

## Form-set Use for Scratch-built and Extensively-modified Vehicles

### Background:

When LVV Certification for scratch-built and extensively modified vehicles commenced in 1992, LVV Certifiers were only required to apply the NZHRA Code of Construction Manual (COCM) Form-sets for Scratch-built and Extensively-modified Vehicles, using either the relevant Form-set for those vehicles built or modified before 1992, or after 1992, as appropriate.

Over time, Low Volume Vehicle Standards have been progressively introduced into the LVV certification system. These new LVV Standards have (in most cases) superseded parts of the COCM, because the standards are better detailed, cover a broader range of subjects, and are more applicable. For example, on page 120 and 121 of the NZHRA Code of Construction Manual, there is sub-section '8.13 Interior Impact'. This was enough to get the system off to a start back in 1992, but clearly, better requirements were needed. When the LVV Standard 155-40(00) (Interior Impact) was developed and released in June 2002, 8.13 of the COCM effectively became redundant.

This means that a vehicle constructed before 1992 would not need to meet any Interior Impact requirements, whereas a vehicle constructed between 1992 and 2002 would be required to meet sub-section '8.13 Interior Impact' of the COCM, whereas a vehicle built after June 2002 would be required to meet LVV Standard 155-40(00) (Interior Impact).

Because of the progressive introduction of LVV Standards, there has always been some confusion as to which parts of the COCM should apply, and which parts are replaced by LVV Standards.

In time, when a comprehensive Form-set is developed to mirror the new Car Construction Manual (NZCCM), the whole issue will be greatly simplified because the applicable parts of the LVV Standards are incorporated within the NZCCM. It could however take up to two years however for this new Form-set to be developed.

### Required Forms and Form-sets

In the interim period, this LVV Information Sheet has been developed to assist LVV Certifiers in understanding which LVV certification documentation they should be using for scratch-built and extensively-modified vehicles, dependent on the date of the construction of the vehicle in question.

Note that where the 'base Form-set' is referred to, this means the:

- F000 - Certification Plate Order Form
- F001 - LVV Statement of Compliance Certificate
- F002 - LVV Data Form
- F003 - LVV Safety Item Form

- F004 - LVV Rectification Form

To follow are the required Forms and Form-sets, depending on construction and/or modification dates:

**Vehicles built before 1992:**

Built pre-1 January 1992, no subsequent modifications:

- *Base LVV Form-set (Forms F000 through F004); and*
- *the Retrospective Vehicle Design & Construction Certification Form-set (before 1 January 1992).*

Built pre-1 January 1992, but has subsequent modifications:

- *Base LVV Form-set (Forms F000 through F004); and*
- *the Retrospective Vehicle Design & Construction Certification Form-set (before 1 January 1992); and*
- *the applicable Form-sets that relate to any part of the vehicle that was further modified after 1 January 1992.*

**Vehicles built after 1992 and before 2005:**

- *Base LVV Form-set (Forms F000 through F004); and*
- *the New Vehicle Design & Construction Certification Form-set (after 1 January 1992); and*
- *any applicable LVV Form-sets that relate to any parts of the vehicle's construction that are not covered in the COCM – for example, Frontal Impact and Engine & Drive-train Conversions (if the vehicle's construction date is after the implementation date of the Form-set [standard]); and*
- *any relevant Form-sets that supersede existing sections of the COCM because the vehicle was constructed or modified in this area after the introduction date of the LVV Standard - for example, Interior Impact, Lighting Equipment, Door Retention Systems. Note that in these cases, the relevant part of the COCM is not required to be filled out also – for example, when filling out Form-set FS022 (Door Retention Systems), there is no need to fill out sub-section 8.6 (Door Locks and Hinges) of the COCM.*

### **Vehicles built after 2005:**

- *Base LVV Form-set (Forms F000 through F004); and*
- *the New Vehicle Design & Construction Certification Form-set (after 1 January 1992); and*
- FS008 – (LVV Standard 35-00 Braking Systems); and
- FS010 – (LVV Standard 85-40 Engine & Drive-train Conversions); and
- FS021 – (LVV Standard 155-40 Interior Impact); and
- FS022 – (LVV Standard 155-20 Door Retention Systems); and
- FS023 – (LVV Standard 205-00 Wheels & Tyres); and
- FS027 – (LVV Standard 155-30 Frontal Impact); and
- FS033 – (LVV Standard 100-30 External Projections); and
- FS034 – (LVV Standard 200-30 Rear View Mirrors); and
- FS035 – (LVV Standard 185-40 Head Restraints); and
- FS036 – (LVV Standard 125-00 Lighting Equipment); and

Note that generally FS011 (LVV Standard 195-00 Suspension Systems), FS016 (LVV Standard 175-00 Seatbelt Anchorages), and FS030 (LVV Standard 185 Seats & Seat Anchorages) won't apply to a scratch-built or extensively modified vehicle, as the Suspension, Seatbelt Anchorage, and Seat sections of the COCM/NZCCM are more relevant for such vehicles than LVV Standards 195-00, 175-00, and 185-00 are.

### **In summary:**

Please ensure that in the future, when certifying a scratch-built or extensively-modified vehicle, you provide all of the required Forms and Form-sets.

If you have any queries or require any further clarification relating to this Information Sheet, please feel free to contact technical team at the LVVTA office on (04) 238 4343.