

Helping New Zealanders Build & Modify Safe Vehicles

## LVV Operating Requirements Schedule

# Chapter 4

## LVV Certifier Background Criteria

11<sup>th</sup> Amendment | Effective from 1 October 2024



## Approval

LVV ORS Chapter 4 Approval			
Signed in accordance with clause 1.3(5) of the Low Volume Vehicle Code, on... 27 September 2024.....by:			
on behalf of the New Zealand Transport Agency: Name Jim Anderson	Signature 	on behalf of Low Volume Vehicle Technical Association: Name Kenneth McAdam	Signature 

## Amendments

LVV ORS Chapter 4 Amendment Record			
Amendment Details	Amendment #	Issue date	Effect date
• Original issue		2001	2001
• Establishment of new LVV Certifier Categories	1 <sup>st</sup> Amendment	August 2003	October 2003
• Introduction of new procedural requirements including plate affixing, road-testing, and remedial work	2 <sup>nd</sup> Amendment	March 2005	April 2005
• Introduction of documentation use & self-certification	3 <sup>rd</sup> Amendment	February 2006	April 2006
• Introduction of procedures for return of unaffixed plates, and delegation of plate affixing	4 <sup>th</sup> Amendment	May 2007	July 2007
• Introduction of procedures for plate pre-ordering, and establishment of scratch-built sub-categories	5 <sup>th</sup> Amendment	March 2008	April 2008
• Major review of the LVV ORS, new sections for service & communication requirements, conduct & complaints	6 <sup>th</sup> Amendment	January 2010	February 2010
• Minor review for miscellaneous changes and additions	7 <sup>th</sup> Amendment	March 2011	April 2011
• Review to incorporate various detail changes and additions relating to TAC, category extensions, training, and Technical Decision Review Committee	8 <sup>th</sup> Amendment	July 2016	July 2016
• Introduction of Commercial Sub-committee of the TAC	9 <sup>th</sup> Amendment	October 2016	October 2016
• Review to provide for LVCM Certifiers	10 <sup>th</sup> Amendment	June 2017	June 2017
• Complete redevelopment, conversion to individual chapters	11 <sup>th</sup> Amendment	October 2024	October 2024

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 LVV ORS document. From Amendment # 11, amendments are carried out to individual chapters at various times.

Note 2 Text highlighted in grey shows amendments that have been made subsequent to this chapter's previous version, and a grey vertical stroke to the left of the text denotes new or changed information which is important and needs to be understood.

Note 3 Printed or saved copies of LVV ORS chapters may become out of date – visit [www.lvvta.org.nz](http://www.lvvta.org.nz) to check this chapter is the latest version before relying on the enclosed information.

## Associated Information

Background
<p>The LVV Operating Requirements Schedule (LVV ORS) sets out the operational systems and processes which enable the LVV certification system to function effectively. Whereas the <i>Low Volume Vehicle Code</i> provides the legal platform for the LVV certification system, the LVV ORS enables the provision of robust operational systems and processes over the LVV certification system to ensure that LVV certification outcomes are consistent, fair, transparent, and of a high quality.</p> <p>The information in the LVV ORS stems from work undertaken by the Low Volume Vehicle Technical Association Incorporated (LVVTA) founding member organisations that commenced in 1989 and has been progressively developed as an integral part of the NZ Government's land transport regulatory system by agreement with the New Zealand Transport Agency (NZTA).</p>

**Publisher & Owner**

The LVV ORS is developed and owned by the LVVTA, which is an incorporated society established in 1992, representing 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.

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**Availability**

The LVV ORS is produced and distributed by LVVTA, and is available to the public electronically, free of charge, from the LVVTA website [www.lvvt.org.nz](http://www.lvvt.org.nz)

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**Legal Status**

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

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## Chapter 4

# LVV Certifier Background Criteria

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### Purpose of this Chapter

The purpose of this LVV Operating Requirements Schedule chapter (this chapter) is to explain the type of background that a person who would like to become an LVV Certifier needs to have. 'Background', in this context, refers to formal qualifications, but also, and more importantly, practical experience - together with the knowledge and expertise that this practical experience creates.

