



Australian Government

DEFMIL089 Shift loads manually utilising non-motorised equipment

Release: 1

DEFMIL089 Shift loads manually utilising non-motorised equipment

Modification History

Release	Comments
1	This unit was released in DEF Defence Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to DEFCA318 Shift loads manually utilising non-motorised equipment. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice

Application

This unit describes the skills required to manually shift construction materials and other loads of up to 500kg in weight that are unable to be moved by motorised lifting equipment such as forklifts.

Loads may be moved with equipment such as chain blocks, jacks and winches, which provide mechanical advantage. Alternatively, devices such as slings, gins, derricks and sheers may need to be constructed to provide the mechanical advantage necessary to lift and move the load. Loads will need to be prepared for movement using a range of ancillary devices such as strapping, netting, ropes and chains.

This unit was developed for combat engineer personnel required to shift loads manually utilising non-motorised equipment in a deployed operational environment, but is applicable to any individual in this field of work.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would typically work as part of a team under direct supervision. They use discretion and judgement, and take responsibility for the quality of their outputs. They would perform routine tasks in a broad range of contexts.

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

Competency Field

Military Skills

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Plan and prepare to shift the load	1.1 Select and wear personal protective equipment. 1.2 Identify the type of load, safe working load and working load limits, and the distance and/or height to be moved from job instructions. 1.3 Determine condition, length, bulk, weight, most appropriate method to shift the load and resources required. 1.4 Record any damage to load and report to supervisor. 1.5 Develop a movement plan to identify potential difficulties and request approval for the method of shifting the load and any requirement for additional personnel from the supervisor. 1.6 Select and check for serviceability tools, load shifting equipment and other materials and report any defects to the supervisor. 1.7 Prepare work site to ensure sufficient clear space is available.
2. Shift the load	2.1 Break down load to allow handling and moving a number of single items to ensure the maximum weight of 500 kg is not exceeded. 2.2 Use mechanical strapping equipment and other securing devices to stabilise the load. 2.3 Sling/unsling the load using the correct securing devices. 2.4 Construct mechanical aids and field machines by the approved shifting method, so that the load can be shifted. 2.5 Identify and maintain safe working limits for lifting equipment. 2.6 Move load in accordance with approved shifting method and steadied by tag lines and store and stack in relocated position. 2.7 Report any part of the load that is damaged during the lift to the supervisor.
3. Refurbish equipment and work site	3.1 Clean site and clear of debris and unwanted material. 3.2 Clean, inspect, service, maintain and store field machines, tools and equipment. 3.3 Complete documentation.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning NA					Reading					Writing					Oral communication					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Unit Mapping Information

This unit supersedes and is equivalent to DEFCA318 Shift loads manually utilising non-motorised equipment.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>

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Assessment Requirements for DEFMIL089 Shift loads manually utilising non-motorised equipment

Modification History

Release	Comments
1	These Assessment Requirements were released in DEF Defence Training Package release 1.0 and meet the Standards for Training Packages. Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- calculating using basic formulae and measuring
- using knots and lashings
- splicing and maintaining cordage and steel wire rope (SWR)
- handling materials and identifying manual handling risks
- using manual handling equipment to shift loads
- using slings and securing devices
- following instructions/directives and reporting information
- using a variety of verbal and non-verbal communication techniques including language style, active listening
- completing workplace forms and reports
- calculating total weights of individual items and estimating overall load and comparing with safe working load(s) of equipment
- shifting loads of weights up to 500 kg using at least three different methods:
 - chain blocks
 - flatbed hand trucks
 - hand trucks
 - incline planes
 - levers
 - mechanical aids and field machines
 - pallet trolleys
 - rollers
 - slab trolleys

- utilising load shifting equipment:
 - anchorages
 - cables
 - chains
 - cordage
 - crow bars
 - measuring tape/rule
 - mechanical aids
 - packers
 - slings
 - SWR
 - wedges
- utilising mechanical aids and field machines:
 - block and tackle, pulleys
 - gins, sheers and derricks
 - hand operated winches
 - improvised methods including Spanish windlass and par buckles
 - jacks
 - use of expedient materials such as materials obtained on the job from resources available in the local environment
- using slinging devices in conjunction with a load shifting activity using a field machine
- calculating safe working limits and working load limits of anchors, load attachment points and lifting/moving equipment
- constructing field machines and mechanical aids
- safely strapping, slinging, lifting and moving loads without damage to the load, equipment or personnel
- identifying faults and deficiencies and taking action to rectify any problems
- communicating effectively and work in a team

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- types of construction materials and their characteristics
- workplace and equipment safety requirements including relevant WHS regulations, codes and standards applying to load shifting
- handling requirements for different types of material and loads
- storage requirements for different materials
- use of tools and equipment relevant to shifting loads
- pulling and lifting equipment relevant to manual handling operations
- appropriate anchor points for locating slings and anchorages

- estimation/calculation of weights
- principles of team work
- techniques for supporting others
- composition of teams and roles and responsibilities of team members
- verbal and nonverbal communication techniques including language style, active listening

Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

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