

## Vehicle Standards Information 26

June 2021

This information sheet supersedes all previous copies of VSI 26.

# Roadworthiness requirements

This Vehicle Standards Information Sheet constitutes the written directions to Licensed Vehicle Testers given by VicRoads under Regulation 212 of the *Road Safety (Vehicles) Interim Regulations 2020*. Licensed Vehicle Testers must ensure that a vehicle meets these standards before a Certificate of Roadworthiness is issued.

**This information sheet applies to vehicles with a Gross Vehicle Mass (GVM) of 4.5 tonne or less. For heavy vehicle requirements please refer to the National Heavy Vehicle Regulator website at [nhvr.gov.au](http://nhvr.gov.au). For motorcycle and moped requirements please refer to Vehicle Standards Information (VSI) 4 Summary of standards for registration requirements for motorcycles and mopeds.**

### Part 1: Introduction

New vehicles are manufactured to comply with a number of standards, notably the Australian Design Rules (ADRs) and various industry and consumer requirements, which ensure that the vehicles achieve a certain level of safety, environmental harmony and serviceability. During their use, vehicles are subject to wear and tear and can be altered from their original form and in some cases this can become a hazard to road users and others. Although the owner of a vehicle is responsible for keeping the vehicle in a safe and roadworthy condition at all times, roadworthiness testing is undertaken to help minimise the possible hazard to road users, including buyers of used vehicles where the vehicle may be in a potentially harmful condition, often without the owner being aware of it.

The roadworthiness standards set out in this document are aimed at detecting any excessive wear, deterioration, or alterations that could adversely affect the safety of the vehicle, its compliance with the standards for registration, and the ADRs where the items can be assessed by inspection.

Compliance with certain elements of ADR and regulatory requirements are established by ensuring that parts of the vehicle which cannot be tested for compliance in a roadworthiness inspection such as crumple zones, airbags and emissions equipment are not modified or tampered with in any way.

It is also important to note that the roadworthiness requirements cannot be used to impose more stringent requirements on a vehicle than it

would be required to comply with in a new and unaltered condition, as per the standards for registration applicable at the date of manufacture of the vehicle. The requirements have been limited to items which relate to safety and compliance and which lend themselves to detection by inspection.

A certificate of roadworthiness issued by a licensed tester is certification that at the time of inspection a vehicle meets the requirements in this document and is fit for use on the road. A certificate of roadworthiness is not an inspection of the mechanical quality, reliability or cosmetic aspects of the vehicle.

A Licensed Vehicle Tester must ensure that vehicles are examined in respect of the appropriate standards in this document, applying normal industry standards and test procedures. The tester must also take into consideration any relevant information including manufacturer's specifications, an approval certificate issued by a member of the Vehicle Assessment Signatory Scheme (VASS) or testing authorities, and various guidelines, such as VicRoads' VSI sheets, and other information provided by VicRoads in assessing whether or not the vehicle meets the criteria provided. The standards in this document may be overridden by this information in some circumstances.

Part 3 of this document contains sections dealing with various aspects of vehicle safety and environmental requirements. Some of these will only apply to certain vehicles and should be disregarded where they do not apply. There will also be a number of vehicles that are exempt from

some requirements under conditional registration or permit procedures. In these examples these standards need not be checked.

The information provided in other VSIs prepared by VicRoads may be of assistance when interpreting the requirements in this document.

## Part 2: Certificate of Roadworthiness

In Victoria, a Certificate of Roadworthiness is generally required when a vehicle is sold or re-registered, or as part of a mandatory periodic inspection requirement for a bus or taxi.

A Certificate of Roadworthiness is also required after a Vehicle Identity Validation inspection on a repairable write off vehicle.

In some cases, a Certificate of Roadworthiness is required to clear a Vehicle Defect Notice.

A Certificate of Roadworthiness can only be issued by a Licensed Vehicle Tester operating from an approved facility such as a garage or service station.

Before a Certificate of Roadworthiness can be issued for a vehicle, the vehicle must be inspected and found to be within manufacturers specifications, free of excessive wear, severe deterioration and alterations that would make it unsafe for normal use on the road.

A roadworthiness inspection is not a check of the mechanical reliability or general condition of the vehicle. If a comprehensive check of the overall condition of the vehicle is required, you should arrange for a separate independent report.

A roadworthiness inspection is also not a complete assessment of a vehicle's compliance with the standards for registration which, in most cases, are the Australian Design Rules (ADRs).

The ADRs are a set of minimum standards for the construction of motor vehicles and trailers. In most cases, compliance with these standards cannot be assessed by inspection alone.

The cost of obtaining a Certificate of Roadworthiness will depend on a variety of items such as the age, type and condition of the vehicle being

examined. Accordingly, the fee can vary significantly, and it is wise to seek a quote for the cost of the inspection before you authorise the inspection to take place.

A certificate of roadworthiness is current, for the purposes of a transaction, for 30 days from the date of issue.

## Part 3: General inspection standards for roadworthiness test

### Section A

#### Wheels and tyres

##### Wheels

There is no requirement for a spare wheel to be carried on a vehicle and the standards for registration exclude wheels not normally used in service from any requirements. However, where a spare wheel is carried it must be securely retained in or on the vehicle.

All road wheels and rims must be free of cracks or any other type of damage likely to cause failure of the wheel, rim or tyre. The wheel/rim must not be bent or buckled or excessively out of balance. In the case of a passenger car, any replacement wheel/rim must comply with the applicable requirements in VSI 8 *Guide to Modifications for Motor Vehicles* unless a VASS approval certificate is supplied for that modification.

