

# Heavy Combination and Multi Combination Vehicle Licence Course

## Learner Guide



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ADVANCED RIDER TRAINING

## Introduction

This workbook should be used in-conjunction with National Heavy Vehicle Regulations (NHVR) Information bulletins

The following spaces in this guide are left for you to make notes to help you remember information for the Knowledge Test you will undertake in the classroom before beginning practical training in the HC/MC truck.



### NOTES:

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## HC and MC vehicles:

### Heavy combination (HC)

- a prime mover to which is attached a single semi-trailer that has a gross vehicle mass (GVM) more than 9 tonnes plus any unladen converter dolly, or
- a rigid motor vehicle to which is attached a trailer that has a GVM more than 9 tonnes plus any unladen converter dolly.



### Multi combination (MC) or B-double

- An articulated vehicle with a second semi-trailer attached to the rear of the first semi-trailer by means of a turntable.



(extracted from VicRoads website, 18 June 2020)

## Driving hazards

Driving hazards you should be aware of when driving any vehicle including HC and MC vehicles include, but are not limited to, the following:

- Blind corners
- Other vehicles and drivers on the road
- Oil and other fluids on the ground
- Pedestrians
- Vehicles emerging from intersections
- Parked vehicles and doors opening
- Road workers, emergency team members, police patrol etcetera.

## Defensive driving techniques

In order to reduce the risk while driving and keep the driver and others safe:

- Be aware of the surroundings and think safety first
- Be aware of blind spots
- Slow down at intersections and roundabouts
- Minimise all distractions
- Look up ahead

## Efficient driving techniques

Efficient driving techniques include, but are not limited to, the following:

- Accelerate gently
- Maintain a steady speed
- Look ahead to see what is coming up (anticipate traffic)
- Smoothly handle the vehicle steering for going straight, changing lanes, positioning the vehicle in the lane, turning and parking; avoiding all abrupt movements of the steering wheel
- Correctly use all controls at correct times, i.e. appropriately apply air brakes, do not stop or brake abruptly, ensure correct and smooth use of accelerator, indicator, air conditioner, horns etcetera
- Remain calm and confident.
- Look for and be cautious around other vehicles, pedestrian crossings, people, parked cars, traffic lights, oil/fluids on the road, other structures and protrusions etcetera.
- Maintain slow speed or reduce speed when approaching a heavy traffic area, traffic lights, playground, residential areas, stalemate intersections, railway level crossing, bridges, construction areas, business areas etcetera.
- Stop at a sufficient distance from vehicles in front of the truck and avoid collisions.
- Comply with the speed limits and road signs.
- Be courteous to other road users, i.e. do not compete or speed with other vehicles on the road, allow vehicles to overtake, give way to vehicles where appropriate including at stalemate intersections etcetera.

## Controls and instruments in a vehicle

For example:

Controls:

- Brake: To slow or stop the vehicle
- Floor controls, e.g. accelerator pedal: To accelerate the vehicle or to regulate power or momentum
- Truck indicator lights: To indicate the expected movement of the truck (towards the right or left, e.g. when changing lanes, when merging into traffic, when pulling over etcetera).

Instruments:

- Speedometer: Measures the current speed of the vehicle
- Fuel gauge: Indicates the amount of petrol/diesel/gas left in the tank
- Temperature gauge: Shows how hot the engine is

## Medicine/drug/alcohol use

Medicines including pills you take for fever, flu, cough or pain, sedatives and codeine can impact your ability to drive safely.

When driving an MC or HC vehicle, your blood alcohol limit or concentration should be zero.

## Regulatory Issues

### **Driver Requirements**

All Heavy Combination (HC) and Multi Combination (MC) drivers must hold a current endorsed license issued by the relevant state or territory. Drivers are required to have attended a recognized HC or MC training course.

### **Documentation**

The driver of a B-Double vehicle must carry with him at all times the following documentation relative to a heavy vehicle.

For example:

- Must hold a HV or MC License
- Road train / B-Double Permits for vehicle / route
- Logbook
- Dangerous Goods License – if applicable
- Dangerous Goods Emergency Procedures Guides–if applicable
- Required NHVR Information Bulletins (e.g. 26 m B-Doubles, Livestock Loading, Hay Trucks etc.)

**VicRoads eligibility criteria to get a multi-combination licence**


- To apply for an MC licence, you must have held an Australian driver's licence to drive a Heavy Combination vehicle or a Heavy Rigid vehicle for a period of at least 12 months.

