

**Correct as at 28th June 2026. It may be superseded at any time.**

**Extract taken from:** PRS & QMS > PRS: Low volume vehicle certification > Technical part > 1D Modified production – advanced and scratch built

## 4 1D Modified production – advanced and scratch built

### Requirements

	What NZTA expects of you	How NZTA will assess your performance
	<b>Correct technical decisions</b>	
4.1	You thoroughly inspect all modifications and correctly determine if the modifications comply with all legal requirements, taking into account technical information provided by NZTA and the LVVTA such as Low Volume Vehicle Code, Standards, Survey Sheets, Information Sheets, and LVVTA Member Association Technical Manuals.	NZTA will: <ul style="list-style-type: none"><li>• talk to you</li><li>• observe you at work</li><li>• inspect the modifications on vehicles while you are certifying the vehicles, or after you have certified the vehicles</li><li>• inspect inspection and certification documents you use and complete.</li></ul>
4.2	<b>Technical competence</b>	

	What NZTA expects of you	How NZTA will assess your performance
<p>You are competent in all technical aspects relating to <i>Category 1D Modified production – advanced and scratch-built modifications</i>. This means you are competent in the assessment of <i>Category 1C Modified production – advanced and scratch-built modifications</i> including:</p> <ul style="list-style-type: none"> <li>the identification of any modifications such as non-OE components and systems</li> <li>the identification of the</li> </ul>	<p>NZTA will:</p> <ul style="list-style-type: none"> <li>talk to you</li> <li>ask questions to check your competence relating to any of the modifications, and your assessment of the modifications</li> <li>observe you at work</li> <li>inspect inspection and certification documents you use and complete</li> <li>inspect your <a href="#">Training record</a>.</li> </ul> <p>NZTA may administer a short test on <i>Category 1D Modified production – advanced and scratch-built modifications</i>, and the assessment of <i>Category 1D Modified production – advanced and scratch-built modifications</i>.</p>	

	What NZTA expects of you	How NZTA will assess your performance
4.3	<p><b>Technical equipment</b></p>	
	<p>You have, or have access to:</p> <ul style="list-style-type: none"> <li>• a graduated lightboard or commercial quality beamsetter</li> <li>• a 35% VLT tint sample or a light transmission measuring device</li> <li>• a stop-watch or other device capable of measuring average deceleration</li> <li>• a jack or other suitable equipment to lift wheels off the ground</li> <li>• an industrial quality hand-held inspection lamp</li> <li>• a steel test bar for steering and suspension</li> <li>• graduated tyre tread depth gauge</li> <li>• a steel ruler and tape measure</li> <li>• an h-point indicator (eg LVVTA h-frame or h-point template)</li> <li>• an inspection mirror</li> <li>• a protractor or other device used to measure angles</li> <li>• head sphere ball</li> <li>• duct or similar adhesive tape</li> <li>• a string-line</li> <li>• a vernier calliper</li> <li>• a selection of hand tools, including those required for anchorage bolt and trim removal, steering wheel and universal joint attachment, as applicable</li> <li>• containers or objects to simulate occupant weight.</li> </ul> <p>The equipment is in good condition and working order.</p>	<p>NZTA will inspect your technical equipment.</p>

# Scores

	Score			
	0	1	2	3
4.1	Correct technical decisions			

	<b>Score</b>			
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
	<p>You do not thoroughly inspect all modifications or correctly determine if the modifications comply with all legal requirements.</p> <p>The area of non-compliance is <b>likely</b> to compromise the safety of the vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• the design of a tubular space-frame chassis neither follows time-proven design and construction methods and materials, nor has been approved by an LVVTA-recognised build approval process, or</li> <li>• the door retention system of a scratch-built body does not incorporate door latches of a burst-proof design, or</li> <li>• the conversion or installation of an engine positioned in a mid-engine location incorporates an engine mount design that does not provide adequate resistance against potential forward movement, or</li> <li>• the adjustment mechanism of a custom-</li> </ul>	<p>You do not thoroughly inspect all modifications or correctly determine if the modifications comply with all legal requirements.</p> <p>The area of non-compliance <b>may</b> compromise the safety of the vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• a tubular space-frame chassis meets the design or build approval requirements, but critical or load-applying components are attached to areas of the chassis that are not multi-tube intersection points, or</li> <li>• the door retention system of a scratch-built body incorporates door latches of a burst-proof design, but the attachment points of the latching or hinging mechanisms do not meet the specified requirements, or</li> <li>• a north-south engine conversion results in a significant power increase, and no up-rated drive-shaft universals or drive-shaft safety loop is incorporated, or</li> <li>• the leverage ratio of a custom-</li> </ul>	<p>You do not thoroughly inspect all modifications or correctly determine if the modifications comply with all legal requirements.</p> <p>The area of non-compliance is <b>unlikely</b> to compromise the safety of the vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• a tubular space-frame chassis meets the design or build approval requirements, and the details of the chassis construction are sound, but the welding process has caused corrosion sites, or</li> <li>• the door retention system of a scratch-built body incorporates door latches of a burst-proof design, and the attachment points of the latching and hinging mechanisms meet the specified requirements, but the latches are not of a type that have been tested or approved, or</li> <li>• a differential conversion uses a differential centre and axle assembly from a vehicle of less power output than the vehicle</li> </ul>	<p>You thoroughly inspect all modifications and correctly determine if the modifications comply with all legal requirements.</p>