A Certificate of Roadworthiness must not be issued for a vehicle which has a temporary use spare tyre fitted to one or more road wheels.

Alloy wheels must bear the appropriate standards mark as specified in VSI 8.

On wire-spoked wheels, all spokes must be intact, straight, fitted and laced correctly and properly tensioned.

Welds on steel wheels must be of good quality and free of defects. Widened wheels must have no more than one peripheral weld. Welds or any other type of repair on wholly cast wheels or cast structural components of wheels are not acceptable. Chromed wheels other than those chromed during the manufacturing process are not acceptable.

When in the straight ahead position, the wheels and tyres must not project beyond the extreme width of the

mudguards when viewed (from above). Wheels and tyres must not contact any part of the vehicle under any combination of steering and/or suspension movement.

##### Wheel studs and nuts

The wheels must be securely attached with the correct number and type of nuts or bolts. Stud or bolt holes, and any locating washers, must not be expanded or elongated, and all wheel and retainer tapers must match. All studs must be securely fitted and engage for at least the same thread length as provided originally by the vehicle manufacturer.

##### Track width

The track measured to the centre of the tyre treads must not exceed the original specification by more than that specified for that type of suspension in VSI 8. However, for vehicles fitted with diagonally split braking systems, there must be no change in front or rear track from the original specification.

Hub/rim spacers are unacceptable unless specified by the vehicle manufacturer.

##### Tyres

All tyres fitted to the road wheels of a vehicle, must be of a type constructed and certified for normal road use. Except at the tread wear indicators, tyres must have a minimum tread depth of 1.5mm in all principal grooves.

The principal grooves are the wide grooves that are usually positioned in the central zone of the tyre but may run across the tread.

Tread wear indicators are usually located in the principal grooves of the tyre and indicate the degree of tyre tread wear. Where tread wear indicators are provided, the tread must not be worn to the extent that any tread wear indicator contacts the road surface.

A tyre can be considered roadworthy if there is less than 1.5mm of tread in the secondary grooves, which are typically shallower than the principal grooves and may disappear during the life of the tyre.

A tyre must not have uneven wear across its width such that an edge of the tyre is significantly more worn than the remainder of the tyre surface.

The tyres must not be regrooved unless they are of a type marked by the manufacturer as being suitable for regrooving.

Tyre sizes must be compatible with rim sizes as set out by the Tyre and Rim Association.

The tyres and rims must be of the same dimensions when along the same axle (i.e. both tyres and rims at the front of the vehicle must be of the same dimensions, and both tyres and rims at the back of the vehicle must be of the same dimensions).

The tyres should also be checked to ensure they are free from any deep cuts, cracks, bulges or any other damage or defects likely to cause failure of the tyre.

For vehicles fitted with passenger car tyres and manufactured after 1 January 1973, all tyres fitted to the road wheels must be of the same carcass construction (i.e. radial ply, cross ply, bias belted, run-flats etc.), but may have a different tread pattern.

Repairs to the sidewall or shoulder areas on radial ply passenger car tyres are not acceptable.

The load rating of tyres on vehicles subject to ADRs must be at least equivalent to the minimum ratings shown on the tyre placard.

The speed rating of the fitted tyre casing must be, at a minimum, the lesser of:

- 140km/h for a passenger car with special features for off-road use such as 4WD
- 180km/h for any other passenger car
- 120km/h for any other motor vehicle not described above
- the vehicle's top speed.

All pneumatic tyres not marked "Tubeless" must be fitted with a tube, and all retreaded tyres must be marked with the identification of the retreader and the word "Retreaded" and any other markings required by the relevant Australian Standard.

Refer to VSI 8 and VSI 16 *Tyre Maintenance and Repair* for more information on wheels and tyres.

## **Section B**

### **Steering and suspension**

#### **General**

The vehicle steering and suspension system must be free from wear or play exceeding the manufacturer's limits and the vehicle must track satisfactorily without undue wander.

All steering components, including dust and grease seals, must be in good condition, securely and correctly mounted, and free from damage and excessive wear or worn beyond manufacturers specifications.

All nuts, bolts and other fasteners used on steering components must be secure and fitted with appropriate retaining or locking devices where necessary. All fasteners must have at least the same thread engagement as when new. There must be no binding in the steering system as the steering wheel is turned from lock to lock.

#### **Steering wheels**

All safety features installed by the manufacturer at the time of compliance must be present and operational. Steering wheel to be aligned correctly in the straight-ahead position. Steering wheel rims, knobs and other devices, which have deteriorated to an extent that they are hazardous, are unacceptable. Steering wheel covers, including padded impact protection, if fitted, must be secure.

#### **Power steering**

Any power steering pump or associated components must function and be securely mounted. Hoses, pipes and drive belts, etc. must not foul any other components in a manner likely to cause failure.

All fittings must be free of oil leaks, however, dampness or staining around seals is acceptable. The reservoir must be correctly filled.

#### **Suspension**

All suspension components must be properly mounted and aligned with no distortion, cracks, fractures or other damage likely to cause failure or instability. There must be adequate clearance between components and the vehicle body, and all joints, bushes, pivots, dust and grease seals, wheel bearings and mountings must be in good condition.

Shock absorbers and struts must be securely mounted, function effectively and be free of leaks. Dampness or staining around seals is acceptable.

The auto levelling function must operate on hydraulic or air suspension systems.

Modified suspensions must comply with the relevant sections of VSI 8.

