

## LVV Certification Threshold Schedule

### Modifications that do not require LVV certification

#### Introduction

All modifications to light vehicles must meet warrant of fitness or certificate of fitness requirements, however not every modification requires low volume vehicle (LVV) certification.

If a vehicle is modified, it may or may not be required to undergo LVV certification, depending on the level of modification. There are three groups of modifications:

- those higher-level modifications that will always require LVV certification; and
- those that require LVV certification if they exceed a certain level; and
- those lower levels of modification that are never required to be LVV certified.

The tables on the following pages list modifications that are commonly made to vehicle components and systems and confirm whether LVV certification is required.

**Note** that there are some differences between Entry and In-service thresholds, see Note 4 below.

Any modification to a law enforcement or emergency service vehicle that relates to the specialised law enforcement or emergency service functions of the vehicle, does not require LVV certification.

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## Notes

The document refers in several places to notes. These notes are detailed below.

### Note 1 - Weakening the vehicle structure:

Heating, drilling, welding or cutting the vehicle structure, modifying a roof bow, or modifying any part of the structure would be considered to weaken it. Cutting a single layer of unstressed panel steel (i.e. roof) is not considered to weaken the vehicle structure. Drilling a hole suitable for a child restraint top tether does not require LVV certification.

### Note 2 - Forward-facing pedestrian traps:

A pedestrian trap is any part of a vehicle that may hook, catch or pull/push a pedestrian into or under a vehicle. Vehicle components should be shaped to reduce injury to a pedestrian and to move the pedestrian away from the vehicle in the event of an incident.

### Note 3 - Frontal impact occupant protection standard:

The following vehicles with a GVM of 2500kg or less must comply with a frontal impact occupant protection standard:

- Class MA motor vehicles manufactured on or after 1 March 1999; and
- Class MA motor vehicles that were less than 20 years old when they were first registered in New Zealand on or after 1 April 2002; and
- Class MB and MC motor vehicles manufactured on or after 1 October 2003.

### Note 4 – Grandfather clause:

Where the in-service modification threshold includes a grandfather clause (such as ‘The modification was carried out before 1/3/1999’), that exclusion from LVV certification only applies to vehicles continuously registered in New Zealand from before that date. A grandfather clause is not a valid exclusion from LVV certification for the purposes of entry or re-entry.

The heading and numbering system contained within the threshold tables correlates directly to the official NZTA WoF and CoF Vehicle Inspection Requirements Manual (VIRM). The same threshold requirements are listed in the ‘Tables and Images’ tab, found at: <https://vehicleinspection.nzta.govt.nz/virms>

## Vehicle Exterior

### (2-1 External Projections)

**LVV Certification is always required for any external projection-related modifications unless specified below:** (if modification does not appear below, always refer to LVV Certifier)

#### Fitting of or modification to:

**LVV Certification is not required provided that:** (refer to LVV Certifier if beyond threshold below)

Body kits and components (including utility canopies, plastic bumper skins and bonnet projections)

- the fitting system does not weaken the vehicle structure (Note 1); and
- no frontal impact components have been removed where the vehicle is required to comply with a frontal impact occupant protection standard (Note 3); and
- the kit or components do not present any forward-facing external projections that could cause injury, to the occupants or pedestrians, or present a snagging/hooks risk to a vehicle or person; and
- the driver’s vision has not been affected; and
- the performance of any lamp is not affected as a result of the kit or components.

Side racks (for glass or other sheet materials)	<ul style="list-style-type: none"> <li>▪ there is no doubt as to the rack’s load carrying capacity; and</li> <li>▪ the rack is secured without weakening the vehicle structure (Note 1); and</li> <li>▪ no forward-facing pedestrian traps exist (Note 2); and</li> <li>▪ the rack is designed and protected so that sharp or dangerous cargo cannot face directly forward projecting beyond the outside of the body.</li> </ul>
Bonnet emblems or badges	<ul style="list-style-type: none"> <li>▪ the emblem or badge either: <ul style="list-style-type: none"> <li>▫ is designed and attached in such a way that it will fold back or break off in the event of contact, without leaving any sharp edges; or</li> <li>▫ has no sharp edges, and is fitted flat against the bonnet with a thickness of no more than 10 mm.</li> </ul> </li> </ul>
Bonnet pins	<ul style="list-style-type: none"> <li>▪ the vehicle is not required to comply with a frontal impact occupant protection standard (Note 3); and</li> <li>▪ the bonnet pins: <ul style="list-style-type: none"> <li>▫ have no sharp protrusions (edges have a radius of at least 3 mm); and</li> <li>▫ do not present any external projections that could cause injury to the occupants or pedestrians; and</li> <li>▫ do not present a snagging risk.</li> </ul> </li> </ul>
Ute trays or decks	<ul style="list-style-type: none"> <li>▪ for vehicles first registered in New Zealand before 1 January 2021 (Note 4): <ul style="list-style-type: none"> <li>▫ In-service requirements for condition and performance must be met.</li> </ul> </li> <li>▪ for vehicles first registered in New Zealand on or after 1 January 2021: <ul style="list-style-type: none"> <li>▫ the tray or deck has no sharp protrusions (edges have a radius of at least 3 mm); and</li> <li>▫ no forward-facing pedestrian traps exist (Note 2); and</li> <li>▫ the tray or deck either: <ul style="list-style-type: none"> <li>- protrudes no more than 100 mm from the widest part of the vehicle cab/body structure (excluding mirrors); or</li> <li>- has forward edges that are tapered rearwards at an angle of not less than 30 degrees from the tray or deck’s front edge, or have an equivalent, or better, form of pedestrian protection.</li> </ul> </li> </ul> </li> </ul>

