- **Avoid bright lights inside the cabin** at night.
- **Ensure headlights are clean, undamaged, and adjusted for load.**
- If livestock are on or near the road, dip your headlights to low beam so they can see. Otherwise you will blind the livestock who will remain standing in the road. Remember if you see a kangaroo or an emu, they are often in groups – so if you have seen one there will often be others.

Note: (ARR 219) states: A driver must not use, or allow to be used, any light fitted to or in, the driver's vehicle to dazzle, or in a way that is likely to dazzle another road user.

(ARR218) Using headlights on high beam.

- Applies to daytime and night-time and includes oncoming and following vehicles.
- You must not use the vehicle's headlights on **high beam** if you are driving less than 200 metres behind a vehicle or less than 200 metres from an oncoming vehicle.
- If you see livestock on or near the road at night, dip your lights so that they can see. This is good practice for crash avoidance.
- Dip your headlights when lights of an oncoming vehicle separate into individual units of light.

- On undulating (bumps and dips) roads, it may be possible to only see overhead clearance lights from an oncoming vehicle. Your high beam lights may be blinding the driver.

(ARR221) Using hazard warning lights.

Hazard warning lights can only be used where:

- The vehicle is stopped and is obstructing or is likely to obstruct, the path of other vehicles or pedestrians.
- The vehicle is slow moving and is obstructing, or likely to obstruct, the path of other vehicles or pedestrians or the vehicle is stopped in an emergency stopping lane.
- The vehicle is stopped for the driver to sell a product (e.g. ice creams) that may attract children onto the road.
- The driver is driving in hazardous weather conditions (e.g. fog or smoke).
- The vehicle is a bus, and the driver has stopped to pick up or set down children.
- The lights operate as part of an anti-theft device fitted to the vehicle

Note: Further information can be found at the following website: [Australian Road Rules](#) via the www.Legislation.sa.gov.au website.

Drugs and Alcohol

It is an offence to drive under the influence of drugs in all States of Australia. The drug **does not** have to be **illegal**; a doctor could prescribe it. However, if it affects your driving ability, then it becomes an offence.

Drugs affect the way your body and mind function; they can change how you feel, think, and behave. If it affects your driving ability, then it becomes an offence. Drugs can seriously affect your driving skills.

Drugs include:

- **Legal** – alcohol, caffeine, medicines, and tobacco,
- **Illegal** – cannabis, amphetamines, ecstasy, cocaine, or heroin,
- **Illicit** – illegal drugs, **prescription drugs** obtained illegally or not being used for the medicinal purpose or other substances being used inappropriately (petrol, glue).

The different types of drugs affect your driving ability in the following ways:

- **Stimulants** – driving too fast or erratically, being aggressive behind the wheel, reduced vision, and an overestimated sense of confidence.
- **Depressants** – driving too slowly, falling asleep at the wheel, veering out of your lane, slower reactions (alcohol is a depressant).
- **Hallucinogens** – distorted vision, hard to correctly judge distances, seeing things that are not there.

The time your body takes to eliminate a drug varies. It depends on many factors, including the drug itself (how much you took, how strong etc.) and you as an individual (your metabolism, age, health, environment etc.).

Even prescription drugs may have side-effects or be harmful if not taken properly as people react differently to the same medicine. With illicit drugs you often have no idea what is in them or how strong they are. The risks to your health, even to your life, can be serious.

Check with your **Doctor** or **Pharmacist** and make sure you understand:

- What are you taking and how it will help you
- How and when you should take the medicine
- The best way to store the medicine
- What side effects are possible and how to manage them
- How is it affected by any other medicine you take
- The impact of taking it long-term
- *(RTA s47BA)—Driving with prescribed drug in oral fluid or blood.*
- *Road Traffic (Miscellaneous) Regulations 2014-R16—Prescribed drugs (section 47A of Act)*



Note: For more information refer to Page 43 and 44 in the [Heavy Vehicle Drivers Handbook](#).

For the purposes of the definition of **prescribed drug** in section 47A(1) of the Act, the following are declared to be prescribed drugs:

- (a) delta-9-tetrahydrocannabinol; (marijuana or cannabis)
- (b) methyl amphetamine; (speed – 10-20% pure; or ice – 80% pure)
- (c) 3, 4-methylenedioxymethamphetamine (MDMA); (ecstasy).

(RTA s47A) *prescribed concentration of alcohol* means:

- in relation to a person who is not authorised under the *Motor Vehicles Act 1959* to drive the vehicle (e.g. a *learner's permit holder*)— no concentration of alcohol in the blood.
- in relation to a person who is driving a **prescribed** vehicle—any concentration of alcohol in the blood.

Prescribed vehicles are:

- Vehicles with a gross vehicle mass exceeding 15 tonnes.
- Prime movers with an unladen mass exceeding 4 tonnes.
- Buses designed to carry more than 12 persons including the driver.
- Mini-buses designed to carry 9 - 12 persons, including the driver, which are used for hire, business, or community purposes.
- Taxis and hire cars while carrying passengers for hire.
- Vehicles used to transport dangerous substances within the meaning of the Dangerous Substances Act 1979.
- Therefore both the applicant and the MDI/AE acting as the QSD must have zero PCA.

It is an offence to drive under the influence of any drug or alcohol in all States of Australia where your ability to drive is impaired.

The drug does not have to be illegal, a doctor may prescribe it, however, if it affects your driving ability, it becomes an offence.

Note: Your insurance will be **void** if you contravene any of these conditions.

Alcohol affects depend on a range of factors, including:

- Gender
- Mental and physical health
- Medical conditions
- Use of other drugs or medications

Alcohol can affect you more quickly if you:

- Drink on an empty stomach
- Have a lower tolerance to alcohol.
- Are a young person.
- Weigh less.
- Do not usually drink alcohol.



Alcohol can:

- Pass into your blood through walls of stomach and intestine.
- Travel to all parts of your body including your brain.
- Slow down your brain
- Affect the way you think, feel, and behave.

Sobering up takes time. The liver removes one [standard drink](#) per hour.

Sweating it out with exercise, cold showers, coffee, fresh air, or vomiting ease the symptoms but will not remove alcohol from your system. This means it may not be safe to drive the following day

As you drink, the level of alcohol in your blood rises. The level of alcohol in your blood is called Blood Alcohol Concentration (BAC). BAC is what police roadside breath tests are testing for.

The speed in which your BAC rises can be different for everyone but an average, healthy person, one standard drink can -

- Increase BAC by about 0.02,
- Take about one hour to break down.
- You are breaking the law in Australia if you drive with a **BAC** equal to or more than **0.05%**.
- Weigh less.
- Do not usually drink alcohol.

Alcohol can:

- Pass into your blood through walls of stomach and intestine.
- Travel to all parts of your body including your brain.
- Slow down your brain
- Change your behaviour
- Reduce reaction times to hazards

Sobering up takes time. The liver removes one [standard drink](#) per hour.

Relative risk of involvement in a casualty crash by driver's BAC:

BAC of 0.05 to 0.08

- Impaired judgement and movement,
- Limits your ability to do more than 1 thing at a time,
- Makes simple tasks more difficult,
- Slows down your reaction time,
- Reduced inhibitions, feeling more confident.

