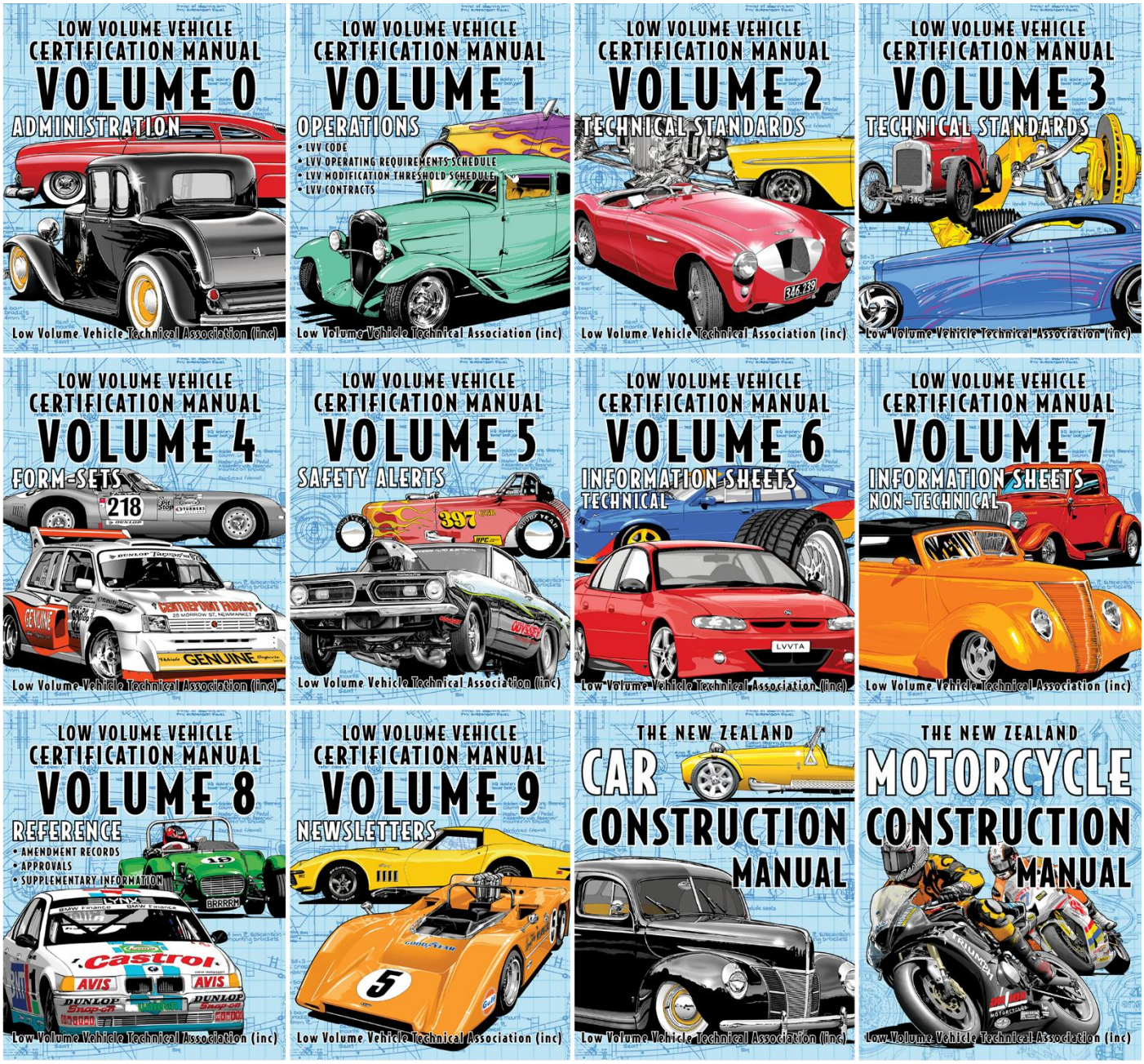
Low Volume Vehicle Technical Association (inc)

Helping New Zealanders Build & Modify Safe Vehicles

LVV Operating Requirements Schedule

Chapter 6
LVV Documents, Equipment, & Premises

Version 12 | Effective from 1 October 2025



Approval Record

Signed in accordance with clause *1.3(5)* of the *Low Volume Vehicle Code* of LVVTA, on …… by:			
New Zealand Transport Agency		Low Volume Vehicle Technical Association	
Name	Signature ----------	Name	Signature ----------

Amendment Record

Amendments details	Version #	Issue date	Effect date
• LVV ORS - Original Issue	Version 1	2001	2001
• LVV ORS – Amendment # 1	Version 2	1 August 2003	1 October 2003
• LVV ORS – Amendment # 2	Version 3	1 March 2005	1 April 2005
• LVV ORS – Amendment # 3	Version 4	1 February 2006	1 April 2006
• LVV ORS – Amendment # 4	Version 5	1 May 2007	1 July 2007
• LVV ORS – Amendment # 5	Version 6	1 March 2008	1 April 2008
• LVV ORS – Amendment # 6	Version 7	1 January 2010	1 February 2010
• LVV ORS – Amendment # 7	Version 8	1 March 2011	1 April 2011
• LVV ORS – Amendment # 8	Version 9	1 July 2016	1 July 2016
• LVV ORS – Amendment # 9	Version 10	1 October 2016	1 October 2016
• LVV ORS – Amendment # 10	Version 11	1 June 2017	1 June 2017
• LVV ORS Chapter 6 - Amendment # 11	Version 12	10 September 2025	1 October 2025

Note 1 The first ten amendment processes to the LVV ORS (Amendment #s 1-10), carried out between August 2003 and June 2017, were made to the complete ORS document. From Amendment # 11 (which is Version 12, issued 10 September 2025), amendments are carried out to individual chapters.

Note 2 Text highlighted in grey shows amendments that have been made subsequent to the previous version of this chapter, and a grey vertical stroke to the left of the text denotes important new or changed information (which may include information which has been removed).

About the LVV Operating Requirements Schedule

The LVV Operating Requirements Schedule (LVV ORS), and its sub-set of LVV ORS chapters (the chapters) set out the operational systems and processes which enables the LVV certification system to function effectively. Whereas the *Low Volume Vehicle Code* provides the legal platform upon which the LVV certification system operates, the LVV ORS provides robust operational systems and processes to ensure that LVV certification outcomes are consistent, fair, transparent, and of a high quality.

