



New 'Scratch-built' & 'Modified production' LVV definitions

Introduction

This LVV Information Sheet introduces and explains two new legal definitions that have just been passed into land transport legislation during November 2013, and which take effect on January 1 2014. One is a re-worded 'scratch-built' low volume vehicle definition, and the other is a completely new definition for 'modified production' low volume vehicle. Contained within this Information Sheet is an explanation of the reasons why the new definitions were needed, what the new definitions are expected to achieve, and how the new definitions will affect low volume vehicle builders and modifiers.

Background

Original intention of the 'scratch-built' definition

The development of the low volume vehicle certification system and the original Low Volume Vehicle Code (LVV Code) for light hobbyist motor vehicles was carried out by the five founding member associations that formed the LVVTA, and the Ministry of Transport, between 1989 and 1991. The original 1990 version of the LVV Code took effect in 1992.

An important part of that system's development was the establishment of a set of definitions designed to identify differing types of modified, home-built, and kit-type light vehicles so as to apply the most appropriate certification processes and registration categories for them.

As with many such processes when new, the original definitions were too complicated and numerous, and as a result, rather clumsy. The definitions have progressively evolved and refined throughout the development of the 1993 and then 1996 LVV Codes, into fewer categories (eventually to distinguish between just modified production and scratch-built), which began to work well.

Problems along the way

Unfortunately, during the mid-1990s there were attempts made by unscrupulous car dealers (some successfully) to exploit the LVV Code to provide a back-door method of getting vehicles on the road that did not meet the Government's normal entry compliance requirements. Whilst we tried hard to resist this, legal challenges won out, and as a result of that, changes and additions were made by (the then) Land Transport Safety Authority to the definitions in the LVV Code and the Land Transport Compliance Rule during the mid to late 1990s to prevent further abuse of the LVV system. This is the reason that part (a) of the definition was introduced into the 'scratch-built' definition.

Additionally, (the then) Land Transport Safety Authority used the same scratch-built definition that was developed for light vehicles to resolve a problem that they had at the time with heavy vehicles, by amending the definition further to cater for the needs of heavy vehicles. This is why the wording "*for light vehicles,*" appeared at the start of (b)(ii) of the 'scratch-built' definition.

These changes provided the desired results of successfully closing the doors to the abuse of the LVV Code, and helping the heavy vehicle situation, however, unfortunately, the changes have also had the

effect of creating significant difficulties for the light hobbyist motor vehicle enthusiasts – the very group of people who the LVV Code and the definitions were originally established to help.

Consequently, for many years now, genuine motor vehicle enthusiasts with safe, well-engineered vehicles, have experienced serious difficulties in getting their modified vehicles through the LVV Certification and Entry Compliance processes, due to the way in which the definition of 'scratch-built' contained within the Land Transport Compliance Rule 35001/1, and the various individual equipment rules, has been worded and applied.

Proposal of new definitions

In recent years, LVVTA has proposed to NZTA a new definition to replace the pre-1 January 2014 'scratch-built' definition, and a completely new 'modified production' low volume vehicle definition. LVVTA has worked closely with NZTA to agree these definitions.

The intention of the proposal was to set down some lines in the sand, so to speak, that clearly, logically, and fairly establish whether a vehicle is in fact still the original old vehicle, albeit modified, or if the vehicle has been modified to such an extent that its identity as an old vehicle has been lost.

It is important to note that there are very few scratch-built vehicles entering the New Zealand vehicle fleet each year. Over the past 5 years, the average number of scratch-built vehicles entering the fleet per annum is less than 100. Scratch-built low volume vehicles account for something in the order of .06 % of the vehicle fleet.

Application problems with the existing definition

Inconsistency in its application

The pre-2014 definition became very poorly worded and structured, and contained a high degree of complexity. Consequently the definition was very difficult to understand and apply, so much so that it was regularly misunderstood and incorrectly applied by Transport Service Delivery (TSD) agents, different people within New Zealand Transport Agency, and LVV Certifiers.