BAC of 0.08 to 0.15

- Slurred speech,
- Impaired balance, coordination, vision, hearing, and reflexes,
- Unstable emotions,
- Nausea and vomiting.

BAC is 0.15 to 0.30

- Unable to walk without help,
- Sleepy,
- Difficulty breathing,
- Memory loss,
- Loss of bladder control,
- Possible loss of consciousness.

BAC of over 0.30

- Coma,
- Death

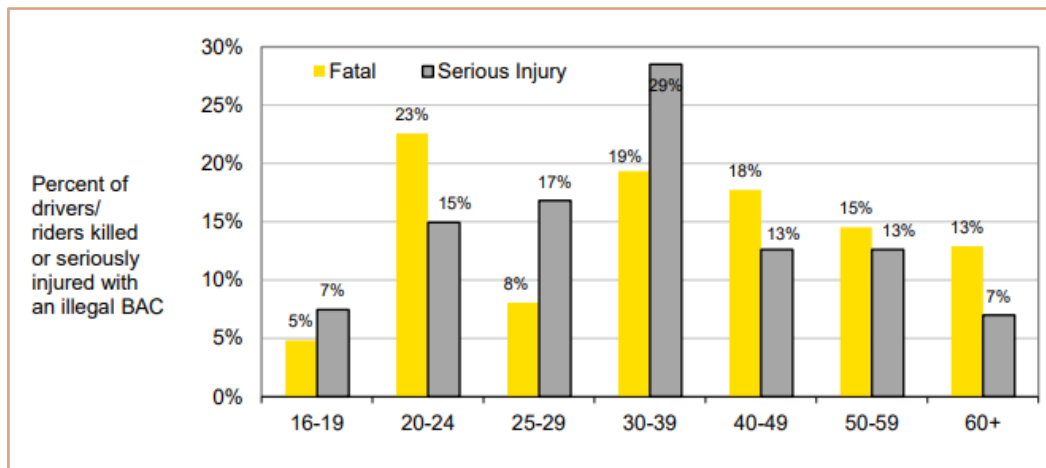


Table: Drivers/riders with a BAC above .05 killed or seriously injured by age group, South Australia,

Alcohol affects driving skills:

- When alcohol reaches the brain, it acts like an anaesthetic.
- Causes driver fatigue (tiredness)
- Slows reaction times.
- Poor judgement
- Reduced attention and hearing
- Poor coordination
- False sense of confidence



(Courtesy: The Adelaide Advertiser)

Offences being under the influence.

Driving under the influence (DUI) – Section 47 (RTA)

It is an **offence** in South Australia to drive or attempt to put a vehicle in motion while under the influence of intoxicating liquor or drug as to be incapable of exercising effective control of the vehicle.

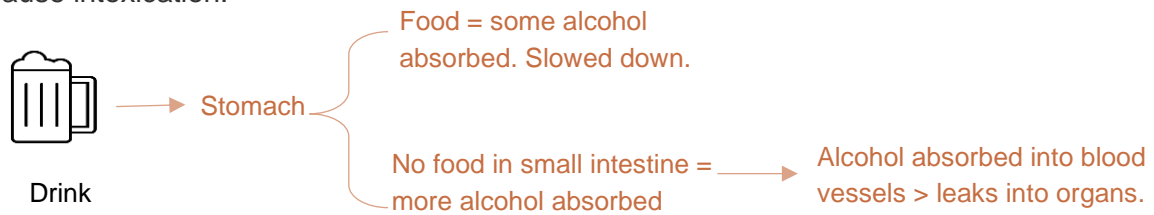
It is not necessary for a person to exceed **0.05** because if they are **incapable** of exercising effective control of a vehicle due to the influence of intoxicating liquor or drugs, this is considered an offence.

Prescribed concentration of alcohol (PCA)

When alcohol is consumed, it enters the stomach, where it can be absorbed into the bloodstream. However, if **no food** is present, most of the alcohol moves down into the small intestine where there is a much **larger surface area for absorption** compared to the stomach.

Alcohol moves through the blood vessels (capillaries) and “leaks” into the cells of various organs. The construction of the brain capillaries generally does not allow most drugs to enter

the brain itself, however, alcohol can. In the brain, alcohol interferes with the brain cell function to cause intoxication.



Refusal to take a breath test.

Refusal to take a breath test – Section 47E (RTA)

If a member of the Police Force believes, on reasonable grounds, that a person, while driving a motor vehicle or attempting to put a vehicle in motion, has committed an offence or has behaved in a manner that indicates the person’s ability to drive a motor vehicle is impaired or has been involved in an accident, they may require that person to submit to an alcotest, breath analysis, or both.

Refusal to give a blood sample.

Refusal to give a blood sample – Section 47F (RTA)

Where a person who is required to submit to an alcotest or breath analysis test fails to comply with the requirement or direction by reason of some physical or medical condition then that person is required to give a sample of their blood if requested by a member of the Police Force.



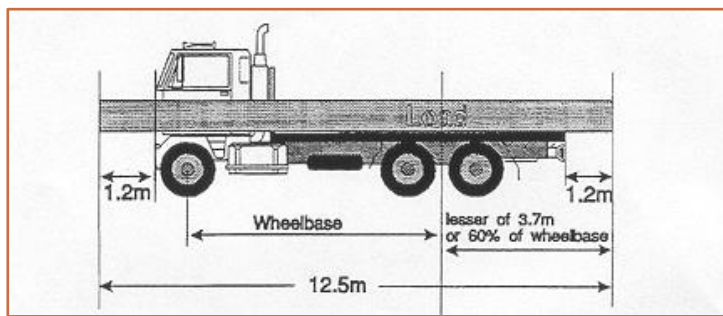
Heavy Vehicle Dimensions

Suggested supporting document: “National heavy vehicle mass and dimension limits” (NHVR Website)

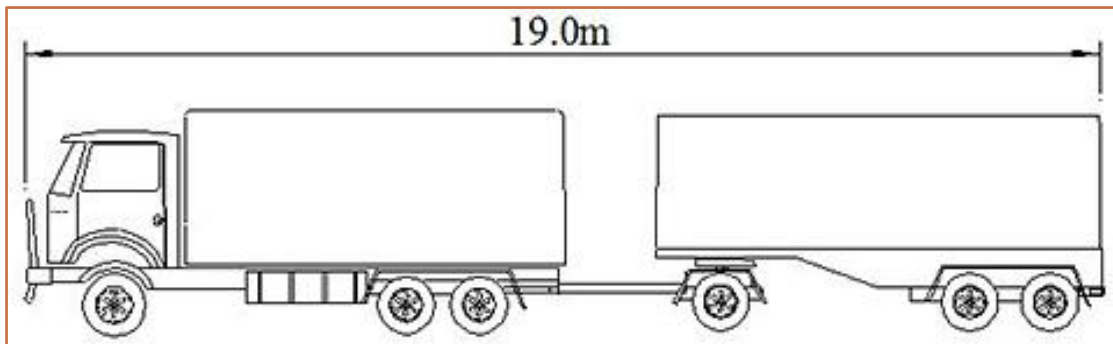
<https://www.nhvr.gov.au/files/201607-0116-mass-and-dimension-limits.pdf>

