Is your large passenger service vehicle compliant?

Large passenger service vehicle requirements







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Disclaimer

This booklet is intended for use by Large Passenger Service Vehicle (LPSV) operators to assist in maintaining the vehicles to a compliant standard whilst the vehicles are in service. Waka Kotahi has endeavoured to ensure material in this document is technically accurate and reflects legal requirements.

However, this document does not override governing legislation. Waka Kotahi does not accept liability for any consequences arising from the use of this document. The user of this document should confirm the material in this document is current by referencing the relevant legislation.

More Information

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Contents

- 5 Windscreen damage within the critical vision area (CVA)
- 6 Windscreen wire mesh stoneguards
- 6 Certificate of loading (CoL)
- 7 Engine compartment
- 8 Emergency exits signage
- 9 Dedicated emergency exits
- 10 Glass-breaking devices and associated alarms
- 11 Dedicated emergency exit operation and alarm testing
- 11 Advertising and anti-graffiti overlays on dedicated emergency glazing
- 12 Power-operated doors
- 12 Power-operated door operating force
- 13 School bus signage
- 14 Dimensions of vehicle mounted school signs
- 14 Large passenger service vehicle tow bar
- 15 Interior lighting
- 15 Fire extinguishers
- 16 Stairwell panel
- 17 Stairwell guardrail or equivalent
- 17 Handrails, handholds and handgrips
- 17 Windscreen equipment demisters and sunvisors
- 18 Reversing warning
- 18 Seats and seat anchorages
- 19 Common interior faults

Introduction

The aim of this guide is to help owners and operators of large passenger service vehicles (LPSVs) make sure their vehicles meet legislative requirements. However, this is only a guide and not an exhaustive list. It shouldn't be used for the design of large passenger service vehicles. These are detailed in the relevant legislation. Anyone applying the guidance in this booklet must also make sure they meet the requirements of all relevant legislation and regulations.

What does the Land Transport Act say?

Section 30A(1)(a) of the Land Transport Act 1998 says, "the holder of a Transport Services License must ensure that every vehicle to be used in the service (operated under the TSL) is maintained in a fit and proper condition and that the requirements of any (relevant) legislation made for this purpose are met."

The requirements must be complied with whenever the vehicles are being operated on public roads. Operators have a legal obligation to maintain their LPSVs to roadworthy, compliant, and fit an proper conditions at all times when in service.

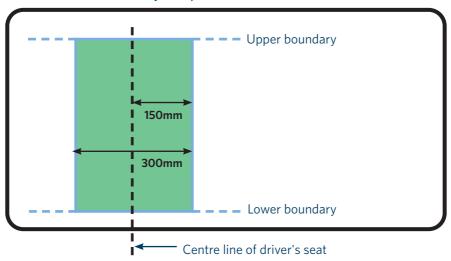
Land Transport Rule: Passenger Service Vehicles 1999 also applies to the compliance of individual components.

Windscreen - damage within the critical vision area (CVA)

Land Transport Rule: Glazing, Windscreen Wipe and Wash, and Mirrors 1999, 2.2(1)(d)

A windscreen must not have scratches or other defects that unreasonably impair the driver's vision through the glazing or compromise the strength of the glazing.

Critical vision area (CVA)



The upper boundaries of the CVA of an LPSV are the lower of:

- 100mm from the highest edge of the windscreen's transparent area, or
- 900mm from the top of the uncompressed seat base cushion of the driver's seat.

The lower boundaries of the CVA of an LSPV are the higher of:

- the top of the uncompressed seat cushion, or
- 100mm above the lowest edge of the transparent area of the windscreen

Windscreen - wire mesh stoneguards

If a stoneguard is fitted:

- the top edge must not be
 - above the top of the steering wheel at its highest adjusted position, and
 - more than 225mm above the lowest edge of the transparent area of the windscreen
- it must have a minimum mesh size of 12mm.
- it must not hinder access to the windscreen for cleaning.

Note – no object, whether functional or otherwise (such as signs or badges) may be attached to a wire mesh windscreen stoneguard.