<p>Auxiliary bars (including bull bars, nudge bars, external roll cages and winches)</p>	<ul style="list-style-type: none"> <li>▪ the vehicle is not required to comply with a frontal impact occupant protection standard (Note 2) and: <ul style="list-style-type: none"> <li>▫ the auxiliary bar: <ul style="list-style-type: none"> <li>- presents no pedestrian traps (Note 2); and</li> <li>- is not angled forward except where necessary to clear the contours of the vehicle; and</li> <li>- has no sharp protrusions (edges have a radius of at least 3 mm); and</li> </ul> </li> <li>▫ the winch either: <ul style="list-style-type: none"> <li>- does not protrude forward of the front face of the bumper; or</li> <li>- does protrude forward of the bumper line but is fitted with 'pedestrian-friendly' shrouds to reduce trapping risk and to present a larger forward-facing surface area.</li> </ul> </li> </ul> </li> <li>▪ the vehicle is required to comply with a frontal impact occupant protection standard (Note 3) and: <ul style="list-style-type: none"> <li>▫ the auxiliary bar either: <ul style="list-style-type: none"> <li>- is a vehicle manufacturer-supplied component for that vehicle; or</li> <li>- has been certified by the auxiliary bar manufacturer as frontal impact-compliant (as may be indicated by a label).</li> </ul> </li> </ul> </li> </ul> <p><i>Note: An auxiliary bar that does not meet the requirements above is unlikely to meet LVV requirements and so cannot be certified.</i></p>
<p>Side steps</p>	<ul style="list-style-type: none"> <li>▪ the vehicle is not a Passenger Service Vehicle.</li> </ul>
<p>Bumper bar (removal and change)</p>	<ul style="list-style-type: none"> <li>▪ the vehicle is not required to comply with a frontal impact occupant protection standard (Note 3).</li> </ul> <p><i>Note: Bumper bar means either the structural part inside a plastic bumper or a complete metal bumper as used on older vehicles.</i></p>
<p>A-frames</p>	<ul style="list-style-type: none"> <li>▪ the A-frame meets all of the following requirements: <ul style="list-style-type: none"> <li>▫ is attached to the chassis by means other than welding; and</li> <li>▫ the components are fit for purpose; and</li> <li>▫ the brackets remaining on the vehicle when the A-frame is removed are recessed behind the forward surface of the bumper by no less than 20 mm; and</li> <li>▫ the brackets are fitted so that they do not bridge the vehicle's crumple zones; and</li> <li>▫ the brackets are fitted so that they do not significantly stiffen the front of the vehicle.</li> </ul> </li> </ul>

<p><b>Fitting of or modification to:</b></p>	<p><b>LVV Certification is <u>never required</u>:</b> (never refer to LVV Certifier)</p>
<p>Towbars</p>	<p>In-service requirements for condition and performance must be met.</p>
<p>Trunk racks</p>	
<p>Roof-racks</p>	
<p>Additional or substituted rear-view mirrors</p>	
<p>Aerials</p>	
<p>Roof-mounted solar panels</p>	

# Vehicle Structure

## (3-1 Structure)

**LVV Certification is always required for any structure-related modifications unless specified below:** (if modification does not appear below, always refer to LVV Certifier)

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>not required provided that</u>:</b> (refer to LVV Certifier if beyond threshold below)
Addition of side windows into a panel van or goods van	<ul style="list-style-type: none"> <li>▪ the modification was carried out before 1/3/1999 (Note 4); or</li> <li>▪ the modification was carried out on or after 1/3/1999, and the modification has not weakened the vehicle structure (Note 1).</li> </ul>
Body kits and components (including utility canopies, plastic bumper skins, and bonnet projections)	<ul style="list-style-type: none"> <li>▪ fitting, removal, or modification does not weaken the vehicle structure (Note 1).</li> </ul> <p>See section 2-1 for additional details.</p>
Fibreglass replacement panels (that are substituted for OE panels)	<ul style="list-style-type: none"> <li>▪ no frontal impact components have been removed from a vehicle which is required to comply with a frontal impact occupant protection standard (Note 3); and</li> <li>▪ the OE panels being replaced do not contribute to the strength of the vehicle structures, including side impact resistance; and</li> <li>▪ the replacement panels use OE attachment points (bonnet hinges and latches must be OE or direct replacements).</li> </ul>
Bumper bar (removal and change)	<ul style="list-style-type: none"> <li>▪ the vehicle is not required to comply with a frontal impact occupant protection standard (Note 3); and</li> <li>▪ the removal/change does not weaken the vehicle structure (Note 1); and</li> <li>▪ any changes to the bumper do not affect the performance of mudguards; and</li> <li>▪ a rear bumper bar has been replaced by a towbar crossmember.</li> </ul> <p>See section 2-1 for additional details.</p>
Front-mounted intercooler	<ul style="list-style-type: none"> <li>▪ the front structure of the vehicle has not been modified; and</li> <li>▪ the front bumper structure is unaltered (cosmetic changes are permitted); and</li> <li>▪ the components do not present any forward-facing external projections; and</li> <li>▪ none of the frontal impact components have been removed where the vehicle is required to comply with a frontal impact occupant protection standard (Note 3).</li> </ul>
Campervan conversions	<ul style="list-style-type: none"> <li>▪ the conversion was completed before 1/3/1999 (Note 4); or</li> <li>▪ there is evidence of certification of the modification from the company that carried out the modification, such as a secondary certification plate or label in the case of a motorhome conversion (see NZTA Technical Bulletin 13); or</li> <li>▪ the conversion was completed on or after 1/3/1999, and:               <ul style="list-style-type: none"> <li>▫ no modifications were carried out to the cab rear wall; and</li> <li>▫ no seats or seatbelt anchorages were retrofitted; and</li> <li>▫ modifications to the roof meet the following requirements:                   <ul style="list-style-type: none"> <li>- only a single layer of sheet metal may be cut per roof opening; and</li> <li>- any bracing or structural elements have not been modified; and</li> <li>- no modifications are within 150 mm of a seatbelt anchorage.</li> </ul> </li> </ul> </li> </ul> <p>Note: This means that a campervan conversion completed on or after 1/3/1999, other than a camper box fitted to an unmodified cab and chassis, always requires LVV certification.</p>