## **Section C**

### **Brakes**

#### **General**

All brake components must function correctly, be securely mounted, appropriately located and free from distortion or damage likely to cause failure, malfunction or uneven application or wear outside of that specified by the manufacturer.

Brake hoses and piping must be of an appropriate material and specification, adequately supported and free from damage.

Hydraulic systems must be filled to the appropriate level and all pipes, hoses, cylinders and reservoirs must be free from leaks and apparent contamination. However, brake fluid dampness behind cylinder boots is acceptable and alone should not be a cause for rejection.

Air systems, including trailer brake connections, where fitted, must be free from leaks. Compressors must be properly mounted and aligned with drive belts in good condition and correctly tensioned.

Air compressors must be capable of rapid build up, recovery and working pressure maintenance. Air tanks and other valves and components must be free of contamination, including excessive oil build up, which may adversely affect their operation.

#### **Brake linings**

Lining material must not be worn down to the wear indicators where they are provided. Where no wear indicators are provided, the minimum remaining useable thickness of lining material measured at any point on the lining must be no less than the vehicle manufacturer's minimum recommended thickness and where no manufacturer's instructions are provided must be no less than 1.0mm. Brake lining materials must not be contaminated.

## Brake discs and drums

The thickness of the friction section of a brake disc or the internal diameter of a brake drum must be within the manufacturer's specifications. Light circumferential scoring is acceptable on friction surfaces providing it does not affect the operation or durability of the brake system.

## Stopping performance

Vehicle service brakes must function correctly and with one sustained application of the service brakes, under normal operation and application conditions, on a dry smooth level surface free from loose material, be capable of:

- stopping the vehicle within the distances specified in Table 1
- achieving the deceleration rates specified in Table 1.

Table 1. Minimum braking performance of service brakes

Vehicle type by GVM	Max. stopping distance from 35km/h	Min. average deceleration from any legal speed	Min. peak deceleration from any legal speed
Vehicles under 2.5 tonnes GVM	12.5m	3.8 m/s <sup>2</sup> (0.39 g)	5.8 m/s <sup>2</sup> (0.59 g)
Vehicles 2.5 to 4.5 tonnes GVM	16.5m	2.8 m/s <sup>2</sup> (0.29 g)	4.4 m/s <sup>2</sup> (0.45 g)

The application of the brakes must not cause the vehicle, when travelling in the centre of a 3.7m wide lane, to project outside that lane.

Vehicle parking and emergency brakes must function correctly. Parking brakes must be capable of holding the vehicle stationary on any up or down grade found on highways.

Emergency brakes, including parking brakes intended to provide emergency braking such as those on vehicles, which do not have split system service brakes or are not subject to ADR 31 or ADR 35 must be capable of either:

- stopping the vehicle on a dry smooth surface free from loose material, within the distances specified in Table 2
- achieving the deceleration rate specified in Table 2.

Table 2. Minimum Braking Performance of Emergency Brakes

Vehicle type by GVM	Max. stopping distance from 35km/h	Min. average deceleration from any legal speed	Min. peak deceleration from any legal speed
Vehicles under 2.5 tonnes GVM	30.5m	1.6 m/s <sup>2</sup> (0.16 g)	1.9 m/s <sup>2</sup> (0.19 g)
Vehicles 2.5 to 4.5 tonnes GVM	40.5m	1.1 m/s <sup>2</sup> (0.11 g)	1.5 m/s <sup>2</sup> (0.15 g)

## Parking brake

The parking brake of a vehicle or combination must be able to hold the vehicle or combination stationary on a 12% gradient:

- when the vehicle or combination is on a dry, smooth road surface, free from loose material; and
- whether or not the vehicle or combination is loaded.

## Warning devices

Any audible or visible warning devices fitted must be properly mounted and function correctly.

## Other brakes and equipment

Where required, trailer breakaway brakes must be fitted and operational.

Where a motor vehicle is fitted with vacuum assisted or air operated brakes and that vehicle is equipped to tow a trailer or a semi trailer, the motor vehicle must be equipped with a means for providing that, if the trailer or semi trailer breaks away, the brakes of the motor vehicle are capable of stopping the motor vehicle within the appropriate distance specified in Table 2.

## ABS and ESC (or EBS for trailers)

Where ABS or ESC (or EBS for trailers) is fitted on a vehicle as standard, it must operate correctly. A fault with the operation of these systems is determined by the presence of a warning light.

## Section D

### Seats and seatbelts

#### Seats

The driver's seat assembly must be free from any defects which may impair the driver's ability to safely control the vehicle.

All seats and backrests must be secure, free of structural damage and/or defects, sharp and/or jagged edges or protrusions, which could be hazardous. Any padding originally provided on the seat must be present, securely held in position on the seat structure, not expose the seat structure and be in a good condition free from improper repairs.

Unless evidence is produced that a vehicle is registered with reduced seating capacity, all seating positions must be complete and present at the time of inspection. A motorhome seating plan can be classified as evidence of reduced seating capacity.

Seat slides and other control mechanisms used for adjustment of the seat and will affect the occupant's seated position must be functional, have no abnormal looseness, and be effective in the release and locking actions. Optional mechanisms such as lumbar adjustments need not function, providing they do not interfere with seat security, or the driver's control of the vehicle. Where provided, head restraints must be secure and free of structural damage and/or defects.

Seats equipped with airbags in accordance with manufacturers requirements. Where seat covers are fitted on seats with airbags, they must be of a type approved for that seat so as not to restrict the deployment of the seat mounted airbag.