Because of the high level of complexity and diversity associated with LVV certification, this chapter sets out the:

- general appointment criteria – in particular the knowledge and practical experience – that any person wishing to become appointed as an LVV Certifier, regardless of which LVV certification categories are being applied for, must meet; and
- more specific appointment criteria for each of the various LVV certification categories a person wishing to become appointed as an LVV Certifier must meet.

This chapter should be read in conjunction with *LVV ORS Chapter 3 – LVV Certification Categories*, and *LVV ORS Chapter 5 – LVV Certifier Application & Appointment*.

The use of *italics* throughout this chapter is to enable readers to distinguish between '*explanatory information*' and '*the requirements*'. *Italics* are also used when referencing '*external documents*' which are not part of this chapter.

## Section 1 General Appointment Criteria to Become an LVV Certifier

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### 1.1

#### Introduction

*As with any certification process, the single-most important ingredient in achieving the highest possible level of safety outcomes is to ensure that the people who become appointed as LVV Certifiers have the appropriate general background, and in particular, have the specific background relevant to the LVV certification categories for which they are appointed.*

### 1.2

#### The need for knowledge and practical experience

*LVV certification is unique amongst all other certification types, in that there is no formal trade or profession to support it. Being a motor mechanic or engineer alone is a good platform, but it is not enough to equip a person with the necessary level of knowledge and practical hands-on experience required in order to make sound safety-related judgments within the complex and diverse world of modified and individually constructed motor vehicles.*

*Three decades of managing LVV certification operations have proven that, for the majority of LVV certification categories, the only people who consistently perform well as an LVV Certifier are those people who have built up a vast amount of knowledge and practical experience in relation to modified and individually constructed vehicles. This knowledge and skill is only achieved through the practical experience that comes from working in an automotive mechanical environment, together with extensive direct practical involvement in the motor vehicle modification and construction sector. This knowledge can't come from anywhere else. There is no other way to learn it other than by doing it. The lessons learnt and historical knowledge accumulated during modifying and building motor vehicles creates a solid understanding of best practice in this difficult certification discipline.*

*Active involvement in the motor racing scene can also be an important contributor to the knowledge and experience required to become a good LVV Certifier.*

*Without this knowledge and practical experience, it is highly unlikely that the right safety-related decisions will be made when assessing a modified or individually constructed vehicle. There are potentially catastrophic consequences as a result of an LVV Certifier not being able to recognise the essential starting-point principles of whether, for example, a vehicle is fitted with its original suspension uprights (and therefore whether or not the steering arms are in the correct position relative to the steering rack); or whether the steering arms are the correct shape (and therefore whether or not they have been heated and bent); or whether the disc brakes are original or adapted (and therefore whether the spindles might have been incorrectly machined). In short, if an LVV Certifier is unable to determine that modifications have occurred in the first place, then there is no chance of ensuring that the modifications – safety-critical in many cases – have been carried out correctly and safely.*

### 1.3

#### **A passion for modified motor vehicles**

*Another lesson that LVV certification history has taught us well is that there is a clear correlation between consistently high-performing LVV Certifiers, and people with a genuine passion for motor vehicle modification and construction. Without the passion, there isn't the total commitment to the modified and individually constructed motor vehicle scene, that, over a lifetime, creates the necessary knowledge and practical experience required to competently assess such complex motor vehicles.*

*Consequently, there is a very small pool of people with the right attributes for LVV certification, and a much greater degree of difficulty exists in identifying and training such people when the need arises. The criteria in this chapter for application as an LVV Certifier has been developed over time, to eliminate the possibility of people without the necessary knowledge, practical experience, or high ethical standards becoming appointed.*

### 1.4

#### **The need to be ‘scratch-built capable’**

*Ideally, a person wishing to become an LVV Certifier should have an exceptionally broad and high level of knowledge and practical experience so that they might be able, ultimately, to become appointed for the top-level LVV certification categories including LV1D (extensively modified and scratch-built vehicles), LV2B (extensively modified and scratch-built motorcycles), and LV2C (extensively modified and scratch-built trikes). If the available LV1A and LV1B ‘bread and butter’ work is spread too thinly across too many LVV Certifiers, the LVV Certifiers will not get enough work to stay sharp, and there will be insufficient work available to attract and keep the vitally important LV1D, LV2B, and LV2C Certifiers.*