**VicRoads eligibility criteria to get a heavy-combination licence**

- To apply for this category, you must have held an Australian car driver licence for at least 24 months, and an Australian driver licence to drive a Medium Rigid or Heavy Rigid licence for at least 12 months.

**Permits**

Permits are no longer required for travel on approved roads as per Mass Limit Guidelines; however drivers must have on board NHVR Information Bulletins with appropriate paper work required. A permit application is shown below.



ACCESS<sup>RD</sup>  
**B Double Permit Application**  
Heavy Vehicle National Law Section 144

Please note: All fields marked with a \* must be completed. If these fields are blank or incorrect, your application may be rejected.

Regulator Customer Number (RCN) (if known)  
  
 If you have an RCN do not complete Section 1.

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**Section 1**  
Applicant Details

Applicant's Name (must be Company or Individual)

\* Australian Business Number (ABN) or Australian Company Number (ACN) ABN/ACN is not required for Individuals

\* Trading As Name (if applicable)


Registered Company Address (or Business Address for individuals)  
  
 State  Postcode

Postal Address (if same as Registered Company write "As Above")  
  
 State  Postcode

Billing Postal Address (if same as Postal write "As Above")  
  
 State  Postcode

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www.nhvr.gov.au



ACCESS<sup>RD</sup>  
**B Double Permit Application**  
Heavy Vehicle National Law Section 144

**Section 2**  
Contact Person's Details

Full Name

\* Title/Position

\* Phone Number      Fax Number      Mobile Phone Number

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\* Billing Person's Details     Same as Contact Person Details

Full Name

Phone Number      Fax Number

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**Section 3**  
Applicant Declaration

I hereby declare that all details provided in this application are true and correct. Knowingly making a false statement to the NHVR may attract significant penalties under section 701 of the Heavy Vehicle National Law.

Applicant's Name

Title / Position

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**Privacy Statement**  
The NHVR is collecting the information on this form for the purpose of assessing heavy vehicle access under the Heavy Vehicle National Law (HVNL) and Regulations. This information is authorised or required by the HVNL. Where relevant, the NHVR may disclose your personal information to third parties, including law enforcement agencies, road and asset owners. Your privacy will be respected and your personal information will be handled and disclosed in accordance with the Information Privacy Act and other relevant legislation.

Applicant's Signature

\* Date Signed

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**B Double Permit Application**  
Access<sup>SM</sup>  
Heavy Vehicle National Law Section 144

**Section 2**  
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Full Name

Title/Position

Phone Number  Fax Number  Mobile Phone Number

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Full Name

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**B Double Permit Application**  
Access<sup>SM</sup>  
Heavy Vehicle National Law Section 144

**Section 4**

**Length**

19m (50t to 55t)     23m     25m    if vehicle is a 26m B-double please select 25m

**Load Details**

**Freight type**

General freight     Commodity

please supply type

Livestock     Dangerous Goods     Car Carrier

Vehicle operating under livestock load scheme    State

Other

If Other, please describe freight type

**Section 5**

**Period**

Please indicate permit period.

Period from  /  /     Period to  /  /

Note – Requested period cannot exceed 3 years

Permit issued by:

NHVR     NSW     VIC     TAS     QLD     ACT     SA

Permit Number

\* Please attach existing permit. For jurisdictional permits, all pages of the permit must be attached.

**Section 6**

**Route/Area Details**

Start Address (Full Address including street number)

Destination Address (Full Address including street number)

state    postcode

Journey ID and version number

Route/Area Description

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If a B-Double moves off gazetted roads, a permit is required.

The maximum length of a B-Double in Victoria without a permit is 25m.

Some areas have special conditions (e.g. Directions, Times, Weight, Length).

When operating interstate, always check for special requirements.

**Example:**

Victoria did have a requirement for B-Doubles exceeding 42.5 tonnes to only use the second lane from the left when crossing the Westgate Bridge.

A B-Double can use a non-approved road in the case of an emergency, only at the direction of a Police Officer or authorised VicRoads Officer.

The driver must not drive anywhere where posted mass or dimension limits would be exceeded and must keep 200mm (approx. 8 inches) clearance beneath overhead obstructions to the highest point of the vehicle.

VicRoads makes no representation that any road, bridge, culvert, causeway or grid is capable of withstanding the loads carried on it or that there is sufficient clearance to any overhead structures, cables, wires or trees or rail level crossings.

