LVV Seatbelt Anchorage Standard Release

The ST120395 Specification

Until now, the only guidance, and existing documentation from which a LVV certifier can inspect and certify a seatbelt anchorage installation in other than a scratch-built vehicle, is the ‘St120395 Specification’ which is a document that was developed jointly in 1995 by Land Transport New Zealand and the Imported Motor Vehicle Dealers Association.

Whilst a good effort for its day, it covered only a few situations, and was very restricted in terms of what it allowed and provided for. Despite the existence of the ‘St120395 Specification’, there has always been an endless string of questions that couldn’t be answered by the document.

Development of the new LVV Seatbelt Anchorage Standard

The intention behind the development of the new LVVTA Seatbelt Anchorage Standard was to deal with all the “what ifs” that LVV certifiers typically come up against on a daily basis. Such as:

- What if the anchorages have to go in a parcel tray?
- What if retractor belts are used?
- Can the anchorages be mounted in the cant rail?
- Can the diagonal seatbelts for a rearward-facing seat share the OE anchorages for the front seat?
- What if there’s a false floor?

and so on.

And so here we are at long last, the new standard finally completed and out to you. We’re not kidding ourselves that every conceivable base will be covered, but it certainly deals with most of the common issues about, and as we’ve said before, these standards can be amended and improved and added to as time goes by. Our only regret is that it has taken so long, however it has proven a lot more complex and difficult than we expected at the start of the project.

The Seatbelt Anchorage Standard has been under development by LVVTA for approximately 18 months, and has during that time been through several rounds of consultation within various segments of the motor vehicle industry, and sections within the LTNZ, until finally becoming formally signed off by LTNZ at the end of March.

Three things you need to know for now

We won’t go into explaining the standard here now; there’s a training session coming up (covered separately in this mail out) and the Seatbelt Anchorage Standard will be discussed there. There are really only three points we need to mention here; two of which are “don’t panic” cautions, and one is a bit of general information:

- Firstly, when you look through the standard and see the size of the document, don’t be too worried; you’ll only use some components of the standard each time you need to refer to it, so don’t try and learn it cover to cover – spend some time initially looking at the contents pages, and get a feel for the subjects covered, then look at the subjects you’re interested in. All you need to do for now is to get your head
around what’s in there, and how to find it. Then just use it bit by bit as you need it, and eventually you’ll become comfortable with it all.

▪ Secondly, don’t panic when you see the specific loading figures mentioned, and references to calculations and testing – the principle of this standard is that it provides the user with 3 options; physical testing against specific loading figures; calculations against specific loading figures; or what we call “using the recipes in the standard”. The latter option is the one that most of you will use – think of the standard as a ‘recipe book’, and if you follow the recipes, you don’t need to worry about testing or calculation. Those other two options are there for the minority to use in situations where something not covered by the recipes is required, and the job warrants the cost and effort of testing or calculation.

▪ Thirdly, there are still many (non-technical) questions that commonly arise in relation to seatbelts and seatbelt anchorages, such as whether or not 3-point belts have to be fitted to open vehicles, or older vehicles, and so on. Because of the legislative nature of the LVV Standard, these issues can’t be covered within the standard, so we are preparing an additional Information Sheet (#03-2002 LVV Seatbelt Anchorage Supplement) to deal with these issues. This will be included within another mail-out once completed. You should find this supplement useful when trying to decide whether a particular vehicle should or shouldn’t have certain type of seatbelts.

Information sheet 08-2000 now redundant
The LVVTA Information Sheet #08-2000, issued in July 2000, was aimed at providing some stopgap clarifications until the new LVVTA Seatbelt Anchorage Standard came out. Therefore, both the LVVTA Information Sheet #08-2000, and the St120395 Specification are now effectively redundant.

From 1 May 2002, all Seatbelt Anchorage retrofits must be certified using only one of the following two options:
▪ For all panel steel seatbelt anchorage retrofits, effectively meaning all retrofits in modern unitary-construction vehicles, plus all other panel steel retro-fits, the LVVTA Low Volume Vehicle Seatbelt Anchorage Standard 175-00 (Seatbelt Anchorages); or

▪ In the case of a scratch-built vehicle, or a vehicle which has had custom anchorages installed in accordance with one of the formulas or systems provided for in section 8.15 of the NZHRA Code (which was developed for specific applications such as roll-bars, lugs or bosses off chassis members etc), the NZHRA Code of Construction Manual is still the appropriate document to use from which to make your certification judgements, until it too is eventually replaced with the new NZ Hobby Vehicle Technical Manual presently under development.

Documentation required from here-on
▪ For the purpose of having your certification documentation accepted by the plate administrator of the low volume vehicle system, Land Transport New Zealand, you will need to make sure that you meet the following requirements. This will ensure smooth processing of your documentation, and issue of a compliance plate:

▪ Have a copy of both the LVVTA Low Volume Vehicle Standard 175-00 (Seatbelt Anchorages), and the NZHRA Code of Construction Manual (in particular section 8.15 of the NZHRA Code); and
- apply the correct document for the type of certification being carried out; and

- provide a basic drawing within your documentation to show where the anchorages are positioned, and specify the details of the system being used; and

- refer to the document you used to assess the seatbelt anchorage retrofit (LVV Standard 175-00 or NZHRA Code 8.15) in the appropriate place within the FS001 Statement of Compliance Form.

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