Seatbelt anchorages retrofitted	<i>See section 7-5 for details.</i>
Suspension braces (strut braces) and underfloor/body braces	<ul style="list-style-type: none"> <li>▪ there are no structural changes to the body or suspension mounting points; and</li> <li>▪ no cutting, heating, or welding to the vehicle structure or suspension components is involved in the attachment of the brace; and</li> <li>▪ the brace is attached to existing chassis/suspension points with the correct grade bolts and exposed thread is showing through the nut/fastener.</li> </ul>
Aftermarket sunroof or roof vent/hatch	<ul style="list-style-type: none"> <li>▪ the fitting has not weakened the vehicle structure (Note 1).</li> </ul>
Cargo hoist/cargo lift platform (fitted inside the vehicle)	<ul style="list-style-type: none"> <li>▪ the vehicle is not adapted for the transportation of a person in a wheelchair; and</li> <li>▪ the hoist or tail-lift is positioned to the rear of any vehicle occupants; and</li> <li>▪ the hoist or tail-lift is adequately mounted; and</li> <li>▪ the vehicle structure has not been weakened (Note 1).</li> </ul>
Gear shift lever relocation	<ul style="list-style-type: none"> <li>▪ no substantial modifications have occurred to the floor or gearbox tunnel area, other than provision for the gear-shift mechanism; and</li> <li>▪ the relocation presents no additional risk of injury than OE specification.</li> </ul>
Wheelchair stowing device	<ul style="list-style-type: none"> <li>▪ the device is for stowing and/or deploying an unoccupied non-powered wheelchair, and the device: <ul style="list-style-type: none"> <li>▫ is securely attached to the vehicle structure; and</li> <li>▫ folds and locks in a position outside of the vehicle's passenger compartments; and</li> <li>▫ has no sharp protrusions (edges have a radius of at least 3 mm); and</li> <li>▫ does not compromise the safe performance of the vehicle.</li> </ul> </li> </ul>
Auxiliary bars (including bull bars, nudge bars, external roll cages and winches)	<i>See section 2-1 for details.</i>
A-Frames	<i>See section 2-1 for details.</i>
Side racks (for glass or other sheet materials)	<ul style="list-style-type: none"> <li>▪ fitting, removal, or modification does not weaken the vehicle structure (Note 1).</li> </ul>
Ute trays and decks	<ul style="list-style-type: none"> <li>▪ for vehicles first registered in New Zealand before 1 January 2021 (Note 4): <ul style="list-style-type: none"> <li>▫ In-service requirements for condition and performance must be met.</li> </ul> </li> <li>▪ for vehicles registered in New Zealand on or after 1 January 2021: <ul style="list-style-type: none"> <li>▫ the fitting has not weakened the vehicle structure (Note 1); and</li> <li>▫ the tray or deck has no sharp protrusions (edges have a radius of at least 3 mm).</li> </ul> </li> </ul> <p><i>See section 2-1 for additional details.</i></p>

Stereo equipment and speakers	<ul style="list-style-type: none"> <li>▪ the modification or fitting was carried out before 1/1/1992 (Note 4); or</li> <li>▪ if fitted to the rear shelf: <ul style="list-style-type: none"> <li>▫ no upper seatbelt anchorage is attached to the shelf or any shelf support bracket; and</li> <li>▫ the removal of any material from the rear shelf is minimal and is unlikely to have weakened the vehicle structure to which a seatbelt anchorage is attached; and</li> <li>▫ in the case of a top tether point for a child seat attached to the rear shelf, the top tether point is not located within 150 mm of a modification to a rear shelf;</li> </ul> </li> <li>or</li> <li>▪ if fitted to a part of the vehicle other than the rear shelf: <ul style="list-style-type: none"> <li>▫ no structural material has been removed from within 300 mm of a seatbelt anchorage; and</li> <li>▫ any material removed is minimal and is unlikely to have weakened the vehicle structure (including a seatbelt anchorage structure).</li> </ul> </li> </ul>
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<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u></b> (never refer to LVV Certifier)
Towbars	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul>
Roof-racks	
Roof mounted solar panels	

## Lighting

**(Applies to 4-1 to 4-14 Inclusive)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u></b> (never refer to LVV Certifier)
Lamps (that are substituted for OE or additional)	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul>
Lamp protectors (both clip-on and adhesive-fixed)	<p><i>Note: Although 4.1 to 4.14 of the NZTA VIRM does not include any reference to modifications relating to lighting, the fitting of or modification to any lamps does not require LVV Certification.</i></p>

## Vision

**(5-1 Glazing, 5-3 Windscreen Wipe and Wash, 5-4 Rear View Mirrors)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u></b> (never refer to LVV Certifier)
Overlays on glazing (including antiglare band, clear or transparent stone-guard)	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul> <p><i>Note: A change of glazing type, such as replacement of glass with plastic, requires certification and the plastic glazing must meet an approved standard for abrasion resistance.</i></p>
Stickers on glazing	
Radio antennae on glazing	
Monsoon shields over glazing	
Electric demisters on glazing	
Aftermarket sunroof or roof vent/hatch	
Removal of a windscreen wash system from a vehicle	



manufactured before 1/1/1992	
Additional or substituted rear-view mirrors, or removal of a non-mandatory mirror	
Isolation shields (to separate vehicle occupants for the purpose of medical isolation)	See section 7-7 for details.

## Entrance and Exit

### (6-1 Door and Hinged Panel Retention Systems)

**LVV Certification is always required for any occupant door retention system modifications unless specified below: (if modification does not appear below, always refer to LVV Certifier)**

<b>Fitting of or modification to:</b>	<b>LVV certification is not required provided that:</b> (refer to LVV Certifier if beyond threshold below)
Exterior door handles (on doors normally used for entry and exit of occupants)	<ul style="list-style-type: none"> <li>▪ the modification is minor (e.g. removal of door locks); and</li> <li>▪ door handles remain fitted and in serviceable condition.</li> </ul> <p><i>Note: The fitting of a door opening/closing mechanism (which may include the removal of exterior door handles) that differs from original must be LVV certified.</i></p>

## Vehicle Interior

### (7-1 Seats and Seat Anchorages)

**LVV Certification is always required for any seat & seat anchorage-related modifications unless specified below: (if modification does not appear below, always refer to LVV Certifier)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is not required provided that:</b> (refer to LVV Certifier if beyond threshold below)
Seats of an unstressed type – modification or replacement, or installation of a seat anchorage after 1 March 1999 (Note 4)	<ul style="list-style-type: none"> <li>▪ the seat is of an unstressed type and is either an unmodified OE seat from another vehicle, or of a known and reputable aftermarket brand, and: <ul style="list-style-type: none"> <li>▫ the seat is unmodified, and fitted to unmodified OE seat anchorages; and</li> <li>▫ the seatbelt anchorage or operation is not affected or moved; and</li> <li>▫ the seat components (including brackets, runners, and rails) are compatible with each other (i.e. they are either OE components from a production vehicle or of a known and reputable aftermarket brand), and are not fitted together by welding; and</li> <li>▫ the relationship between the seat, seat occupant, front airbag, and location of the seatbelt anchorages is not affected; and</li> <li>▫ no airbag has been removed or disabled (see LVVTA Information Sheet 07-2009).</li> </ul> </li> </ul> <p><i>Note: LVV certification is not required where the only modification is the removal of seats and/or seatbelts; however, a class change and new load rating may be required in some cases.</i></p>