*This balance is needed for reasons of both safety and geographical coverage, for both the vehicle modification industry and the enthusiast motor vehicle sector.*

*This unique situation is detailed further within ‘7.2 Application of Geographical Coverage for LVV Certification’ which can be found in ‘Annex 7 Related System Legal Reviews’ of the Low Volume Vehicle Code (LVV Code), which is available to the public electronically, free of charge, from the LVVTA website [www.lvvta.org.nz](http://www.lvvta.org.nz).*

*This expectation of being ‘scratch-built capable’ may, however, in some cases not be imposed, as circumstances will occasionally dictate that the most suitable person for a particular LVV certification category may not have the appropriate practical experience to certify vehicles of a particular era, type, or origin. This has to be taken into consideration to ensure that modified and scratch-built vehicles are being certified by the best-suited people, and this factor has to be carefully balanced against the challenges around geographical coverage. Although the LVV certification category system has been refined in this way, the objective is still, wherever possible, to start a new LVV Certifier with category LV1A, and work upwards.*

## 1.5 General background requirements

1.5(1) A person wishing to become appointed as an LVV Certifier must meet general background requirements, which comprise the accumulation of:

- (a) a high level of knowledge and practical experience within the light motor vehicle industry (see Note 1 below); and
- (b) practical experience in light motor vehicle-related modification work; and
- (c) a strong interest in, and general knowledge of, light motor vehicles.

**Note 1** The 'high level of knowledge and practical experience within the light motor vehicle industry' required by 1.5(1)(a) can be accumulated over a period of time during a person's career, and the person wishing to become appointed as an LVV Certifier does not have to be engaged in that industry at the time of making an application.

1.5(2) In addition to the general background requirements specified in 1.5(1), a person wishing to become appointed as an LVV Certifier must also meet the specific appointment criteria relevant to each LVV certification category being applied for, as specified in 2.2 to 2.14 (see Note 1 below).

**Note 1** The details of the vehicle and modification types which can be LVV certified under each of the LVV certification categories specified in section 2 are explained in *LVV ORS Chapter 3 – LVV Certification Categories*, which is available to the public electronically, free of charge, from the LVVTA website [www.lvvtta.org.nz](http://www.lvvtta.org.nz)

1.5(3) A person who wishes to become appointed as an LVV Certifier will undergo a comprehensive assessment process, the details of which are provided in *LVV ORS Chapter 5 – LVV Certifier Application & Appointment*.

## Section 2 Specific Appointment Criteria for LVV Certification Categories

### 2.1 Introduction

*LVV certification is as diverse as it is complex. If one considers that LVV certification covers scratch-built cars, hand-built motorcycles, custom-built trikes, right-hand drive conversions, taxi-van seating, disability transportation equipment, electric vehicles, and a host of other vehicle and modification types, it would be almost impossible for any one person to possess the knowledge and practical experience to certify all those vehicle and modification types.*

*For this reason, all of the possible vehicle and modification types have been broken down into a number of different 'LVV certification categories', for which an LVV Certifier may be appointed. An LVV Certifier may be appointed for just one LVV certification category, or multiple LVV certification categories.*

*This section sets out the specific knowledge and practical experience required for a person wanting to become an LVV Certifier for each of the various LVV certification categories.*

*The details of the vehicle and modification types which can be LVV certified under each of the LVV certification categories specified in section 2 are explained in *LVV ORS Chapter 3 – LVV Certification Categories*, which is available to the public electronically, free of charge, from the LVVTA website [www.lvvtta.org.nz](http://www.lvvtta.org.nz)*

## 2.2 Category LV1A Modified Production – Limited

2.2(1) A person applying to become appointed to certify under LVV certification category ‘LV1A Modified Production - Limited’ must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years’ full-time practical industry experience in vehicle modification work, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of (primarily) mechanical modifications to vehicles, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.2(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.2(1)(b) is met.

## 2.3 Category LV1B Modified Production – Extended

2.3(1) A person applying to become appointed to certify under LVV certification category ‘LV1B Modified Production - Extended’ must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years’ full-time practical industry experience in vehicle modification work, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of (primarily) occupant protection system modifications to vehicles, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.3(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.3(1)(b) is met.