	Score			
	0	1	2	3
4.2	Technical competence			

		Score			
		0	1	2	3
You demonstrate	You demonstrate:	You demonstrate:	You demonstrate		
<ul style="list-style-type: none"> <li>• <b>some competence</b> in the technical aspects relating to <i>Category 1D Modified production – advanced and scratch-built</i> modifications, or</li> <li>• a level of competence that <b>may</b> compromise the safety of the vehicle occupants or other road users.</li> </ul> <p>This means there are <b>some gaps</b> in your knowledge of, and skills in:</p> <ul style="list-style-type: none"> <li>• the assessment of <i>Category 1D Modified production – advanced and scratch-built</i> modifications, including: <ul style="list-style-type: none"> <li>◦ the identification of any modifications such as non-OE components and systems</li> <li>◦ the identification of the source of any non-OE components and systems</li> <li>◦ the identification and assessment of material types,</li> </ul> </li> </ul> <p>This means there are <b>significant gaps</b> in your knowledge of, and skills in:</p>	<ul style="list-style-type: none"> <li>• <b>adequate competence</b> in the technical aspects relating to <i>Category 1D Modified production – advanced and scratch-built</i> modifications, or</li> <li>• a level of competence that is <b>unlikely</b> to compromise the safety of the vehicle occupants or other road users.</li> </ul> <p>This means there are <b>minor gaps</b> in your knowledge of, and skills in:</p> <ul style="list-style-type: none"> <li>• the assessment of <i>Category 1D Modified production – advanced and scratch-built</i> modifications, including: <ul style="list-style-type: none"> <li>◦ the identification of any modifications such as non-OE components and systems</li> <li>◦ the identification of the source of any non-OE components and systems</li> <li>◦ the identification and assessment of material types,</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>adequate competence</b> in the technical aspects relating to <i>Category 1D Modified production – advanced and scratch-built</i> modifications, or</li> <li>• a level of competence that is <b>unlikely</b> to compromise the safety of the vehicle occupants or other road users.</li> </ul> <p>This means there are <b>minor gaps</b> in your knowledge of, and skills in:</p> <ul style="list-style-type: none"> <li>• the assessment of <i>Category 1D Modified production – advanced and scratch-built</i> modifications, including: <ul style="list-style-type: none"> <li>◦ the identification of any modifications such as non-OE components and systems</li> <li>◦ the identification of the source of any non-OE components and systems</li> <li>◦ the identification and assessment of material types,</li> </ul> </li> </ul>	<p><b>comprehensive competence</b> in all technical aspects relating to <i>Category 1D Modified production – advanced and scratch-built</i> modifications.</p> <p>This means you demonstrate <b>comprehensive knowledge</b> of, and skills in:</p> <ul style="list-style-type: none"> <li>• the assessment of <i>Category 1D Modified production – advanced and scratch-built</i> modifications, including: <ul style="list-style-type: none"> <li>◦ the identification of any modifications such as non-OE components and systems</li> <li>◦ the identification of the source of any non-OE components and systems</li> <li>◦ the identification and assessment of material types, manufacturing and machining processes (where applicable)</li> <li>◦ the</li> </ul> </li> </ul>		
This means there are <b>significant gaps</b> in your knowledge of, and skills in:					

	<b>Score</b>			
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
	<b>Technical equipment</b>			
<b>4.3</b>	Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.	All of the specified equipment is available and in working order, but some or all of it is in poor condition.	All specified equipment is available, in working order, and in at least adequate condition.	All specified equipment is available and in good condition and working order.