The maximum vehicle length (all classes)

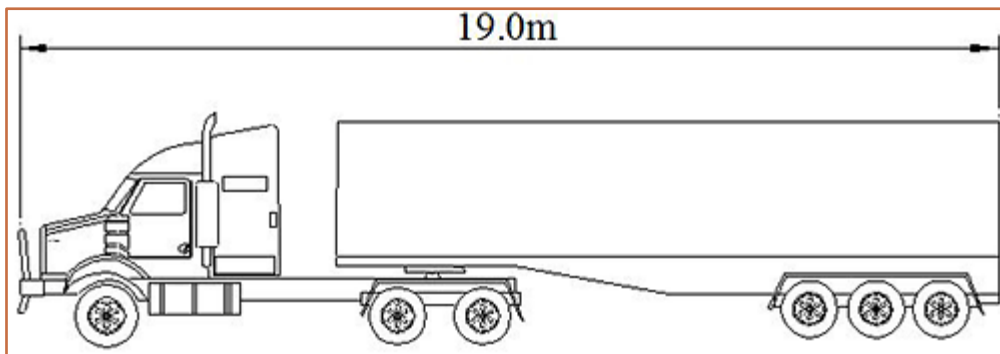
- Rigid vehicles must not exceed **12.5 metres** (this includes any overhang to both front and rear).



- Vehicles being a combination of a rigid truck and trailer must not exceed 19 metres.



- Combination vehicles with one trailer must not exceed 19 metres.



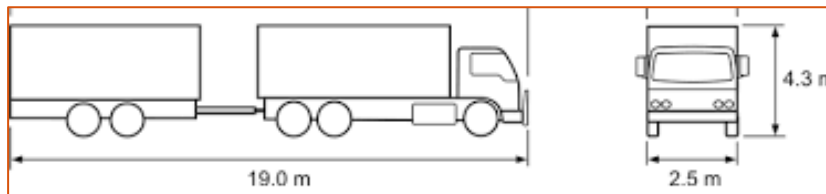
The maximum width and height (all classes)

The overall width of a vehicle including any load must not be more than **2.5m**. This excludes any lights, mirrors, reflectors, central tyre inflation systems and signaling devices.

Maximum vehicle height including any load is **4.3m** except for:

- vehicles designed to carry livestock can be up to 4.6m high.
- vehicles designed to carry motor vehicles on more than one deck may be up to 4.6m high.
- double-deck buses can be up to 4.4m high.

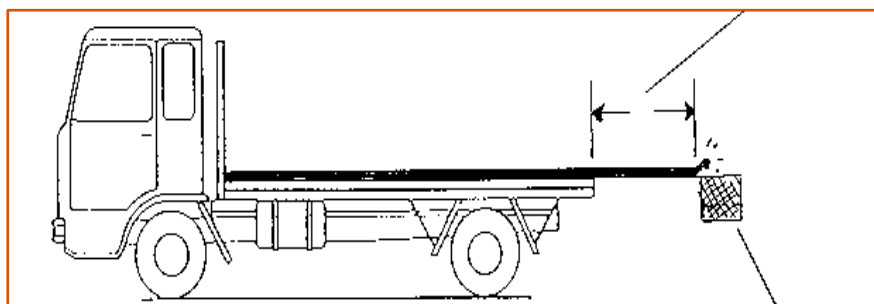
Heavy vehicle combinations are usually limited to a maximum overall length of **19 m**. Larger combinations such as a B-Double must meet specified conditions to travel at up to 26 m.



Overhang - flag or light

Projections to the front, rear, and sides of vehicles:

- A load must not project more than 1.2 metres in front of the vehicle.
- A load must not project more than 150mm from the outermost part of either side of the vehicle (regardless of the width of the vehicle).
- If a load projects to the rear of the vehicle by more than 1.2 metres **or** cannot be clearly seen from behind **or** is on a pole type trailer, in daytime it must be identified by a brightly coloured flag measuring at least 300mm x 300mm and at night by a red light that can be seen for 200 metres.



(More than 1.2 metres = flag (day) or light)

Maximum **length** of heavy vehicles:

Vehicle	Maximum length
Rigid vehicle (except an articulated or controlled access bus)	12.5 metres
Combination vehicle – e.g. prime mover, or semi-trailer	19.0 metres
B-Double	25.0 metres
B-Double (When distance from front articulation point of forward trailer is not more than 20.6 meters to rear of B-Double)	26.0 metres
B-Triple	36.5 metres
Type 1 Road Train	36.5 metres
Type 2 Road Train	53.5 metres

The maximum protrusion of mirrors

Vehicles with a gross vehicle mass (GVM) of over 3.5 tonnes may have mirrors that project an extra 230mm from the widest point of the vehicle if they can fold into 150mm.

Exempt vehicles

Class 1/3 heavy vehicles (special purpose vehicles, oversize over mass vehicles, agricultural vehicles) may be exempt from complying with prescribed mass or dimension requirements of a Common

wealth Gazette notice through the issue of a permit by the NHVR.

Examples of gazette notices for oversize over mass access can be found on the NHVR website [here](#). Further information can be found in the [Heavy Vehicle \(Mass, Dimension and Loading\) National Regulation \(NSW\)](#).

Rear Marker Reflector Plates

All vehicles with a gross vehicle mass (GVM) exceeding 12 tonnes, and all trailers with a gross vehicle mass (GVM) exceeding 10 tonnes must be fitted with two retro-reflective rear marker plates.

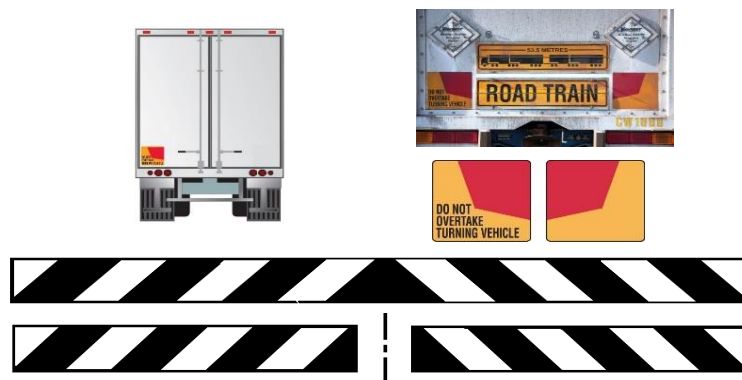
Plate and sign selection requirements

The types of vehicles on which rear marking plates must or may be placed is determined by their **GVM** or **GTM**.

The types of vehicles or combinations on which the: **Do Not Overtake Turning Vehicle** message must be fitted is determined by the length of the vehicle or combinations and how the vehicle performs when turning at intersections.

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

Various Reflector Types



Portable Warning Triangles

(ARR226)—Heavy vehicles - equipped with warning triangles.