	<b>Failure to comply with the permit/gazette will result in a withdrawal of the permit</b>
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**NOTES:**

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**Scheduling**

Planning the journey of a B-Double or Road Train vehicle is extremely important. Transport operators and drivers are required to ensure that a safe travel plan is in place. Factors to consider are:

- Appropriate permits in place
- Fatigue Management plan
- Management of driving hours including required rest breaks, allowing for loading and unloading time
- That only gazetted roads are used
- Load management: Loads that are poorly placed or not properly stacked are unsafe and can cause loss of steering and loss of traction. Ensure you spread the load close to the centre line of the vehicle.

**Signs**

**Portable Warning Signs**

Heavy vehicles over 4.5 tonnes must carry three portable warning signs.

- If your vehicle breaks down, you must place one sign to the rear and one sign to the front of the vehicle, between 50 and 150 m from the vehicle.
- The third sign must be placed at the side of the vehicle nearest the centre of the road.

**Note:** *If you have broken down in the right hand lane of a multi lane carriageway, the third sign should be to the left of the vehicle.*

## Long Vehicle Signs

- (Taken from the Victorian Government Gazette – S111 – 1.3(1) to 1.3(9))

A warning sign shall be affixed in a horizontal position at the rear of the rear most trailer. The sign must be made of rigid material at least 1020mm long by 250mm high with 180mm high black lettering on a retro-reflective yellow background with the words “**LONG VEHICLE**”.

The sign must have a black border and show the manufacturer’s name or logo and the brand and class of retro-reflective materials used in block letters no more than 10mm high.



This sign must be mounted so that no part of it is higher than **1800mm** or less than **500mm** above the ground. The sign must be fitted to all B-Doubles that are 22 m or longer.



**Note:**  
*When the vehicle is not in a B-Double configuration, the “LONG VEHICLE” sign must not be displayed.*

## Do Not Overtake Turning Vehicle Signs



This sign allows a long vehicle to occupy space outside an assigned lane when turning as long as:

- The vehicle is within 50m from a corner
- The move can be made safely
- Wherever possible you should set up the back of your vehicle so that the vehicle so that traffic behind you cannot overtake your vehicle on the side you are turning to.

## Over-Dimensional Signs

O.D. Signs show approved routes for “Over-Dimensional” vehicles



### NOTES:

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## Road Train Information

### Road Train Signs

- A warning sign shall be affixed in a horizontal position to the front of the hauling unit and to the rear of the rear most trailer of all road trains.
- The sign shall consist of a retro-reflective yellow background not less than 1200mm wide by 250mm high with the Legend ‘**ROAD TRAIN**’, in black letters 180mm high. The sign may be in two sections – one part reading “**ROAD**” and the other part “**TRAIN**”
- The front warning sign shall be affixed such that it is not below the bumper bar of the hauling unit.
- The rearmost sign is to be affixed no more than 3 m above ground level.
- No reflector sign other than the “**ROAD TRAIN**” warning sign, except as permitted or prescribed by law, shall be affixed to the front of any road train.
- The warning sign shall not obscure any light, registration plate or other safety device.
- A “**ROAD TRAIN**” warning sign shall not be displaced on any vehicle unless such vehicle is operating as a road train.



**NOTE:**

*The letter sizing in the ROAD TRAIN sign is based on Australian Standards 1744-1975 'Form of letters and Numerals for Road signs' known as 'Standard Alphabets for Road Signs' Series D 2.*



*The use of the ROAD TRAIN warning sign on vehicles other than road trains is prohibited.*



**NOTE:**

*Ensure you check in your State as requirements change. This information was correct at time of printing.*

### **Standard Road Train Combinations**

#### **Length**

2 Trailers – 36.5m NSW, SA, QLD, NT, WA.

3 Trailers – 53.5m SA, QLD, NT, WA

Trailers must not differ more than **3m** in length

Trailers must not track more than **100mm** either side of the hauling unit, while travelling in a straight line on a smooth level surface

#### **Weights**

- 2 Trailers – 79 tonne NSW, SA, QLD, NT, WA.
- 3 Trailers – 115.5 tonne for all States, unless special permission is granted by a permit (less NSW)

**Note:**

*Special permission is granted for vehicles outside these conditions, e.g. medium articulated dog, B-triple, AB-triple, Tri axle dollys*





**NOTES:**

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**Road Train Dimensions**

	Metres	Tonnes	Trailer Configurations
Length	36.5		2 Trailers (NSW, SA, WA QLD, NT)
	53.5		3 Trailers (SA, WA, QLD, NT)
Width	2.5		
Height	4.3		General, including load.
	4.6		Livestock and Car carriers
Weight		79	2 Trailers (SA, WA, QLD, NT, NSW)
			3 Trailers (SA, WA, QLD, NT.)