Author, Publisher, & Owner

This chapter is authored, published, and owned by the Low Volume Vehicle Technical Association Incorporated (LVVTA). LVVTA is an incorporated society established in 1992, that represents a group of specialist automotive organisations (in turn representing approximately 150,000 members) who are dedicated to ensuring that vehicles, when scratch-built or modified, meet the highest practicable safety standards.

The information in this chapter has stemmed from work undertaken by LVVTA founding member organisations that commenced in 1989 and has been progressively developed as an integral part of the New Zealand Government's land transport regulatory system, by agreement and in consultation with the New Zealand Transport Agency (NZTA).

As a result, the considerable experience in specialist certification management built up by LVVTA and the specialist automotive member groups over the past several decades can be of benefit to members of the New Zealand public who also wish to build or modify motor vehicles.

LVVTA's contact details are:

- Phone: +(00) 64 4 238 4343
- Email: info@lvvta.org.nz
- Postal address: P. O. Box 50-600, Porirua 5240, Wellington, New Zealand
- Website: www.lvvta.org.nz

Availability & Current Version

This chapter is printed and distributed by LVVTA, and is available to the public free of charge from the LVVTA website; www.lvvta.org.nz.

Note that printed copies of this chapter, like any other printed LVVTA documents, may have been superseded by a later version and become out of date.

Therefore, this and all other LVVTA documents should not be relied upon without first ensuring that the version number (on the right-hand side of the header above) is the current version – please visit the LVV ORS area of www.lvvta.org.nz to check that this chapter is in fact the latest version.

User's Feedback

This chapter is constantly undergoing an evolutionary development process in order to keep pace with changing trends and technology. To assist in this, LVVTA invites users of the chapter to engage in an ongoing consultation process with us by making submissions for any changes, additions, or clarifications which might improve the chapter, at any time.

Any submissions made via this rolling consultation process will be thoroughly considered, and incorporated, where appropriate, at the next available amendment opportunity.

Submissions should be made to submission@lvvta.org.nz, with the name of this chapter in the Subject line.

Legal Status & Copyright

This chapter is incorporated by reference, as an integral part of the *Low Volume Vehicle Code*, within *Land Transport Rule: Vehicle Standards Compliance 2002*.

Disclaimer

LVVTA has made all reasonable efforts to provide sound and correct advice, based on the historical knowledge and best practice experiences of all parties involved in the development and production of this chapter.

However, no responsibility or liability is accepted by LVVTA for any error or omission, or any loss suffered by any person relying directly or indirectly on this chapter. Any person who builds or modifies a motor vehicle accepts that there may be some associated risks, and does so in the full knowledge of this, and accepts full responsibility for their own actions.

Contents

Subject		Page #
Purpose of this Chapter		**5**
Section 1 – Document Requirements		**5**
1.1	Introduction	5
1.2	Development of LVV Certification Management Documents	5
1.3	Provision of LVV Certification Management Documents	6
1.4	Provision of NZTA resources	6
1.5	Access to LVV Certification Management Documents	6
1.6	Maintenance of LVV Certification Management Documents	7
Section 2 – Equipment Requirements		**8**
2.1	Introduction	8

2.2	Equipment required for all LVV certification categories	8
2.3	Additional equipment required for specified LVV certification categories	9
2.4	Maintenance, storage, and return of equipment	9
Section 3 – Premises Requirements		**10**
3.1	Introduction	10
3.2	Inspection premises required for all inspections	10
3.3	Inspection premises required for primary inspections	11
3.4	Approval of inspection premises	11
Terms & Definitions for Chapter 6		**12**
APPENDIX 1 - LVVTA DOCUMENT OVERVIEW		**15**
APPENDIX 2 - LVVTA CERTIFICATION MANAGEMENT DOCUMENTS		**16**

Chapter 6:
LVV Documents, Equipment, & Premises

Purpose of this Chapter

The purpose of this LVV Operating Requirements Schedule chapter (the chapter) is to set out the resources that an LVV Certifier needs in order to provide LVV certification services to the motoring public and vehicle modification industry. The chapter will explain, in particular:

- the LVV certification-related documents that an LVV Certifier requires, and where they can be obtained; and
- the LVV-related certification inspection equipment that an LVV Certifier will need to have; and
- the type of premises that an LVV Certifier will need to operate LVV certification activities from.

This chapter should be read in conjunction with *LVV ORS Chapter 3: LVV Certification Categories.*

Italics are used throughout this chapter when referencing '*external documents*' that are not part of this chapter.

Section 1 Document Requirements

1.1 Introduction

The technical, operational, and procedural documents used by LVV Certifiers during their LVV certification inspections are developed by LVVTA, in consultation with the NZ Transport Agency (NZTA). The LVV certification documents are supplied to the LVV Certifiers by LVVTA, together with the updated versions of the documents as they are amended from time to time.

LVV Certifiers are required to have, and use, a number of reference and inspection documents, to ensure the safety and compliance of each vehicle that they LVV certify.

Collectively, these documents used by the LVV Certifiers are known as the *LVV Certification Management Documents*.

1.2 Development of LVV Certification Management Documents

LVVTA establishes, maintains, and continuously improves the *LVV Certification Management Documents*, which comprise, primarily:

- the *LVV Code*, the *LVV Operating Requirements Schedule*, and all other operational and procedural documents used in the LVV certification process; and
- the principle technical documents used in the LVV certification process including the *LVV Standards*, the *NZ Car Construction Manual*, and the *NZ Motorcycle Construction Manual*; and
- the supporting technical documents used in the LVV certification process including *LVV Information Sheets* and *LVV Safety Alerts*; and
- the *LVV Base Forms* and *LVV Inspection Form-sets* used by the LVV Certifiers to record the findings of their LVV certification inspections; and
- a document management system, known as the '*LVV Certification Manuals*', within which to house the various *LVV Certification Management Documents*.

The relationship between the applicable legislation and the *LVV Certification Management Documents* is summarised in 'Appendix 1 – LVVTA Document Overview' at the back of this chapter.