Seats of a stressed type – modification or replacement, or installation of a seat anchorage after 1 March 1999 (Note 4)	<ul style="list-style-type: none"> <li>▪ the seat is of a stressed type and is an unmodified OE seat sourced from the same make and model vehicle; and <ul style="list-style-type: none"> <li>▫ the seat is directly bolted to the original OE seat mount; and</li> <li>▫ no additional components or modifications are required for the fitting of the seat; and</li> <li>▫ no airbag has been removed or disabled (see LVVTA Information Sheet 07-2009).</li> </ul> </li> </ul> <p><i>Note: A stressed type seat is a seat to which a seatbelt is directly mounted to any of the components that make up the seat and seat frame. An unstressed seat has no seatbelt attachment point on either the seat or the seat frame (i.e. the seat belt is attached to a different part of the vehicle structure).</i></p> <p><i>Note: LVV certification is not required where the only modification is the removal of seats and/or seatbelts; however, a class change and new load rating may be required in some cases.</i></p>
Aftermarket 'Retro' brand child seats designed for children 5–12 years old (up to 38 kg)	<ul style="list-style-type: none"> <li>▪ the seat is identified as complying with the Australian Federal Code of Practice VSB-5A (category 2 and 3) and installed by Auckland Auto Trimmers or their agents before 1 June 2012 (Note 4).</li> </ul>
Campervan conversions	See section 3-1 for details.

<b>Fitting of or modification to:</b>	<b>LVV Certification is never required:</b> (never refer to LVV Certifier)
Seat pads or covers	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul> <p><i>Note: Where a seat with an integrated airbag is fitted with a seat cover that is not airbag compatible, the seat airbag may not work properly in a crash. Airbag compatible seat covers are readily available.</i></p>

## (7-3 Head Restraints)

**LVV Certification is always required for any head restraint-related modifications unless specified below:** (if modification does not appear below, always refer to LVV Certifier)

<b>Fitting of or modification to:</b>	<b>LVV certification is not required provided that:</b> (refer to LVV Certifier if beyond threshold below)
Head restraint removal	<ul style="list-style-type: none"> <li>▪ there is no solid structure within 300 mm behind the seat back; and</li> <li>▪ for front headrests, the vehicle is not required to comply with a frontal impact occupant protection standard (Note 3).</li> </ul> <p><i>Note: A vehicle that does not meet the requirements above is unlikely to meet LVV requirements and so cannot be certified.</i></p>
Fitting of aftermarket LCD screens to head restraints	<ul style="list-style-type: none"> <li>▪ the performance of the head restraint is not affected (e.g. the head restraint still provides sufficient padding for the seat occupant); and</li> <li>▪ the screen either: <ul style="list-style-type: none"> <li>▫ is fitted in a suitable manner (e.g. it appears similar to OE fitments in other vehicles); or</li> <li>▫ can be easily attached or removed.</li> </ul> </li> </ul>

## (7-5 Seatbelts and Seatbelt Anchorages)

**LVV Certification is always required for any seatbelt anchorage-related modifications unless specified below: (if modification does not appear below, always refer to LVV Certifier)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>not required provided that</u>:</b> (refer to LVV Certifier if beyond threshold below)
Seatbelts	<ul style="list-style-type: none"> <li>▪ the modification is approved by the seatbelt or vehicle manufacturer (note that such approval is unlikely, and the inspector must sight evidence of approval); and</li> <li>▪ the modification is temporary for the accommodation of a child restraint, and does not:               <ul style="list-style-type: none"> <li>▫ affect the performance of the child restraint; or</li> <li>▫ cause injury to a vehicle occupant; or</li> <li>▫ cause damage to the seatbelt.</li> </ul> </li> </ul>
Top tether anchorage for a child seat or child harness	<ul style="list-style-type: none"> <li>▪ the installation is carried out in accordance with the instructions of the seat or harness manufacturer.</li> </ul>
Stereo equipment, stereo speakers	<ul style="list-style-type: none"> <li>▪ if fitted in the passenger compartment, the equipment or speakers:               <ul style="list-style-type: none"> <li>▫ present no additional risk of injury, and</li> <li>▫ are securely fastened by a mechanical means.</li> </ul> </li> </ul> <p><i>See section 3-1 for additional details.</i></p>
Campervan conversions	<i>See section 3-1 for details.</i>

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u>:</b> (never refer to LVV Certifier)
Retrofitted type-tested rear seatbelt anchorages	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul>
Rear seatbelts fitted to class MD1, MD2 and NA vehicles before 1 March 1999 (Note 4)	
Removal of seatbelts (including full or partial removal) where the seating position has been removed	
Replacing a type R1 or R2 seatbelt with a web-clamp R1 or R2 seatbelt (eg where VIRM Technical bulletin 5 applies)	

## (7-6 Frontal Impact Airbags)

**LVV Certification is always required for any Frontal Impact Airbag **system** modifications**

- The only permissible modifications, which must be LVV certified, are:
  - fitting a switch to render an airbag temporarily inoperable; or
  - removal or permanent deactivation of an airbag in a vehicle that:
    - is at least 14 years old; or
    - has been adapted for a person with a disability; or
    - has been extensively modified for motorsport use:
- or
- removal of seat side airbags (see LVVTA Information Sheet 07-2009).

## (7-7 Interior Impact)

**LVV Certification is always required for any interior impact-related modifications unless specified below: (if modification does not appear below, always refer to LVV Certifier)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is not required provided that:</b> (refer to LVV Certifier if beyond threshold below)
Additional and substituted items such as instruments, switches, phone installations and navigation equipment or an OE item from another vehicle	<ul style="list-style-type: none"> <li>▪ the items are:               <ul style="list-style-type: none"> <li>▫ fitted forward of the steering wheel; or</li> <li>▫ between the steering wheel and the nearest inner pillar or sidewall area; or</li> <li>▫ fitted between and forward of the front seats (where no centre seat exists), and within 140 mm either side of the vehicle centreline.</li> </ul> </li> </ul> <p><i>Note: See section 4.3 of the LVV standard 155-40 (Interior Impact) for further clarification of these approved zones.</i></p>
Roll-bar or roll cage structures (roll protection or cosmetic)	<ul style="list-style-type: none"> <li>▪ each seating position is fitted with an effective head restraint; and</li> <li>▪ the bars are positioned:               <ul style="list-style-type: none"> <li>▫ behind, following a plane extending upward, parallel to the back of the backrest on the rear-most seat; and</li> <li>▫ in such a way that the head-restraint would provide protection from head contact with any bar section during a crash.</li> </ul> </li> </ul>
Cargo barrier	<ul style="list-style-type: none"> <li>▪ the cargo barrier is positioned behind the rear-most seat, following a plane extending upward, parallel to the back of the backrest; and</li> <li>▪ a head restraint is fitted:               <ul style="list-style-type: none"> <li>▫ to each seating position that is within 300 mm of the cargo barrier; and</li> <li>▫ in such a way to provide protection from head contact with any cargo barrier section during a crash.</li> </ul> </li> </ul>