**Note:**

***Double and triple trailers must not vary in length more than 3m***



**NOTES:**

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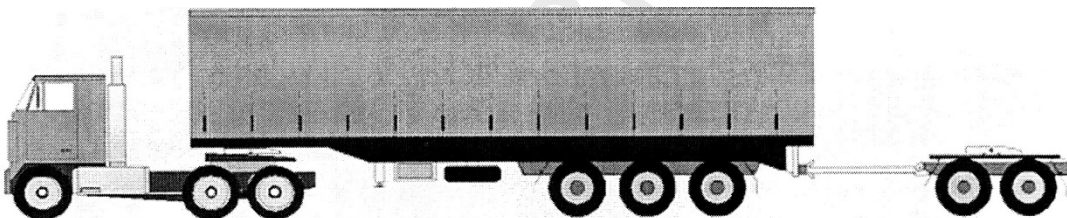
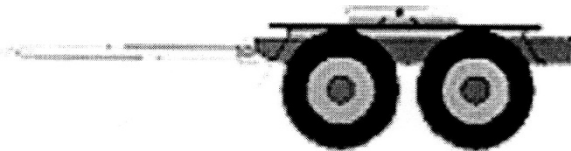
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## Converter Dollies

- The Converter Dolly towing eye is to be permanently marked
- Must check the bushes at the end of "A" frame of the Converter Dolly for wear and movement
- Length of lead between the towing eye and the pivot point of the axles on the Converter Dolly is a **minimum of 3m and a maximum of 5m**
- Before coupling, ensure that the turntable on the dolly is clean (free from sand etc.)
- **DRAW BAR**  
As per ADR Standard
  - The angle of the draw bar must be no greater than 5 degrees
  - Ride height unladen of 875mm
  - Plus or minus of 75mm
- When coupling, inspection of 'A' Frame bushes is important



**Note:**



**When towing a trailer and dolly, only connect the supply line to release the maxi-brakes (springbrakes). Do not connect the signal line as this will cause skidding of the dolly, even under normal braking.**

### **Coupling and Inspection of trailers:**

- Ensure that you check with the State authority in which you intend to operate as to the requirements for coupling for trailers. Some may require the trailers to be tagged 1, 2, or 3 and may also include an “L” which indicates that this trailer can only be used at the rear or last.
- Also check if a yearly roadworthy inspection is required.

### **Ringfeeder**

- The **RINGFEEDER** is to have a “D” rated pin AS 2213-1984
- The **RINGFEEDER** must be 50 mm diameter and this must be matched to a 50mm Ring. (A 40mm pin is not allowed in a 50mm eye). Inspect eye bush regularly. It could cost around \$30 for a Bush compared to \$700 if you replace the Eye Assembly.
- Sizing collars are no longer permissible
- The ring must have a stamp of approval to be legal.
- There may be no more than 4mm wear allowable between ring and pin.
- Visually check that safety locking pin is locked.

### **Air Hose Connectors**

B doubles and road train vehicles are also required to have **polarized** hose connectors.

In WA it is mandatory to have **Clear Bore** fittings to allow air to travel the greater distance with less restriction and achieve optimum braking.

### **Speed Limits for Trains**

- 2 Trailers – 90kph unless otherwise stipulated on the gazette or permit note.
- 3 Trailers - the truck must be gear limited and speed limited to 90kph



**NOTES:**

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**Loading**

- The **lightest** trailer must be at the rear



**Point to remember:**

**Road Trains are only permitted to the Victorian border towns of Mildura, Moama, and Tocumwal and must break combinations at these points.**

**Spacing of Road Trains**

Where the speed limit is in excess of 60kph a road train shall, when following another vehicle more than **8m** in length, keep more than **200m** behind the other vehicle.

Always maintain a safe braking distance.

*Note:* Always check regulations as they vary from State to State.



**NOTES:**

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## **B-DOUBLE DIMENSION LIMITS**

The maximum dimensions for vehicles are specified in the Victorian Road Safety (Vehicles) Regulations 1999. These include:

1. Length
  - a. Rigid Truck 12.5m
  - b. Semi-trailer combination 19.0m
  - c. B-double 25.0m
2. Width 2.5ms
3. Height 4.3m except for the following articulated vehicles which may operate up to 4.6m:
  - a. Car Carriers carrying substantially complete vehicles, including caravans or trailers
  - b. Vehicles carrying livestock
  - c. Tri-axle semi-trailers carrying hay at 62.5tonnes and
  - d. Vans carrying cubic freight, provided the vehicles stability is maintained by:
    - i. Each semi-trailer having at least 50% of its deck length no more than 1.2m above the ground;
    - ii. Each semi-trailer having air suspension and
    - iii. The gross mass of the vehicle is at least 10% less than the general mass limits. i.e. 10% less than 42.5tonne for 6 axle semi-trailers and 10% less than 62.5 tonne for 9 axle B-Doubles.