More detailed information about the *LVV Certification Management Documents* is provided in 'Appendix 2 – LVV Certification Management Documents' at the back of this chapter.

1.3 Provision of LVV Certification Management Documents

1.3(1) LVVTA will provide to each newly appointed LVV Certifier, free of charge (see Notes 1 to 4 below):

(a) one set of *LVV Certification Manuals*; and

(b) one *NZ Car Construction Manual*; and

(c) where applicable, one *NZ Motorcycle Construction Manual;* and

(d) all applicable updates to the *LVV Certification Manuals*, *NZ Car Construction Manual,* and *NZ Motorcycle Construction Manual*.

Note 1	'Providing' the documents to a newly appointed LVV Certifier, as referred to in 1.3(1), can be by either in hard-copy form or by electronic means.
Note 2	The documents provided to an LVV Certifier by LVVTA will vary, depending on the LVV certification categories for which the LVV Certifier is appointed. For example, an LVV Certifier who is not appointed for motorcycle or trike-related categories will not be provided with an *NZ Motorcycle Construction Manual*.
Note 3	Any documents provided to an LVV Certifier by LVVTA remains the property of LVVTA and must be returned to LVVTA upon cessation of the LVV Certifier's appointment.
Note 4	Any documents purchased by an LVV Certifier from LVVTA or any other source (such as carbonated *LVV Base Forms*) remains the property of the LVV Certifier.

1.4 Provision of NZTA resources

1.4(1) NZTA will provide each newly appointed LVV Certifier, free of charge, with access to:

(a) the electronic *In-service Vehicle Inspection Requirements Manual* (*VIRM*); and

(b) the electronic *Performance Review System* (*PRS*) *Manual*; and

(c) Motochek (see Note 1 below).

Note 1	Motochek, as referred to in 1.4(1)(c) is a website which enables registered users to access NZTA's Motor Vehicle Register information electronically.

1.5 Access to LVV Certification Management Documents

1.5(1) An LVV Certifier must have, or have access to, at the LVV Certifier's primary inspection facility (see Notes 1 to 5 below):

(a) the *LVV Certification Manuals*; and

(b) the *NZ Car Construction Manual;* and

(c) where applicable, the *NZ Motorcycle Construction Manual*; and

(d) the *In-service Vehicle Inspection Requirements Manual* (*VIRM*)*;* and

(e) a civil driver's license, which is current and applicable to the types of vehicles covered by the LVV certification categories held; and

(f) an *LVV Certification Plate Register;* and

(g) a *Notice of Appointment* from NZTA; and

(h) the *Performance Review System Manual;* and

(i) documentation to verify that the LVV Certifier holds current professional indemnity insurance cover as required by *LVV ORS Chapter 14: LVVTA Services & Support* (see Note 5 below).

Note 1	Having 'access to' the documents referred to in 1.5(1) can be by either hard-copy or electronic means.
Note 2	A 'primary inspection facility', as referred to in 1.5(1), is the facility where an LVV Certifier conducts the majority of their LVV certification inspections, and where their records are kept.
Note 3	An LVV Certifier who does not have a primary inspection facility and only operates a mobile service must carry, at all times, either an electronic or hard copy of all documentation specified in 1.5(1).
Note 4	The requirement to have, or have access to, a document listed in 1.5(1) only applies if the LVV Certifier is appointed for an LVV certification category relative to the listed document.
Note 5	*LVV ORS Chapter 14: LVVTA Services & Support*, as specified in 1.5(1)(i) is available to the public electronically, free of charge, from the LVVTA website at www.lvvta.org.nz

1.5(2) An LVV Certifier must have, or have access to, during any LVV certification inspection which does take place at the LVV Certifier's primary inspection facility (see Notes 1 and 2 below):

(a) the *LVV Certification Manuals*; and

(b) the *NZ Car Construction Manual*; and

(c) where applicable, the *NZ Motorcycle Construction Manual*; and

(d) the *In-service Vehicle Inspection Requirements Manual* (*VIRM*); and

(e) a civil driver's license, which is current and applicable to the types of vehicles covered by the LVV certification categories held; and

Note 1	The requirement to have, or have access to, a document listed in 1.5(2) only applies if the LVV Certifier is appointed for an LVV certification category relative to the listed document.
Note 2	Having 'access to' the documents referred to in 1.5(2) can be by either hard-copy or electronic means.

1.6 Maintenance of LVV Certification Management Documents

1.6(1) An LVV Certifier must ensure that, if hard copies are held, all *LVV Certification Management Documents* required by 1.3(1) are:

(a) in a complete and current form at all times; and

(b) in legible condition; and

(c) in the case of the multi-chapter or multi-section documents, the chapters and sections are in their correct location and order within their respective folders.

Section 2 Equipment Requirements

2.1 Introduction

LVV Certifiers are required to have, and use, a number of items of equipment, in order to enable a thorough LVV certification inspection to occur, and correctly verify compliance with LVVTA's technical requirements. The items of equipment held by an LVV Certifier for LVV certification inspections must meet the equipment requirements specified in this section.

Some items of equipment are custom-designed and manufactured by LVVTA specifically for the LVV Certifiers in the application of their LVV certification activities.

The requirements as to what items of equipment is required to be held vary, depending on the LVV certification categories held by the LVV Certifier (see Note 1 below).

Note 1	Information on the LVV certification categories referred to in 2.1 is available in *LVV ORS Chapter 3: LVV Certification Categories*, which is available to the public electronically, free of charge, from the LVVTA website www.lvvta.org.nz

2.2 Equipment required for all LVV certification categories

2.2(1) An LVV Certifier must, for all LVV certification categories, when carrying out an LVV certification inspection, have, or have access to, all items of equipment specified in 'Table 6.1 Equipment Requirements' (see Table 6.1 below, and Notes 1 to 4 below).

