



Australian Government

Department of Education, Employment and Workplace Relations

DEFCA101B Operate and maintain an armoured fighting vehicle

Release: 1

DEFCA101B Operate and maintain an armoured fighting vehicle

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

This unit covers the competency required to operate and perform operational level maintenance on an armoured fighting vehicle (AFV) to effectively provide a stable gun platform.

This unit does not cover weapon systems, which is covered in DEFCA102B Operate and maintain armoured fighting vehicle weapon systems.

People who undertake this work will be part of an armoured fighting vehicle crew.

Application of the Unit

Application of the Unit

The application of this unit in the workplace - the environments, complexities and situations involved - will be written during Phase II of the Review of the PUA00 Public Safety Training Package.

This text will be useful for the purposes of job descriptions, recruitment advice or job analysis; where possible, it will not be too job specific to allow other industries to import it into other Training Packages, where feasible.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite Unit/s Nil

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 required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare armoured fighting vehicle for operations	1.1 Armoured fighting vehicle is checked for operation, documentation is completed and equipment is stowed in accordance with standard procedures 1.2 In-service ammunition is identified and handled in accordance with standard procedures 1.3 Armoured fighting vehicle is prepared for battle 1.4 Armoured fighting vehicle faults are identified, reported and/or rectified in accordance with standard procedures 1.5 Occupational health and safety (OH&S) requirements and recognised safety precautions are applied throughout the operation in accordance with standard procedures
2. Operate armoured fighting vehicle	2.1 Road laws and other legislative requirements are applied throughout the operation in accordance with operational requirements and standard procedures 2.2 Armoured fighting vehicle is driven in accordance with operational requirements and standard procedures 2.3 Tactical operating techniques are applied in accordance with operational requirements and standard procedures 2.4 Driving techniques to negotiate complex terrain are applied in accordance with operational requirements and standard procedures 2.5 Faults are reacted to in accordance with operational requirements and standard procedures 2.6 Armoured fighting vehicle is manoeuvred to allow the direct fire weapon systems to be employed in accordance with operational requirements and standard procedures 2.7 Vehicle communications systems are operated in accordance with standard procedures 2.8 Navigational techniques are applied in accordance with orders and standard procedures
3. Conduct operator maintenance	3.1 Inspections and checks are conducted to maintain armoured fighting vehicle performance in accordance with operational requirements and

standard procedures

3.2 Armoured fighting vehicle ***sub-systems*** and ***ancillary equipment*** are tested, adjusted or replaced in accordance with operational requirements and standard procedures

3.3 Relevant documentation is completed and stored in accordance with standard procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required Skills

- apply operational safety
- communication skills
- drive a vehicle
- employ relevant vehicle equipment
- fieldcraft skills
- maintenance skills
- navigation techniques
- work in a team

Required Knowledge

- characteristics and employment of vehicle weapon systems
- characteristics, technical capabilities, maintenance requirements and employment of vehicle communication systems
- characteristics, technical capabilities, maintenance requirements, effects, employment and limitations of vehicle
- current operational environment
- fieldcraft
- navigation techniques
- operational safety
- orders
- specific civil and military regulations relevant to the operation of the vehicle
- team work
- vehicle documentation

Evidence Guide

EVIDENCE GUIDE

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

Assessment must confirm the ability to receive and apply orders; to react instinctively to orders; to operate the vehicle without a breach of safety procedures; to apply tactical operating techniques over cross country, roads and water crossings and to apply defensive driving techniques work as an effective member of the crew.

Consistency in performance

Competency should be demonstrated over a range of actual or simulated operator contexts that could be expected in an operation.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in an operational or simulated operational environment. The simulation should replicate the live environment where stress and fatigue are key features. The individual must be assessed as part of a crew.

Specific resources for assessment

Access to an armoured fighting vehicle, crew and suitable area for driving.

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 in the Performance Criteria is detailed below.