## **19 M B-Doubles**

A B-Double which does not exceed 19m in length and:

- (a) Has a gross mass not exceeding 50tonne is allowed to use all roads except as specified in Section 3
- (b) Has a gross mass exceeding 50tonne is only allowed to use approved roads



### **NOTES:**

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### **B-Doubles more than 19m long**

A B-Double more than 19m long is only allowed to use the approved roads shown on the maps in this Information Bulletin.

### **Power Requirements for B-Doubles**

Power requirements for B-Doubles are as per AUSTRROADS requirements.

- Power to start from a rest position on a 10% gradient
- Maintain a speed of 70kph on a 1% grade whilst laden
- NSW minimum power of hauling unit 300kilowatts (approx. 400 HP), or capable of starting on a 12% gradient and maintaining 70kph on a 1% gradient whilst laden.

### **Axle Weights & Dimension Limits**

Please refer to NHVR National Heavy Regulations Mass and Dimensions Limits



#### **NOTES:**

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### **ABS Braking System**

Anti-lock brakes must be fitted to the prime mover if it:

- was manufactured on or after 1 January 1990, or
- was first used in a B-Double on or after 1 January 1994, or
- is used in a B-Double that includes a tanker semi-trailer containing dangerous goods

Anti-lock brakes must be fitted to both semi-trailers if one (or both) of the semi-trailers (are) carrying dangerous goods.



**ABS is not required on road trains**



**NOTES:**

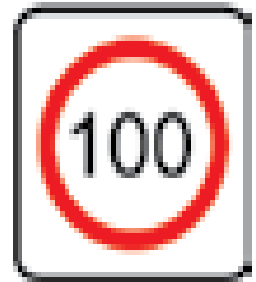
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### **Speed Limits for B-Doubles**

- B-Doubles must be Road Speed Limited to a maximum of 100Kph
- B-Doubles may therefore not exceed 100Kph or the posted speed limit, whichever is the lesser.



**A B-Double must only be driven forward when entering or exiting a road**

### **Spray Suppression Devices**

It is not mandatory to fit spray suppression devices to B Double vehicles. Australian standards may be published in the future which require these devices however this is not the case at present.



**NOTES:**

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## Air Hose Connectors

All Heavy Combination and Multi Combination vehicles require **polarized** hose connectors. (One male fitting and one female fitting).

In WA it is mandatory to have **Clear Bore** fittings to allow air to travel the greater distance with less restriction and achieve optimum braking.

### Recommendation:

Ensure that connector hose is given a quarter turn to ensure correct fitting.

### Discussion Point:

In Victoria, discuss the requirements for fittings on Prime Movers



### NOTES:

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## Following Distance for B-Doubles

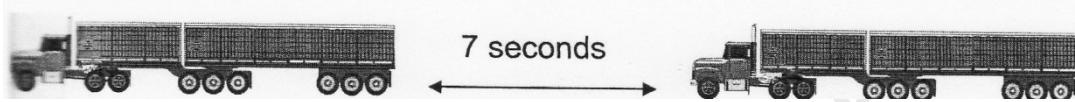
In ideal conditions, the approximate stopping distance for a loaded B-double travelling at a speed of 100km/h is 200m.

Recommended Crash Avoidance Areas are:

- A minimum distance of 200m in non-built up areas travelling at 100kph
- In built up areas a 60m minimum distance is required depending on traffic and road conditions

**Exceptions:**

- When driving on a multi-laned carriageway
- When overtaking
- When in a built up area
- When front vehicle is stopping



**Note:**



It is recommended that the 200 m following distance should still be maintained wherever possible, even in a built up area.

This is also important when crossing bridges to help safeguard against bridge span structure damage.

As of the Victorian Road rule amendments by VicRoads on the 9<sup>th</sup> of November 2009, the minimum following distance is 200m.



**NOTES:**

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**Handling Characteristics**

**Off Tracking**

The maximum allowable tolerance for off-tracking in a B-Double is 100mm. In rural conditions, additional encroachment off the shoulder is likely.

Occurrences of high speed off-tracking are relatively small.

B-Doubles are capable of operating wherever semi-trailers, up to 19m in length, are operating.

### **Maneuverability**

The AUSTROADS requirement is that a B-Double is able to turn 180 degrees between two walls 25m apart, meaning they usually have more turning lock available.