- A person must not drive a vehicle with a GVM **over 12 tonnes** unless the vehicle is equipped with at least **3 portable warning** triangles.
- The person must produce the warning triangles for inspection if the person is directed to do so by a police officer or an authorised person.

(ARR227)—Using warning triangles.

If the driver stops on a road or shoulder of a road, or if some or all of any load being carried by the vehicle falls on to a road, the driver must place the triangles as shown in *Diagram 1*

- At a place where the **speed limit is 80 kilometres per hour or more** and the **vehicle is not visible at any time for at least 300 metres** in all directions:

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- place 1 triangle at least 200 m, but not over 250 m, behind the vehicle or fallen load; and
 - place 1 triangle at least 200 m, but not over 250 m, in front of the vehicle or fallen load; and
 - place 1 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.
- At a place where the speed limit is **less than 80 kilometres** per hour and the **vehicle is not visible at any time for at least 200 metres** in all directions:
 - place 1 triangle at least 50 m, but not over 150 m, behind the vehicle or fallen load; and
 - place 1 triangle at least 50 m, but not over 150 m, in front of the vehicle or fallen load; and
 - place 1 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.

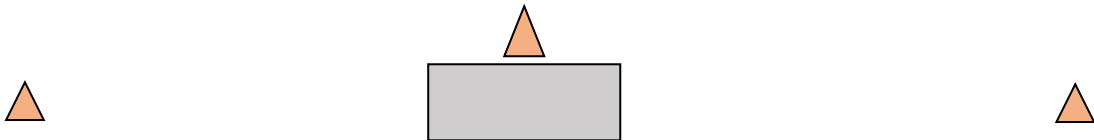


Diagram 1.

If the vehicle or fallen load is on a **one-way or divided road** (*any length of a two-way road that has a median strip that is a structure*), instead of placing one triangle to the front, place that triangle midway between the triangle at the rear and the vehicle or fallen load as shown in diagram 2

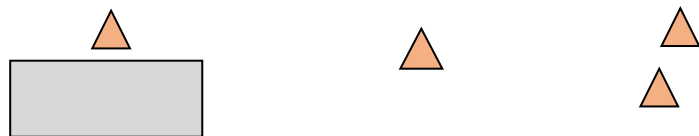







Diagram 2

Truck and trailer terminology

Description	Graphic
<p>Prime mover – a motor vehicle built to tow a semi-trailer.</p> <p>Cab over engine prime mover. This example is referred to as a day cab (as opposed to a sleeper cab) This body style is more manoeuvrable than a bonneted vehicle.</p>	 <p>(Courtesy: Machines 4U)</p>
<p>Traditional bonnet style prime mover with integrated sleeper cab.</p> <p>This body style gives you somewhere to rest when the mechanic is working under the bonnet. The fibreglass bonnet helps to reduce weight and to make this body style more aerodynamics.</p>	 <p>(Courtesy: JT Fossey Trucks)</p>
<p>Pig trailer</p> <p>A trailer with one axle group or a single axle near the middle of its load carrying surface and connected to the towing vehicle by a drawbar.</p>	 <p>(Courtesy Barry Stoodley)</p>
<p>“A” trailer or lead trailer</p> <p>Curtainsider tri-axle B-Double “A”trailer</p>	 <p>(Courtesy Gray's Online)</p>
<p>Pole-type</p> <p>A trailer that is attached to a towing vehicle by means of a pole or an attachment fitted to a pole and is ordinarily used for transporting loads such as logs, pipes, structural members ,or other long objects that are generally capable of supporting themselves.</p> <p>Extendable pole trailer</p>	 <p>(Elphinstone Australia)</p>

Ball race turntable

Note location of locking pin. Used for applications requiring very tight turns or to aid stability to the front of a semi tipper trailer when the prime mover and trailer are not aligned. The semi-trailer must be fitted with a block to stop sideways movement on the top of the turntable.



(Australasian Transport News / McColl's Transport).

Drawbar coupling

The component on the left is attached to the towing vehicle and the other is the front of the drawbar. Often referred to as a **ring feder** due to the most common brand of coupling.

This type of hitch is used for dog and pig trailers, and converter dollies. Note the safety wheel and handle are in the open position.



(Owner Driver / Wikipedia)

Non-ball race turntable

The turntable or fifth wheel is a greased metal disk on a prime mover that supports the weight of a semitrailer and provides a pivot point around which the two vehicles are articulated.



Over-dimension / mass permits.




Permit Vehicles

Vehicles that exceed the standard dimensions or operating requirements set out in a gazette notice are referred to as **oversize** or **over mass** and **may require a permit** issued from the **NHVR** to operate on the road network.

The permit must be carried by the driver at all times and all requirements must be adhered to.

<https://www.nhvr.gov.au/road-access/access-management/applications/oversize-overmass-permit>

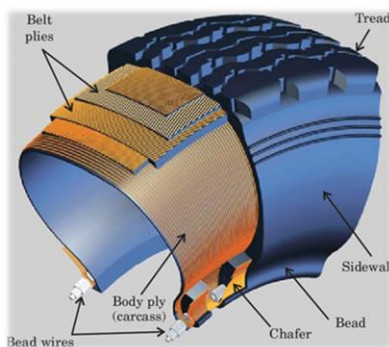
The following table provides descriptions of some over dimension / mass vehicles which require a permit.

Description	Graphic
<p>Steerable platform trailer.</p> <p>This style of trailer has axles which steer to assist with cornering. They are designed to be widened. Note the flags which are a requirement of the permit.</p> <p>Note: The flags positioned at the back and front of the trailer are a requirement of the permit.</p>	 <p>(Courtesy Tuff Trailers)</p>
<p>Modular platform with electronic steering</p>	 <p>(Courtesy TRT Australia)</p>
<p>Quad axle low loader (float) trailer and dolly.</p> <p>The dolly is for mass distribution purposes.</p>	 <p>(Courtesy HTE Transport)</p>

Tyres

What is a tyre?

A pneumatic tyre is a pressure vessel which contains air that carries the weight of the vehicle and its load and also creates the friction between the vehicle and the road surface.



Courtesy Research Gate: Jozef Pelc)

A tyre has four basic functions:

1. Support the load of the vehicle.
2. Transmit the steering forces between the road and the wheels which allows the vehicle to change direction.
3. Transmit the traction forces for the vehicle to accelerate and the friction for it to stop.
4. Form part of the suspension system to absorb road shocks and provide a comfortable ride.

Why do tyres have tread?

The tread of the tyre forms the contact between the tyre and the road, it transmits the forces required to **start, stop, and steer** the vehicle.

In wet weather the pattern or grooves in the tread allow the water lying on the road in front of the tyre to be **dispersed** or **squeezed** through the tread pattern so that the tyre can contact the road.

When the tread pattern wears or if there is more water on the road than the tyre can disperse a situation can arise where the tyre rides up on top of the water causing the grip between the tyre and the road to be lost with the water acting as a lubricant between the two. This is called **aquaplaning** or **hydroplaning** and generally happens at higher speeds.

