



Australian Government

TLIC0023 Operate four wheel drive vehicle

Release: 1

TLIC0023 Operate four wheel drive vehicle

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to operate a four wheel drive vehicle.

It includes driving a four wheel drive vehicle on roads, traversing gradients, ascending and descending steep gradients, and operating in rugged terrain.

It also includes using vehicle equipment/controls and completing pre-start and post-operational checks safely in accordance with the relevant state/territory legislated roads and traffic licence requirements.

Full or provisional driver licence must be held prior to commencing this unit of competency.

Driving involves the application of four wheel drive vehicle operating principles and procedures to maintain the safety and operation of a four wheel drive vehicle across a variety of on-road and off-road contexts.

Driving is performed with limited supervision, and with duty of care responsibility for self and others in achieving the prescribed outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

C – Vehicle Operation

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate

essential outcomes.

achievement of the element.

1 Operate four wheel drive vehicles

- 1.1** Pre-start checks of vehicle and equipment are carried out in accordance with manufacturer specifications and roadworthy requirements
- 1.2** Job hazards are identified and required action is taken to minimise, control or eliminate identified hazards
- 1.3** Tyres are checked for pressure suitable for terrain and/or changed in accordance with manufacturer and workplace procedures
- 1.4** Vehicle fuel, water and any ancillary equipment are checked before starting vehicle journey in accordance with manufacturer and workplace procedures
- 1.5** Loads are secured in accordance with workplace and safety requirements
- 1.6** Vehicle is driven on-road and off-road in accordance with legislative and workplace requirements at appropriate operating speeds for road or track conditions and hazards
- 1.7** Vehicle equipment/controls are set and operated in accordance with manufacturer instructions for operation in surrounding terrain
- 1.8** Road conditions are constantly monitored, negotiated and appropriate operations and control techniques are used to ensure safe vehicle operation and no injury to people or damage to vehicle, tracks or loads is sustained
- 1.9** Vehicle is parked and shut down in accordance with workplace and manufacturer requirements

2 Operate vehicle on or across a gradient

- 2.1** Intended vehicle path is inspected prior to negotiating gradient
- 2.2** Loads are secured in accordance with workplace and safety requirements
- 2.3** Appropriate gear and/or range are selected, and engine revolutions are maintained to ensure constant traction
- 2.4** Vehicle is driven on-road and off-road in accordance with legislative and workplace requirements at appropriate speeds for conditions and gradient hazards
- 2.5** Vehicle equipment/controls are set and operated in

		accordance with manufacturer instructions for operation on or across a gradient
	2.6	Gradient conditions are constantly monitored, and appropriate operations and control techniques are used to ensure safe vehicle operation and no injury to people or damage to vehicle, tracks or loads is sustained
3 Operate vehicle ascending a steep gradient	3.1	Intended vehicle path is inspected prior to negotiating ascent
	3.2	Appropriate gear and/or range are selected to ascend grade, and engine revolutions are maintained to ensure constant traction
	3.3	Vehicle equipment/controls are set and operated in accordance with manufacturer instructions for operation while ascending a steep gradient
	3.4	Stall recovery techniques are applied in accordance with manufacturer and workplace procedures
	3.5	Ascent conditions are constantly monitored, and appropriate operations and control techniques are used to ensure safe vehicle operation and no injury to people or damage to vehicle, tracks or loads is sustained
4 Operate vehicle descending a steep gradient	4.1	Intended vehicle path is inspected prior to negotiating gradient
	4.2	Appropriate gear and/or range are selected to descend grade, and engine revolutions are maintained to ensure constant traction
	4.3	Vehicle equipment/controls are set and operated in accordance with manufacturer instructions for operation while descending a steep gradient
	4.4	Stall recovery techniques are applied in accordance with manufacturer and workplace procedures
	4.5	Descent conditions are constantly monitored, and appropriate operations and control techniques are used to ensure safe vehicle operation and no injury to people or damage to vehicle, tracks or loads is sustained
5 Operate vehicle in rugged terrain	5.1	Intended vehicle path is inspected prior to negotiating rugged terrain
	5.2	Appropriate gear and range are selected to negotiate rugged terrain and engine revolutions are maintained to ensure

	constant traction
5.3	Vehicle equipment and controls are set and operated in accordance with manufacturer instructions for operation in surrounding terrain
5.4	Vehicle chains are fitted in accordance with manufacturer instructions and environmental conditions, as required
5.5	Vehicle load is inspected, positioned and secured to maximise traction for four wheel driving
5.6	Rugged conditions are constantly monitored, and appropriate operations and control techniques are used to ensure safe vehicle operation and no injury to people or damage to vehicle, tracks or loads is sustained
6 Complete post-operations check	
6.1	Vehicle is parked and shut down in accordance with workplace procedures and manufacturer requirements
6.2	Faults or malfunctions are recorded and/or reported in accordance with workplace procedures
6.3	Vehicle and equipment are cleaned and stored after use in accordance with manufacturer and workplace procedures
6.4	Documentation and journey reports are completed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the TLI Transport and Logistics Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIC2025 Operate four wheel drive vehicle.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIC0023 Operate four wheel drive vehicle

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation and workplace procedures
- cleaning and storing vehicles and equipment
- communicating effectively with others
- completing relevant documentation
- conducting pre-start checks
- demonstrating low-risk driving behaviours
- identifying and reporting operational faults
- identifying job hazards and taking required action
- implementing contingency plans
- interpreting and following operational instructions
- modifying activities depending on operational contingencies, risk situations and environments
- reading and interpreting relevant instructions, procedures, information and signs
- recording and reporting any identified problems, faults or malfunctions promptly in accordance with workplace procedures
- using and adjusting vehicle equipment/controls, as required:
 - brakes
 - electronic traction control
 - freewheeling hubs
 - gears/range
 - heating and cooling systems
 - jacks
 - tyres
- working with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and include knowledge of:

- documentation and record keeping requirements
- effect of hard surface driving (such as transmission wind up) on a four wheel drive system
- effect of loads while negotiating a gradient
- efficient driving techniques and safe driving strategies
- environmental impact of four wheel driving
- hazards and risks associated with traversing cross gradients
- hazards that may exist when operating a four wheel drive vehicle in on-road and off-road situations, and action to minimise, control or eliminate identified hazards
- low risk driving behaviours:
 - creating and maintaining crash avoidance space
 - protecting crash avoidance space
 - road rules and directions
 - space and time management
- pre- and post-operational checks and related action
- problems that may occur when operating a four wheel drive vehicle, and action that can be taken to report or resolve the problems
- relevant land management procedures and regulations
- relevant state/territory road traffic authority road rules, regulations, permit and licence requirements
- relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- vehicle equipment/controls, instruments and indicators, and their use
- vehicle handling procedures and techniques for a range of road and track conditions
- workplace procedures for operating a four wheel drive vehicle in both on-road and off-road situations.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions in a four wheel drive vehicle typical of that which is driven in the workplace.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy

requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises and case studies
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including legislation, regulations, codes of practice, workplace procedures and operation manuals.

A simulator/online assessment is not suitable for the final assessment of this unit of competency.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>