## 2.4 Category LV1C Modified Production – Structures

2.4(1) A person applying to become appointed to certify under LVV certification category ‘LV1C Modified Production - Structures’ must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years' full-time practical industry experience in structural motor body modification work, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of (primarily) structural modifications to vehicles, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.4(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.4(1)(b) is met.

## 2.5 Category LV1D - Advanced Modified Production & Scratch-built

2.5(1) A person applying to become appointed to certify under LVV certification category 'LV1D Advanced Modified Production & Scratch-built' must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modification or construction relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years' full-time practical industry experience in extensive vehicle modification or scratch-built vehicle construction, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of extensive vehicle modifications or scratch-built vehicle construction, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.5(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.5(1)(b) is met.

## 2.6 Category LVRH Modified Production – Right-hand Drive Conversions

2.6(1) A person applying to become appointed to certify under LVV certification category 'LVRH Modified Production – Right-hand Drive Conversions' must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category, as a result of either having (see Note 1 below):

- (i) had two years' full-time practical industry experience in converting a variety of vehicle makes and ages to right-hand drive, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
- (ii) carried out right-hand drive conversions on a variety of vehicle makes and ages, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
- (iii) accumulated experience in an alternative way to 2.6(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.6(1)(b) is met.

## 2.7 Category LVEX – Exhaust Noise & Gas Emissions

2.7(1) A person applying to become appointed to certify under LVV certification category 'LVEX - Exhaust Noise & Gas Emissions' must, as a minimum (see Note 1 below):

- (a) meet the general background requirements specified in 1.5; and
- (b) be appointed for one or more LVV certification categories other than LVEX (see Note 2 below).

**Note 1** Existing knowledge and experience in exhaust noise testing or gas emissions testing is not necessary, as LVVTA provides full training, including the use of the relevant testing equipment.

**Note 2** An appointment for LVV certification category LVEX can occur concurrently with other LVV certification category appointments.

## 2.8 Category LV2A Motorcycles - Modified Production

2.8(1) A person applying to become appointed to certify under LVV certification category 'LV2A Motorcycles - Modified Production' must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in motorcycle modifications relevant to the LVV certification category, as a result of either having (see Note 1 below):

- (i) had two years' full-time practical industry experience in motorcycle modification work, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
- (ii) carried out a variety of (primarily) mechanical modifications to motorcycles, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
- (iii) accumulated experience in an alternative way to 2.8(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.8(1)(b) is met.

**2.9 Category LV2B Motorcycles – Advanced Modified Production & Scratch-built**

2.9(1) A person applying to become appointed to certify under LVV certification category 'LV2B Motorcycles – Advanced Modified Production & Scratch-built' must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in motorcycle modification or construction relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years' full-time practical industry experience in extensive motorcycle modification or scratch-built motorcycle construction, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of extensive motorcycle modifications or scratch-built motorcycle construction, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.9(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.9(1)(b) is met.

**2.10 Category LV2C Trikes – Advanced Modified Production & Scratch-built**

2.10(1) A person applying to become appointed to certify under LVV certification category 'LV2C Trikes – Advanced Modified Production & Scratch-built' must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in trike modification or construction relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years' full-time practical industry experience in extensive trike modifications or scratch-built trike construction, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of extensive trike modifications or scratch-built trike construction, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.10(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below);

and

- (c) possess a high level of knowledge and practical experience in car components and systems as they relate to trike construction (see Notes 1 and 2 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.10(1)(b) and (c) is met.

**Note 2** Many trikes incorporate car components and systems – such as an OEM car independent rear suspension and differential assembly. Accordingly, 2.10(1)(c) requires that an LV2C Certifier must have the necessary car-related experience and knowledge to enable these aspects of trikes to be correctly LVV certified.

## 2.11 Category LV3A Disability Adaptation – Limited

2.11(1) A person applying to become appointed to certify under LVV certification category ‘LV3A Disability Adaptation - Limited’ must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years’ full-time practical industry experience in vehicle adaptations for people with disabilities, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of vehicle adaptations for people with disabilities, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.11(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.11(1)(b) is met.