Armoured fighting vehicle may include

All current in-service equipment:

- main battle tank family of vehicles (MBT FOV)
- Australian light armoured vehicle family of vehicles (ASLAV FOV)
- armoured personnel carrier family of vehicles (APC FOV)

Checking an armoured fighting vehicle include

Preparation for recovery and water operations

Testing, adjusting and/or replacing:

- air intake and exhaust system
- braking systems
- cooling system
- engine lubrication system
- firefighting equipment
- fuel system
- hydraulic system
- lighting, electrical and charging system
- pivot steering system
- steering mechanical and hydraulic systems
- suspension and running gear
- transmission system
- transfer case, differentials and marine drives
- universal joints, drive shafts and planetary gears
- vehicles batteries

Standard procedures may include

Australian Standards

Job guides, pamphlets and other publications

Manufacturers' handbooks, industry specifications and technical instructions

OH&S regulations

Organisational policies and procedures

Relevant local government by-laws

Relevant state/territory or federal legislation

Verbal and/or written orders and job instructions

RANGE STATEMENT**Ammunition may include**

120 mm
 105 mm
 25 mm
 12.7 mm
 .50 calibre
 .30 calibre
 7.62 mm
 9 mm
 5.56 mm

And can be identified by:

- colour
- hazard band labelling
- lot/batch numbers
- markings
- nomenclature packaging
- type eg high explosive anti-tank (HEAT), high explosive squash head (HESH), armour piercing discarding sabot (APDS)

Preparing an armoured fighting vehicle for battle may include loading

Ammunition
 Camouflage gear
 Fuel
 Water

Driving an armoured fighting vehicle include

Starting
 Steering
 Manoeuvring
 Positioning
 Stopping

Tactical operating techniques must include

Specific patrol formations
 Methods of movement
 Adoption of fire positions
 Concealment procedures
 Turret down
 Hull down

RANGE STATEMENT

	All around defence
	Jockeying
	Counter surveillance techniques
	Use of ground to provide cover and concealment
	Physical concealment of vehicle
Driving techniques must include	Approach (entry/exit)
	Gear selection
	Speed
	Steering
	Use of brakes
Complex terrain may include	Ascents and descents
	Bogs and marshlands
	Close country
	Dirt tracks
	Ditches
	Knife edges
	Open country
	Ridges
	Roads and highways
	Slopes
	Trenches
	Urban and rural areas
	Vertical steps
	Water courses
Direct fire weapon systems may include	APC FOV weapons systems (e.g. 12.7 mm, 7.62 mm)
	ASLAV FOV weapon systems (e.g. 25 mm)
	MBT FOV weapon systems (e.g. 105 mm, 120 mm)
Vehicle communication systems may include	Associated communication accessories
	Battlefield command support system
	Cipher equipment
	HF installation

RANGE STATEMENT

	Remote and line equipment
	UHF installation
	VHF installation
	Vehicle intercommunication system
Navigational techniques may include	Map marking
	Map reading
	Operating global positioning systems
	Route cards
Inspections and checks may include	First parade
	Halt parade
	Final parade
	Ancillary equipment
	Basic maintenance and fault finding
	Communication checks
	Functionality of key operating components
	Service engine
	Weapon systems operation
Sub-systems may include	Air intake and exhaust system
	AFV ramp system
	Compressed air and braking systems
	Cooling system
	Engine lubrication system
	Firefighting equipment
	Fuel system
	Heater
	Hydraulic system
	Lighting, electrical and charging system
	Nuclear, biological and chemical (NBC) system
	Pivot steering system
	Steering mechanical and hydraulic systems
	Suspension and running gear

RANGE STATEMENT**Ancillary equipment may include**

Transfer case, differentials and marine drives
Transmission system
Universal joints, drive shafts and planetary gears
Vehicles batteries
Water operations system
Wheels and suspension
Block and tackle
Chainsaw
De-humidifiers
Emergency breathing apparatus
Firefighting equipment
Fuel pumps
Generators
Global positioning systems
Night fighting equipment
Specialist medical equipment
Specialist tools and equipment

Unit Sector(s)

Not applicable.

Corequisite Unit/s**Co-requisite Unit/s**

Nil