Disability adaptive controls	<ul style="list-style-type: none"> <li>▪ for disability adaptive hand control systems: <ul style="list-style-type: none"> <li>▫ the hand control operates the accelerator system only; and</li> <li>▫ the presence of the hand control system does not significantly increase the risk of injury to occupants in the event of a crash.</li> </ul> </li> <li>▪ for an additional accelerator pedal fitted to the left of the brake pedal: <ul style="list-style-type: none"> <li>▫ the vehicle is equipped with automatic transmission; and</li> <li>▫ the additional accelerator pedal does not affect the operation of the brake pedal or any other part of the brake system; and</li> <li>▫ the vehicle retains the original equipment accelerator pedal to the right of the brake pedal; and</li> <li>▫ adequate clearance is maintained between all pedals; and</li> <li>▫ the additional pedal operates smoothly and safely, and cannot bind against, or have any effect on the safe operation of the original pedal, or any other part of the vehicle controls or structure; and</li> <li>▫ the accelerator system is protected from accidental application by a shield or cover over the right-side accelerator pedal, or both pedals are hinged so as to enable either pedal being folded out of reach when not in use; and</li> <li>▫ there is a warning notice easily visible to the driver warning that the foot controls are not as provided by the vehicle manufacturer.</li> </ul> </li> </ul>
Steering wheels	<ul style="list-style-type: none"> <li>▪ the vehicle does not have an airbag installed as OE; and</li> <li>▪ the vehicle is not required to comply with a frontal impact occupant protection standard (see Note 3); and</li> <li>▪ the steering wheel does not obscure visibility of the speedometer or mandatory warning lights; and</li> <li>▪ the steering wheel is: <ul style="list-style-type: none"> <li>▫ either a non-OE item of a reputable brand, or an OE item from another vehicle; and</li> <li>▫ a direct substitute that does not necessitate shaft modification; and</li> <li>▫ is mounted with a one-piece boss; and</li> <li>▫ has a diameter greater than 245 mm.</li> </ul> </li> </ul> <p><i>Note: A vehicle that cannot comply with this clause cannot be LVV certified unless it has been issued with an LVV authority card, or is at least 14 years old.</i></p> <p><i>Note: A vehicle fitted with a quick release steering wheel must always be referred for LVV certification, and is only permitted within strict criteria.</i></p>

Isolation shields (to separate vehicle occupants for the purpose of medical isolation)	<ul style="list-style-type: none"> <li>▪ the shield: <ul style="list-style-type: none"> <li>▫ is constructed from a transparent flexible thin film; and</li> <li>▫ does not interfere with the driver's vision (including through the front side windows, and rear-view mirrors); and</li> <li>▫ does not interfere with the operation of airbags; and</li> <li>▫ does not interfere with the driver's ability to reach vehicle controls (including lights, warning devices, etc.); and</li> <li>▫ is fastened to the vehicle using flexible/breakaway fixings that are unlikely to injure a vehicle occupant; and</li> <li>▫ can be quickly and easily removed to allow for emergency access or exit of the vehicle.</li> </ul> </li> </ul> <p><i>Note: The partition/shield should be able to be removed, or broken, with a reasonable push or strike to allow both the driver and passenger/s to use an alternative exit in the event of an emergency.</i></p> <p><i>Note: The NZ Transport Agency makes no representations about the effectiveness of these installations, whether they are required, or whether they are sufficient for the purposes of meeting health and safety or other requirements. It takes no responsibility for the installation and use of isolation shields.</i></p>
Cargo hoist/cargo lift platform (fitted inside the vehicle)	See section 3-1 for details.
Stereo equipment and speakers	See section 3-1 for details.
Gear shift lever relocation	See section 3-1 for details.
Aftermarket brake pedal pads or covers	See section 8-1 for details.
Aftermarket or custom brake pedal extensions (to accommodate the needs of a person with short limbs)	See section 8-1 for details.
Additional brake and accelerator pedals (for driving school vehicles)	See section 8-1 for details.
Steering wheel spinner	See section 9-1 for details.

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u>:</b> (never refer to LVV Certifier)
Modified accelerator pedal	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul>
Roof and door lining replacement	

# Brakes

## (8-1 Service Brake & Park Brake)

**LVV Certification is always required for any brake-related modifications unless specified below: (if modification does not appear below, always refer to LVV Certifier)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>not required provided that</u>:</b> (refer to LVV Certifier if beyond threshold below)
Brake rotors	<ul style="list-style-type: none"> <li>▪ rotors are direct replacement after-market substitute brake rotors, which are:               <ul style="list-style-type: none"> <li>▫ the same size as the OE rotors; and</li> <li>▫ catalogued aftermarket items for that make and model of vehicle (and can include cross-drilled and/or slotted types); and</li> <li>▫ attached to unmodified OE parts; and</li> <li>▫ not modified in any way.</li> </ul> </li> </ul>
Brake lines/hoses (including stainless steel braided brake hoses)	<ul style="list-style-type: none"> <li>▪ brake lines or hoses are:               <ul style="list-style-type: none"> <li>▫ direct replacements; and</li> <li>▫ are fitted using all OE attachment points.</li> </ul> </li> </ul> <p><i>Note: Flexible hose end fittings must be crimped to the hose.</i></p>
Additional brake pedals (for driving school vehicles)	<ul style="list-style-type: none"> <li>▪ the operation of the primary brake pedal is not affected; and</li> <li>▪ no modification to the primary brake pedal or any other part of the primary brake system has occurred.</li> </ul>
After-market brake pedal pads or covers	<ul style="list-style-type: none"> <li>▪ the fitment of the pads or covers does not:               <ul style="list-style-type: none"> <li>▫ necessitate any modification to the pedal arm; or</li> <li>▫ affect the safe operation of the brake pedal or other pedals.</li> </ul> </li> </ul> <p><i>Note: a brake pad or cover significantly wider than the original brake pad may not be acceptable, depending on fitment.</i></p>
Aftermarket or custom brake pedal extensions (to accommodate the needs of a person with short limbs)	<ul style="list-style-type: none"> <li>▪ the extension:               <ul style="list-style-type: none"> <li>▫ does not exceed 100 mm length when measured from the surface of the original brake pedal; and</li> <li>▫ is securely clamped to the original pedal by a mechanical means; and</li> <li>▫ is sufficiently strong and rigid to withstand emergency braking loads; and</li> <li>▫ does not involve any modification to, or compromise the strength of, the original brake pedal; and</li> <li>▫ does not significantly change the side-load or leverage against the pedal; and</li> <li>▫ does not significantly increase the weight of the pedal.</li> </ul> </li> </ul>
Removal of secondary accelerator and brake system (where driving school vehicle is converted to single primary system)	<ul style="list-style-type: none"> <li>▪ the vehicle was not originally manufactured as a dual-control control vehicle (the system was retro-fitted after manufacture); and</li> <li>▪ the removal of the secondary system has reinstated the vehicle's primary systems back to the vehicle's exact original specification.</li> </ul>