One example that illustrated the confusion well, cropped up in 2004. The case was an XE Ford Falcon body fitted to a Nissan Patrol four-wheel drive chassis, and clarification was sought by a TSD agent from New Zealand Transport Agency as to how the vehicle should be processed for re-entry back into the fleet. During the ensuing discussions, different people involved in the decision-making process of what the vehicle should be declared as were unable to reach any clear consensus; - some determined that it should be a scratch-built LVV, whereas others regarded the vehicle as a modified production Ford Falcon, and others regarded it as a modified production Nissan Patrol.

This obvious confusion is not a reflection on anyone's knowledge or skills, but simply a reflection on how, with amendment after amendment made in an effort to resolve problem after problem, the 'scratch-built' definition became poorly-worded and overly-difficult to understand.

Time delays experienced

Because of the problems experienced with providing consistent interpretation, disputes have commonly arisen, and it has not been uncommon for motor vehicle enthusiasts to have to wait for over a year before being able to get their vehicle registered for road use.

For an organisation like LVVTA that was established to represent the needs of its enthusiast members, this has been an untenable situation.

Different wording between different Rules

The problems were further complicated by the fact that when the 1998 version of the Land Transport Compliance Rule 35001 was amended in 2002 (to create 35001/1), a wording change mysteriously occurred which involves the substitution of the word 'or' with 'and' between two sub-paragraphs within the definition. This change had a profound effect on the outcome of the definition, and has caused the definition contained within Land Transport Compliance Rule 35001 to be in conflict with the definition contained within NZTA's individual equipment rules.

Outcome problems with the definition

Problems for hot rod builders and classic vehicle modifiers

Hot rod builders and classic vehicle modifiers are the groups most commonly affected by the problem with the scratch-built definition as it has been worded, because of the common practice for hot rod builders and classic vehicle modifiers to replace the chassis in their vehicles. The reason for this is that their vehicles of choice – predominantly 1920s to 1940s vehicles – have a simple ladder chassis that, because of the rough and pot-holed roads prevalent at the time of the manufacture of these vehicles, were designed to allow a substantial amount of torsional (diagonal) flex.

With smooth modern roads and higher open-road speeds of today, the performance requirements from such vehicles have changed, and a more stable and rigid platform is necessary. To achieve this, hot rod enthusiasts typically stiffen their chassis' with cross-member systems that run throughout every plane to create a chassis that is rigid in both bending and torsion. Due to the condition of the 70 and 80 year old chassis' that these enthusiasts start with however, it is often more advantageous from the points of view of economy, degree of work involved, and overall long-term safety, to reproduce the chassis from new material, incorporating new chassis rails that replicate the originals but which incorporate torsionally-stiff cross-member systems.

LVVTA has promoted the position that motor vehicle enthusiasts should not be penalised for wishing to increase the level of safety in any area within the vehicles they restore, rebuild, or modify.

When chassis reproduction occurs, there is concern from some quarters about the loss of the original identifiers. However, in many cases the chassis numbers do not in fact become 'lost', because many of these old vehicles never had a chassis number to begin with. Many such separate body/chassis vehicles only ever had body numbers or engine numbers affixed. The Model-A Ford for example – one of the most popular vehicle types amongst hot rod enthusiasts – had a body number stamped on the floor frame of the body, and had nothing anywhere in the way of an identifier on the chassis itself. In fact, the Ford Motor Company didn't use an identifier on the chassis of their vehicles until 1933. Many other vehicle manufacturers didn't affix an identifier to their chassis until much later than this.

In other cases, the part of the vehicle's chassis that carried the chassis number has rusted out and been replaced, often without the owner or repairer even knowing the number ever existed there.

Body repairs and replacement

It must also be recognised that some of these subject vehicles are 70 years old, and that nothing man-made lasts forever, particularly things manufactured from sheet-steel. It is common-place for the rebuilding of such vehicles (whether restoring or modifying) to require extensive body restoration due to 80 years of corrosion. Replacement of floors, lower panels, sills, firewalls, and even body framing is required more often than not – which all represents a massive labour of love. New reproduction panels are available for popular models of old vehicles, and are identical to the original parts.