### **Swept Paths / Cutting In**

Swept paths for 23m B-Doubles generally fall inside those for 19m semi-trailers, but outside those for regulation 17.5m vehicles. A 25m B-Double will cut in further than a 23m B-Double.

When travelling downhill and rounding bends at the same time, the rear trailer will cut in more.

When a 25 metre B-double takes a 90-degree right angle turn, the rear trailer wheels normally cut in more than that of a standard trailer.

### **Factors Affecting Handling Characteristics**

- Trailer whip (RINGFEEDER versus turntable)
- Wet conditions affect stability and traction, therefore caution is required when using the exhaust retarder and brakes, especially on downgrades.
- Over braking on one wheel/trailer (incorrect brake adjustment or poorly maintained brakes)
- Overtaking/Passing. Must be careful not to drop off shoulder due to camber of road
- Uneven surfaces/Change of surface (roundabouts/intersections).
- Incorrect loading of trailers. Refer to Load Restraint Guide
- Ignorance of car drivers of requirements of operating heavy vehicles

### **Fields of View**

Mirror checks should be consecutive. This informs you of the road position of the truck for setting up cornering, traffic, pedestrians, objects, signage and trees etc.

### **Safe Travel**

The vehicle's registered operator and driver are responsible for planning the journey to ensure that:

- a. The vehicle crosses bridges and negotiates curves in a safe manner, bearing in mind that some roads and intersections may not be capable of accommodating vehicles at the allowable dimensions
- b. The vehicle is not driven under a bridge or structure which carries a sign with the words LOW CLEARANCE or CLEARANCE if the height of the vehicle is equal to or greater than the clearance shown on the sign
- c. The clearance to other overhead structures, cables, wires and trees is at least 200mm greater than the height of the vehicle and is sufficient to ensure safe passage; and
- d. The vehicle is not driven on a road, bridge or structure if it would exceed any posted mass or dimension limit.

The **VicRoads B-doubles and Higher Mass Limits Trucks** document can be referred to for further information on a list of bridges not permitted to cross in a B-double.



**NOTES:**

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**Line Markings**

Intersection line markings can be too tight for HC and MC vehicles and therefore trip planning is essential to recognize these areas. Drivers and operators should take all care when operating in these areas and understand driving behaviours of car drivers.



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**26m B-Doubles**

Truck operators now have the choice of operating a 25m long or a 26m long B-double combination in Victoria.

In addition to the current 25m long B-double operating conditions, operators who choose to operate a 26m long B-Double can do so, provided they meet a new set of operating conditions.

**Conditions for operating 26m B-Doubles in Victoria are:**

1. The distance between the point of articulation (kingpin) at the front of the leading semi-trailer and the rear of the combination must be no more than 20.6m
2. The prime mover of the combination must be fitted with a front underrun protective device that complies with Regulation No. 93 of the United Nations Economic Commission for Europe (UN ECE);
3. Prime movers with a date of manufacture after 2005, must be fitted with a crash worthy drivers cabin that complies with Regulation No. 29 of the Un ECE; and
4. Prime movers must not have a load carrying area and may not carry a load on the prime mover

B-Doubles that exceed the 20.6m trailer length dimension are restricted to operate at the 25m length limit.  
26m B-Doubles may operate up to the current 25m B-Double mass limits

**Refer to the NHVR National class 2 B-double Operator’s Guide.**



**NOTES:**

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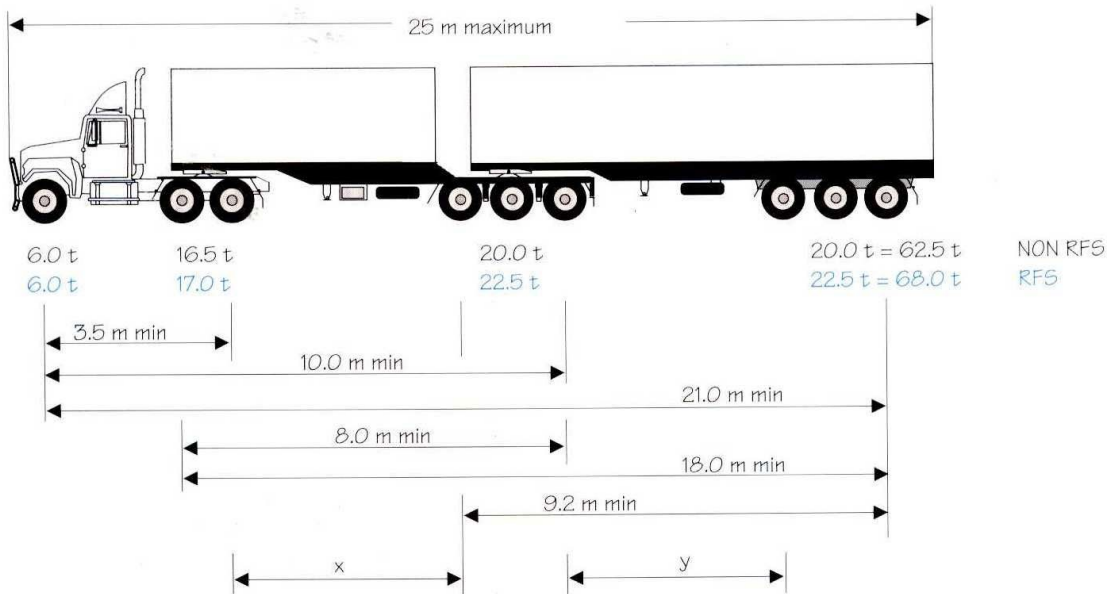
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**B-Double Load Axle Characteristics**