Table 6.1 Equipment Requirements

Required equipment	***Categories***	
	All except 2A,2B, AC	*2A,2B*
• An under-body inspection facility that meets the requirements of section 3	✓	✗
• An industrial quality trolley jack and axle stands (see Note 1 below)	✓	✓
• A hand tool selection	✓	✓
• Access to a 100 kph road appropriate to enable the safe and efficient conducting of general road-testing and cyclic brake-testing of any vehicle being certified.	✓	✓
• A stop-watch or other electronic brake-testing device capable of measuring average deceleration.	✓	✗
• A graduated light-board or commercial quality optical beam setter (see Note 2 below)	✓	✓
• An industrial quality hand-held (spot) inspection lamp (not lead light)	✓	✓
• A steel test bar for steering and suspension	✓	✓
• A graduated tyre tread depth gauge (see Note 2 below)	✓	✓
• A vernier caliper	✓	✓
• A steel ruler	✓	✓
• A steel tape measure	✓	✓
• A mirror suitable for detailed inspection work, or electronic snake camera	✓	✓
• A 35% VLT tint sample, or calibrated light transmission measuring device (see Note 2 below)	✓	✓
• An analogue or digital protractor (see Note 3 below)	✓	✓
• A magnet	✓	✓
• A radius gauge or equivalent (able to measure 3 mm radius)	✓	✓
• A magnifying glass (suitable for close inspections such weld quality and brake pipe flaring quality)	✓	✓

Note 1	A trolley jack and axle stands are part of the required equipment for LVV certification, but are not acceptable as a means of providing an underbody inspection facility for LVV certification. (A floor-jack is an acceptable method of lifting a motorcycle).
Note 2	A graduated light-board or commercial quality optical beam setter, a graduated tyre tread depth gauge, and a 35% VLT tint sample are only required if an LVV Certifier is taking responsibility for 'remaining safety item' condition requirements on a vehicle being LVV certified.
Note 3	A phone-based angle-finding app meets the requirement of an analogue or digital protractor.
Note 4	Information on the LVV certification categories referred to in 2.2(1) is available in *LVV ORS Chapter 3: LVV Certification Categories*, which is available to the public electronically, free of charge, from the LVVTA website www.lvvta.org.nz

2.3 Additional equipment required for specified LVV certification categories

2.3(1) An LVV Certifier must, for specified LVV certification categories, when carrying out an LVV certification inspection, have, or have access to, in addition to those items required by 2.2(1) (in Table 6.1), all items of equipment specified in 'Table 6.2 Additional Equipment Requirements' (see Table 6.2 below and Note 1 below).

Table 6.2 Additional Equipment Requirements

Additional required equipment	*Categories*
• An LVVTA H-frame or H-point template	1B, 1C, 1D, 2C
• A 165 mm head-sphere	All except 2
• Containers or objects to simulate occupant weight	1A, 1B, 1C, 1D
• A string-line and adhesive tape, or alternative means of achieving vision sight-lines	1A, 1B, 1C, 1D, 2C
• A stop-watch, or a wristwatch with a second hand	2A, 2B, 2C
• A surveyors' tape or other device capable of accurately measuring 61 metres	2A, 2B, 2C
• An LVVTA-supplied Type-2 sound level meter with wind-sock	EX
• An LVVTA-supplied Class-1, Type-0, or Type-1 sound level meter, complete with all accessory equipment, supplied in the case provided. • *(Equipment includes: wind-sock, tripod, field calibrator, noise meter lead, infra-red tachometer, reflective tape for infra-red tachometer, 45-degree positioning* ruler*, vernier caliper, 3 metre tape measure, calculator, double-A battery charger, 4 spare rechargeable double-A batteries, laminated sound level meter instructions, 2 x laminated test examples, ESMP data folder.)*	EX
• An LVVTA-supplied exhaust gas analyzer, complete with all accessory equipment supplied in the case provided. • *(Equipment includes: padlock, Innovate LM-1 or LM-2 digital meter, Innovate exhaust clamp, heat-sink extension bung, welding wire, 9-volt battery, 18 ft lead, roll of 100 MPH tape, wide-band oxygen sensor, 12-volt battery lead adaptor, cigarette lighter socket power lead, LM-1 or LM-2 meter operating instructions, Innovate CD, Innovate quick start* guide*.)*	EX
• An LVVTA-supplied, or LVVTA-approved, suspension bump-steer swing-check bar assembly, or measuring device.	1A, 1D

Note 1	Information on the LVV certification categories referred to in 2.3(1) is available in *LVV ORS Chapter 3: LVV Certification Categories*, which is available to the public electronically, free of charge, from the LVVTA website www.lvvta.org.nz

2.4 Maintenance, storage, and return of equipment

2.4(1) An LVV Certifier must ensure that all items of equipment required by 2.2(1) and 2.3(1) are:

(a) maintained in good working order; and

(b) in the case of items supplied by LVVTA, are:

(i) presented for re-calibration and maintenance as and when required by LVVTA; and

(ii) safely stored, transported, and cared for at all times.

2.4(2) An LVV Certifier must, upon cessation of appointment, return any equipment that has been provided at no cost by LVVTA or NZTA (see Notes 1 to 3 below).

Note 1	Any equipment provided by LVVTA at no cost to an LVV Certifier remains the property of LVVTA. Any other equipment purchased by an LVV Certifier from LVVTA or any other source remains the property of the LVV Certifier. Such equipment may, upon cessation of an LVV Certifier's appointment, by mutual agreement, be purchased from the LVV Certifier by LVVTA.
Note 2	Where an LVV Certifier refuses to return equipment provided by LVVTA or NZTA, LVVTA will seek to recover the value of the equipment from the LVV Certifier.
Note 3	Objective Noise Test (ONT) equipment will be provided by LVVTA to the LVV Certifiers, and must be returned to LVVTA upon cessation of the LVV Certifier's appointment.

2.4(3) Where equipment is provided to an LVV Certifier by LVVTA, a bond may be applied by LVVTA to cover the value of the equipment, refundable upon the cessation of the LVV Certifier's appointment and return of equipment in good condition (see Note 1 below).

Note 1	In the case where any equipment owned by LVVTA is lost, stolen, damaged, or is otherwise inoperable while in the care, custody, or control of the LVV Certifier, the cost for the repair or replacement must be met by the LVV Certifier.

Section 3 Premises Requirements

3.1 Introduction

LVV Certifiers may work from within their own inspection premises, or, in order to provide a mobile service for their customers, inspection premises owned by other parties.