Presently, debate often crops up as to whether the repaired body sections form part of the 'original' body surface area, because the situation is not clearly spelt out within the current definitions.

Also, if an enthusiast elects to replace his 1932 sedan body with a factory or coach-built body that was available for the chassis in question at the time of its manufacture, such as a coupe body, debate often crops up as to whether the changed body style causes the vehicle to become a scratch-built LVV, because again, the situation is not clearly defined.

New 'clean sheet' set of definitions required

It was agreed some years ago between New Zealand Transport Agency and LVVTA that a 'clean sheet approach' be taken to develop an alternative set of definitions that will meet the needs of everyone concerned, without opening up any opportunity for abuse of the system.

LVVTA began down the path of finding a solution to our local problems in this area by looking at how overseas regulatory jurisdictions deal with the problem of defining different types of low volume vehicles. There were no models that we could find that were fair, clear, sensible, and logical. Therefore a new set of modified production and scratch-built definitions have been jointly developed by LVVTA and NZTA.

The way in which overseas systems that we studied deal with defining such vehicles are summarised as follows:

United Kingdom

England, Ireland, Scotland and Wales all operate under the system prescribed under the Driver Vehicle and Licensing Agency (DVLA), in conjunction with the Single Vehicle Approval system (SVA) – which is similar to our LVV Code. This system is hugely and unnecessarily complicated, and for all of its complexity it provides some illogical outcomes. For example, under a points allocation system a home-built vehicle can retain a high volume vehicle manufacturer's original registration mark as long as it can score 8 points – but 8 points can be achieved without having either the OE body or the OE chassis.

Similarly flawed is the fact that a kit vehicle over there does not have to bear any visual resemblance whatsoever to that mass-produced vehicle which it can remain registered as.

Europe

From the information that we have been able to find, it would appear that many, if not most, European countries apply the UK's DVLA and SVA systems for their individually constructed and small-volume vehicles.

Australia

The whole low volume vehicle equivalent system in Australia is immensely complicated because the Federal Government makes the job of dealing with modified and home-built vehicles the responsibility of each individual state. The outcomes within the various states in Australia therefore range from 'do whatever you like' in the Northern Territories, to unreasonably restrictive requirements in New South Wales and Queensland.

One of the reasons the whole LVV system was developed as an entirely new and unique system in New Zealand, was because of the lack of sound technical requirements encompassed within the Australian systems.

United States of America

The USA has the same individual state-responsibility regime as Australia, so variation is high, while any actual enforcement of their regimes is very low.

What most states have adopted is the very simplistic philosophy of allowing a custom-built/home-built/scratch-built/individually constructed vehicle to be registered as that mass-produced vehicle which it visually most closely resembles. Interestingly, they are applying this concept for modern legislation such as noise emissions and air quality emissions also.

While that regime is, in principle, ideal in terms of simplicity and ease of application, it is probably not a viable option as written because of the potential liability issues that the LVV Certifier, LVVTA, and New Zealand Transport Agency could be subjected to through a home-built particular make and model replica vehicle being misrepresented as a high-value mass-produced vehicle, such as the AC Cobra, Type-35 Bugatti, or Lamborghini Diablo that the home-built vehicle has replicated.

The New Zealand solution

LVVTA's view is that with a 'clean-sheet' review of what has existed, but staying along similar lines, if done well, will provide the best outcome for the motor vehicle enthusiasts, the compliance industry, and New Zealand Transport Agency, from both safety and registration view-points.

Objectives of the new definitions

Clarity and ease of application

The intention was to write the new definitions in such a way that they can be read and understood by anyone involved in the entry compliance industry, and the risk of misinterpretation of any part of the definitions is minimised as much as possible.

Avoidance of conflicting definitions

It was also proposed to position the new definitions just once within the Low Volume Vehicle Code and include an incorporation of the definitions by reference to the LVV Code within each Rule to (a) ensure that there is no conflict of the wording within the definition spread throughout the many Land Transport Rules; and (b) to enable the quickest possible means of amending the definitions if new circumstances necessitate changes sometime in the future.