The load distribution characteristics of a B-Double are significantly different to standard articulated vehicles. Figure 1 shows a typical B-Double configuration with axle tare weights 62.5 tonne.



**Figure 1**

This characteristic is the result of the fifth wheel on the first trailer being positioned behind the centre of the first trailer's axle group. Load applied to the fifth wheel produces a movement about the axle group centre, which tends to lift the front of the trailer and reduce the load on the prime mover, as shown in figure 4.

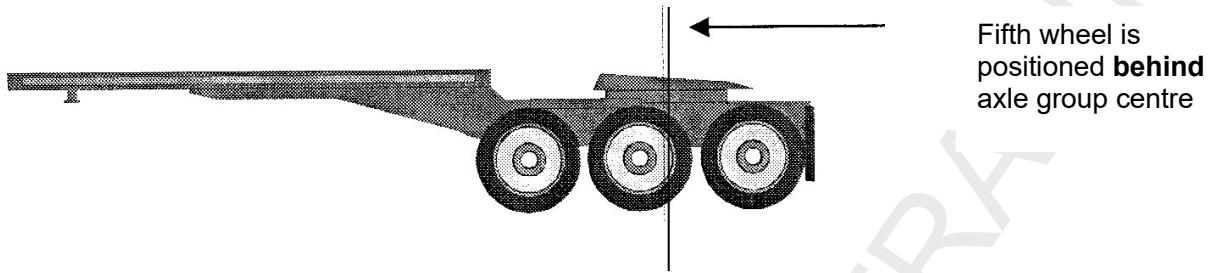


Figure 2

It is also important to understand the effects that the positioning of the load on each trailer will have on the individual axle loads.

#### Other hazards

Vehicles carrying high centre of mass loads and live loads are more likely to overturn on corners. High centre of mass loads include bulk liquids; and live loads include livestock.

When driving at night, you must not drive close to the vehicle in front. Always leave a longer gap behind any vehicle in front.