All premises used for LVV certification inspections must meet the premises requirements specified within this section. These requirements vary, depending on whether the inspection is a 'primary' inspection, or another type of inspection where an underbody inspection facility is not required.

It is a requirement that every LVV certification inspection, at some point during the process, is carried out at premises which incorporate a proper under-body inspection facility.

The specific requirements for premises that must be used by LVV Certifiers during the course of their LVV certification inspections are provided here to ensure that the premises used will enable a thorough inspection to take place. In essence, the requirement is that all primary inspections are carried out on a hoist or over a pit, and inside a proper building that affords an LVV Certifier all of the comfort, light, and convenience necessary to do an inspection well.

3.2 Inspection premises required for all inspections

3.2(1) An LVV Certifier must, for all LVV certification categories, when carrying out any LVV certification inspection, use inspection premises that (see Notes 1 to 3 below):

(a) incorporates an inspection area that enables a safe and thorough inspection to occur; and

(b) complies with:

(i) Occupational, Safety, and Health requirements; and

(ii) any other relevant Acts, regulations, and local bylaws.

Note 1	Information on the LVV certification categories referred to in 3.2(1) is available in *LVV ORS Chapter 3: LVV Certification Categories*, which is available to the public electronically, free of charge, from the LVVTA website www.lvvta.org.nz
Note 2	A premises which meets the requirements of 3.2(1) may be used for: • a preliminary 'chassis inspection' which doesn't require a hoist or a pit to facilitate a thorough inspection; and • a 'rectification inspection' where the nature of the rectifications are such that a hoist or a pit is not required to determine that the rectifications have been carried out correctly; and • the affixing of an LVV Electronic Data Plate or an LVV engraved certification plate.
Note 3	It is the responsibility of an LVV Certifier, as an independent person operating commercially, to identify which Acts, regulations, and by-laws must be complied with. https://www.worksafe.govt.nz/ details some of the health and safety requirements that an LVV Certifier will need to comply with.

3.3 Inspection premises required for primary inspections

3.3(1) An LVV Certifier must, for all LVV certification categories, when carrying out a primary LVV certification inspection, in addition to 3.2(1), use inspection premises which incorporates an inspection area that (see Note 1 below):

(a) is situated within a building that has a roof, sides, and door made of permanent building materials; and

(b) is of sufficient dimensions, including doorway and access-way, as to enable the efficient and thorough inspection of any vehicle being certified; and

(c) is on ground that is constructed of a material that will remain firm in all weather conditions; and

(d) is on ground that is even and level, as to enable a vehicle to remain stationary with all brakes released; and

(e) is sufficiently clear of structural and equipment intrusions (other than those necessary for the inspection process) as to enable the comfortable, efficient, and thorough inspection of any vehicle being certified; and

(f) enables a close visual inspection of the complete vehicle under-body from a standing position; and

(g) is equipped with sufficient lighting to enable good visibility of the vehicle being certified and the equipment used in the inspection process.

Note 1	A 'primary inspection' as referred to in 3.3(1) is an inspection where the vehicle is being fully and thoroughly inspected using an underbody inspection facility, and does not include a preliminary 'chassis inspection' or a 'rectification inspection' where specified items which can be inspected without the use of an underbody inspection facility.

3.4 Approval of inspection premises

3.4(1) Inspection premises are approved for use by an LVV Certifier for LVV certification inspections, provided that the premises either:

(a) have been approved by NZTA for the purpose of issuing a Warrant of Fitness or Certificate of Fitness; or

(b) meet the premises requirements specified in 3.3(1).