Certificate of loading (CoL)

The certificate of loading for an LPSV has two pages. The vehicle details on the first page must match the vehicle. The second page shows the maximum number of passengers the vehicle is allowed to carry. This includes how many standing passengers – if allowed.



Note – any difference in numbers between adult/secondary and intermediate/primary indicates seatbelts are not fitted. If the quantities of all seated locations are the same, seatbelts must be fitted.

Engine compartment

Land Transport Rule: Passenger Service Vehicles 1999, 6.2(5A)

The engine compartment of a large passenger service vehicle with the engine positioned rearward of the front axle set must be maintained free of any build-up of residual fuel, oil, or other combustible material.

Bus fires can be caused by:

- dirty and oily engine compartments
- lack of air ventilation to the engine compartment because of clogged vent holes
- untidy electrical wiring harnesses short circuiting
- unprotected battery terminals.

Regular steam-cleaning is good practice for engine compartments.

Land Transport Rule: Vehicle Equipment 2004, 2.6(1)(d)

Fuel tanks, fuel lines, and associated components must be:

- securely mounted
- made of suitable materials
- in good condition
- free from serious leaks
- placed to minimise the risk of mechanical damage or heat gain.

Waka Kotahi and the New Zealand Bus and Coach Association have produced two brochures to assist bus or coach drivers and operators keep themselves and their passengers safe: Coach safety on the Milford Road and Preventing bus and coach fires.

You can download these at nzta.govt.nz/bus-coach-safety



Emergency exits - signage

Land Transport Rule: Passenger Service Vehicles 1999, 5.3

Clear instruction signs for operating every means of exit must be displayed inside and outside the vehicle, on or next to every:

- (a) power-operated passenger entry/exit door, and
- (b) dedicated emergency exits.

NOTE

The emergency exit signage for power-operated passenger entry/exit doors and Dedicated Emergency Exits are different

The words on the instruction sign must be at least 10mm high and include the words:

- (a) 'Emergency Door Control' for power-operated passenger entry/exit doors, or
- (b) 'Emergency Exit' for dedicated emergency exits.





Quantity of emergency exits

- A minimum of two emergency exits for 26 or fewer people, including the driver.
- At least three emergency exits for more than 26 people including the driver.
- At least four emergency exits if the vehicle entered service in New Zealand on or after 1 September 1999 and carries more than 35 people including the driver.

Dedicated emergency exits

Land Transport Rule: Passenger Service Vehicles 1999, Section 5

A dedicated emergency exit is a door, window, hatch, or other opening that is designed and constructed solely to provide an exit in case of an emergency. A dedicated emergency exit is not used under normal operating conditions.

A dedicated emergency exit must have:

- (a) a coloured band on the inside frame at least 20mm wide that contrasts with the surrounding area, or
- (b) both signs on the exit (inside and outside) with the words 'Emergency Exit' in letters which are at least 75mm high



Internal sign and instructions with operating device (hammer). Note no coloured band required due to size of lettering.



Internal signs and instructions



Internal emergency exit sign with a 20 mm wide contrasting band – lettering less than 75 mm high.



Dedicated emergency exits must:

- be provided for on as many different upper surfaces of the vehicle as is practicable, and
- not be on the left-hand side of the vehicle if the vehicle has less than three dedicated emergency exits.

Dimensions of dedicated emergency exits

- A dedicated emergency exit that's a doorway must be at least 1200mm high (unless the vehicle is a stretch limousine), and 500mm wide.
- A dedicated emergency exit that's a window or hatch must have no dimension less than 500mm, and the free area of the opening must be at least 0.35 m².

Glass-breaking devices and associated alarms

Land Transport Rule: Passenger Service Vehicles 1999, 5.4(2) (c) & (d)

A breakable glass dedicated emergency exit must have a glass breaking device for breaking the glass which must be:

- on or next to the glass on the inside of the vehicle, and
- if the device is readily removable, there must be an audible or visual alarm system that alerts the driver if the device is removed or tampered with.

Note – it's acceptable to have a tether attached to the hammer and the body, if there's enough length for the hammer to be used for its intended purpose.





Glass breaking device - hammer - securely fitted next to the dedicated emergency exit.

Dedicated emergency exit operation and alarm testing

Note – only check the operation of an emergency exit if it can be done without causing damage.