## 2.12 Category LV3B Disability Adaptation – Structures

2.12(1) A person applying to become appointed to certify under LVV certification category ‘LV3B Disability Adaptation - Structures’ must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category, as a result of either having (see Note 1 below):
  - (i) had two years’ full-time practical industry experience in disability adaptation-related vehicle structure modifications, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of disability adaptation-related vehicle structure modifications, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.12(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.12(1)(b) is met.

## 2.13 Category LV4 - Electric & Hybrid Vehicles

2.13(1) A person applying to become appointed to certify under LVV certification category 'LV4 – Electric & Hybrid Vehicles' must, as a minimum:

- (a) meet the general background requirements specified in 1.5; and
- (b) possess an industry-expert level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category, as a result of either having (see Notes 1 and 2 below):
  - (i) had two years' full-time practical experience in the modification of vehicles with electric power, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (ii) carried out a variety of modifications to electric vehicles, incorporating significant complexity and wide-ranging diversity (see Note 1 below); or
  - (iii) accumulated experience in an alternative way to 2.13(1)(b)(i) or (ii) but which is determined to be entirely relevant and equivalent (see Note 1 below).

**Note 1** The LVV Certifier Pre-assessment specified in *section 6 of LVV ORS Chapter 5 – LVV Certifier Application & Appointment* will determine whether the knowledge and experience criteria required by 2.13(1)(b) is met.

**Note 2** Category LV4 applies to modifications to electric vehicles. Where an Internal Combustion Engine vehicle is converted to electric power, an LVV Certifier with the appropriate LVV certification category (usually LV1A and/or LV1C) will need to be involved. For specific information on this, refer to *LVV ORS Chapter 3 – LVV Certification Categories*.

## 2.14 Category LVAC – LVV Authority Card

2.14(1) A person applying to become appointed to certify under LVV certification category 'LVAC – LVV Authority Card' must (see Notes 1 and 2 below):

- (a) be the approved representative of the organisation authorised by *Annex 3 of the Low Volume Vehicle Code* to issue LVV Authority Cards for specific purposes; and
- (b) provide written confirmation from the President or Chief Executive of the association responsible for the administration of the Authority Card, of that organisation's endorsement of the Applicant.

**Note 1:** Because an LVV Certifier appointed for LVV certification category LVAC is effectively just performing an administrative function, many of the processes, requirements, and costs specified in this chapter will not apply.

**Note 2:** More detailed information on the LVV Authority Card system can be found in *LVV ORS Chapter 12 – LVV Certification Plates & Labels*, which is available to the public electronically, free of charge, from the LVVTA website [www.lvvta.org.nz](http://www.lvvta.org.nz)

# Section 3 Additional Categories for Existing LVV Certifiers

## 3.1 Introduction

*The criteria for appointment of additional LVV certification categories for an existing LVV Certifier is, in terms of background knowledge and practical experience, fundamentally the same as that for a new Applicant.*

*There are, however, additional considerations relative to an existing LVV Certifier's certification performance history, detailed in LVV ORS Chapter 5 – LVV Certifier Application and Appointment.*

### **3.2 Criteria for appointment for additional LVV certification categories**

3.2(1) An existing LVV Certifier applying to become appointed for an LVV certification category additional to that for which they are already appointed, must:

- (a) possess an appropriate level of knowledge and practical experience in vehicle modifications relevant to the LVV certification category being applied for; and
- (b) meet the appointment criteria for additional LVV certification categories specified in section 15 of *LVV ORS Chapter 5 – LVV Certifier Application and Appointment*.

## **Section 4 Appointment Limitations**

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### **4.1 Application of limitations within the Notice of Appointment**

*Since LVV certification began in 1992, modified vehicles have become increasingly diverse and complex, with technologies and trends tending to become more and more fragmented. Despite the many different LVV certification categories specified in section 2, it has become vastly more difficult, particularly over the past two decades, to find people with the diversity of knowledge and experience to be capable of assessing the same modifications across vehicles of different types, ages, and origins.*

*For example, the knowledge and experience of an LVV Certifier who intimately understands building hot rods or older American and Australian vehicles using traditional components and systems won't necessarily translate across to assessing modifications to modern performance vehicles. Conversely, an LVV Certifier conversant with modern vehicles using complex electronic technology will often be unfamiliar with many aspects of the traditional technology incorporated within older vehicles.*