Disability parking brake system	<ul style="list-style-type: none"> <li>▪ the system is a non-OE mechanical or electrical system for applying and releasing the parking brake, and: <ul style="list-style-type: none"> <li>▫ the parking brake performance is not compromised; and</li> <li>▫ the parking brake will not release in the event of an electrical failure.</li> </ul> </li> </ul>
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**Fitting of or modification to:** **LVV Certification is never required:** (never refer to LVV Certifier)

Brake linings/pads	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul>
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## Steering

### (9-1 Steering & Suspension Systems)

**LVV Certification is always required for any steering or suspension-related modifications unless specified below:**  
(if modification does not appear below, always refer to LVV Certifier)

**Fitting of or modification to:** **LVV Certification is not required provided that:** (refer to LVV Certifier if beyond threshold below)

Right-hand drive steering conversions (vehicles first registered in New Zealand before 1 March 1999) (Note 4)	<ul style="list-style-type: none"> <li>▪ the conversion can be proven, via documented evidence, to have been carried out prior to 1 August 1990; or</li> <li>▪ the conversion was carried out between 1 August 1990 and 1 March 1999, and has a recognised conversion company's plate affixed which records: <ul style="list-style-type: none"> <li>▫ the company name of the conversion agent; and</li> <li>▫ the vehicle's chassis number or VIN; and</li> <li>▫ a traceable sequential conversion number allocated to the vehicle by the conversion agent.</li> </ul> </li> </ul>
Right-hand drive steering conversions (regardless of first registration date)	<ul style="list-style-type: none"> <li>▪ the conversion was carried out by a high-volume vehicle manufacturer and either: <ul style="list-style-type: none"> <li>▫ the vehicle is included on Appendix 1 of the LVV standard 190-70 Right-hand Drive Steering conversion, 'LVVTA-recognised vehicles converted to right-hand drive by high volume vehicle manufacturers'; or</li> <li>▫ documented evidence is provided to verify that the vehicle has been converted to right-hand drive by the manufacturer of the vehicle.</li> </ul> </li> </ul>
Steering wheel spinner (to assist in operation of the steering wheel)	<ul style="list-style-type: none"> <li>▪ the spinner: <ul style="list-style-type: none"> <li>▫ is contained within the outer circumference of the steering wheel; and</li> <li>▫ is securely attached; and</li> <li>▫ has no exposed sharp edges (edges have a radius of at least 3 mm); and</li> <li>▫ does not interfere with the operation of an airbag (if fitted);</li> </ul> <p>and</p> <li>▪ the deployment of an airbag will not cause the spinner to become detached from the steering wheel.</li> </li></ul>
Steering wheels	See section 7-7 for details.



Springs and shock absorbers  
(Including modification of ride height)

- the springs or shock absorbers are direct replacements, and:
  - replacement springs are contained within unmodified OE seats throughout full suspension travel; and
  - replacement springs are self-retaining in their seats at full extension, without use of non-standard devices such as wire-ties, straps, or external spring locators; and
  - replacement springs have not been heated or cut; and
  - springs and spring seats are not height adjustable by any means (unless OE); and
  - suspension maintains sufficient travel for safe operation; and
  - suspension components maintain sufficient clearance from unmodified bump-stops when fully laden; and
  - a minimum of 100 mm ground clearance (un-laden and without driver) exists below any part of the vehicle structure, or any steering, braking or suspension component (does not include such items as exhaust pipes and exterior body panels that do not contribute to the structural strength of the vehicle); and
  - the normal relationship between front and rear suspension height is not unduly affected; and
  - clearance is maintained between all components, when tested from lock to lock at full droop; and
  - suspension retains at least 40 mm of rebound (droop) wheel travel (Note 6).

*Note: Strut or spring spacers always require certification.*

*Note: The only other allowable methods of adjusting vehicle ride height without LVV certification are leaf spring blocks (as per below requirements) or adjustment of OE equipment (torsion bars or OE adjustable air suspension).*

*Note: When determining if there is sufficient suspension travel remaining, consideration must be given to the vehicle being in use and fully-laden.*

*Note: Sufficient clearance must be maintained from the travel-limiting bump stop (not an OE spring aid). The spring aid and/or bump stop must not be modified. A spring aid is a low-density conformable material that is fitted inside a coil spring or above a leaf spring by a vehicle manufacturer to assist the spring, and acts as the bump stop only once it is fully compressed. The spring aid may be contacted at any loading condition to increase the vehicle's spring rate, but the vehicle must retain sufficient wheel travel. A bump stop is a small high-density rubber bumper that is designed to stop vehicle suspension or driveline components from coming into contact with the vehicle structure at the extremes of its suspension travel, and is not designed to carry the load of the vehicle for sustained periods of time.*

*Note: Rebound wheel travel should be measured as the difference between the distance from the top of the tyre and the wheel arch with the vehicle resting on the ground, and the top of the tyre to the wheel arch with the vehicle lifted so that its tyres are clear of the ground (suspension hanging in full rebound). This difference must be greater than 40 mm.*

*Note: A vehicle can be LVV certified with less than 100 mm ground clearance provided that there is sufficient suspension travel.*

Blocks for leaf springs, to adjust their ride height (up or down)

- the leaf spring suspension has not been raised by any other means; and
- the leaf spring blocks are:
  - securely-fitted; and
  - constructed from metal; and
  - designed for the purpose; and
  - firmly seated over not less than the OE seat area; and
  - not more than 50 mm in height; and
  - located using the same method as original (assessment of location method is only required where visible without dismantling).