1. Check seats tilt easily to improve exit.



Remove cover to access switch - alarm must sound. Push and hold the switch to test alarm turns off.



3. Operate lever and open door while pushing cover switch.



4. Push contact switch to confirm alarm turns off.

Note - the alarm must sound when either or both switches are released

Advertising and anti-graffiti overlays on dedicated emergency glazing – PSV rule 5.4(2)(b)

The legal requirements on overlays applied to dedicated emergency exit glazing are:

'The glass must not be modified, covered, or treated in a way which might adversely affect the breakability or the removal of the glass.'

Note - the operator may need to prove that any overlays applied to dedicated emergency exit glazing complies with requirements.

Power-operated doors

Land Transport Rule: Passenger Service Vehicles 1999, 2.2(6) & (7)

A large passenger service vehicle that entered service on or after 1 July 2000 and that has a door which is controlled from the driver's seat must have emergency controls that can be operated in an emergency when the vehicle is stationary. These controls must be fitted on or next to the door both inside and outside the vehicle.

The operating instructions must be clear and concise.





An emergency exit can be:

- a door used for normal exit and entry
- the access between the front and rear sections of an articulated bus
- the stairway from the upper deck to the lower deck
- a dedicated emergency exit.

Note – a double door in considered a single emergency exit.

Power-operated door operating force

Land Transport Rule: Passenger Service Vehicles 1999, 2.2(2)

A power-operated door, its control mechanisms and associated equipment must be designed, constructed and maintained so that the operating force of the door or its method of operation is unlikely to injure or trap any person.

A power-operated door is considered acceptable if it automatically opens when it meets an obstruction and remains open until closed by the driver operated control. Also if the door closes on part of a person, that person can easily remove the trapped part of their body.

School bus signage

Land Transport Rule: Traffic Control Devices 2004, 4.4(15) & (21)

A motor vehicle that is being used as a school bus must display on the outside of the vehicle a 'SCHOOL BUS', 'SCHOOL' or a pictorial 'CHILDREN SIGN' with or without flashing lights, at both the front and the rear.

Schools may display a 'KURA' (Māori for school) sign on a school bus, but they must also display an approved internationally recognised pictorial school sign which clearly identifies the vehicle as a school bus to all road users. Legislation currently allows for the use of such pictorial signs.

A sign must be mounted:

- at the rear, with its lower edge not less than 1.5m from the ground in the centreline, or to the right of the centreline, of the school bus when it is facing forward (applicable to 'SCHOOL' and 'SCHOOL BUS' signs)
- at the front, so as to be visible to road users approaching the vehicle from the front and on the opposite side of the roadway.



The front sign is clearly visible to all approaching vehicles. The rear school sign is 1.5m above the ground.

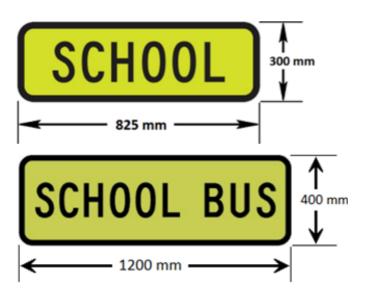
The picture signs have flashing lights and are displayed at the front and the rear of the vehicle.

Note – vehicle mounted school signs must be concealed when **not** operating as a school bus. This when they aren't waiting to pick up children or transporting them.

Dimensions of vehicle mounted school signs

The rules on vehicle mounted school signs can be found on our website – W17-1.1 and 1.2.

nzta.govt.nz/resources/rules/traffic-control-devices-schedules#schedule1



Large passenger service vehicle tow bar

Heavy Vehicle Rule 4.4 and PSV Rule 6.13

A passenger service vehicle must not tow heavy trailers with a GVM exceeding 3,500kg. A towbar fitted to a large PSV on or after 1 April 2006 must comply with NZ standard 5467:1993 Code of Practice for Light Trailers. The towbar must also have a certification plate or label attached to it permanently.

The details on the certificate plate must be readable.

Interior lighting

Land Transport Rule: Passenger Service Vehicles 1999, 6.15(3)

Interior lights must be positioned so that they adequately illuminate doorways, aisles and steps without interfering with the driver's vision when the doors are closed.