- A tyre fitted to the vehicle must have a tread pattern at least 1.5mm deep, other than at tread wear indicators, in a band running continuously.
 - across at least 75% of the tyre width that normally comes into contact with the road; and
 - around the whole circumference of the tyre.
- Tyre care and maintenance



(Courtesy Owner Driver)

Tyres should be:

- Inspected **daily** for possible punctures or damage.
- **Pressures** should be **checked weekly** as correct pressures are important and should be checked with a suitable tyre gauge when the tyre is cold.
- Be aware that **balancing sand** may be used inside tyres (usually steer tyres only) and it may interfere with the valve operation unless special filtered valve cores are used.
- A pressure reading of a **hot** tyre can show an increase of up to 25% over a **cold** tyre.
- **Do not** be tempted to let air out of the hot tyre as this may cause damage to the tyre.
- **Under inflation** will increase sidewall distortion and generate excessive heat, which can cause casing failure. Tyres that are 10% under-inflated can generate up to 30% more heat, which may result in up to **3% more fuel usage** When you are running at about 1.7 km per litre this will quickly eat into your profits.
- In **extremely hot** conditions, some operators will inflate tyres about **10-15% lower** than the recommended cold inflation pressure.
- **Over inflation** will create problems such as poor ride quality, impact fractures and irregular tread wear.
- **Overloading** is another cause of premature tyre failure as increased weight (down force) over the tyres will exceed the design limits of the tyre. A tyre overloaded by 10% can lose up to 15% of its life.
- If a pair of tyres are not **inflated evenly**, the one taking the weight will tend to overheat which again may lead to casing failure. This may also destroy the plastic guard, mud flap and light assembly

Note: The repair bill should be a good deterrent for poor maintenance!

- The need for maximum pressures on Radials (825Kpa) and others (700Kpa)

Of the two types of tyre construction there are definite upper limits for inflation.

Radial ply tyres **must not exceed a cold inflation pressure** of more than **825 Kpa** and other types of tyres fitted to commercial vehicles must not exceed a cold inflation pressure of **700 Kpa**.

Even though the metric system of measurement has been adopted, most tyre inflation is still referred to in pounds per square inch (psi). In this scenario, steer tyres run at 120 psi, drive, and trailer tyres at 100 psi.



(Courtesy Youtube)

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- Truck tyre sizes starting in 8, 9, 10, 11 and 12 are standard profile tubeless with the tyre body width in inches.
 - Standard profile tyres have an aspect ratio of 88 percent. (The aspect ratio is the comparison of the tyres section height with its section width).
 - The height of the tyre from rim to tread will be 88 percent of the width. An 11R22.5 tyre will be approximately 11 inches wide and 9.5 inches high.
- Tube-type tyres are given widths as 9.00, 10.00 or 11.00, as in 10.00R20. (Pronounced **ten hundred R twenty**). Tyres requiring inner tubes have an aspect ratio of 98 percent.
- Wide tyres (super singles) have a section width of at least 375mm.
 - They are fitted to the front (steer) axle of some vehicles to allow for greater mass allowances or as a replacement for dual tyres on tri-axle groups where they are rated for the same mass.
 - When mounted on aluminium wheels, one super single is considerably lighter than two conventional steel wheels and tyres.

This example - is a tyre measuring **385/65 R 22.5** which indicates:

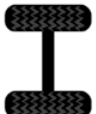

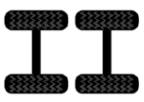



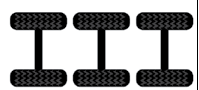

- The section width (385 mm)
- The aspect ratio – (the height is 65% of the width)
- **R** indicates **radial ply** construction
- The nominal diameter of the wheel rim (22.5 inches).



1949 Bedford K 1.5 ton truck

Axle Weight

Mass limits for single axles and axle groups

Axle/s	Axle group/tyres	Axle/vehicle details	Mass limit (t)
	Single axle Single tyres	Steer axle Non steer axle, tyres less than 375mm Non steer axle, tyres 375mm to 449mm Non steer axle, tyres at least 450mm	6.0t 6.0t 6.7t 7.0t
	Single axle Dual tyres	Pig trailer Any other vehicle A complying bus, or a bus authorised to carry standing passengers under an Australian road law. An ultra-low floor bus with no axle groups, only 2 single axles	8.5t 9.0t 10.0t 11.0t
	Twin-steer axle group Single tyres	Non-load-sharing suspension system Load-sharing suspension system	10.0t 11.0t
	Tandem axle group Single tyres	Less than 375mm 375mm to 449mm At least 450mm	11.0t 13.3t 14.0t
	Tandem axle group Dual/single tyres	Single tyres on one axle and dual tyres on the other axle A complying bus	13.0t 14.0t
	Tandem axle group Dual tyres	Pig trailer Any other vehicle	15.0t 16.5t
	Tri-axle group Single tyres	Single tyres on all axles with section width less than 375mm , or single tyres on one or two axles and dual tyres on the other axle or axles Pig trailer with either super single tyres with at least a 375mm section width, dual tyres on all axles or a combination of those tyres	15.0t 18.0t
	Tri-axle group Dual tyres	Vehicle other than a pig trailer with either a super single tyre with at least a 375mm section width, dual tyres on all axles or a combination of those tyres	20.0t

Axle mass limits for single axles:

- Steer axle – single tyres (total 2 tyres - 6 tonnes)
- Single drive – dual tyres (total 4 tyres - 9 tonnes)



Typical medium rigid truck

Axle mass limits for tandem axles:

Twin steer with load sharing suspension – single tyres (total 4 tyres - 11 tonnes)


Twin steer axle group means a group of 2 axles:




- With single tyres; and
- Fitted to a motor vehicle; and
- Connected to the same steering mechanism; and
- The horizontal distance between the centrelines of which is at least 1m but not more than 2m.



Load-sharing suspension system, of an axle group, means a suspension system:

- Built to divide the load between the tyres on the group so no tyre carries a mass more than 10% above the mass it would carry if the load were divided equally; and
- With effective damping characteristics on all axles of the group.
- Tandem group – dual tyres total 8 tyres - 16.5 tonnes

Limits

Description	Graphic
<p>Tandem axle group means a group of at least 2 axles, in which the horizontal distance between the centrelines of the outermost axles is at least 1m but not more than 2m.</p>	

<p>Tri axle group – dual tyres –(total 12 tyres – 20 tonnes)</p> <p>Tri-axle group means a group of at least 3 axles, in which the horizontal distance between the centrelines of the outermost axles is more than 2m but not more than 3.2.</p>	<p>(Courtesy Quora)</p>  <p>(Courtesy Plant Miner)</p>
<p>Maximum limits on Pig Trailers</p> <p>Due to their design, pig trailers tend to drag their axles when cornering. This leads to a lack of stability due to placement of mass relative to trailer design.</p> <p>Because of this, they have a lower GVM allowed over each axle group.</p>	
<p>Pig trailer – 3 axles with 12 tyres (18 tonnes)</p> <p>Tri-axle pig trailer</p>	 <p>(Courtesy Truckworld)</p>
<p>Single drive – single tyres (Total 2 tyres – 6 tonnes)</p> <p>Not a common arrangement, manly converted and used for 4WD applications. This eliminates the scenario of rocks caught between the dual wheels causing severe tyre failure and potential third-party damage.</p> <p>The same front and rear track means the rear tyres follow in the compacted wheel tracks of the front resulting in greatly improved off road performance especially in soft sand/mud.</p>	<p>(Courtesy: All Terrain Warriors)</p> 

