

Apply rescue techniques for the extrication of entrapped people from vehicle wreckage

Level 4

Credits 10

Purpose People credited with this unit standard are able to: demonstrate knowledge of the terminology used to describe the construction and component features of vehicles; prepare vehicles for rescue and extrication activities; implement glass management techniques on vehicles; and select and apply methods of providing access to casualties.

Subfield Fire and Rescue Services

Domain Fire and Rescue Services - Structural and Industrial

Status Registered

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Entry information Prerequisite: Unit 25978, *Demonstrate knowledge of rescue equipment and establish a rescue tool staging area*, or demonstrate equivalent knowledge and skills.

Accreditation Evaluation of documentation and visit by NZQA and industry.

Standard setting body (SSB) Fire and Rescue Services Industry Training Organisation

Accreditation and Moderation Action Plan (AMAP) reference 0039

This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Special notes

- 1 Compliance with the fire and rescue service provider's Health and Safety policy and procedures is mandatory.
- 2 Assessment against this unit standard may take place under real or practical simulated conditions.

3 Definitions

Vehicle describes any craft, machine, automobile, engine, or plant, unless otherwise described, that can be involved in an incident or accident that results in the entrapment of people.

Casualty refers to a person or people who are injured or trapped as a result of an incident or accident. Related terms may include victim and patient.

Fire and rescue service provider's requirements refer to policies and procedures on safety and operation set down by each fire and rescue service employer or host organisation.

Elements and performance criteria

Element 1

Demonstrate knowledge of the terminology used to describe the construction and component features of vehicles.

Range manufacturer-assembled, customised.

Performance criteria

1.1 The features of motorcars are identified in terms of their construction and safety components.

Range may include but is not limited to – 2-door, 4-door, 3 and 5-door, hard-top, soft-top.

1.2 The features of utility trucks, light vans, and light trucks are identified in terms of their construction and safety components.

Range may include but is not limited to – rear access, dual side access, flat bed tray, drop side tray, tip tray, single axle, dual axle.

1.3 The features of medium and heavy trucks are identified in terms of their construction and safety components.

Range may include but is not limited to – medium and heavy rigid vehicles, medium and heavy articulated vehicles.

1.4 The features of passenger and recreational vehicles are identified in terms of their construction and safety components.

Range may include but is not limited to – minivan, passenger coach over ten passengers, mini camper, recreational motor home.

1.5 The features of manufacturer and other light vehicles are identified in terms of their construction and safety components.

Range may include but is not limited to – motorised buggies, micro-light aircraft, light aircraft power driven and non power driven, power boats, trains, railcars, large specialist machinery.

Element 2

Prepare vehicles for rescue and extrication activities.

Performance criteria

- 2.1 Vehicle stabilisation methods are selected and implemented in accordance with the fire and rescue service provider's requirements.
- Range may include but is not limited to – inverted step chock, traditional step chock, step chock/wedge combination, crib/wedge combination, tensioning techniques, controlled tyre deflation.
- 2.2 Stabilisation methods ensure the ongoing integrity of vehicle and scene security and safety in accordance with the fire and rescue service provider's requirements.

Element 3

Implement glass management techniques on vehicles.

Performance criteria

- 3.1 Common glass types used in vehicle manufacture both pre- and post-1980 are identified in terms of their characteristics.
- Range may include but is not limited to – tempered, armoured, laminated, synthetic.
- 3.2 Glass management equipment and techniques are applied for the purpose of gaining clear access in accordance with the fire and rescue service provider's requirements.

Element 4

Select and apply methods of providing access to casualties.

Performance criteria

- 4.1 Forced door entry techniques are selected and applied in accordance with the fire and rescue service provider's requirements.
- Range may include but is not limited to – nader pin latch (traditional), nader pin crush, roof rail spread, quarter light spread, rear door panel crush, hinge side spread, hinge spread and cut, hinge cutting.

- 4.2 Techniques of providing access to the passenger compartments of vehicles are applied in accordance with the fire and rescue service provider's requirements.
- Range may include but is not limited to – roof flap rear, roof flap front, roof flap side, half roof flap, quarter roof flap, roof removal, rapid extrication.
- 4.3 Space making techniques are selected and applied in accordance with the fire and rescue service provider's requirements.
- Range may include but is not limited to – B pillar cut and spread, side removal, inverted side removal, inverted ramming, inverted double ramming, third door conversion.
- 4.4 Extrication of casualties from frontal entrapment is undertaken in accordance with the fire and rescue service provider's requirements.
- Range may include but is not limited to – dash roll, dash lift center, dash lift side, alternative purchase dash roll.
- 4.5 Techniques for interior clearing are applied in accordance with the fire and rescue service provider's requirements.
- Range may include but is not limited to – footwell flap, pedal pull/cutting, steering wheel cutting, forced seat removal, seat reversing, seat cutting.
- 4.6 Lifting techniques using hydraulic rescue tools are applied in accordance with the fire and rescue service provider's requirements.
- Range spreader lifts, ram lifts.
- 4.7 Techniques for positioning and supporting air bags are applied to achieve optimum lift in accordance with the fire and rescue service provider's requirements.

Please note

Providers must be accredited by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Fire and Rescue Services Industry Training Organisation info@frsito.org.nz if you wish to suggest changes to the content of this unit standard.