#### Seatbelts

Seatbelts must be present as specified in VSI 21 *Summary of Seatbelts and Child Restraint Fitting Requirements*.

All seatbelts must comply with the appropriate seatbelt standard and where initially fitted by the manufacturer for ADR compliance, the seatbelts must be original equipment or appropriate replacement parts.

Seatbelts must be appropriately and securely fitted with the appropriate hardware and be accessible, and all components, including retractors

where fitted, must function correctly. Seatbelt webbing must be firmly secured to its end fittings and must not be damaged, cut, knotted or frayed. Repairs or modifications of any kind to webbing, buckles, retractors or other seatbelt components are not permitted. Seatbelts that have been melted or repaired with heat are prohibited.

Where present, pretensioners must be in operational condition. Any indicators of faulty or deployed pretensioners including an SRS warning light, locked seatbelt retractors or retracted seatbelt buckles are unacceptable.

Refer to VSI 21 for more information on seatbelts.

## Section E

### Lamps, signals, reflectors etc.

#### General

Lighting requirements (lamps, reflectors and marking plates) vary substantially with the type of vehicle and its date of manufacture.

For newer vehicles and optionally for older vehicles, details of the requirements together with the type, number, location, colour, operation adjustment of lamps and reflectors are set out in the Third Edition ADRs and the *Road Safety (Vehicles) Interim Regulations 2020*. Alternatively, for vehicles not required to meet the Third Edition ADRs, the requirements specified in the standards for registration for that particular type of vehicle must be applied.

Generally, all motor vehicles must be fitted with functional headlamps, stop lamps, front and rear position (parking) lamps, a number plate lamp and turn signal lamps emitting light of the specified colour. All other vehicles (trailers etc.) require rear position lamps, stop lamps, a number plate lamp and turn signal lamps.

In addition to these lamps, a number of other lamps such as work lamps, auxiliary driving lamps, LED light bars, front and rear fog lamps, reversing lamps, external cabin lamps, clearance lamps, marker lamps, daytime running lamps and front lamps on sidecars are either required or permitted. While the vehicle is being driven on the road there shall be no visible red light to the front or visible white light to the rear. Hazard warning lamps are required on certain buses and late model vehicles.

Vehicles must not be fitted with lights or reflectors not required or permitted by the standards for registration or the ADRs.

All lamps that are required under the standards applicable at the time of manufacture must be operational.

All lamps fitted to a vehicle, including any optional lamps, but excluding undipped headlamps and ancillary driving lamps, must be fitted with lenses or otherwise shielded so that the light emitted does not cause glare. All lenses must be of the correct colour, not substantially faded and must be clean on the inside and free of any damage, which would permit dust or water to enter the lamp. Headlamp reflectors must be in good condition.

Where fitted, driving lamps or LED light bars must only be able to be activated when the high beams are on and must turn off if high beams are turned off.

The presence of minor condensation on semi sealed lamps is acceptable.

All lamps must be securely mounted and correctly orientated.

#### Note

Applicable vehicles are required to comply with ADR 13, ADR 19 and provisions within the *Road Safety (Vehicles) Interim Regulations 2020*.

#### Warning lamps/telltale lamps

All mandatory internal warning lamps, including the airbag check lamp where fitted, must function correctly.

#### Reflectors

Reflectors must be functional, of the correct colour and securely mounted.

Rear marking plates must not be faded or deteriorated and must be of the correct type and correctly located.

#### Additional Lighting

Some vehicles, due to the nature of their use, require additional or special lighting or lighting located in non-complying positions. These vehicles will usually belong to Police, Emergency, Road Maintenance or other similar organisations. Other vehicles owned by private organisations requiring special

lighting may be allowed to fit the lighting under conditional registration provisions.

Refer to VSI 12 *Flashing lights, Other Lights and Reflectors* for more information.

## Section F

### Exhaust and emission control

#### General

The exhaust system of a vehicle must not pass through the cabin or any passenger area and must be free of leaks. Condensation drain holes are not leaks.

The exhaust system must be fitted with an effective silencing device and all exhaust gases must pass through the device.

All mountings must be secure and the exhaust system must have adequate clearance between all other parts of the vehicle and the road.

Unshielded parts of an exhaust system, other than the outlet, must not protrude beyond the profile of the vehicle other than on the underside. The outlet must be located so as to avoid direct entry of gases into the passenger compartment and must not extend beyond the plan of the vehicle.

Refer to VSI 8 for more information on exhausts.

Vehicles manufactured to comply with emission control ADRs must have all pipes, hoses, valves, sensors, fuel and air control devices, catalytic converters and any other emission control equipment originally fitted by the vehicle manufacturer properly located and connected and not apparently damaged, deteriorated or altered in any way so as to appear ineffective.

On passenger vehicles manufactured from 1 January 1986, no modifications are permitted from the clean side of the intake air filter through to the last catalytic converter or particulate filter in the exhaust system, unless modified in accordance with VSI 8.

Dual fuelled vehicles must retain any emission control equipment fitted to enable them to meet emission requirements while operating on petrol. However, allowances are made for minor air cleaner and carburettor modifications required to fit the conversion. The heated air intake system can be removed and the air

cleaner replaced with one to suit the LPG conversion.

For vehicles fitted with a four-stroke engine, exhaust emissions (except for water vapour) must not be visible to the naked eye for more than 10 seconds under normal operating conditions. When running, the engine must not discharge excessive crankcase fumes, and where crankcase ventilation equipment is fitted, it must be secure and leak free.