<p>Tag axle – 2 axles with 6 tyres (total 6 tyres 13 tonnes)</p> <p>If the vehicle is a complying bus (total of 6 tyres – 14 tonnes)</p>	
<p>Tri axle group with less than 12 tyres (total between 6-10 tyres – 15 tonnes)</p> <p>This is an inefficient arrangement: trucks need to maximise their payload to generate the best profitability. This arrangement would probably only occur rarely due to running out of spare wheels or other catastrophes, and only as a last resort.</p>	
<p>Quad axle group</p> <p>Semi-trailer gross combination mass of 50 tonnes (or 50.5 tonnes)</p> <p>B – double 1 quad = 72.5 tonnes</p> <p>B – double 2 quad = 77.0 tonnes</p> <p>Need approval via PBS blue prints and specific vehicle requirements</p>	

The **differences** when running with 'wide tyres' (super singles) and some of the **advantages** that can be gained:

- Steer axle – single wide tyres (total 2 tyres - 6.7 tonnes)
- Tandem group – single wide tyres (total 4 tyres - 13.3 tonnes)
- Tri axle group – single wide tyres (total 6 tyres - 20 tonnes)
- Super singles typically are lighter than a standard dual set-up -- in some cases up to 30% per wheel position, but still bulkier and heavier than one normal wheel and tyre.
- With one tyre instead of two, there are fewer sidewalls that are deflecting.
- Dual tyres can have different diameters due to wear, tending to make the vehicle pull in one direction or another. Super singles minimize that possibility.

However, there are **disadvantages**.

- Regular tyres are able to be re-treaded safely at least twice providing the carcass remains sound. A super single can only be re-treaded once due to the operational stresses they are under.
- Super singles also tend to wear out faster than dual tyres, because they have less tread depth to begin with.
- Super singles do not offer the "limp home" capabilities of dual wheels:
flat tyre + no spare = park up.

Road Friendly Suspension

Route access and increased mass limits for operators, with road friendly suspensions on their vehicles. This is an alternative compliance **Mass Management** scheme.

Road friendly suspension systems **reduce the impact** of laden axles on roads and bridges.

For a **suspension system** to be considered as road friendly, and eligible for operating at higher mass limits (HML) than standard, it must be **certified to the requirements** stipulated under the *Commonwealth Department of Infrastructure, Regional Development and Cities*

[Vehicle Standards Bulletin 11 "Certification of Road-Friendly Suspensions"](#).

A listing of certified Road-Friendly Suspensions is available on the website.

When operating at higher mass limits, operators must ensure that the **route is authorised** for their particular vehicle.

For restrictions to heavy vehicle travel refer to the **National Network Map**, this initiative aims to improve heavy vehicle access efficiency and decision-making by bringing together the state-based heavy vehicle networks and display them in one location.

All South Australian Heavy Vehicle maps, promoting the roads and restrictions to heavy vehicles is published by NHVR through [National Network Map](#).

The interactive mapping system allows you to see what conditions and restrictions that apply across the country. Further information about the map can be found on the [National Network Map Fact Sheet](#)

Trips in South Australia refer to the following link to discover any roadworks, road closures and accidents. [SA.GOV.AU - Daily roadworks, hazards and news \(www.sa.gov.au\)](http://www.sa.gov.au)

The networks shown provide an indication only and the relevant state road transport authority maps should be used, <https://www.nhvr.gov.au/road-access/route-planner>

To qualify as a road friendly suspension system, the owner must demonstrate compliance with the following performance characteristics:

- static load sharing between axles in a group (no greater than 5 per cent variation between any two axles)
- frequency of oscillation of sprung mass (no greater than 2.0 Hz)
- damping capability (no less than 20 per cent of critical damping)
- damping capability (no greater than 50 per cent of total damping due to friction damping).

The National Heavy Vehicle Regulator

The [National Heavy Vehicle Regulator](#) (NHVR) is Australia's independent regulator for all heavy vehicles.

It was established in 2013 as an independent statutory authority pursuant to the [Heavy Vehicle National Law](#).

Virtually all the information you require as a professional truck driver is available from these two sites.

During the course of your driving career you will encounter **Safety and Compliance officers** at random locations or specific checking stations on the highway

When the checking stations are open, there will be signs advising this. Instead of requiring all trucks to enter, they will restrict this to one at a time. If you are travelling in the opposite direction, you are not required to enter. The role of these officers is to enforce:

- prescribed work, rest, driver fatigue and work diary requirements
- vehicle standards heavy vehicles must meet when on roads.
- Maximum permissible mass and dimensions of heavy vehicles used on roads.
- Loading and restraining of loads on heavy vehicles used on roads.

Note: Fatigue and load restraint are two of the biggest issues facing truck drivers.

Work Diary

Authorised Work Diary

The **National Driver Work Diary** is evidence that a driver's work and rest hours are compliant with the Heavy Vehicle National Law (HVNL) and their fatigue is being managed.

Drivers are **not allowed** to drive or work more than the **maximum work hours** or rest less than the minimum rest hours in a certain period set out by law.

It is important that a **driver completes their diary correctly** and in accordance with the Heavy Vehicle National Law and ensures time is counted correctly.

Fatigue Related Heavy Vehicle

A Work Diary is required to be carried by the drivers of **fatigue-regulated heavy vehicles**.

These are defined as:

- A motor vehicle (except a bus or tram) with a GVM over 12 tonnes.
- A motor vehicle (except a bus or tram) forming part of a combination if the total GVM of the combination is over 12 tonnes.
- A bus with a GVM over 4.5 tonnes fitted to carry more than 12 adults including the driver.

A work diary entry must be recorded if the vehicle is to be driven **outside a 100 km radius** from the driver's base. This requirement applies to drivers working under standard hours; other rules apply for drivers working under basic or advanced fatigue management hours.

Driver's base and garage address

The **driver's base** is the reference point for the **100km radius** and is the place from which the driver normally works and receives instruction. If no address is recorded, an authorised officer may determine that the base is the garage address of the vehicle. If the base changes, the new location, and the date of the change must be recorded. This information must be kept up to date. It should be stressed the work diary is the **property of the person to whom it is issued** and does not belong to the vehicle. A work diary is to be used by the person it is issued too and should not be lent to another person.

A person may only have **one work diary at any time**, and it is an offence to have more than one work diary.

To obtain a work diary the applicant should apply to a **Service SA Customer Service Centre** (or Police Station in remote areas) with an appropriate driver's licence and the prescribed fee which is **\$28** (July 2023).

If the application is to replace an existing work diary, then the existing work diary must be presented, and the remaining pages cancelled. Work diaries can be issued and replaced in all participating jurisdictions.