All interior (and exterior) lighting must be serviceable and effective.

Fire extinguishers

Land Transport Rule: Passenger Service Vehicles 1999, 6.2(12-16)

A PSV that has more than 12 seating positions must be equipped with fire extinguishers appropriate to the:

- · size of the vehicle
- · materials used in the construction of the vehicle, and
- type of fuel used.

Every (separate) passenger compartment that has more than 12 seating positions must have at least one fire extinguisher.

A fire extinguisher must be:

- inspected regularly as is appropriate for the particular make and model of fire extinguisher and the date of the inspection must be recorded on or near the fire extinguisher, and
- sealed so it is clearly apparent if it has been discharged and needs recharging or replacement.

One of the fire extinguishers must be located near the driver and must:

- be clearly visible to passengers, or
- have clearly visible signage that indicates its location to passengers.

If a fire extinguisher is in a closed container, the container must:

- have a cover that's easily removable or breakable by a passenger
- clearly display instructions that explain how to access the fire extinguisher in an emergency
- allow the driver to confirm the fire extinguisher is there by:
 - being transparent enough for a clear view of the fire extinguisher, or
 - being equipped with an audible or visual alarm system that alerts the driver if the extinguisher is missing when the engine is running.

Clear and simple operating instructions, in English or with pictorial symbols, must be attached to each fire extinguisher.





Fire extinguisher located near the front door and driver's seat, and clearly visible to passengers.

Stairwell - panel PSV Rule 2.4(5)(b)

A large PSV must be fitted with a panel to prevent the feet of seated passengers from protruding into any nearby stairwell or ramp. This panel must be properly secured and in good condition.



Stairwell - guardrail or equivalent

PSV Rule 2.4(5)(c)

A guardrail or equivalent must be fitted to the:

- rearward side of any stairwell or ramp, if passengers can stand or sit behind the stairwell or ramp
- forward side of the stairwell or ramp if there is a rearward- or sidewaysfacing seat in front of it, or if passengers can stand in front of it.

The guardrail must be properly secured.



Handrails, handholds and handgrips

Land Transport Rule: Passenger Service Vehicles 1999, 6.9

Handrails, handholds, and handgrips required by the PSV rule must be of adequate strength for their foreseeable use and be securely attached.

In a motor vehicle that entered service as a passenger service vehicle in New Zealand on or after 1 July 2000, the cross section of:

- the handholds on doors and seats may have a minimum dimension of 15mm if one other dimension is at least 25mm, and
- all other handholds must have no dimension smaller than 20mm or greater than 45mm.

Windscreen equipment - demisters and sunvisors

Land Transport Rule: Passenger Service Vehicles 1999, 6.10

The front windscreen and side windows used by the driver must be equipped with effective demisting equipment, adjustable from the driver's seat.

The windscreen must be fitted with a sunvisor or sunvisors adjustable from the driver's seat.

Reversing warning

Land Transport Rule: Passenger Service Vehicles 1999, 6.15(4)

A large PSV that can carry more than 12 persons and entered service on or after 1 July 2000 must be fitted with a device that operates when reverse gear is engaged, the engine is running, and gives audible and visible external warnings.

Seats and seat anchorages

Land Transport Rule: Seats and Seat Anchorages 2002, 2.2

- Seats and seat anchorages must be securely attached to the motor vehicle's structure.
- The driver's seat and its anchorages must be designed, constructed and maintained to enable the driver to have proper control of the motor vehicle.
- The driver's seat must be adjustable to ensure the driver has access to the driving controls. (Refer to PSV Rule 4.3(3))



Driver's seat must be adjustable



Passenger seats must be in good condition and properly secured.

Common interior faults

The most common interior faults found during CoF inspections:

- Brake controls.
- Emergency exits.
- Fire extinguishers.
- Interior lamps.
- Seats and seat anchorages.
- Seatbelts.
- Warning devices.
- Windscreen.
- Wipers and washers

You can find more detailed information in the *Vehicle inspections* requirements manual (VIRM): In-service certification.

vehicleinspection.nzta.govt.nz/virms/in-service-wof-and-cof