Terms & Definitions for Chapter 6

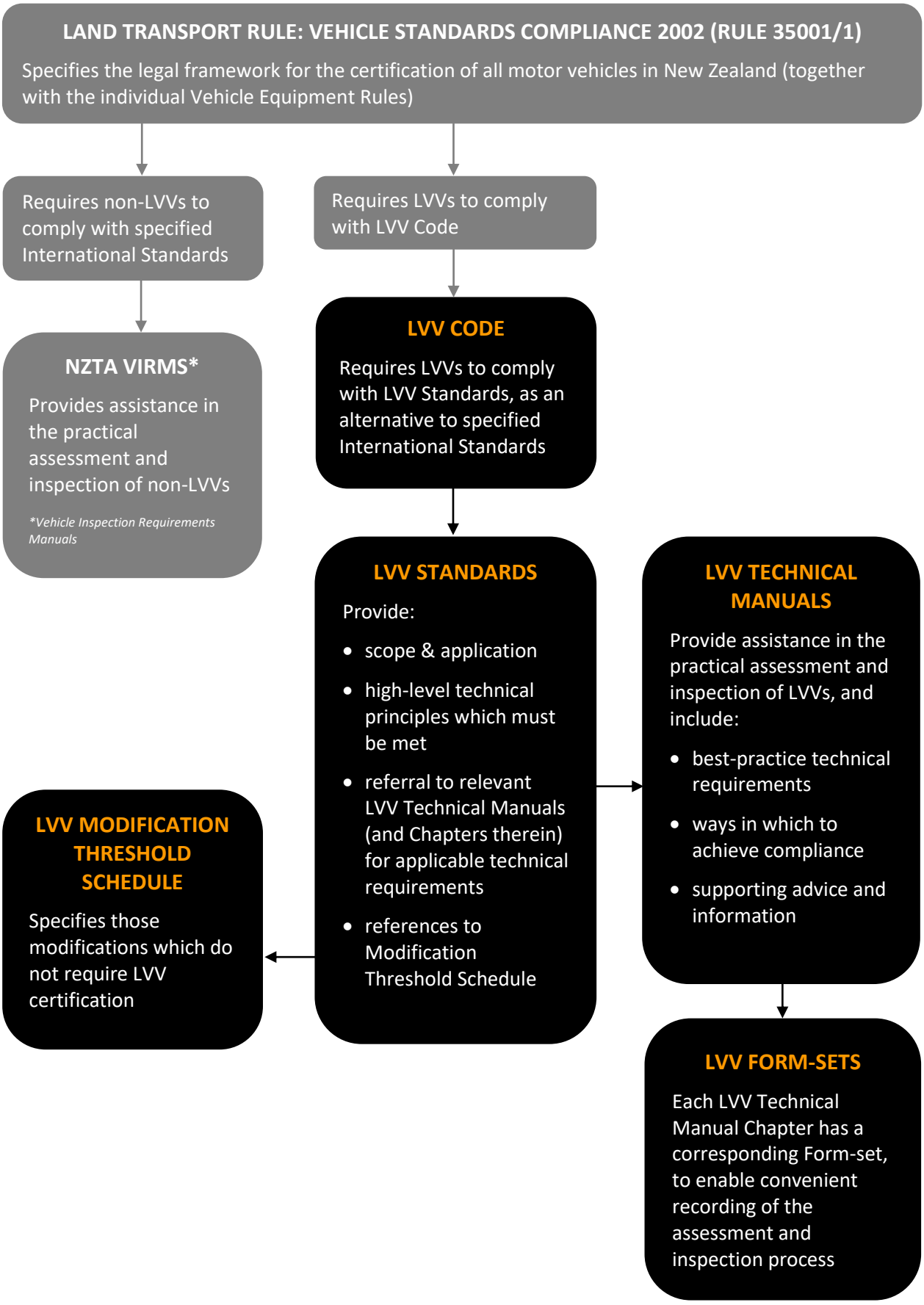
Applicable requirements	means any technical or operational requirement referred to in the *LVV Code* which an LVV must comply with in order to be approved for LVV certification.
Bump-steer bars	(also known as bump-steer swing-check bars) means a bespoke measuring device designed and built by LVVTA for the use of LVV Certifiers to measure the amount of toe-change that occurs throughout a vehicle's range of suspension travel.
Certify	is, as defined in the *Land Transport Rule: Vehicle Standards Compliance 2002*, to verify that a vehicle complies with safety-related legal requirements prescribed by New Zealand land transport legislation.
CCM	(**NZ Car Construction Manual**) means LVVTA's detailed technical standards, incorporated by reference under the *LVV Code*, which must be met to enable an LVV to comply with applicable requirements. The *CCM* is referred to by the corresponding *LVV Standard*.
Chassis inspection	means an inspection carried out by an LVV Certifier of an LVV at an early stage of its construction, particularly relevant to a scratch-built LVV, ideally when the chassis is tack-welded together before it is fully welded. This is often carried out as part of, or at the same time as, a preliminary inspection.
Compliant	(also known as compliance) means a condition where evidence exists that an LVV complies with the applicable requirements specified in the *LVV Code*.
ESMP	(**Engine Speed at Maximum Power**) means a specified engine speed applicable to the particular make and model of engine, when carrying out an ONT.
Graduated light board	means a tool used for inspecting and adjusting vehicle headlamps, and while once commonly used, most have been replaced by the more accurate optical beam setter (see also optical beam setter).
Inspection	means the vehicle inspection process specified in *section 2.4*, *2.5*, and *2.6* of the *LVV Code*, carried out by an LVV Certifier during the LVV certification of a low volume vehicle.
LVV	(**Low Volume Vehicle**) means, in simple terms, vehicles which are modified or scratch-built in small numbers, and includes individually modified or scratch-built vehicless. The full definition of an LVV is contained in the *LVV Code*.
LVV Base Forms	(**Low Volume Vehicle Base Forms**) means the set of Forms used by an LVV Certifier as part of their inspection of an LVV which are common to all LVV certifications.
LVV Certification	(**Low Volume Vehicle Certification**) means the process specified by the *LVV Code*, by which the design of an LVV is determined to comply with any applicable requirements, and, in recognition of which, an LVV EDP is affixed.
LVV Certification File	(**Low Volume Vehicle Certification File**) means the set of documents, including the *LVV Base Forms, LVV Inspection Form-sets*, supporting information, and photographic record, which an LVV Certifier is required to collate during an LVV certification inspection process, and submit to LVVTA upon completion.

LVV Certification Management Documents	(**Low Volume Vehicle Certification Management Documents**) means the collective of all documents relevant to the LVV certification system, including those documents housed within the *LVV Certification Manuals*, and external documents which may be used or referred to by LVVTA or an LVV Certifier.
LVV Certification Manuals	(**Low Volume Vehicle Certification Manuals**) means LVVTA's set of manuals which house all of LVVTA's legal, operational, and technical certification documents which are incorporated by reference under the *LVV Code*. The *LVV Certification Manuals* contain the *LVV Code*, the *LVV ORS*, *LVV Standards*, *LVV Base Forms* and *LVV Inspection Form-sets*, *Safety Alerts*, *Information Sheets*, *LVVTA Newsletters*, and other Reference Material.
LVV Certifier	(**Low Volume Vehicle Certifier**) means a person appointed by NZTA under the provisions of *Land Transport Rule: Vehicle Standards Compliance 2002*, to carry out certification of modified and scratch-built LVVs, as specified by *Part 2* of the *LVV Code*.
LVV Certify	(**Low Volume Vehicle Certify**) means the same as LVV certification.
LVV Code	(**Low Volume Vehicle Code** or the **Code**) means an LVVTA document which is incorporated by reference into the *Land Transport Rule: Vehicle Standards Compliance 2002*, and all applicable individual *Land Transport Equipment Rules*, that provides the legal framework to enable the LVV certification of modified and scratch-built LVVs in New Zealand.
LVV EDP	(**Low Volume Vehicle Electronic Data Plate**) is an RFID tag, in use from February 2021, fitted to an LVV upon completion of the LVV certification process, which when scanned by an NFC-capable device, displays details and photographs of the modifications and construction features on the LVV to which it is affixed.
LVV Information Sheets	(**Low Volume Vehicle Information Sheets**) means *Information Sheets* incorporated by reference under the *LVV Code*, which provide or support applicable requirements.
LVV Inspection Form-set	(**Low Volume Vehicle Inspection Form-set** or **LVV Form-set**) means the check-sheets used by an LVV Certifier to guide and record their inspection of an LVV, and confirm compliance with applicable requirements.
LVV ORS	(**Low Volume Vehicle Operating Requirements Schedule** or **ORS**) means the document, incorporated by reference under the *LVV Code*, which provides LVVTA's operational processes and systems necessary to meet applicable requirements. The *LVV ORS* sets out the obligations and responsibilities of LVVTA, and the LVV Certifiers.
LVV plate	(**Low Volume Vehicle engraved certification plate**) is an engraved aluminium plate (approximately 110 mm x 80 mm in size) in use from the commencement of LVV certification in April 1992 to February 2021, which displays a summary of information, via engraving, about the modifications and construction features on the LVV to which it is affixed.
LVV Safety Alerts	(**Low Volume Vehicle Safety Alerts** or **Safety Alerts**) means LVVTA's publication system, incorporated by reference under the *LVV Code*, which is designed to draw attention to unsafe aftermarket automotive components, and which must be met to enable an LVV to comply with applicable requirements.
LVV Standards	(**Low Volume Vehicle Standards**) means LVVTA's technical standards, incorporated by reference under the *LVV Code,* that set out the legal requirements which vehicles that are modified and scratch-built vehicles in New Zealand must meet. Each *LVV Standard* refers to a corresponding *CCM* or *MCM* for detailed technical requirements.

