

Title	Demonstrate knowledge of vehicle body and chassis alignment and measuring systems		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to demonstrate knowledge of vehicle body and chassis alignment systems and vehicle body and chassis measuring systems.
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Classification	Motor Industry > Collision Repair
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Available grade	Achieved
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Guidance Information

1 Legislation and references

Performance of the outcomes of this unit standard must comply with the following:
Health and Safety at Work Act 2015;

- Land Transport Rule: Vehicle Repair 1998, Rule 34001;
- Health and Safety at Work (Hazardous Substances) Regulations 2017.

2 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

Land Transport Rules are available online at <https://www.nzta.govt.nz/>.

3 Definitions

Company requirements refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include company policies and procedures, work instructions, manufacturer specifications and legislative requirements.

Service information may include vehicle structural repairer code of practice, technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

4 Assessment

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturer's specifications, service information, company requirements and legislative requirements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of vehicle body and chassis alignment systems.

Performance criteria

1.1 Purposes of body and chassis alignment systems are described.

1.2 Types of body and chassis alignment systems are described.

Range may include – bench straightening systems, rack straightening systems, pulling towers, portable hydraulic push-pull jack; evidence of two is required.

1.3 Types of pulling methods are described.

Range single pull, multiple pull, pull angles and force, use of heat, stress relieving.

1.4 Safety requirements when using body and chassis alignment systems are described.

1.5 The importance of using manufacturer specifications when using body and chassis alignment systems is explained.

Outcome 2

Demonstrate knowledge of vehicle body and chassis measuring systems.

Performance criteria

2.1 Types of vehicle body and chassis measuring systems are described.

Range may include – trammel gauge, dedicated jigs, universal measuring systems, computerised systems; ultrasonic, laser; evidence of three systems is required.

2.2 Purposes of measuring vehicle body and chassis are described.

2.3 Types of measurements used for vehicle body and chassis alignment are described.

Range datum, centre line, symmetrical and asymmetrical dimensions, upper body dimensions, three dimensional checking.

2.4 Purposes of body measuring points are described.

Replacement information	This unit standard and unit standard 31995 replaced unit standard 23978.
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Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 July 2020	31 December 2027
Review	2	25 May 2023	N/A

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.