Crankcase ventilation recirculation equipment is required on petrol engine vehicles (other than motorcycles) built from 1 January 1972.

Nitrous oxide injection systems must not be fitted. This prohibition includes a partial installation or a disconnectable nitrous oxide system that is fitted to the vehicle ready for use.

#### Exhaust Particulate Filter

Where a motor vehicle has been manufactured with a Diesel Particulate Filter (DPF) or Gasoline Particulate Filter (GPF) it must not be removed or rendered inoperable.

## Section G

### Windscreen and windows

#### General

All glazing used in motor vehicles built after June 1953 is to be safety glass or other approved material. The glazing that is necessary to allow the driver to see the road and other road users is not to be damaged or altered to the extent that it prevents the vehicle being used safely.

At least half the number of windows must be openable or the vehicle must be provided with an alternative method of ventilation.

#### Wear or damage

During the service life of a vehicle, the windscreen and windows may incur various types of damage. Testers are advised that deterioration from the 'as new' condition is allowable and a windscreen or window with minor damage should not be rejected.

A windscreen should only be rejected if:

- it is discoloured, badly scratched, fractured or chipped within the area wiped by the windscreen wiper(s) to the extent that the driver's vision is so impaired that the vehicle cannot be driven safely

- in the case of a laminated windscreen, it has any crack that penetrates more than one layer of glass
- in the case of a laminated windscreen, it has one or more bulls eyes or star fractures over 16mm in diameter or one or more cracks over 150mm in length in a single layer of glass within the area wiped by the windscreen wiper(s). One or more bulls eyes or star fractures up to 16mm in diameter and cracks up to 150mm in length in a single layer of glass within the area wiped by the windscreen wiper(s) are allowable provided that they do not impair the driver's vision to the extent that the vehicle cannot be driven safely.

Side windows that are scratched or otherwise damaged to the extent that the driver's vision is so impaired that the vehicle cannot be driven safely should also be rejected. Where signalling devices are not provided, the driver's side window must be capable of being opened or some other means provided to give hand signals.

#### Repairs and obstructions to view

In a repaired windscreen a faint outline of the repaired damage or in some cases a slightly dull spot may be visible where the repair has been performed. A repaired crack may also be detectable by a fine hairline surface mark. These are acceptable and should not be rejected during a roadworthy test providing the rest of the windscreen complies with the requirements as set out in this section.

Apart from any pillar or other part of the vehicle's structure or fittings, there must be no internal obstructions to a driver's view through the swept area of the windscreen, to the right of the driver's position or 60° to the left of the driver's position, except for the area outside the primary vision area.

#### Tinting requirements

The primary vision area of the windscreen of a vehicle may be lightly tinted to achieve a light transmittance of no less than 75% if the vehicle was manufactured from 1 January 1972, or 70% if manufactured earlier. Tinting in the primary vision area must have been incorporated during the manufacture of the windscreen and not by coating or tint films added afterwards.

Any tinting applied to the windows of a vehicle after it has been manufactured must comply with the requirements specified in VSI 2 *Window Tinting*.

#### Primary Vision Area

For cars and other light vehicles, the primary vision area can be approximated by excluding the area above the wiper arc or the top 10% of the windscreen, whichever is the greater.

## Section H

### Windscreen Wipers, Washers and Demisters.

#### General

All motor vehicles (except motorcycles) fitted with a windscreen must be fitted with an effective windscreen wiper system. If manufactured before 1960 then the wiper need only be fitted to the driver's side. On vehicles where the windscreen is such that a driver, in the normal driving position, can obtain adequate vision of the roadway ahead by looking over the top, below or to a side of the windscreen, a windscreen wiper system is not required.

If the vehicle is required by the standards or the ADRs to have a windscreen washer system then the system must be fitted and work effectively.

All motor vehicles manufactured on or after 1 September 1966 and required to be fitted with a windscreen wiper system must also be fitted with an effective windscreen washer system.

Both the windscreen wiper system and the windscreen washer system must be capable of being operated by the driver from the normal driving position.

All components of both systems must be secure, functional and not excessively worn. Windscreen wiper blades must only sweep over the windscreen glass and not contact any other component to an extent which could affect their performance while in operation.

Windscreen washer jets must be correctly aimed.

Rear windscreen wipers need not be operational.

## Windscreen Demisters

Vehicles required to comply with demisting provisions must have the necessary equipment present and operational. Demisters were required on passenger vehicles built from 1971 onwards and were required on other vehicle types in subsequent years as per the relevant ADR.

## Section I

### Body and chassis

#### General

The structural components of all vehicles must be sound and free from cracks, damage, faulty repairs or modifications, rust, deterioration, distortion or any other condition which could lead to structural failure of the vehicle or adversely affect the performance of safety related features.

The body and fittings of all vehicles must be free from any damage, which might increase the risk or severity of injury to any occupant, pedestrian or other road user. The body must also be free of any damage likely to allow the entry of exhaust gases into the passenger area. All seals at body openings necessary to prevent the entry of exhaust gases into any passenger area must seal effectively.

Floors including floors in load areas must be free of structural damage and/or defects. Floors in passenger areas must be free of loose material or objects or tears, or incorrectly fitted matting, or covering likely to interfere with the driver's ability to safely operate the vehicle.

For passenger vehicles fitted with airbags, the rail extensions forward of the engine subframe and the vehicle cross car beam (bumper) must be free of damage, repairs or modification, other than those specifically authorised by the vehicle manufacturer, due to the risk of compromise to the vehicle's crash structure.