This 'incorporation by reference' methodology for the LVV system has been used extensively over the past 15 years within all of the individual equipment rules, the LVV Certifiers' Deeds of Appointment, and the NZTA Performance Review System documentation. This process is favoured because, aside from preventing 'version disease', it enables a much speedier process for making amendments and improvements if they are required. The LVV Code can be amended within weeks if necessary through mutual agreement and sign-off between LVVTA and New Zealand Transport Agency, rather than the lengthy time-frames that the Rules amendment process involves.

Such methodology has been a great bonus to the regulatory regime over the years – many times new technology or changes in the way the industry does things has necessitated a safety-related technical requirement change to an LVV standard, which LVVTA and New Zealand Transport Agency have been able to jointly achieve within weeks of identifying the problem.

Resolution of delays

With the clarity and ease of application expected of the new definitions, the time delays in getting affected vehicles through the LVV certification and Entry Compliance processes should become a thing of the past.

Resolution of hot rod builders' and classic car' modifiers problems

The new definitions have been written in such a way that the problems outlined under 'outcome problems with the definition' for hot rod builders and classic car modifiers who have had the entry compliance process made unreasonably difficult as a result of the way in which the current definitions have been interpreted and applied, are resolved. Specifically, these include:

Chassis reproduction

The new definitions will now allow motor vehicle enthusiasts to build reproduction chassis rails that are of a similar design, material specification, and construction method for their vehicles, without being deemed by the definition to become a scratch-built vehicle, and therefore be subjected to some of the technical requirements that are not appropriate for the style of vehicle being built.

A person rebuilding and modifying an original 1932 Ford, for example, can fit a complete reproduction 1932 Ford chassis, such as a 'Kiwi Konnection' chassis, and the vehicle will still remain a modified 1932 Ford (rather than becoming a new scratch-built vehicle). Similarly, a person rebuilding and modifying a 1956 Chevrolet may elect to install a complete 1956 Chevrolet reproduction chassis, such as those supplied by 'Art Morrison Enterprises' (in order to take advantage of power steering, disc brakes, and many other upgrades), and the vehicle will remain a modified 1956 Chevrolet (rather than becoming a new scratch-built vehicle). The wording provides a degree of scope for using a chassis from a similar period, so that common same-era swaps, such as installing a 1932 Ford chassis under a 1928-31 Ford body, will not cause the vehicle to become a new scratch-built vehicle.

Where there is no predominance of manufacturer between body and chassis, or the body and chassis are out of period – such as a Mitsubishi L300 chassis under a 1941 Willys coupe, or an HQ Holden ute chassis under a 1946 Chevrolet pick-up – such a vehicle will immediately become a scratch-built low volume vehicle.

There is no reference to cross-members in the new definitions, so builders and modifiers are free to construct whatever style of cross-members they deem fit.

It is important to note that in every such case where the vehicle is deemed to remain a modified production low volume vehicle, the LVV certification system will still apply, and the LVV inspection process for such vehicles will ensure that all important safety aspects of the vehicle such as steering, suspension, braking, steering system collapsibility, chassis engineering, seats, seatbelts, seat and seatbelt anchorages, etc all meet the same level of safety requirements as for a scratch-built vehicle.

The concessions that a modified production vehicle might have over a scratch-built vehicle is in relation to the use of some of its original equipment such as lighting equipment (still with performance requirements), or door retention systems within the vehicle's original timber-framed body.

Body repairs and replacement

The new definitions recognise that the replacement of any part of an old vehicle body with identical direct replacement parts is in fact a repair, and not a modification.

In the same way as that which applies to a vintage vehicle, if a hot rod builder chooses to replace a sedan body with a factory or coach-built body that was available for the chassis in question at the time of its manufacture, this will not, on its own, cause the vehicle to become a 'scratch-built'. A common example of this might be the replacement of a sedan body with a same make, model coupe or roadster body.