*The LVV certification system has to accept this challenge, and recognise that some people who could become great LVV Certifiers won't always be able to apply their knowledge and experience across all vehicle types, ages, and origins. This challenge can be catered for by appointing a person as an LVV Certifier who can provide a good service for a certain segment of the modification market, by ring-fencing, where necessary, the LVV Certifier's scope of operations via 'limitations' recorded in the LVV Certifier's Notice of Appointment that is issued by NZTA.*

*Any need for the application of 'limitations' to an LVV Certifier's Notice of Appointment will be discussed with the LVV Certifier during the assessment process.*

## **Terms & Definitions Chapter 4**

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<b>Disability adaptation</b>	The modification of a vehicle to suit the specific needs of a person with one or more disabilities.
<b>Electric vehicle</b>	A vehicle whose form of motive power is derived from electricity, rather than internal combustion.
<b>Hybrid vehicle</b>	A vehicle that uses more than one type of propulsion system, typically combining an ICE with one or more electric motors which can recover energy through regenerative braking, which charges the battery during deceleration.

<b>ICE</b>	An acronym for Internal Combustion Engine.
<b>Industry-expert level</b>	A level of knowledge and experience held by a person who is widely recognised as being of particularly high standing within their respective field, and who others in the same industry would rely on for advice.
<b>LVV Authority Card</b>	An LVV certification document, issued under the delegated authority of NZTA, specifying alternative safety-related equipment required by a vehicle for special purposes.
<b>Low Volume Vehicle Code</b>	The Low Volume Vehicle Code of LVVTA, incorporated by reference into the <i>Land Transport Rule: Vehicle Standards Compliance 2002</i> , and all applicable individual Land Transport equipment rules.
<b>LVV Code</b>	An abbreviation for Low Volume Vehicle Code.
<b>Modified Production (low volume vehicle)</b>	In simplest terms, a vehicle which, while modified, maintains a sufficient percentage of body or chassis from one primary mass-produced vehicle that it can still be considered to be that vehicle.  See the full modified production (low volume vehicle) definition contained in the <i>LVV Code</i> (which is available to the public electronically, free of charge, from the LVVTA website <a href="http://www.lvvta.org.nz">www.lvvta.org.nz</a> ).
<b>NoA</b>	An acronym for Notice of Appointment.
<b>Notice of Appointment</b>	A document provided by NZTA to a person appointed as an LVV Certifier, outlining the terms and conditions of their appointment, and their obligations and responsibilities.
<b>NZTA</b>	An acronym for New Zealand Transport Agency.
<b>OE</b>	An acronym for original equipment.
<b>OEM</b>	An acronym for original equipment manufacturer.
<b>Original equipment manufacturer</b>	A company that produces parts, components, or equipment used in the assembly of a vehicle sold under the vehicle manufacturer's brand name. OEM is also used in reference to a high-volume vehicle manufacturer.
<b>Right-hand drive</b>	A vehicle with its steering wheel and driving position to the right-hand side of its longitudinal centreline.
<b>Scratch-built</b>	A low volume vehicle that is not a 'modified production' low volume vehicle.
<b>TAC</b>	An acronym for the LVVTA Technical Advisory Committee.
<b>Structure</b>	The elements of a motor vehicle which are critical to the strength, rigidity, steering and suspension geometry, and crashworthiness of the vehicle.
<b>Technical Advisory Committee</b>	The technical committee of LVVTA. More information can be found in <i>LVV ORS Chapter 15 – LVVTA Committees and Working Groups</i> , which is available to the public electronically, free of charge, from the LVVTA website <a href="http://www.lvvta.org.nz">www.lvvta.org.nz</a>
<b>Trike</b>	Usually, a Class LE motor-tricycle (three-wheeled motor vehicle).

<b>Vehicle manufacturer</b>	A company or entity responsible for designing, assembling, and distributing motor vehicles in high volumes (OEM components are often included in their products).
<b>Wide-ranging diversity</b>	In the context of this chapter, a broad array of dissimilar vehicles modified by an individual, using a variety of skillsets.

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