



Australian Government

MARC034 Maintain hull out of water

Release: 2

MARC034 Maintain hull out of water

Modification History

Release 2. This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor statement changes in Knowledge Evidence
- Minor statement changes in Assessment Conditions.

Release 1. New unit of competency. Licensing/regulatory information has been incorporated in accordance with Regulatory requirements. Assessment Requirements have been strengthened in accordance with Regulatory requirements.

Application

This unit involves the skills and knowledge required to carry out basic maintenance to vessel hull while it is out of water.

This unit applies to people working in the maritime industry in the capacity of:

- Marine Engine Driver Grade 1 Near Coastal
- Marine Engine Driver Grade 2 Near Coastal
- Marine Engine Driver Grade 3 Near Coastal

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit.

This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Marine Engine Driver Grade 3 NC, Marine Engine Driver Grade 2 NC and Marine Engine Driver Grade 1 NC as specified in Marine Order 505.

Seafarers seeking certification should check with AMSA.

Pre-requisite Unit

Not Applicable.

Competency Field

C - Equipment Operations

Unit Sector

Not Applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for work

2 Carry out required maintenance and repairs to hull, equipment and fittings

3 Clean up and complete documentation

PERFORMANCE CRITERIA

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

1.1 Planned maintenance program for hull type and construction material is accessed to determine hull maintenance requirements

1.2 Vessel is inspected and additional maintenance requirements are determined

1.3 Maintenance tasks are planned and sequenced in conjunction with others involved in or affected by maintenance work

1.4 Repair tools and equipment are selected and checked for serviceability

1.5 Work area is prepared

2.1 Suitable personal protective equipment is selected and used according to work health and safety (WHS)/occupational health and safety (OHS) requirements

2.2 Permits for hot work, confined space entry and other high risk activities are completed according to organisational and regulatory requirements

2.3 Tasks are performed according to manufacturer specifications, maintenance yard requirements and organisational practices

3.1 Work area is cleared and cleaned so it is in a serviceable condition

3.2 Materials are disposed of or recycled according to legislative and organisational requirements

3.3 Tools and equipment are cleaned, checked and stored according to organisational procedures

- 3.4** Maintenance reports are completed according to 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.

Unit Mapping Information

This unit replaces and is equivalent to MARC002 Maintain hull out of water.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>

Assessment Requirements for MARC034 Maintain hull out of water

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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 work health and safety (WHS)/occupational health and safety (OHS) practices, including hazard identification, risk assessment and risk control measures
- carrying out maintenance tasks including:
 - examining anchors and cables
 - inspecting:
 - anodes
 - hull fittings
 - propeller, shafts and seals
 - rudder, rudder stock and seals
 - watertight and weather tight hatches
- explaining procedures and techniques for hull maintenance according to regulations and vessel operating procedures
- implementing safe and environmentally responsible work practices
- planning and preparing for maintenance
- reading, interpreting and complying with:
 - manufacturer instructions, including all WHS/OHS requirements
 - operating and service manuals for maintenance of vessel hull
 - safety data sheets (SDS)/material safety data sheets (MSDS)
- recognising faulty equipment and taking appropriate actions according to organisational procedures
- recognising hull damage and deterioration and taking appropriate actions according to organisational procedures
- selecting and using correct tools and equipment for maintenance task.

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:

- component parts, operation and routine maintenance requirements of vessel, equipment and fittings
- differences in vessels, hull structures and equipment
- functions of underwater equipment
- nature and causes of corrosion of marine surfaces and structures, and available methods for its control
- organisational procedures for maintenance
- principles and procedures of lubrication as they relate to underwater vessel equipment and fittings
- procedures for:
 - checking and inspecting vessel hull as part of routine maintenance program
 - initiating and coordinating repair and or replacement of underwater equipment and fittings
- process and requirements for hull maintenance
- types, characteristics and functions of equipment or tools used in maintenance
- use of sacrificial anodes
- WHS/OHS procedures and practices including:
 - hazard identification, risk assessment and risk control measures
 - hazards of working in confined spaces
 - maintenance hazards and associated problems.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training current at the time of assessment.

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.

Practical assessment must occur in a workplace, or realistic simulated workplace, under the normal range of workplace conditions.

Simulations and scenarios may be used where situations cannot be provided in the workplace or may occur only rarely, in particular for situations relating to emergency procedures and adverse weather conditions where assessment would be unsafe, impractical or may lead to environmental damage.

Resources for assessment must include access to:

- applicable documentation, such as legislation, regulations, codes of practice, safety management system (SMS), workplace procedures, operational manuals and SDS/MSDS
- a commercial vessel with inboard diesel propulsion power of greater than or equal to 150 kW or appropriate vessel ashore
- tools, equipment, machinery, materials and relevant personal protective equipment (PPE) currently used in industry.

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>