#### Door latches

All doors, boot lid, bonnet, hatch, tailgates and any other hinged or removable covers, and all other attachments to the body both inside the passenger area and outside the vehicle must be securely mounted and located. All latches and latch mechanisms, hinges and other securing devices including tilt cab latches must be in good condition and effective.

All latches and secondary latches on all doors giving access to the passenger areas must function correctly and secure the doors and allow them to be readily opened in an emergency.

#### Wheelguards (mudguards)

Effective wheel guards must be fitted for all wheels on all vehicles except front wheels on mopeds and motorcycles manufactured before 1 July 1988. Wheel guards may include parts of bodywork, etc.

Mud guards must extend to within 230mm of ground level on all vehicles with four or more wheels or within 300mm of ground level on off-road vehicles.

Mudflaps are not normally required on passenger car type vehicles as bodywork serves the mud guard function. However, mudflaps must be in place on vehicles where they form part of the wheel guard system such as on some motorbikes and vehicles with a tray type body.

Flexible wheel guards or mud flaps must retain their functional position when the vehicle is in motion.

The tyre section width must be covered when the wheels are in the straight-ahead position as viewed in plan (from above). For motorcycles, sidecars and trikes, guards must cover the tyre section width.

Relaxed wheel guard provisions may apply to some special purpose vehicles.

#### Bumper bars/bull bars

Bumper bars and bull bars, where fitted, must be secure and designed to eliminate sharp corners or protrusions, which might cause injury to other road users. They must not obscure any lamps, unless additional lamps are fitted, and must not substantially exceed the normal width of the vehicle body. ADRs and VicRoads information sheets cover visibility angles of lamps. Ends of bumper bars must turn towards the body to a sufficient extent to avoid any risk of hooking or grazing.

Refer to VSI 1 *Bull Bars* for more information.

#### Towing couplings

Any towbars, eyes, hooks, turntables or automatic couplings fitted to a vehicle must be in good condition, secure and not cracked, excessively deformed or damaged in a way likely

to cause failure. All electrical wiring, connectors, couplings, flexible pipes, etc associated with a device for coupling a trailer to a motor vehicle must be in good condition.

Where the coupling manufacturer has specified a wear limit the coupler must be within this wear limit.

#### Bonnet scoops

The shape of the scoop must comply with the requirements of Vehicle Standards Bulletin 14 (VSB 14). The driver's vision requirements specified in VSI 29 *Drivers Field of View Requirements* must be met.

#### Wheelchair accommodation, hoist and ramps

Every wheelchair position, hoist and ramp provided, must be securely mounted, in good condition and not present a danger to passengers and equipment operators. All roll stops for hoists and edge barriers for hoists and ramps must be present and in a serviceable condition. In the fully raised position there must not be more than 12mm vertical distance between the horizontal surface of the hoist platform and the horizontal surface of the vehicle entrance (floor level). The surface of any hoist or ramp, and standing area for a wheelchair must be skid resistant, effective and free of structural damage and/or defects.

Wheelchair occupant restraints must be marked with AS 2942 or 10542 compliance markings.

Wheelchair hoists and ramps must be marked as compliant with 'AS/NZS 3856 – Hoists and ramps for people with disabilities – vehicle mounted; Parts 1 and 2.'

## Section J

### Engine and driveline

#### General

All mountings, brackets and fastenings necessary for the safe operation of the vehicle secure and within manufacturers specifications where available, free from damage, excessive wear, or abnormal deterioration. All shafts, splines, universal joints, support bearings, tail shaft guards, and other drive line components must be in good condition and free of excessive wear or vibration and must be within manufacturer's specifications.

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The power unit, clutch system, transmission system, differentials, axle housings and all associated pipes and lines must be properly sealed and free of dripping or flowing leaks onto the roadway, exhaust system or brake friction surfaces. Dampness, weeping or staining are acceptable, but fluid leaking from the underside of the vehicle to such an extent that it is likely to drop on the road surface (if the vehicle is parked or idling stationary) is unacceptable. Water condensation drops from air conditioning systems is acceptable.

Slipping clutches and automatic transmissions are acceptable so long as it does not impact the safety of the vehicle.

Any insulating material in an engine enclosure must be in good condition and free from contamination by fuels or lubricants and there must not be any accumulation of fuel or lubricant in engine compartments.

Check engine lamp may be illuminated if it can be established that the fault code does not cause the vehicle to operate in limp mode, have any impact on a safety system or have any impact on the operation of the vehicle emissions system.

#### Hybrid systems/electric vehicles

If a vehicle is a hybrid vehicle, the hybrid batteries must be present and the hybrid system must function as the manufacture intended. Batteries and electrical cabling must comply with the appropriate section of this VSI. All insulation around orange or high voltage cables must be free of damage and/or defects or beyond manufacturers specifications.

#### LPG equipment

VSI 27 *LPG/LNG/CNG conversions and repairs* contains further information regarding LPG conversions.

A LPG system fitted to a vehicle must comply with the requirements of the Australian Standard AS 1425 applicable at the date of the installation. If the date of installation is not known, the age of the vehicle and LPG tank date stamp may be used in determining the date of installation.

The LPG system must be free of leaks and all components secure and free from damage and deterioration or beyond the manufacturers specifications.

The periodic inspection requirements of Australian Standard 1425 should be used when carrying out a roadworthy inspection on a vehicle fitted with LPG.

All work conducted on LPG systems must be conducted in a workshop with a current AFSACS agreement in place authorised by VicRoads.