LVVTA	(**Low Volume Vehicle Technical Association**) is an incorporated society comprised of specialist vehicle associations. Established in 1992, its objectives are to represent the interests of vehicle modifiers and builders in New Zealand, and to ensure high safety standards for modified and scratch-built LVVs. The LVVTA owns and administers the *LVV Code*.
MCM	(**NZ Motorcycle Construction Manual**) is a manual specifically developed by LVVTA for New Zealand motor vehicle modifiers and builders, to provide the necessary legal requirements relating to motorcycle modification and construction, and which also provides best-practice guidance and helpful information.
MDC	(**Modification Declaration Certificate**), also known as Declaration or Declaration Certificate), means a document that was issued to modified and scratch-built LVVs between 1991 and 1998, as a record of confirmation that the LVV was built or modified prior to the introduction of the *Transport (Vehicle Standards) Regulations 1990*, and is therefore not required to be certified to the *LVV Code*. This is provided that the LVV has been continuously registered and has not been modified further.
Modification	is defined in *Land Transport Rule: Vehicle Standards Compliance 2002*) to change a vehicle from its original state by altering, substituting, adding or removing any structure, system, component or equipment, but does not include repair. 'Modified' and 'modification' have corresponding meanings.
NoA	(**Notice of Appointment**), means the contract which exists between an LVV Certifier and NZTA, that provides an LVV Certifier with the authorisation to carry out LVV certification on behalf of NZTA, and which outlines the terms, conditions, and obligations of the appointment.
NFC	(**Near Field Communication**) means a short-range wireless technology, typically requiring a distance of 40 mm or less to initiate a contact.
NZTA	(**New Zealand Transport Agency**) is a Crown entity responsible for managing New Zealand's land transport system.
ONT	(**Objective Noise Test**) means a test carried out by an LVV Certifier to measure the noise level of a vehicle's exhaust system at a specific engine RPM.
Optical beam setter	means a device for inspecting and adjusting a vehicle's headlamps and other lamps (see also graduated light board).
Primary inspection	means the main LVV certification inspection where an LVV is fully and thoroughly inspected using an underbody inspection facility, and all aspects of the LVV's modifications and construction features are assessed by the LVV Certifier. This is different to a preliminary inspection, or rectification inspection, which focus on specific vehicle aspects only.
PRS	(**Performance Review System**) is the quality management monitoring tool used by NZTA to measure the performance of all certifiers, including LVV Certifiers.
Rectification inspection	means a partial re-inspection of an LVV by an LVV Certifier to ensure that items which have been identified (during a previous inspection) as requiring additional work to bring the LVV into a safe and compliant condition have been completed, enabling the LVV Certifier to complete the LVV certification inspection.

RFID	(**Radio Frequency Identification**) is a technology which uses electromagnetic fields to automatically identify and track tags attached to objects. These tags link to electronically stored information, which can be accessed using RFID readers.
Sound level meter	means a device for measuring the level of sound output, in decibels, when carrying out an ONT.
VIRM	(**Vehicle Inspection Requirements Manual**) means NZTA's inspection manuals, used by certifiers for every certification activity except for LVV certification.
VLT	(**Visible Light Transmittance**) means the method of measuring the quantity of light able to be transmitted through a non-opaque item, for example a piece of automotive glass. 35% VLT is the maximum legal window glass tint allowable on an MA or MB class vehicle in New Zealand.

APPENDIX 1 – LVVTA DOCUMENT OVERVIEW



APPENDIX 2 – LVVTA CERTIFICATION MANAGEMENT DOCUMENTS

The table below provides the primary *LVV Certification Management Documents* developed by LVVTA and used within the LVV certification system, together with a brief bullet-point summary of the functions of the documents, and notes to help explain the purpose of them. All of the primary *LVV Certification Management Documents* are developed by LVVTA, and are contained in the *LVV Certification Manuals.*

Ref #	LVVTA Functions relating to documents	Notes
A2-1	**Low Volume Vehicle Code**	
	Develop, maintain, and continuously improve the *Low Volume Vehicle Code* (*LVV Code*), which includes: • development of *LVV Code* • periodic review and amendment of *LVV Code* • engaging with NZTA on amendments to *LVV Code*, and sign-off • making *LVV Code* available to LVV Certifiers via mail-out system • making *LVV Code* available to industry and public via website.	*The LVV Code is the 'legal framework' document that governs the operation of the LVV certification system, and is incorporated by reference within the Land Transport Compliance Rule.*
A2-2	**LVV Operating Requirements Schedule**	
	Develop, maintain, and continuously improve the *LVV Operating Requirements Schedule* (*LVV ORS*), in accordance with the *LVV Code*, which includes: • development of *LVV ORS* • periodic review and amendment of *LVV ORS* • engaging with certifiers, industry, and public on ways to improve *LVV ORS* • engaging with NZTA on amendments to *LVV ORS*, and sign-off • making *LVV ORS* available to LVV Certifiers via the mail-out system • making *LVV ORS* available to industry and public via website.	*The LVV Operating Requirements Schedule is the 'rules of the game' document that sets out how the LVV certification processes and systems are managed, and the roles and responsibilities of the key participants; LVVTA, NZTA, and the LVV Certifiers.*
A2-3	**Non-technical Information Sheets**	
	Develop, maintain, and continuously improve *Non-technical Information Sheets* (*NT Info-sheets*), in accordance with the *LVV Code*, which includes: • development of new *NT Info-sheets* • making *NT Info-sheets* available to LVV Certifiers via mail-out system • making *NT Info-sheets* available to industry & public via website • creating awareness of *NT Info-sheets* via specialist automotive media.	*These provide operational and procedural information to LVV Certifiers, on an as-and-when-required basis, to assist them in their LVV certification inspections.*
A2-4	**LVV Modification Threshold Schedule**	
	Develop, maintain, and continuously improve an *LVV Modification Threshold Schedule* (*MTS*), in accordance with the *LVV Code*, which includes: • development of *MTS* • periodic review and amendment of *MTS* • engaging with NZTA on amendments to *MTS*, and sign-off • working with NZTA to ensure correct incorporation of *MTS* in *VIRM* • making *MTS* available to LVV Certifiers via the mail-out system • making *MTS* available to LVV Certifiers, industry, and public via website.	*The LVV Modification Threshold Schedule is a document which lists those modifications which do not require LVV certification, because they are below an agreed 'threshold'.*

