



Australian Government

Department of Education, Employment and Workplace Relations

FPICOT2234B Operate 4x4 vehicle

Release: 1

FPICOT2234B Operate 4x4 vehicle

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to operate a 4x4 vehicle safely in a range of conditions, including on normal roads, traversing slopes, ascending and descending steep slopes, and stall recovery

Compliance with licensing, legislative, regulatory or certification requirements may be required in various jurisdictions

This unit replaces FPICOT2234A Operate 4x4 vehicle

Application of the Unit

Application of the unit

The unit involves operating a 4x4 vehicle in a forest environment setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for 4x4 operations	<p>1.1. Applicable <i>occupational health and safety</i> (OHS), <i>environmental</i>, <i>legislative</i> and <i>organisational requirements</i> relevant to operating a 4x4 <i>vehicle</i> are identified and followed</p> <p>1.2. <i>Pre-start checks</i> of 4x4 vehicle and equipment are carried out in line with <i>manufacturer specifications</i> and roadworthy requirements</p> <p>1.3. Tyres are checked for pressure suitable for terrain and changed as required in line with organisational procedures</p> <p>1.4. Loads are secured in line with organisational and legislative requirements</p> <p>1.5. <i>Communication</i> with others is established and maintained in line with OHS requirements</p>
2. Operate 4x4 vehicle	<p>2.1. Intended vehicle path is inspected for potential <i>hazards and risks</i> prior to negotiation in line with OHS and environmental requirements</p> <p>2.2. 4x4 vehicle is driven on and off-road at speeds appropriate for <i>conditions</i> in line with organisational and legislative requirements, and environmental regulations</p> <p>2.3. 4x4 vehicle is parked and shut down in line with manufacturer specifications and organisational requirements</p> <p>2.4. 4x4 vehicle and equipment are cleaned and stored after use in line with manufacturer specifications and organisational procedures</p>
3. Operate 4x4 vehicle on a steep slope	<p>3.1. Intended 4x4 vehicle path is inspected prior to negotiation of slope</p> <p>3.2. Appropriate gear is selected to negotiate grade and engine revolutions are maintained to ensure constant traction</p> <p>3.3. Airconditioning unit is turned off to avoid engine acceleration</p> <p>3.4. Braking is used to control descent/ascent and skidding is avoided through application of brakes to emulate ABS</p> <p>3.5. Traction is maintained in line with requirements of 4x4 vehicle and surrounding terrain</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment; efficiently and safely operate a 4x4 vehicle; safely negotiate steep slopes; clean and store 4x4 vehicle and equipment; attach equipment to 4x4 vehicle; operate a jack
- Communication skills sufficient to follow legislation, regulations, standards, codes of practice and established safe practices and procedures for operating a 4x4 vehicle; use appropriate communication and interpersonal techniques with colleagues and others; record and report workplace information; maintain documentation
- Literacy skills sufficient to follow legislation, regulations, standards, codes of practice and established safe practices and procedures for operating a 4x4 vehicle
- Numeracy skills sufficient to measure, estimate and calculate time required to complete a task
- Problem solving skills sufficient to identify problems and equipment faults; demonstrate appropriate response procedures; identify potential hazards and operational faults

Required knowledge

- Applicable commonwealth, state or territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for operating a 4x4 vehicle
- Environmental protection requirements, including the safe disposal of waste material, and the minimisation of carbon emissions
- Environmental risks and hazards
- Using energy effectively and efficiently
- Operational knowledge of 4x4 vehicle, including controls, instruments and indicators and their use
- Road rules, regulations, permit and licence requirements of the relevant state/territory road traffic authority
- Established communication channels and protocols
- Problem identification and resolution strategies, and common fault finding techniques
- Types of tools and equipment, and procedures for their safe use and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently operate a 4x4 vehicle

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable commonwealth, state or territory legislative and regulatory requirements and codes of practice relevant to operating a 4x4 vehicle
- following organisational policies and procedures relevant to operating a 4x4 vehicle
- communicating and working safely with others in rough terrain or water crossing location
- performing pre-start checks of vehicle and equipment
- safely operating a 4x4 vehicle in a range of on and off-road conditions, including negotiating steep slopes

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI05 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of

EVIDENCE GUIDE

workplace relevant contexts) together with application of required knowledge

- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

OHS requirements:

are to be in line with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and

RANGE STATEMENT

may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices, including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements
may include:

Legislative requirements:

are to be in line with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements
may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards

RANGE STATEMENT

- recording and reporting requirements
 - equipment use, maintenance and storage requirements
 - environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
- Vehicles** may include:
- all terrain vehicles
 - cars
 - utilities
 - trailers
 - light trucks
- Pre-start checks** may include:
- fuel
 - water
 - oil
 - brake and transmission fluid levels
 - battery water levels and electrolyte checks
 - tyres
 - belts
 - leads
 - hydraulic lines and connections
 - aircleaners
 - airconditioners
 - brakes
 - off-road safety equipment
- Manufacturer specifications** may include:
- engine characteristics
 - systems warning function
 - four wheel drive operation
 - radius of turning circle
 - safety procedures
- Communication** may include:
- verbal and non-verbal language
 - constructive feedback
 - active listening
 - questioning to clarify and confirm understanding
 - use of positive, confident and cooperative language
 - use of language and concepts appropriate to individual social and cultural differences
 - control of tone of voice
- Hazards and risks** may include:
- rocks and other unexpected obstacles
 - damage to vehicle

RANGE STATEMENT

- wet and iced terrain
- flooded terrain
- fire in vehicle
- faulty brakes
- leaking fuel
- faulty steering mechanism on vehicle
- animals and objects in vehicle path
- windy or foggy sections of terrain
- steep slopes
- oil on road
- parked vehicles on road
- pedestrians crossing the road
- poor visibility
- on and off-road conditions

Conditions are to include:

which may include:

- smooth
- rough
- uneven
- slippery
- boggy
- sandy
- steep or hilly terrain
- rock
- ice
- snow
- mud
- adverse weather conditions
- speed limits for non-response operation
- legal parking
- traffic pattern and density
- visibility
- effects of weather on roads

Unit Sector(s)

Not Applicable

Competency field

Competency field

Common Technical