Prevention of abuse of LVV Code

The new definitions have been written in such a way as to prevent people using the LVV Code as a back-door means of registering production vehicles for road use that do not meet the New Zealand Transport Agency's normal entry compliance requirements. This is already spelt out clearly in the LVV Code, however the new 'modified production' and 'scratch-built' definitions help to ensure that such vehicles cannot be processed as scratch-built low volume vehicles.

Correct description of vehicles

The new definitions are intended to ensure that no home-built, individually-constructed, or low volume kit-type vehicle can become certified and registered as something that it is not. Neither the LVV certifier, nor LVVTA, nor the New Zealand Transport Agency should be put in a position of being a party to a case of misrepresentation. A vehicle that looks like an AC Cobra for example, must not be described under its 'make' field as an AC Cobra, unless it actually is one.

In the case where any doubt exists as to the authenticity of a vehicle, a Category 1D LVV Certifier will inspect and confirm the exact status of the vehicle, and record this through the LVV FS010 Statement of Authenticity (see note [d] of 'Modified Production' definition), which will be reviewed and verified by the LVVTA office prior to commencement of the LVV certification process.

Alignment between description and appearance

The new definitions will help to ensure that a vehicle looks like what the Land Transport Registry system describes it as. If the vehicle looks like a 1946 Chevrolet Pick-up for example, then, despite the body being fitted to a 1980 Holden Utility chassis as opposed to its original chassis, there should be a clear reference to the 1946 Chevrolet Pick-up on the registry system, even if only under the 'Model' field, being preceded by the word 'replica'.

This is an important factor for many reasons, not the least of which being from the NZ Police's point of view; - if they are calling for assistance in relation to a specific vehicle, the make and model and sub-model should be representative of what the vehicle actually looks like.

Registration fees

The new definitions will help to prevent a vehicle that is not genuinely an old vehicle to receive the cheaper registration fees available to genuine old vehicles, until after 40 years from the date it was put on the road.

The new definitions

Previously, the definitions in relation to this whole subject include only 'scratch-built'. If a low volume vehicle was deemed not to be a 'scratch-built' low volume vehicle, then it automatically became a 'modified production' low volume vehicle.

LVVTA and NZTA have introduced a definition for a 'modified production' low volume vehicle, and has rewritten the existing definition for a 'scratch-built' low volume vehicle. The details have been removed from the 'scratch-built' vehicle definition, and now, instead, the 'modified production' low volume

vehicle definition includes the details. Any low volume vehicle not meeting the definition of a ‘modified production’ vehicle, becomes, by default, a ‘scratch-built’ low volume vehicle. This is thought to be a much more logical approach.

The two definitions are as follows:

‘Modified production’ low volume vehicle definition

The definition for a modified production low volume vehicle is provided below. The primary role of this definition is to ring-fence those vehicles whose modifications are limited to such an extent that the vehicle can still reasonably be considered the same vehicle as that from which it originated.

Such vehicles can be treated as modified production vehicles for the purpose of low volume vehicle certification, entry compliance certification, and registration.

The new definition will now live in the LVV Code.

<p>Modified production low volume vehicle ^{see} notes (1), (2), (3), (4), (5), (6), (7), (8)</p>	means a vehicle that was produced by a recognised mass-produced vehicle manufacturer, and has subsequently been modified in such a way that may affect one or more safety-related legal requirements, and:
	(a) despite its modifications, the vehicle continues to bear a clear visual resemblance to the specific make, model, and year of the originating mass-produced vehicle; and
	(b) retains 60% or more of the original or authentically-repaired body from the originating mass-produced vehicle (based on surface area of body but not including sub-panels); and
	(c) either:
	(i) retains 60% or more of the original or authentically-repaired chassis rails from the originating mass-produced vehicle; or
	(ii) incorporates replacement chassis rails that are of a similar design and era, and which use similar materials to the chassis rails from the originating mass-produced vehicle;
	and
	(d) where any doubt exists as to the authenticity of the vehicle, has (a) to (c) authenticated by the presence of a valid F010 Statement of Authenticity Certificate issued by an LVV Certifier authorised for the purpose and validated by the Low Volume Vehicle Technical Association (Inc), which specifies the vehicle’s classification as ‘modified production’.
<p><i>Note (1): A modified production low volume vehicle must meet all of New Zealand Transport Agency’s normal Entry Compliance requirements, as specified in 2.3(6) of the Low Volume Vehicle Code, before it can be processed as a low volume vehicle.</i></p>	

