



Australian Government

TLIC2025 Operate four wheel drive vehicle

Release: 1

TLIC2025 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 safely in a range of conditions in accordance with the relevant state/territory legislated roads and traffic licence requirements.

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- and post-operational checks.

Recognised driver's licence or provisional car 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

essential outcomes.

demonstrate achievement of the element.

1 Operate four wheel drive vehicles on roads

- 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 legislative 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 legislative 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 in, 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/or range are selected to negotiate rugged terrain and engine revolutions are maintained to

ensure constant traction

- 5.3 Vehicle equipment/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 operations

- 6.1 Vehicle is parked and shut down in accordance with workplace and manufacturer requirements
- 6.2 Faults or malfunctions are corrected and/or reported in accordance with manufacturer and workplace requirements
- 6.3 Vehicle and equipment are cleaned and stored after use in accordance with workplace requirements
- 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIC2025A 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 TLIC2025 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 of 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 correcting minor operational faults
- identifying job hazards and taking required action
- implementing contingency plans
- interpreting and following operational instructions and prioritising work
- modifying activities depending on operational contingencies, risk situations and environments
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- reading and interpreting relevant instructions, procedures, information and signs
- using and adjusting vehicle equipment/controls as required:
 - brakes
 - electronic traction control
 - freewheeling hubs
 - gears/range
 - heating and cooling systems
 - jacks
 - tyres
- working systematically 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 of 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 4x4 system
- effect of loads while negotiating a gradient
- effect on centre of gravity of changing fluid loads
- efficient driving techniques and safe driving strategies
- environmental impact of 4x4 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

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in 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 used in industry.

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 include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

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

Links

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