### Section K

#### Other items

##### Driving Controls

All driving control pedal faces must have an effective non slip surface or be covered with a non slip material. All essential driving controls must function properly.

##### Padding

Padding on dashboards, steering wheels and sun visors where originally provided must be secure and must not have deteriorated to the extent that its effectiveness is substantially reduced.

##### Speedometer

Vehicles manufactured from 1 July 1988 must be fitted with a functioning speedometer calibrated in km/h.

##### Rear vision mirror

All motor vehicles must be fitted with a rear vision mirror capable of providing a clear view to the rear of the vehicle from the normal driving position. Any vehicle designed primarily for the carriage of goods or any vehicle subject to internal rear vision obstruction must be fitted with external rear vision mirrors on both sides of the vehicle.

All rear vision mirrors must be securely and firmly mounted and capable of appropriate adjustment. The reflective surface must not be cracked or broken nor peeled, tarnished, discoloured or deteriorated to such an extent that its effectiveness is reduced.

On all vehicles subject to ADR 14, except motorcycles, any internal vision mirror must be flat. However, additional curved mirrors may also be fitted, either independently or on standard mirrors. If fitted on a standard mirror they must not occupy a substantial part of the reflective surface of the standard mirror.

#### Horn

All motor vehicles must be fitted with one or more effective horns or other audible warning device, which produces a steady sound of constant pitch.

#### Fuel system

Fuel tanks must be securely mounted and the fuel system including fuel lines and filler pipes must not project beyond the widest part of the vehicle.

Additional or replacement fuel tanks must be at least of an equivalent standard to the original tanks and not affect the vehicle's compliance with evaporative emissions or other provisions.

All fuel lines, vent lines, pumps, valves and fittings must be secure, free of leaks, adequately protected from damage, and must not chafe or rub against each other or other parts of the vehicle. No component of the fuel system should be mounted within the occupant space of the vehicle.

Fuel filler caps must be secure and seal properly. Plastic emergency fuel filler caps are not acceptable.

#### Electrical wiring

Electrical wiring must be properly supported at least every 600mm, insulated, protected from chafing and located to minimise hazards to vehicle occupants or others.

#### Battery

All batteries must be adequately supported and secure. In addition, if fitted in a luggage or occupant compartment, the battery must either be of a type that is fully sealed or be located within a sub-compartment which is vented to atmosphere outside the vehicle.

Vehicles with batteries located in the same way that the vehicle manufacturer installed the original battery are deemed to comply with this requirement, provided the battery is of the same type as the original, and its installation and related components are as per the vehicle manufacturer's specification.

#### Fire extinguishers

Motor homes and caravans subject to ADR 44 must have the correct number and type of extinguishers fitted in an accessible location. Fire extinguishers should be fully maintained and marked as complying with the relevant Australian Standard.



## Visual Display Units (VDU)

Any Visual Display Unit that is visible to the driver from the normal driving position should be rejected if it does not:

- switch off the visual display while the vehicle is in motion
- function as a driver's aid while the vehicle is in motion
- meet the field of view requirements as specified in VSI 29.

Examples of driver's aids:

- closed-circuit television security cameras
- dispatch systems
- navigational or intelligent highway and vehicle system equipment
- rear view screens
- ticket-issuing machines
- vehicle monitoring devices.

## Accessories

Additional equipment fitted to the interior or exterior of a vehicle must not present an undue risk to occupants or others.

## Optional and non essential equipment

Where optional and non essential equipment is fitted, such as air conditioning, rear window demisters, etc, it is not necessary for it to work providing it does not adversely affect the safety of the vehicle or its compliance with mandatory standards for registration.

## Motor homes

All gas and electrical installations must be certified to the relevant Australian Standards as specified in VicRoads' VSI 5 *Conversion of Vehicles to Motor Homes*.

## Modified vehicles

Acceptable modifications to vehicles fall into two broad categories:

- those covered by guidelines published in VicRoads Vehicle Standards Information sheets
- those which require individual approval and thus an approval certificate from a VASS.

This makes it difficult to determine whether the modification has been approved in the context of a roadworthiness inspection.

Where evidence can be provided for the certification of a modification, inspection may be limited to the safety of the installation. Where certifiable modifications exist on a vehicle and certification cannot be established, VASS Signatory certification should be sought.

Refer to VSI 8 for more information on modified vehicles.

## Compliance (identification) plates and VASS Approval Certificates

Compliance plates were required on vehicles manufactured after June 1988 as evidence that, at the time of first registration, the vehicle complied with the applicable ADRs. However, compliance plates are often damaged, lost or stolen during the life of the vehicle. Therefore, the presence of a compliance (identification) plate is not a mandatory requirement for the issue of a certificate of roadworthiness.

Similarly, VASS approval certificates are generally supplied as evidence at the time of registration or change of description, that the vehicle complies with the applicable standards for registration.

A VASS approval certificate should only be requested by a Licensed Vehicle Tester, when a vehicle modification, which affects handling, structural integrity or compliance with the standards for registration, does not appear to comply with good industry practices, VSI 8 or VSB 14 as published on the Commonwealth Department of Infrastructure, Transport, Regional Development and Communications (DITRDC) website.

## Part 4: Buses

### Seats

Any padding originally provided on bus seat backs must be present and in good condition.

### Lamps

Hazard warning lamps are required on certain buses.

Stairwell lighting is required on all buses with a stairwell structure.

### Body Structure and chassis

Where a bus is more than 25 years old, proof of a current acceptable structural assessment must be provided and sighted by the tester.

