



Helping New Zealanders Build & Modify Safe Vehicles

Technical Advisory Committee (TAC) Outcome Reporting Form For reporting on 'Variations from Technical Requirements' (VTR's)

TAC Meeting Date: 6 September 2022

Date(s) Considered *	6/9/2022
Application Type * (E.g. modification, component approval.)	Modification – suspension ball joint.
Description of matter(s) under consideration *	Approval to weld a forged steel suspension component.
Conflict of interest declaration	None
Information provided by applicant *	Vehicle details, explanation and description of reason for needing to carry out this modification, full details of modification, welding process, welding material specifications, NDT to LVVTA specification. Drawings, 'NZHRA-approved engineer' certificate.
Sections of the LVV Code relevant to the decision (If outside the scope of the LVV Code, note how.)	The NZ Car Construction Manual Chapter 18 disallows the welding of cast/forged components.
Considerations (Judgments and rationale.)	<p>Replacement ball joints are not available for this type of vehicle – the joint has been modified to make it adjustable and to enable it to be repaired/reconditioned. This has been done this by removing the back of the joint housing, machining a thread to allow an adjustable seat to be inserted, and welding on a ring to provide a locking method for the seat.</p> <p>The weld is not being relied upon in any way to support the vehicle, it only provides a way to create a robust mechanical thread-locking device.</p> <p>The welding method used was deemed to be acceptable and the.</p> <p>While TAC members wouldn't generally encourage this kind of work they have confidence in the person who has carried out the work, there is no safety concern with the modification itself.</p>
Decision & number*	Approved VTR00016