

Vehicle Standards Information 29

June 2021

This information sheet supersedes all previous copies of VSI 29.

Fitment of equipment and accessories within the drivers field of view

This Vehicle Standards Information sheet outlines the requirements for objects attached to the windscreen or outside of the vehicle that may impact the driver's field of view.

This information sheet applies to vehicles 4.5 tonne GVM or less. For heavy vehicle requirements please refer to the National Heavy Vehicle Regulator website at nhvr.gov.au

Introduction

The driver of a vehicle must have a full and uninterrupted view of the road and any traffic ahead and to each side of the vehicle and, by use of rear vision mirrors a clear reflected view of any following or overtaking vehicle.

The Standards for Registration require that a vehicle not be constructed nor have anything fitted to it which would prevent the driver from having an adequate view of the traffic to each side of the vehicle and in all directions ahead of the vehicle.

In cases where any equipment or accessory is mounted on a vehicle care must be taken not to obscure the driver's field of view. The area referred to as the driver's field of view is based on the primary vision area requirements contained in Australian Design Rule 8 and illustrated in Figure 2 – Drivers field of view.

The following instructions are supplied to ensure that the driver's field of view is not adversely affected whenever any equipment or accessories, including bullbars and driving lights, are fitted to a motor vehicle. In addition, the fitting of the accessories or equipment must be secure and not have any sharp edges or protrusions which would be likely to increase the risk of injury to any other road users such as pedestrians or cyclists. Further information and instructions regarding fitment of bull bars and bull bar mounted accessories can be found in VSI 1 *Bull Bars*.

Fitment of GPS devices and other authorised driver's aids

Driver's aids such as GPS devices, dash cameras and vehicle reversing camera screens must be securely mounted to the vehicle in such a way as to ensure that the fitment does not pose a hazard to vehicle occupants or obstruct driver vision. Additionally, it is recommended that driver's aids be positioned in such a way as to minimise the hazard due to impact in case of an accident.

The following should be considered when mounting drivers aids:

- objects may become dangerous projectiles if they are placed in front of or near an airbag that deploys in an accident. **Figure 1 – Typical airbag deployment zone and suggested device mounting locations** shows the typical airbag deployment zone where objects must not be placed in vehicles with front airbags. Side and curtain airbags should also be considered if mounting an object on the A-pillar – the bodywork beside the

windscreen. It is recommended to seek the vehicle manufacturer's advice on airbag deployment when mounting accessories

- objects must not be placed anywhere which would prevent the driver from being able to see the road more than 11m in front of the vehicle as per Figure 2
- driver's aids or electronic tolling tags may be placed in the tinted zone at the top of the windscreen, as this portion of the windscreen cannot be used to gain vision of the road. It is recommended that, where a dash camera is fitted to a vehicle, that it be placed behind the rear vision mirror, as this provides the camera with vision of the road while not obstructing the drivers view of the road
- care must be taken to ensure that any cables attached to driver's aids are properly managed so as to not obstruct the drivers view or become a hazard
- the drivers view of the speedometer must not be obstructed.

Aerials

Aerials other than normal radio aerials are often fitted on a vehicle for the purposes of two way communications. In many cases these aerials are mounted on the front bumper or bull bar, or other part of the front of the vehicle.

If an aerial more than 30 mm in diameter is mounted on the front of the vehicle forward of the A pillar, the following guidelines apply:

- the aerial should be mounted as close as practicable to the left side of the vehicle

- the aerial and mounting must be free of any sharp edges or protrusions which could or be likely to cause injury to any person
- the surface of the aerial or any fittings more than 30 mm in diameter must be non-reflective, matte black is preferred
- no part of the aerial which is more than 30mm in- diameter should encroach into the driver's field of view as illustrated in Figure 2
- the aerial or mounting should not obscure or otherwise adversely affect the performance or visibility of headlamps, parking lamps, turn signal lamps or any other mandatory lamp or reflector

If these requirements cannot be met then the aerial should either be mounted on the roof or alternatively on the rear of the vehicle, particularly if the vehicle has a boot or sloping rear area providing adequate clearance for the aerial to operate efficiently.

Special purpose vehicles which are required to be fitted with these aerials and cannot meet these guidelines may apply for conditional registration through a VASS Signatory. If conditional registration is granted

strict use conditions including the requirement that the aerial can be easily folded down or removed when not in use will apply.

Police and emergency vehicles which are required to be fitted with non complying aerials or other features must be used in strict compliance with risk assessments and usage instructions developed and held by those organisations.

Support for roof racks

Some vehicles generally used for commercial purposes have overhead racks or carry platforms fitted to carry lengths of pipe or other loads. Where these racks extend forward over the roof of the vehicle and have supports extending up from the front of the vehicle the following guidelines apply:

- the diameter of the supports must not be more than 51 mm, or if square or rectangular material is used, no side of the section can be wider than 36 mm
- the supports must not obscure or otherwise adversely affect the performance of the headlamps, turn signal lamps, parking lamps and any other mandatory lamps or reflectors

- no part of the rack or load forward of the windscreen is allowed to be below a horizontal plane level with the top of the vehicle cabin
- there must not be any sharp edges or protrusions and tube bottoms must be protected to ensure that no exposed corners at the front of the vehicle are present
- supports must be located as far forward and as close as possible to the outer edge of the vehicle without being outside the plan area of the vehicle. In any case they should not be more than 300mm in from the outer edge of the vehicle
- the vertical supports should be painted matt black to reduce the chance of distraction from light reflection

Refer to VSB Guidelines for the installation and location of aftermarket in-vehicle visual display unit devices.

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**).