<p><i>Note (2): A modified production low volume vehicle that has two unique identifiers assigned by recognised mass-produced vehicle manufacturers as a result of having its original body or original chassis replaced, must have the surplus identifier linked by New Zealand Transport Agency within the transport registry system to the vehicle's primary identifier.</i></p>
<p><i>Note (3): 'Sub-panels' as in (b) means those bolt-on panels which can be removed from the body-shell with the use of hand-tools.</i></p>
<p><i>Note (4): 'Authentically-repaired' as in (c)(i) means the replacement of any part of a chassis rail which incorporates the same design, material specifications, and construction methods, as used in the manufacture of the original chassis rails.</i></p>
<p><i>Note (5): 'Similar design' as in (c)(ii) means, for example, if the original chassis was of ladder construction, then the replacement chassis must also be of ladder construction (as opposed to a tubular space-frame or monocoque tub); and 'similar materials' means, for example, if the original chassis was manufactured from mild steel, then the replacement chassis must also be of mild steel (as opposed to high-strength steel or composite material).</i></p>
<p><i>Note (6): Where any clarification or confirmation is required in relation to any part of this definition, this shall be provided by the Low Volume Vehicle Technical Association (Inc), in consultation with the appropriate LVVTA Member Association.</i></p>
<p><i>Note (7): In the case of a vehicle, that by reason of technicality of design or component selection, falls outside of one of the modified production low volume vehicle definition criteria specified in (a) to (c), but which meets the spirit and intent of the modified production low volume vehicle definition, or at any time when an LVV Certifier or vehicle owner requires clarification, such a vehicle may be considered by the joint NZTA-LVVTA Technical Working Group (as detailed in the LVV Operating Requirements Schedule of the Low Volume Vehicle Technical Association Inc), and may be issued with a variation to the definition provided that such details of variation are stated on the F010 Statement of Authenticity Certificate.</i></p> <p><i>In assessing such vehicles on a case-by-case basis, the following points will be considered:</i></p> <ol style="list-style-type: none"> <i>1. A modified production low volume vehicle should incorporate a predominance of key components sourced from the same vehicle manufacturer.</i> <i>2. A unibody vehicle that has been converted to a body/chassis vehicle, or a unibody vehicle that has had a complete floor and mechanical conversion, will always be considered a scratch-built low volume vehicle.</i> <i>3. A vehicle may continue to be described as a modified production low volume vehicle, despite the modifications causing the vehicle to no longer maintain a clear visual resemblance to the original vehicle as required in (a), provided that the vehicle which the modified vehicle most closely resembles is recorded on the vehicle attributes screen in the Model field, followed by the word 'replica'.</i>
<p><i>Note (8): The replacement of an original body with another factory or coach-built body that was available for the chassis in question at the time of its manufacture, does not, on its own, cause the vehicle to become a scratch-built low volume vehicle.</i></p>

Scratch-built low volume vehicle definition

The definition for a scratch-built low volume vehicle is provided below. The primary role of this definition is to clarify that any vehicle that does not meet the criteria specified for a modified production becomes a scratch-built vehicle for the purpose of low volume vehicle certification, Entry Compliance certification, and registration.

The new definition will now live in the LVV Code.