A2-5 Low Volume Vehicle Standards

Develop, maintain, and continuously improve a suite of *Low Volume Vehicle Standards* (*LVV Standards*), in accordance with the *LVV Code*, which includes:

- development of new *LVV Standards*
- periodic review and amendment of existing *LVV Standards*
- engaging with LVV Certifiers, industry, and public on ways to improve *LVV Standards*
- working with NZTA regarding prioritisation, review frequency, sign-off of *LVV Standards*
- making *LVV Standards* available to LVV Certifiers via mail-out system
- making *LVV Standards* available to LVV Certifiers, industry, and public via website
- creating awareness of *LVV Standards* via specialist automotive media and social media.

These are the technical requirements around which the LVV certification system is based. The LVV Standards 'set the scene' in relation to the scope and application of technical requirements for Low Volume Vehicles, and provide basic requirements, which then refer to the relevant NZ (Car or Motorcycle) Construction Manual for high-level technical guidance.

A2-6 LVV Base Forms & LVV Inspection Form-sets

Develop, maintain, and continuously improve a suite of *LVV Base Forms* and *LVV Inspection Form-sets* (*Forms & Form-sets*) in accordance with the *LVV Code*, which includes:

- development of new *Forms & Form-sets*
- periodic review and amendment of existing *Forms & Form-sets*
- making *Forms & Form-sets* available to LVV Certifiers via mail-out system.

Forms & Form-sets are a series of 'check-sheets' used by the LVV Certifiers for guiding and recording the inspection process. They are linked to the technical requirements.

A2-7 Technical Information Sheets

Develop, maintain, and continuously improve *Technical Information Sheets* (*Tech Info-sheets*) in accordance with the *LVV Code*, which includes:

- development of new *Tech Info-sheets*
- making *Tech Info-sheets* available to LVV Certifiers via mail-out system
- making *Tech Info-sheets* available to industry & public via website
- creating awareness of *Tech Info-sheets* via specialist automotive media and social media.

These provide technical information to LVV Certifiers, on an as-and-when-required basis, to assist them in carrying out the LVV certification activities correctly.

A2-8 Safety Alerts

Develop, maintain, and continuously improve *Safety Alerts,* in accordance with the *LVV Code*, which includes:

- understanding the risks and required resolutions of unsafe aftermarket automotive parts
- development of new *Safety Alerts*
- making *Safety Alerts* available to certifiers via mail-out system
- making *Safety Alerts* available to certifiers, industry, and public via website
- creating awareness of *Safety Alerts* via specialist automotive media and social media.

Safety Alerts are developed to alert LVV Certifiers and the public about the presence of unsafe aftermarket automotive components on the market, and to provide guidance when encountering such components.

A2-9 New Zealand Car Construction Manual

Develop, maintain, and continuously improve the *NZ Car Construction Manual* (*CCM*), in accordance with the *LVV Code*, which includes:

- detailed technical requirements for complex modifications
- best-practice examples, interpretation, guidance, & tips
- tables and charts with specific component type and size recommendations
- documents for associated processes such as 'Design Approval' & 'Authority Cards'
- illustrations and diagrams, and a 'Helpful Information' section at the back of each chapter.

The CCM is referred to by the LVV Standards, and is the document a car builder or modifier follows during the vehicle's construction or modification process. The CCM is the same document that the LVV Certifier inspects the vehicle against.

A2-10 New Zealand Motorcycle Construction Manual

Develop, maintain, and continuously improve the *NZ Motorcycle Construction Manual* (*MCM*), in accordance with the *LVV Code*, which includes:

- detailed technical requirements for complex modifications
- best-practice examples, interpretation, guidance, & tips
- tables and charts with specific component type and size recommendations
- documents for associated processes such as 'Design Approval'
- illustrations and diagrams, and a 'Helpful Information' section at the back of each chapter.

The MCM is referred to by the LVV Standards, and is the document a motorcycle builder or modifier follows during the vehicle's construction or modification process. The MCM is the same document that the LVV Certifier inspects the vehicle against.

A2-11 LVV Certification Manuals

Develop and maintain the *LVV Certification Manuals* (*Manuals*) for housing the various documents referred to in this Appendix, and keeping them updated, which includes:

- design and production of the *Manuals*
- production of artwork, dividers, header pages, contents pages
- design and co-ordination of a periodic mail-out system to distribute *Manual* updates to LVV Certifiers
- development and issue of Amendment Record Sheets to assist the LVV Certifiers to maintain their *Manuals.*

All of the primary LVV certification documents are contained:

- *electronically, on the LVVTA website; and*
- *in hard-copy, in the nine-volume LVV Certification Manual set.*

A2-12 Amendment Record Filing System

Maintain, for the *LVV Certification Management Document* system, a process which captures all comments, suggestions, submissions, and notes relating to something that needs improving or fixing in any of the documents referred to in this Appendix, so that when an amendment opportunity arises the information is available.

This is an in-house 'Amendment Record Filing System' which is accessed whenever amendment opportunities arise.