

### Re-issue of LVV Certification Threshold Schedule (Issue 5)

#### Introduction

This information sheet introduces the revised LVV Certification Threshold Schedule (Issue 5) and provides background information, and a summary of common modifications. For full details refer to the LVV Certification Threshold Schedule (Issue 5) document.

#### Background information

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 threshold tables list modifications that are commonly made to vehicle components and systems, and confirm whether or not LVV certification is required for these modifications.

Where modifications exceed those listed in the table, a WoF or CoF provider must not issue a warrant of fitness or certificate of fitness for the vehicle until an LVV certification has been issued.

#### Summary of common modifications & associated information

##### Common items that always require certification

- The following common modifications always require LVV certification:
  - suspension that has adjustable geometry, (commonly threaded height adjustment)
  - suspension lowered such that ground clearance is less than 100mm
  - brake upgrades - larger size discs or aftermarket calipers
  - conversion to a larger capacity engine
  - petrol to diesel (or vice versa) conversion
  - addition or modification of a turbo or supercharger, wastegate modification
  - seats and seatbelts added, commonly into vans
  - camper conversions with cab structure modifications or added seats
  - bikes converted to trikes

- 4x4 with a body lift kit
- disability hand control adaptations to the braking system.

### Introduction dates and Modification Declaration Certificates

- For most modifications, the introduction date for the requirement for LVV certification is 1 March 1999. In addition, LVV certification was required for some items prior to that date. In particular LVV certification is required for a modification:
  - after 1 January 1992 that affected compliance with a brake standard on a class MA vehicle, or after 1 January 1993 on a vehicle of class MB, MC or NA; and
  - after 1 January 1992 that affected a seatbelt anchorage standard on a passenger vehicle with up to nine seats, that is class MA, MB or MC; and
  - after 1 January 1992 that affected compliance with a standard for door locks and hinges, steering column impact, or interior impact on a class MA vehicle.
- If a modification was carried out prior to LVV certification coming into force, either:
  - a valid modification declaration must be produced, or
  - a vehicle inspector may also accept other authentic evidence to verify that the modifications were carried out prior to LVV certification coming into force. Examples are:
    - an invoice from the company that carried out the modification, or
    - insurance policy cover notes and motoring magazine features provided they record the vehicle's registration number or VIN, the modification details and a date, or
    - other information verifying when the modifications were carried out. Documents such as statements from previous owners are not acceptable.
- Modification declaration certificates give a specific exemption for that modification and they ceased to be issued after January 1999. Copies are available from LVVTA.
- A modified production or scratch-built low volume vehicle that has not been LVV certified, and for which a Modification Declaration Certificate has been issued, must be LVV certified if either:
  - the vehicle has been modified further after 1 January 1992; or
  - the vehicle's registration lapses or the vehicle is de-registered.

### LVV certification plate

- Modifications can be confirmed as certified under the LVV Code by the following means:
  - an LVV authority card, linking listed vehicle modifications to the special requirements of the operator(s), or:
  - an LVV certification plate riveted and glued to the vehicle within the engine compartment in a clearly visible position, or where there is insufficient available space within the engine compartment to enable the LVV certification plate to be fitted and remain clearly visible, in any one of the following positions:
    - within the passenger compartment on the vehicle's A-pillar or B-pillar; or

- in the case of a sedan, on the rear bulkhead or other prominent position in the boot area; or
  - in the case of a van with an engine cover in the passenger compartment, on a non-removable panel steel part of the engine cover or seat frame; or
  - in the case of a vehicle with a raised floor, on the vertical area of a step behind a door; or
  - in the case of a hatchback or station wagon, in the spare wheel well which is accessible without the use of tools.
- It is not possible to list all modifications on the certification plate, such as engine modifications. In this case, the LVV certification plate will list “MOD” in the engine field to signify engine modifications. A Statement of Compliance Certificate is also produced by the LVV certifier which lists the modifications in more detail.

#### Abbreviation ‘OE’

- Where the abbreviation ‘OE’ is used, this refers to the specification of a vehicle at the time it was built and certified by its manufacturer.

#### Law enforcement vehicles

- Any modification on 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.

#### Structures and Frontal Impact

- The structure of a vehicle may incorporate crumple zones that form part of a frontal impact occupant protection system. Modification of the vehicle front end may alter the effectiveness of the occupant protection system, which must be maintained within a safe tolerance of original, even if the vehicle does not have to meet a frontal impact standard.
- The following vehicles with a GVM of 2500 kg 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.
- A body lift on a body/chassis vehicle (commonly a 4 x 4) always requires LVV certification.
- LVV certification is required for the following items on a Passenger Service Vehicle:
  - modifications to roof or roof support for an air conditioning unit; or
  - changes in floor height or geometry, eg due to changes to suspension, wheel or tyre size.

#### Vision and Glazing

- Change of glazing from glass to plastic requires LVV certification, and the material must be an abrasion resistant type.

