



Australian Government

MEM25012 Install and test operations of marine auxiliary systems

Release: 1

MEM25012 Install and test operations of marine auxiliary systems

Modification History

Release 1. Supersedes and is equivalent to MEM25012B Install and test operations of marine auxiliary systems

Application

This unit of competency defines the skills and knowledge required to install and test marine auxiliary systems.

Site locations can include external and internal locations for foundations, footings, beds and frameworks completed prior to installation and commissioning and tasks can be undertaken in a workshop/site, moored or in a sea-trial situation.

Where installation only is required unit MEM25015 Assemble and install equipment and accessories/ancillaries should be selected.

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

Band: A

Unit Weight: 6

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13003	Work safely with industrial chemicals and materials
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations

Competency Field

Marine craft construction

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|-------------------------------------|--|
| 1 Determine job requirements | <ul style="list-style-type: none">1.1 Follow standard operating procedures (SOPs)1.2 Comply with work health and safety (WHS) requirements at all times1.3 Use appropriate personal protective equipment (PPE) in accordance with SOPs1.4 Identify job requirements from specifications, job sheets or work instructions |
| 2 Select auxiliary system | <ul style="list-style-type: none">2.1 Identify installation and compatibility of surface and fitting materials2.2 Identify installation site of system2.3 Select auxiliary system in accordance with job requirements2.4 Identify material structure and installation procedures2.5 Identify and verify associated installation/assembly plans/instruction |
| 3 Install auxiliary system | <ul style="list-style-type: none">3.1 Select appropriate tools for specified installation3.2 Cut structural area to suit installation requirements, where applicable3.3 Fit structural reinforcement to suit job requirement, where applicable3.4 Prepare structural area for surface preparation3.5 Apply coating sealants and/or isolation materials to suit job requirements3.6 Apply fastening methods3.7 Apply installation procedures in accordance with job specification |

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| | | 3.8 | Apply clean work practices |
| 4 | Test operation of auxiliary system | 4.1 | Apply pre-test checks and verify before standard testing procedures are actioned |
| | | 4.2 | Identify and verify test operation procedures |
| | | 4.3 | Set up and use test equipment in accordance with testing practice |
| | | 4.4 | Test system in accordance with specified operational procedures |
| | | 4.5 | Record/report faults to appropriate authorities |
| | | 4.6 | Rectify faults and re-test for correct operation |
| | | 4.7 | Record and document final test operation according to SOPs |

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

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

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Materials include one (1) or more of the following:

- metals
- timber
- resin and glass reinforcements

Auxiliary systems include one (1) or more of the

- bilge
- freshwater

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following:

- fire (water)
- sanitary plumbing systems
- lifting systems, including davits, crane and winch units

Test equipment includes one (1) or more of the following:

- mechanical
- pneumatic/electro-pneumatic
- electronic (analog/digital)
- associated instruments that measure variables, including:
 - temperature
 - pressure
 - flow rate
 - levels
 - lights
 - density
 - any other operational variable

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>