Scratch-built low volume vehicle ^{see} notes (1), (2)	means an individually-constructed vehicle assembled from previously unrelated components.
<i>Note (1): A scratch-built low volume vehicle must have its 'make' recorded as 'LVV', and its 'model' recorded as either 'replica' or 'custom', whilst the year, make, and model of the mass-produced vehicle which it most closely resembles should be recorded in the sub-model field in the Landata system (As the LVV Form-sets do not incorporate a 'sub-model' field, this will be adjoined to the 'model' field.</i>	
<i>Note (2): Where any clarification or confirmation is required in relation to any part of this definition, this shall be provided by the Low Volume Vehicle Technical Association (Inc), in consultation with the Technical Working Group, and where appropriate the relevant LVVTA Member Association.</i>	

Examples of outcomes using the new definitions

To follow is a list of vehicles with typical body/chassis combinations that go through the LVV system on a reasonably frequent basis, together with the category that the new Modified Production Low Volume Vehicle/Scratch-built Low Volume Vehicle definition process would place the vehicles into. This list is intended to provide a comparison guide for LVV Certifiers to refer to when presented with a vehicle.

Vehicle	Category
▪ OE 1930 Ford Coupe body on OE 1930 Ford chassis, modified	Mod Production 1930 Ford
▪ OE 1930 Ford Coupe body on reproduction 1930 Ford chassis, modified	Mod Production 1930 Ford
▪ OE 1930 Ford Coupe body on OE or reproduction 1932 Ford Coupe	Mod Production 1930 Ford
▪ OE 1934 Dodge sedan fitted with OE 1934 Dodge coupe body, modified	Mod Production Dodge
▪ Ferrari replica body panels fitted to a Toyota MR2	Mod Production Toyota 'replica Ferrari'
▪ FWD Mitsubishi Lancer fitted with 4WD Mitsubishi Lancer floor-pan	Mod Production Mitsi Lancer
▪ 1928 Rolls Royce hearse converted to 4-door sedan (seating positions added)	Mod Production
▪ Toyota Hilux body or chassis swap, using same model/series body or chassis	Mod Production
▪ OE 1930 Ford Coupe body on custom tubular space-frame chassis, modified	Scratch-built
▪ OE 1930 Ford Coupe body on reproduction 1930 Ford Coupe	Mod Production
▪ F-glass reproduction 1930 Ford Coupe body on custom tubular space-frame chassis	Scratch-built
▪ F-glass reproduction 1930 Ford Coupe body on reproduction chassis	Scratch-built
▪ F-glass reproduction 1930 Ford Coupe body on OE 1932 Ford chassis	Scratch-built

▪ F-glass reproduction 1930 Ford Coupe body on OE 1930 Ford chassis	Scratch-built
▪ XE Ford Falcon sedan body fitted to Nissan Patrol chassis	Scratch-built
▪ FWD Mazda 323 changed to RWD Mazda RX7 floor and mechanicals	Scratch-built
▪ Volkswagen floor-pan with fibreglass beach buggy body	Scratch-built
▪ F-glass reproduction MGTF on Triumph Herald chassis	Scratch-built
▪ F-glass reproduction MGTF on custom ladder chassis	Scratch-built
▪ F-glass reproduction C-type Jaguar on Mk5 Jaguar chassis	Scratch-built
▪ Aluminium reproduction C-type Jaguar on reproduction tubular space-frame chassis	Scratch-built
▪ Replica Lotus 7 built from mild steel tubing and sheet aluminium	Scratch-built
▪ Fibreglass reproduction T-bucket hot rod	Scratch-built
▪ 'Pursang' Type 35 Bugatti replica	Scratch-built
▪ Ariel Atom low volume factory sports car	Scratch-built

Note that this list is only indicative of some common examples of vehicles, and is intended to provide a guide toward the new definitions. Where any doubt exists as to a particular vehicle, the LVV Certifier should contact the LVVTA technical staff at the earliest opportunity to seek clarification.

Further advice:

Any LVV Certifiers requiring any further technical information or advice, or wishing to seek any clarification or guidance, should contact Justin Hansen or Dan Myers at the LVVTA office in Wellington on (04) 238-4343.

Tony Johnson,
Chief Executive Officer

Low Volume Vehicle Technical Association Inc.