### Seats and seatbelts

- A seat with a side airbag can be replaced with an alternative seat, but the vehicle must be certified to ensure that the remainder of the occupant protection system still functions properly.

### Suspension

- A vehicle suspension can be lowered as long as a minimum of 100 mm ground clearance exists below the vehicle structure. A vehicle can be certified with less than 100 mm clearance as long as the LVV Certifier can confirm that sufficient suspension travel remains for the vehicle to operate safely, including when fully laden.

### Brakes

- Anti-lock braking systems (ABS) can be removed, but must be replaced by all components from a non-ABS variant. This modification always requires LVV certification.

### Tyres and Wheels

- Fitting of wheel spacers or wheel adapters always requires certification.

### Exhaust noise

- The exhaust Objective Noise Test is carried out by an LVV Certifier but it is technically not LVV certification. The exhaust is fitted with a certification label, and the vehicle does not get an LVV certification plate.
- LVV certification is always required for the fitting of a turbocharger as a modification, or the upgrading of a turbo or waste-gate.
- Externally venting waste-gates (screamer pipes) are not permitted as they are not adequately muffled and the exhaust gases passing through the wastegate are not directed through the vehicle's exhaust system. However, waste-gates that have their own exhaust system or exhaust pipe exiting behind the passenger compartment are permitted.

### Engine and drivetrain conversions

- All engine conversions require LVV certification, except for some direct replacements of the same engine capacity or less. Any increase in engine size requires certification – it is a popular misconception that an increase of less than 20% is ok; this is not true and it must be LVV certified.
- An OE engine that is modified such that power or torque has not increased more than 20% does not require certification, unless a turbocharger or supercharger has been fitted or modified.
- A bolt-in conversion such as a Commodore V8 into a Commodore originally fitted with a 6-cylinder engine always requires certification, despite the V8 engine being retro-fitted being available as OE in another variant.
- A gearbox substitution that requires modification or replacement of the brake pedal requires certification. For example, it is common to replace the original brake pedal with a brake and clutch assembly when changing from an automatic to a manual gearbox.

## Changes to the LVV Certification Threshold Schedule as from August 2016

The following describes the changes made to the LVV Certification Threshold Schedule to reflect the recent changes made to the LVV standards.

### Vehicle Exterior

- Bumper bar: Adds 'Frontal Impact'.
- Side Steps: Addition of side steps to table.
- Auxiliary bars: Adds 'Frontal Impact'. Reference to A-frames removed to align with standard.
- Roof-mounted wheelchair winches: Removed from external projections section. Added to Structure under 'Wheel chair stowing device'.
- Cargo hoist/lift platform: Addition of requirements to align with standard. 'The vehicle structure has not been weakened' removed as covered under general safety requirements.
- Wheel chair stowing device: Addition of requirements to align with standard.
- Auxiliary bars: Reference to A-frames removed to align with standard.
- Ute trays: Adds ute trays to modifications that never require certification table.

### Vehicle Interior

- Seat pads or covers: Addition of note regarding airbag compatible seats covers.
- Removal of non-mandatory seatbelts: Adds full or partial removal of seatbelts to align with VIRM.
- Cargo hoist and tail lifters in goods vans: Adds reference to structure section.
- Disability adaptive controls: Addition of requirements to align with revised standard. Steering wheel spinner details moved to steering section.
- Steering wheels: Add requirement to align with standard.
- Additional and substituted items: Adds requirements to align with standard. Adds reference to standard for further explanations.
- Roll-bar or roll-cage structures: Wording changed to clarify a roll-bar must be behind the rear-most seat only and not between seat rows.

### Brakes

- Aftermarket or custom brake pedal extensions: Addition of requirements to align with standard.
- Aftermarket brake pads, linings and hoses: Addition of requirements to align with standard and VIRM.

### Steering

- Right-hand drive steering conversions (vehicles first registered in New Zealand before March 1 1999): Addition of conversion plate requirements to align with standard.

- Right-hand drive steering conversions (regardless of first registration date): Addition of allowance for conversions carried out by high-volume vehicle manufacturers to align with standard.
- Steering wheel spinner: Adds requirements to align with standard.
- Springs and shock absorbers: Addition of requirements and rephrasing to align with standard.
- Blocks for leaf springs, to adjust their ride height: Adds requirement for blocks to be positively located to align with standard.
- Aftermarket suspension bushes: Adds threshold requirements for the fitment of aftermarket bushes to align with standard.

#### Tyres, Wheels and Hubs

- Aftermarket wheel fitments: Wording change; 'catalogued' replaces 'classed'.
- Axle housing replacement: Adds requirements to align with standard.

#### Towing connections

- Towing connection: Removes reference to section 3-1 as redundant.

#### Miscellaneous

- Gearbox Substitution: Adds note regarding braking systems.

#### **Finally:**

For any assistance in the use of this Information Sheet please contact an LVVTA technical team member at the LVVTA office on (04) 238-4343.