Western Australia and the Northern Territory do not have the same fatigue laws as the other states and territories and do not use the National Driver Work Diary.

Standard hours for solo drivers:

Standard hours:

- Meaning hours when **driving / working**
- Maximum hours work time without a break (5 ¼ hours)
- Total number of hours working in 24-hour period (12 hours)
- Total number of hours of working 7 days - 168-hour period (72 hours)

A 24-hour period:

Any period of **24 consecutive hours** and does not necessarily mean midnight to midnight.

Continuous rest periods must be taken away from the vehicle unless the vehicle is fitted with an approved sleeper berth.

Rest periods of 24 hours or more **must be taken away** from the vehicle.

Standard Hours

Standard hours apply to **all** drivers who do not have accreditation for fatigue management. There are maximum numbers of hours that a driver is permitted to work and minimum numbers of hours that a driver is required to rest:

In any period	Maximum work time	Minimum rest time
5 hours 30 minutes	5 hours 15 minutes	15 minutes
8 hours	7 hours 30 minutes	30 minutes in 15-minute blocks
11 hours	10 hours	60 minutes in 15-minute blocks
24 hours	12 hours	12 hours including 7 continuous hours stationary
7 days (168 hours)	72 hours	96 hours including 24 continuous hours stationary
14 days (336 hours)	144 hours	192 hours including 2-night rest breaks and 2 consecutive night rests

Stationary rest time is the time a driver spends out of a regulated heavy vehicle or in an approved sleeper berth of a stationary heavy vehicle.

Night rest breaks are **7 consecutive 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 base of the driver) or a 24 continuous hours stationary rest break.

Records are to be kept by the driver of the time spent with the vehicle, divided into either work or rest.

- Work time is the time spent driving the vehicle and includes:
 - Being in the driving seat of that vehicle while stationary with the engine is running,
 - Being in the vehicle and instructing or supervising someone else to drive it.
 - Time spent by the driver loading or unloading the vehicle,
 - Inspecting servicing or repairing the vehicle,

- Inspecting or attending to the load or attending to the passengers (in the case of a bus),
- Cleaning or refuelling the vehicle
- Performing marketing tasks in relation to the operation of the vehicle
- Recording information or completing a document in relation to the operation of the vehicle
- Helping with or supervising any of the activities mentioned above
- **Work time is rounded up.** Work time limits are maximum limits, so work time is always rounded up to the next 15-minute interval. For example:
 - 6 minutes work is counted as 15 minutes of work time.
 - 32 minutes work is counted as 45 minutes of work time.
 - 2 hours and 21 minutes of work is counted as 2 hours and 30 minutes of work time.
- **Rest time is a continuous period of at least 15 minutes** that does not include any work time of the driver relating to the vehicle
- **Rest time is rounded down.** Rest time limits are minimum limits, so rest time is always rounded down to the last **15-minute interval**. For example:
 - 12 minutes of rest does not count as rest time.
 - Rest between 30 and 44 minutes is counted as 30 minutes of rest time.
 - 6 hours and 40 minutes of rest is counted as 6 hours and 30 minutes of rest time.

Rest requirements

The minimum hours of rest after working 5 ¼ hours is 15 mins.

Stationary rest time is time a driver spends out of a heavy vehicle or in an approved sleeper berth of a stationary vehicle.

Night rest breaks are 7 continuous hours stationary rest time between the hours of 10 pm on a day and 8 am on the next day, or a 24 continuous stationary rest break.

Sleeper berth / cab

A heavy truck requires an approved sleeper berth complying with **ADR 42** (Australian Design Rule 42) This includes rules that apply to location, dimensions and shape, ready exit, communication with driver, protection against exhaust and fuel systems, and ventilation. Or a commercial bus with an approved sleeper berth that complies with the standard approved for commercial buses.

Maximum hours work and rest - sleeper berth

The maximum hours of working and which rest periods can be taken in the sleeper berth.

The standard work and rest hours for a solo driver are described in the previous table.

For two-up drivers, the work times are the same in a 24-hour period however work and rest times then change. In a 24-hour period, a driver must have a minimum of 5 continuous hours rest time which can be taken in a sleeper berth of a stationary or moving vehicle.

In a 7-day period the maximum work time reduces from 72 hours to 60 and in 14 days it reduces from 144 hours to 120.

Minimum hours of rest to be taken away from vehicle.

For **two-up drivers** there is a **minimum 10-hour stationary rest time** in a 52-hour period, in 7 days there must be 24 continuous hours stationary rest time AND 24 hours stationary rest time in blocks of at least 7 continuous hours.

Local area work

Where the driver is engaged in driving the vehicle **within** a 100-kilometre limit being a circle with a radius of 100 kilometres and the centre is the driver's base. Under these conditions the employer must record the following information:

- the drivers name.
- the date of each day the driver was driving.
- an estimate of the driver's total work and rest time for each day
- an estimate of the driver's total work and rest time for each week

If the driver is self-employed similar records should be kept.

Non-local area work

Where the driver is driving the vehicle **beyond** the 100-kilometre limit (100+km) to their work base, a work diary must be carried, and the relevant information must be recorded. Information includes:

- day of the week and date
- drivers name and licence number
- the State or Territory in which the licence was issued.

- the registration number of the vehicle being driven.
- the place and time where change of activity occurs.
- if the driver is involved in a two-up driving arrangement the name and licence of the other driver

If a driver has been engaged in non-local area work, the driver must keep the work diary in the vehicle for a minimum of 28 days after the 100+km work trip.

Records kept

Where a driver is employed, a copy of the driving records for non-local area work must be given to the employer (or if there is more than one employer then a copy to each employer) within a **period of 21 days**. If the driver is self-employed then the copies should be kept at the driver's base. **Records must be kept for 3 years.**

The white daily sheet (marked ORIGINAL) must remain in the work diary. Each daily sheet has two copies. The yellow copy (marked DUPLICATE) is given to the record keeper. The pink copy (also marked DUPLICATE) should remain in the work diary unless it is seized by an authorised officer or has been given to a second employer for that day.



False or Misleading Records

It is against the law to:

- record information in a work diary that the driver knows, or ought to know, is false or misleading.
- use more than one written work diary at the same time.
- record information for the same period in more than one work diary
- alter a work record that the driver knows, or ought to know, is correct.
- Enter a false work record.
- Make an entry in someone else's work record (unless otherwise permitted, e.g. a two-up driver's signature)
- Destroy a work record before the end of the period for which it is required to be kept.

The law requires records to be kept in a way that ensures they are readable, reasonably capable of being understood and capable of being used as evidence.

Work Diary Exemptions

Literacy

A driver may make application for an exemption from the work diary provisions on the grounds of literacy. The applicant must nominate a person to make written work/rest records for the driver, and the nominee must agree in writing.

Other operational variations

Livestock transportation

The Livestock Transport Fatigue Management Scheme is designed to give livestock and rural transporters the flexibility to respond to the dynamic, uncertain, and complex livestock transport task, acknowledging the frequent stops required for welfare checking. More information is available from the NHVR website.