Figure 1. Typical airbag deployment zone and suggested device mounting locations

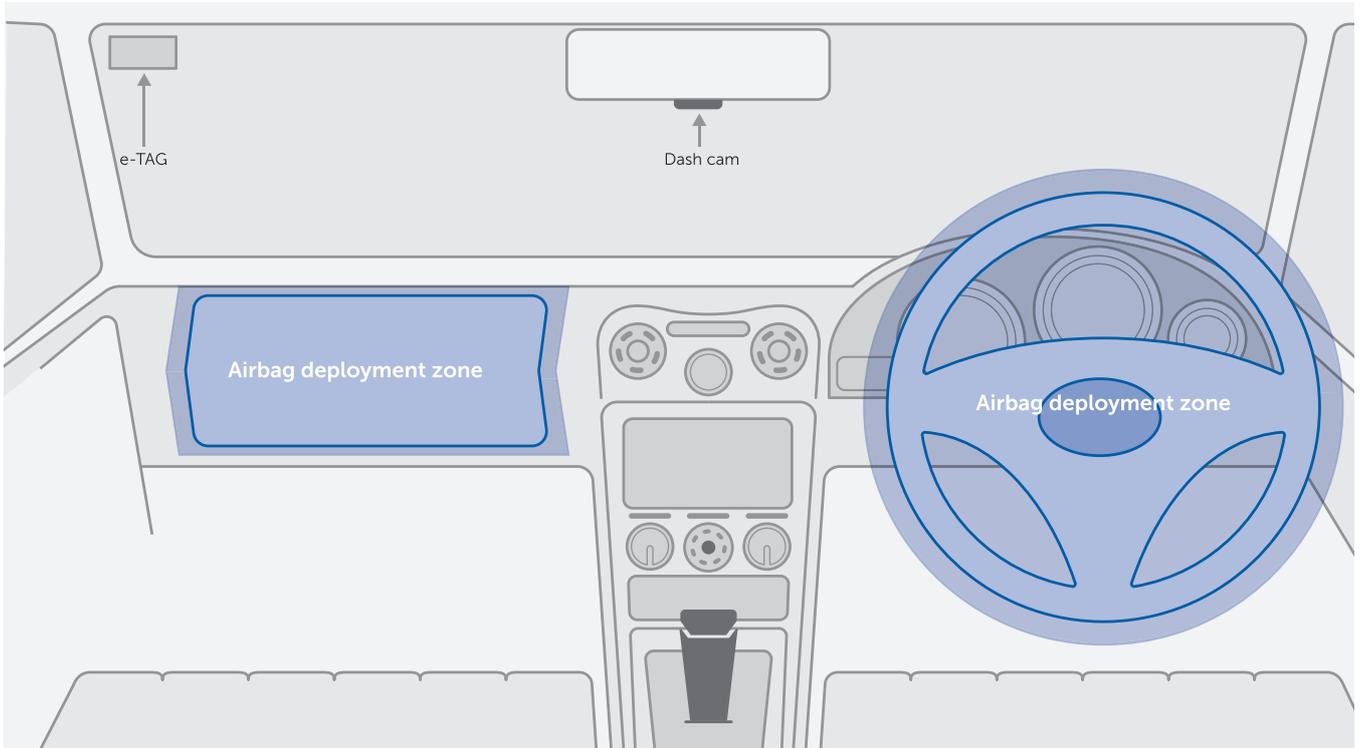
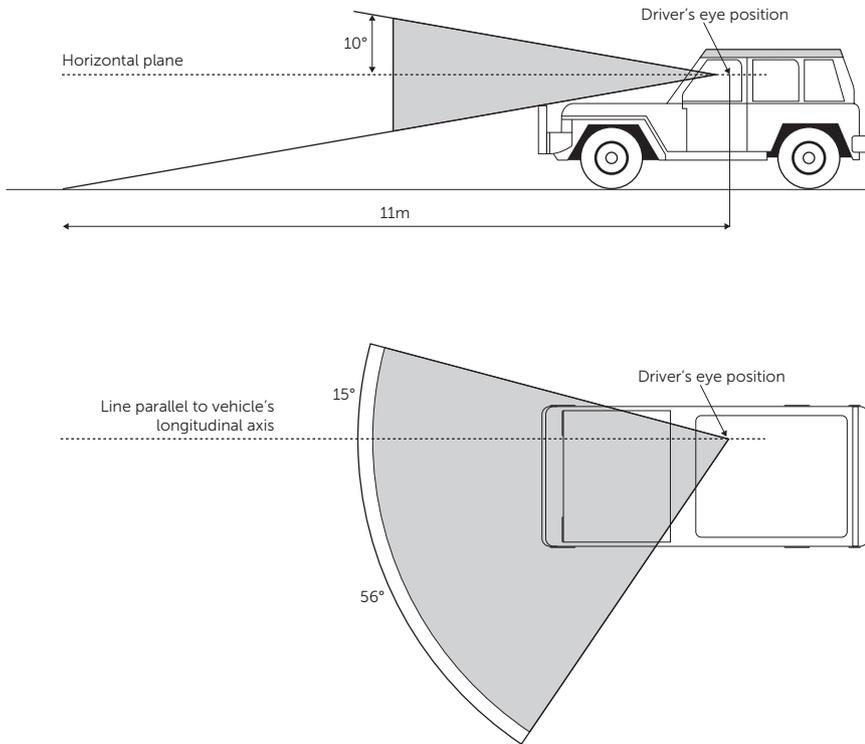


Figure 2. Driver's field of view



As a guide, the driver's field of view, shown as the shaded area in Figure 2, is measured from the driver's eye position or a point 760 mm above the driver's seating position measured vertically from the centre of the rearmost point of the seat cushion with the seat located in the centre of its travel.