Suspension braces (strut braces) and underfloor/body braces	See section 3-1 for details.
Addition of anti-sway bar or uprated anti-sway bar	<ul style="list-style-type: none"> <li>▪ the bar is attached to unmodified OE mounting points; and</li> <li>▪ the bar and its fittings are catalogued items for the make and model of vehicle; and</li> <li>▪ no cutting, heating, or welding to the vehicle structure or suspension components is involved in fitting of the bar.</li> </ul> <p><i>Note: Removal or reduction/downrating of an anti-sway bar always requires certification.</i></p>
Eccentric bolts/bushings for adjustability of wheel alignment	<ul style="list-style-type: none"> <li>▪ the bolts/bushings are: <ul style="list-style-type: none"> <li>▫ designed as a means of correcting or improving wheel alignment; and</li> <li>▫ catalogued aftermarket items for that make and model of vehicle.</li> </ul> </li> </ul> <p><i>Note: these systems are principally designed for correcting camber problems which are a common consequence of lowering suspension systems.</i></p>
Aftermarket suspension bushes	<ul style="list-style-type: none"> <li>▪ the bushes are made from appropriate material such as polyurethane; and</li> <li>▪ no cutting or machining of the suspension arms has taken place to accommodate the fitment of the bushes.</li> </ul>

## Tyres, Wheels & Hubs

### (10-1 Tyres & Wheels)

**LVV Certification is always required for any wheel or tyre-related modifications unless specified below:** (if modification does not appear below, always refer to LVV Certifier)

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>not required provided that:</u></b> (refer to LVV Certifier if beyond threshold below)
Tyre size changes	<ul style="list-style-type: none"> <li>▪ the tyres: <ul style="list-style-type: none"> <li>▫ have a diameter or outer rolling circumference that is not more than 5% greater than OE; and</li> <li>▫ are an appropriate selection for rim width (see LVVTA Information Sheet 01-2009); and</li> <li>▫ have a load rating suitable for the axle (or vehicle where axle mass is not available), and</li> <li>▫ have a speed rating suitable for the vehicle;</li> </ul> </li> <li>and</li> <li>▪ the tyre tread does not protrude beyond: <ul style="list-style-type: none"> <li>▫ in the case of a vehicle that is not a class NA or class MC vehicle, the unmodified original body panels or factory-fitted mudguard extension/flare; or</li> <li>▫ in the case of a class NA or class MC vehicle, 25 mm outside of the unmodified original body panels, provided that a mudguard extension/flare covers the full width of the tyre tread.</li> </ul> </li> </ul> <p><i>Note: An original full-size spare wheel/tyre can be used for comparison of tyre size.</i></p>

Aftermarket wheel fitments	<ul style="list-style-type: none"> <li>▪ the wheels: <ul style="list-style-type: none"> <li>▫ are of a known and reputable brand; and</li> <li>▫ would be considered an appropriate fitment for the vehicle type by the wheel manufacturer; and</li> <li>▫ are not modified; and</li> <li>▫ do not have spacers or adaptors fitted; and</li> <li>▫ have a load rating acceptable for the axle rating (or vehicle GVM where axle rating is not available);</li> </ul> </li> <li>and</li> <li>▪ the tyre tread does not protrude beyond: <ul style="list-style-type: none"> <li>▫ in the case of a vehicle that is not a class NA or class MC vehicle, the unmodified original body panels or factory-fitted mudguard extension/flare; or</li> <li>▫ in the case of a class NA or class MC vehicle, 25 mm outside of the unmodified original body panels, provided that a mudguard extension/flare covers the full width of the tyre tread.</li> </ul> </li> </ul> <p><i>Note: Where the wheel load rating is not visible, a note should be made on the WoF/CoF check-sheet and the operator should be informed to have the load rating checked. Insufficient load rating is only a reason for rejection if the load rating is visible and not sufficient.</i></p>
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## (10-2 Hubs & Axles)

**LVV Certification is always required for any hub or axle-related modifications unless specified below:** (if modification does not appear below, always refer to LVV Certifier)

<b>Fitting of or modification to:</b>	<b>LVV Certification is not required provided that:</b> (refer to LVV Certifier if beyond threshold below)
Differential ratio changes	<ul style="list-style-type: none"> <li>▪ only the differential centre or gear-set is changed; and</li> <li>▪ the OE axle housing is retained.</li> </ul>
Axle housing replacement	<ul style="list-style-type: none"> <li>▪ the axle housing fits the vehicle without adaptation; and</li> <li>▪ the suspension attachment points have not been changed or modified; and</li> <li>▪ the OE drive-shaft(s) has not been modified or substituted; and</li> <li>▪ no changes are made to the OE brake system.</li> </ul>

## (10-3 Mudguards)

**LVV Certification is always required for any mudguard-related modifications unless specified below:** (if modification does not appear below, always refer to LVV Certifier)

<b>Fitting of or modification to:</b>	<b>LVV Certification is not required provided that:</b> (refer to LVV Certifier if beyond threshold below)
Mudguards and mudguard extensions	<ul style="list-style-type: none"> <li>▪ a mudguard has not been cut during modification; and</li> <li>▪ modified mudguards or extensions have no sharp protrusions; and</li> <li>▪ mudguard extensions are securely attached to the vehicle; and</li> <li>▪ the mudguard/mud flap is no less effective than OE</li> </ul> <p><i>Note: Mudguard means a fitting, inclusive of any portion of the vehicle and of any mudflaps attached, that serves to intercept material thrown up by a wheel more or less in the plane of the wheel.</i></p> <p><i>Note: Mudguards flared via rolling do not require certification.</i></p>

# Exhaust

## (11-1 Exhaust System and Silencer)

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u>:</b> (never refer to LVV Certifier)
Exhaust system or silencer	<ul style="list-style-type: none"><li>▪ In-service requirements for condition and performance must be met.</li></ul> <p><i>Note: LVV certification is always required for the fitting of a turbocharger as a modification, or the upgrading of a turbo or waste-gate.</i></p>