## PRE-DRIVE: Checklist

<p><b>Pre-operational Check</b></p> <p><b>1.1 Tyres, wheels and wheel nuts</b></p> <p>Rims: no dents in flanges, cracks, or damage to rim assembly</p> <p>Tyres: min 1.5mm tread depth, no cuts or damage, dual tyres not touching, no rocks lodged between duals, correct inflation and pressure.</p> <p>Spare wheel(s)/tyre(s): location, condition and inflation</p> <p>Wheel nuts: all present, undamaged, no loose lugs or nuts, no visible rust trails</p> <p><b>1.2 Vehicle measurements</b></p> <p>Vehicle or load height</p> <p>Vehicle length (length must be known when crossing a railway crossing which has limited space to fit on the other side)</p> <p>Vehicle weight (GVM/GCM)</p> <p><b>1.3 Fluid leaks/levels (met OH&amp;S requirements))</b></p> <p>Check and top up all relevant accessible fluid levels</p> <p><b>1.4 Air leaks</b></p> <p>Listen. If noisy the applicant may describe this action.</p> <p><b>1.5 Air tanks</b></p> <p>Drain valves, as required.</p> <p><b>1.6 Couplings</b></p> <p>Air lines and cables must not be tangled or stretched, must be correctly coupled/connected or stowed. Must be functional, undamaged and secure.</p> <p>Prime movers/dollies/trailer: aligned correctly. Coupled in sequence.</p> <p><b>1.7 Vehicle posture</b></p> <p>Not leaning to one side and sitting level front to back</p> <p><b>1.8 Load security</b></p> <p>Restraint devices and positioning of load</p> <p>Latches, lockers, stowage compartments and doors serviceable</p> <p><b>1.9 Loose/missing/broken fittings</b></p> <p>The effects on serviceability of vehicle or equipment</p> <p>Safety hazards (sharp edges or items likely to fall off)</p> <p><b>1.10 Registration</b></p> <p>Vehicle and trailers have current registration</p> <p>Registration label is showing (if applicable)</p> <p><b>1.11 Lights and indicators</b></p> <p>All lights, indicators and signages are compliant</p> <p><b>1.12 Drive belts and pulleys</b></p> <p>Belts: condition, tension and adjustment</p>	<p><b>Cabin Drill</b></p> <p><b>2.1 Seating position</b></p> <p>Entering and leaving the driver's cab: meet OH&amp;S requirements, approach the door facing oncoming traffic and has good traffic awareness.</p> <p>Using the hand rail for leverage (using steering wheel not acceptable)</p> <p>Using the steps foothold and grab handle (if fitted) to the vehicle – 3 points of contact</p> <p>Maintaining three points of contact entering and leaving the vehicle</p> <p>Adjusting seat: Good posture, comfort, use of controls</p> <p><b>2.2 Seatbelts</b></p> <p>The seat belt is adjusted (if required) and fastened.</p> <p><b>2.3 Mirrors</b></p> <p>Mirrors are not cracked or broken and adjusted for effective vision.</p> <p>In the case of a bus, all internal mirrors correct for passenger monitoring</p> <p><b>2.4 Cleanliness</b></p> <p>Check the cabin for loose articles and take appropriate action to safely store any loose articles</p> <p>Windows/windscreen are clean, not broken/cracked and do not obscure applicant's or assessor's vision</p> <p><b>2.5 Controls:</b> Identify and test for operational effectiveness of all of the listed controls (if fitted)</p> <p>Steering wheel/accelerator/clutch</p> <p>Brakes: service, park, trailer and auxiliary switches</p> <p>Seat adjustment</p> <p>Engine start and stop</p> <p>Indicators/hazard lights/warning lights</p> <p>Washer/wipers/horn(s)/lighting controls</p> <p>Gear changing mechanisms including range selectors and splitters.</p> <p>Air conditioning/heating/demisting</p> <p>Bus only: cab suspension adjustments</p> <p>Passenger door operations/interlocks</p> <p>Passenger stop cords/buttons/warning lights</p> <p>Other (as applicable to the test vehicle).</p> <p><b>Criteria 13 Load Securing</b></p> <p><b>13.1 Ropes</b></p> <p>Truckie's hitch. Single or double shank/hitch</p> <p><b>13.2 Chains and dogs</b></p> <p>Safely use load binders. (Ratchet/recoilless dogs – not spring dogs).</p> <p><b>13.3 Winches and straps/ratchets and straps</b></p> <p>Safely use winches and straps or ratchets and straps.</p>
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**Important Information. Please read carefully**

1. Conduct a pre-start check on a vehicle before starting the vehicle.
2. Where there is parallel parking you are not permitted to double park your B Double alongside a parked vehicle.
3. When driving at night with your headlights on high beam, you must dip your headlights within 200m of the vehicle ahead or any oncoming vehicle.
4. If you develop a medical condition that could affect your driving, you must notify Vic Roads of your condition.
5. When you are on a two lane road with an 80km speed limit, you must always stay in the left lane unless overtaking.
6. When making a left hand turn, next to a left hand lane, you are only permitted to do so if you are driving a vehicle 7.5m long with a sign on the rear of the vehicle stating (Do not overtake turning vehicle).
7. The maximum allowable length of a HC vehicle including its load is 19 metres.
8. Single deck vehicles including its load has a maximum height of 4.3 metres.
9. If your vehicle you are driving with a GVM of more than 12 tonnes breaks down on a road with a 70km speed limit or greater, you must put warning triangles at the side and 50-150 to the front and rear of your vehicle.
10. Work times in your heavy vehicle diary must include any time spent on tasks related to the operation of a regulated heavy vehicle. You must sign, date and add up your work and break or rest time every day on the daily sheet in your heavy vehicle work diary.
11. While coupling a vehicle and trailer you must make sure your prime mover and semi-trailer are in a straight line. The maximum width (allowable width) of a prime-mover and semi-trailer combination (heavy combination) is 2.5 metres.
12. If your vehicle has air brakes the air tanks need to be drained daily.
13. Using the system of vehicle control, you should slow or stop the vehicle using brakes and then select the appropriate gear to continue.