In some buses, extensive corrosion may be hidden by inner and outer

body panels necessitating panel removal or other means to determine the extent of structural deterioration.

Floors and steps must have a suitable non-slip surface.

## Luggage racks

Where a bus is fitted with a luggage rack or racks, there must be no projections that could cause injury to passengers, and the rack or racks are to be adequately secured and prevent movement of luggage during normal braking and cornering manoeuvres.

## Doors, Emergency Exits and Warning Devices

Driver controlled doors on buses must open and shut correctly when operated from the driver's position.

Emergency exits on buses must be clear of obstruction and must be clearly identified, with the method of opening clearly indicated unless obvious from the design. The exits must be capable of being readily operated.

The warning devices provided on all emergency exits, other than service doors and breakable glass emergency exits, must be present and serviceable.

The warning must be given when the engine is started and/or vehicle is in motion, if:

- the primary opening or ejection device is moved
- an emergency exit is locked from the outside
- an emergency door or window is not securely closed.

The warning device must provide a visible and audible warning to the driver and must activate with movement of the catch or other device securing the emergency exit, not only by movement of the emergency exit itself.

Every service door shall be capable of being easily opened from inside and from outside the vehicle when the vehicle is stationary. Provision to lock the door from outside is permissible, provided that the door can always be opened from the inside.

## Fittings

Any guard rail provided for the driver must be secure and in a sound condition.

Padding on seatbacks and bars in buses, where originally provided

must be secure and must not have deteriorated to the extent that its effectiveness is substantially reduced.

Handgrips, rails, straps or stanchions on buses must be in a serviceable condition and effective.

#### **Fire extinguishers**

Buses subject to ADR 44 or ADR 58 must have the correct number and type of extinguishers fitted in an accessible location. Fire extinguishers should be fully maintained and marked as complying with the relevant Australian Standard.

#### **Additional inspection standards for buses**

The inspection standards in this section apply to Buses subject to the *Bus Safety Regulations 2020* as in force from time to time.

#### **Door interlocks**

Where a bus is fitted with door interlocks, the interlocks must be serviceable.

#### **Internal Mirrors or CCTV**

Internal mirrors or CCTV used to provide the driver with a view of passengers in or on the bus must be serviceable and functioning.

#### **Maximum safe carrying capacity signs/notices**

Maximum Safe Carrying Capacity signs/notices on buses with seating positions for 13 or more adults, including the driver, which display the maximum number of passengers that may be safely carried on that bus, must be in a position visible to the driver and use letters that are at least 25 millimeters high and of proportionate width.

#### **Tail Shaft Guards**

Where the transmission incorporates any longitudinal drive shafts, couplings, or intermediate shafts, provision shall be made to prevent the front end of any such shaft or coupling contacting the road in the event of detachment of the front end from its normal position.

### **Part 5: Additional inspection standards for Wheelchair Accessible Vehicles (WAVs) operating as a Commercial Passenger Vehicle**

The inspection standards in this section apply to Wheelchair Accessible Vehicles licensed under the *Commercial Passenger Vehicle Industry Act 2017*. These standards have been determined by the Commercial Passenger Vehicles Victoria.

#### **Allocated floor space/access for wheelchair positions**

Each wheelchair position (allocated floor/ceiling space) must be allocated at least 1300mm (length) x 800mm (width) x 1500mm (height) as required by the Commonwealth Government's 'Disability Standards for Accessible Public Transport'

All WAVs must have door entry dimensions (i.e. where wheelchairs enter) of at least 1500mm high and 800mm wide.

#### **Wheelchair/occupant restraint systems**

Each wheelchair position in a WAV must be fitted with an occupant restraint system (seatbelts) and a wheelchair restraint system.

Seatbelts must be a lap and sash emergency locking retractor type or a lap and harness type assembly.

#### **Note**

A lap only seatbelt is not a compliant restraint system for people in wheelchairs.

Wheelchairs must be secured to the WAV using at least four tie-down points with approved wheelchair restraints. The number of complete sets of restraints in the vehicle at all times must equal the number of wheelchair positions.

Wheelchair and occupant restraints must be free from fraying, tears and knots.

All restraints fitted must comply with the applicable Australian/New Zealand standards including 'AS/NZS 10542 Parts 1 and 2 Wheelchair tie down and occupant-restraint systems' and any requirements contained in 'AS2942-1994/Amendment 1-1998 Wheelchair Occupant Restraint Assemblies for Motor Vehicles, which are not covered in AS/NZS 10542 Parts 1 and 2.

#### **Wheelchair accommodation, hoists and ramps**

Refer to Section I of Part 3 of this document.

#### **Child restraint anchorages**

Child restraint anchorages must be provided for at least two forward facing rear seating positions. Anchorages must be the clip type and compliant with the applicable ADRs.

#### **Fire extinguisher**

All WAVs must be equipped with a fully maintained fire extinguisher of at least 20B rating. It must be securely mounted in a position so as to be readily available for use and not be a hazard or cause annoyance to the vehicle occupants.

#### **Approval certificates**

All vehicles converted to be a WAV require a VASS approval certificate when first converted to show that the vehicle meets the relevant standards for registration. The certificate must contain a notation identifying that the vehicle is suitable for use as a WAV. Approval may also be required if the number or position of seats and seatbelts are changed. If any concerns arise regarding the VASS certification, the vehicle should be referred to a VASS.

#### **For further information**

Further information is available on the VicRoads website:

**vicroads.vic.gov.au** or by calling VicRoads on **13 11 71** (TTY **13 36 77**, Speak and Listen **1300 555 727**).