# Towing Connections

## (12-1 Light Vehicle Towbar and Fifth Wheel)

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u>:</b> (never refer to LVV Certifier)
Towing connection	<ul style="list-style-type: none"><li>▪ In-service requirements for condition and performance must be met.</li></ul> <p><i>Note: A towbar attachment is a modification to the vehicle structure which never requires LVV certification unless the structure may have been weakened.</i></p>

# Miscellaneous Items

## (13-1 Engine & drive train)

**LVV Certification is always required for any engine or drive-train-related modifications unless specified below:** (if modification does not appear below, always refer to LVV Certifier)

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>not required provided that</u>:</b> (refer to LVV Certifier if beyond threshold below)
Substitution of engines	<ul style="list-style-type: none"><li>▪ when compared with the OE engine, the replacement engine:<ul style="list-style-type: none"><li>▫ is of the same or less cubic capacity; and</li><li>▫ has equal or less weight; and</li><li>▫ uses the same fuel (petrol, diesel, LPG, CNG); and</li><li>▫ uses the same unmodified attachment points and system (i.e. bolts-in); and</li><li>▫ uses the same family of block and cylinder head from the same vehicle manufacturer; and<ul style="list-style-type: none"><li>- the block has the same number of cylinders arranged in the same configuration; and</li><li>- the cylinder head(s) has the same number of valves and camshafts; and</li></ul></li><li>▫ the total power or torque increase, including any minor modifications, is no more than 20% over the OE engine specification</li></ul></li></ul> <p><i>Note: A bolt-in conversion such as a Commodore V8 replacing a V6 always requires LVV certification despite it being available as OE in another variant.</i></p>

<p>Minor engine modifications</p>	<ul style="list-style-type: none"> <li>▪ the total modifications (including engine substitutions) are minor, and result in no more than a 20% power or torque output increase over the OE engine specification.</li> </ul> <p><i>Note: Minor modifications commonly include the fitting of:</i></p> <ul style="list-style-type: none"> <li>▫ extractor or free-flow exhaust manifolds</li> <li>▫ big bore exhaust systems</li> <li>▫ alternative intake manifolds</li> <li>▫ alternative or multiple carburettors</li> <li>▫ modified fuel injection systems</li> <li>▫ modified ignition systems</li> <li>▫ alternative cold air box induction systems.</li> </ul> <p><i>Note: Minor modifications DO NOT include:</i></p> <ul style="list-style-type: none"> <li>▫ fitting of a supercharger</li> <li>▫ fitting of a turbocharger</li> <li>▫ upgrading/modifying the supercharger</li> <li>▫ upgrading/modifying the turbocharger</li> <li>▫ upgrading/modifying the wastegate</li> <li>▫ tuning/re-chipping the ECU of a turbocharged or supercharged engine</li> <li>▫ changing from single camshaft to twin camshaft</li> <li>▫ changing from carburettor to injectors</li> <li>▫ changing from injectors to carburettor</li> <li>▫ fitting of a stroker kit</li> <li>▫ any other capacity increase that exceeds usual reconditioning.</li> </ul> <p><i>Note: Tuning/Re-chipping includes any software or hardware (ECU or piggy-back system) change that is intended to alter the fuelling, boost pressure, or ignition timing from the OE specifications.</i></p>
<p>Gearbox substitution</p>	<ul style="list-style-type: none"> <li>▪ the OE gearbox cross-member has not been heated, cut or welded; and</li> <li>▪ the OE gearbox cross-member mounting to the OE body or chassis members is unchanged; and</li> <li>▪ no replacement gearbox cross-member is used; and</li> <li>▪ the OE drive-shaft(s) remain and is un-modified; and</li> <li>▪ no substantial modifications have occurred to the floor or gearbox tunnel area, other than provision for gear-shift mechanism; and</li> <li>▪ the braking system is not modified or changed, including the brake pedal.</li> </ul> <p><i>Note: Conversion from automatic to manual transmission often requires replacement of the brake pedal system. This always requires certification.</i></p>
<p>Change from 4WD to permanent 2WD (removal of drive train components in 4WD vehicles)</p>	<ul style="list-style-type: none"> <li>▪ the vehicle was originally manufactured with selectable 4WD and a solid/live front axle.</li> </ul>

## (13-2 Fuel System)

**LVV Certification is always required for any fuel system-related modifications unless specified below: (if modification does not appear below, always refer to LVV Certifier)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>not required provided that</u>:</b> (refer to LVV Certifier if beyond threshold below)
Fuel lines	<ul style="list-style-type: none"> <li>▪ the fuel lines are:                             <ul style="list-style-type: none"> <li>▫ of similar construction to the OE fuel lines (i.e. hard lines are not replaced with flexible lines); and</li> <li>▫ in the OE location and mounted to all the OE fixing clips.</li> </ul> </li> </ul>
In-line fuel filter	<ul style="list-style-type: none"> <li>▪ the in-line fuel filter is:                             <ul style="list-style-type: none"> <li>▫ of an appropriate pressure rating; and</li> <li>▫ adequately supported; and</li> <li>▫ at least 50 mm from the exhaust; and</li> <li>▫ at least 100 mm from a catalytic converter.</li> </ul> </li> </ul>
Electric fuel pump	<ul style="list-style-type: none"> <li>▪ the electric fuel pump:                             <ul style="list-style-type: none"> <li>▫ is a replacement for a mechanical pump on a carburettor engine; and</li> <li>▫ is adequately supported; and</li> <li>▫ does not increase the fuel pressure above OE specification.</li> </ul> </li> </ul>

## (13-3 LPG/CNG fuel system)

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>never required</u>:</b> (never refer to LVV Certifier)
Installation or modification of an LPG or CNG fuel system	<ul style="list-style-type: none"> <li>▪ In-service requirements for condition and performance must be met.</li> </ul>

## (13-5 Electric and Hybrid Vehicle Fuel and Electrical Systems)

**LVV Certification is always required for any electric and hybrid vehicle fuel and electrical system modifications unless specified below: (if modification does not appear below, always refer to LVV Certifier)**

<b>Fitting of or modification to:</b>	<b>LVV Certification is <u>not required provided that</u>:</b> (refer to LVV Certifier if beyond threshold below)
Fuel systems	<p>See section 13-2 for details.</p> <p>Note: LVV certification is always required for changes to a high voltage electrical system.</p>