Note: The work diary page must be filled out in accordance with the current **Heavy Vehicle Driver Fatigue laws** (standard hours work / rest option for a solo driver), and with the hours stated above.

Primary producer work diary exemption

The *National Primary Production Work Diary Exemption 2018* grants an exemption to **work diary requirements** for drivers of vehicles over 12 tonnes.

The notice applies to **fatigue-regulated heavy vehicles transporting produce** between a primary production facility and a point of sale, processing, or distribution (including return journeys) within 160km of the driver's base.

This only applies to **primary producer transport**. Drivers of all other fatigue-related heavy vehicles require a work diary when travelling more than 100km from their base.

Two-up Driving

This is the term used for when two drivers are sharing the work. Each driver's particulars must appear in both work diaries. The two-up driver's details must include:

- The full name of the other driver
- The other driver's licence number, indicating where it was issued

- The hours options the other driver is working under.
- The other driver's work diary and page number

The two-up driver must sign the daily sheet when these details are complete. Both drivers must record each other's details in their own work diaries.

If a person sitting in a passenger seat has a licence for the class of vehicle being driven, they will not automatically be classified as being in a two-up arrangement.

Switching from Solo to Two-Up Driving

The driver must record if there is a change from solo to two-up driving or from two-up to solo driving.

If the driver is doing two-up work, in addition to the requirement to record their own work and rest times, they must also draw a straight line through the two-up row on the daily sheet for all the time they are working or resting while in the two-up arrangement (even when both drivers are resting).

The line should start at the time both drivers start the two-up arrangement, with the line finishing at the time the two-up arrangement stops.

Variations for bus and two-up drivers

The times mentioned have been for solo freight drivers. When a driver is driving a bus, or a two-up arrangement is in place, other work and rest time requirements apply. For more information visit the NHVR website.

Chain of Responsibility

Parties in the supply chain: The laws applied to Chain of Responsibility (CoR) were changed to align more closely with Workplace Health and Safety laws, in October 2018. ([Changes to the Chain of Responsibility laws](#))

The aim of CoR is to ensure everyone in the supply chain shares the responsibility for reducing any breaches of the National Heavy Vehicle Laws (NHVL). Under CoR laws, you have a legal responsibility to ensure NHVL is complied with if you are named as a party in the CoR and you exercise control or influence over a transport task.

The law recognises, multiple parties may be responsible for offences committed by the drivers and operators of heavy vehicles. A person may be a party in the supply chain in more than one way. For example, they may have duties as the employer, the operator, and the consigner of goods.

Legal liability applies to all parties for their actions or inactions.

Chain of **responsibility law (CoR) ensures everyone who works with heavy vehicles, is held accountable for the safety of the driver, the truck, and the load.** CoR creates an environment for security, safety, and maintenance of vehicles. Fines are substantial and commence at \$300 for an overloaded truck up to a gross overload of over \$10K

- Driver
- Consignors
- Partners
- Company directors
- Loaders
- Dispatchers
- Employer / owner
- Management team

If breaches of HVNL are taken to court, each party in the chain would be required to demonstrate that they took all reasonable steps to prevent the contravention or show that there were no steps they could reasonably be expected to have taken to prevent the contravention.

Heavy Vehicle Management Scheme

NHVAS – National Heavy Vehicle Accreditation Scheme.

The National Heavy Vehicle Accreditation Scheme (NHVAS) was first offered to industry in 1999 as an alternative compliance scheme to others such as Truck Safe. It has since evolved as a formal process for recognising operators who have robust safety and other management systems in place. It is also being used to show compliance with general duty requirements under road transport law.

Heavy vehicle operators can apply for accreditation under the following NHVAS modules:

- Mass management
- Fatigue management basic
- Maintenance management
- Fatigue management advanced

Previously administered by state and territory road transport authorities, the NHVAS is now managed on a national basis by the NHVR. The NHVR is the administrators and single point of contact for all NHVAS business including all enquiries, applications and maintaining accreditation.

- It is an offence to fail to display and maintain NHVAS labels on either the Maintenance Management or Mass Management Accreditation schemes.
- See <https://www.nhvr.gov.au/files/201706-0531-factsheet8-accreditation-labels.pdf> for more information regarding accreditation labels, nominated vehicles and interception report books.



Mass Management Accreditation

- Operators accredited in the **Mass Management module** can access additional mass concessions. These concessions allow vehicles to operate at [Concessional Mass Limits](#) for general access to the road network. Participation in this module is a pre-requisite for access to [Higher Mass Limits](#).
- Operators must maintain their vehicles and comply with all relevant road transport legislation. Some jurisdictions require annual inspections as part of the registration process but grant exemptions to vehicles with maintenance management. The [Maintenance Management Accreditation Guide](#) summarises the requirements for entry to the scheme and how to remain compliant.

Basic Fatigue Management (BFM)

Operators with BFM accreditation can operate under more flexible work and rest hours allowing for variations such as work of up to 14 hours in a 24-hour period. BFM gives operators a greater say in when drivers can work and rest, providing the risks of driver fatigue from working long

hours and night shifts are properly managed. Both the driver and employer must be accredited within the BFM scheme.

To access BFM, operators will need to be accredited in the NHVAS, and comply with 6 BFM standards:

- Scheduling and rostering
- Fatigue knowledge & awareness
- Internal review
- Fitness for duty
- Responsibilities
- Records and documentation

In any period	Maximum work time	Minimum rest time
6 hrs 15 mins	6 hours	15 min
9 hours	8 hours 30 min	30 min in 15 min blocks
12 hours	11 hours	60 mins in 15 min blocks
24 hours	14 hours	7 continuous hours stationary
14 days	144 hours	24 continuous hours stationary rest time, taken after no more than 84 hours work time. 24 continuous hours stationary rest time, 2x night rest breaks and x2 night rest breaks on consecutive days.

Stationary rest time is the time a driver spends out of a regulated heavy vehicle or in an approved sleeper berth of a stationary heavy vehicle.

Long/night work time is any work time is any work time (outside of the period midnight to 6am) that is in excess of 12 hours of work in a 24-hour period or any work time between midnight and 6am (or the equivalent hours in the time zone of the driver’s base)

Night rest breaks are 7 consecutive 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 base of the driver) or a 24 continuous hours stationary rest break.

Advanced Fatigue Management (AFM)

AFM accreditation brings a risk management approach to managing driver fatigue. Rather than setting work and rest hours, AFM offers the flexibility to roster drivers over longer periods or longer days.

Under AFM, drivers may be allowed to split their continuous rest break. In return, they must demonstrate better accountability in managing fatigue risks. Naturally, the AFM accreditation

process is more demanding. States and territories have agreed to the maximum work time in a 24-hour period being unified to 15.5 hours.

To access this option, an operator must be NHVAS AFM accredited and comply with 10 AFM standards:

- Scheduling and rostering.
- Readiness for duty.
- Fatigue knowledge and awareness.
- Responsibilities.
- Internal review.
- Records and documentation.
- Health.
- Workplace conditions.
- Management practices.
- Operating limits.

References

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