



**Australian Government**

# **MEA364 Maintain and/or repair small aircraft mechanical components or parts**

**Release: 2**

# MEA364 Maintain and/or repair small aircraft mechanical components or parts

## Modification History

Release 2. Equivalent to MEA364 Maintain and/or repair small aircraft mechanical components or parts with amended prerequisite codes.

## Application

This unit of competency requires application of hand skills and the use of relevant maintenance publications to maintain and repair a range of aircraft mechanical components during the performance of scheduled or unscheduled maintenance. Maintenance may be performed individually or as part of a team.

Applications include fixed and rotary wing aircraft classified by the Civil Aviation Safety Authority (CASA) as small aircraft and components in workshops.

The unit is part of the Mechanical Certificate IV (Aircraft Maintenance Stream) training pathway.

Where a CASA licensing outcome is sought this unit forms part of the CASA requirement for the granting of the chosen maintenance certification licence under Civil Aviation safety regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide.

## Pre-requisite Unit

MEA107	Interpret and use aviation maintenance industry manuals and specifications
MEA154	Apply work health and safety practices in aviation maintenance
MEA155	Plan and organise aviation maintenance work activities
MEA156	Apply quality standards during aviation maintenance activities
MEA157	Complete aviation maintenance industry documentation
MEA158	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance

## Competency Field

Aviation maintenance

## Unit Sector

### Elements and Performance Criteria

Elements describe the essential outcomes.

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

1. Maintain and/or repair mechanical components or parts

- 1.1 Maintenance and/or repair requirements are determined, following disassembly and assessment of component parts for serviceability, in accordance with the relevant maintenance documentation
- 1.2 Tagging and repair instructions are accurately specified for parts requiring specialist repair
- 1.3 Appropriate materials, tools, equipment and assembly or fabrication jigs are selected and prepared for the particular specification requirements
- 1.4 Components or parts are maintained, repaired or modified as approved by relevant manufacturers' bulletins or procedures in accordance with required specifications
- 1.5 Mechanical component parts are assembled within specified tolerances and in accordance with the appropriate maintenance documents while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDS) and items of personal protective equipment (PPE)
- 1.6 Mechanical components are adjusted, as required, to operate within prescribed specifications
- 1.7 Test equipment and rigs are used, where applicable, to confirm serviceability
- 1.8 Maintained/repaired or modified components are tagged, sealed and packaged within specified procedures
- 1.9 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures

## Foundation Skills

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.

**Components or parts to be maintained and/or repaired, if applicable to the enterprise, include:**

- Hoses
- Pipes
- Cables, pulleys, chains, sprockets and gear drives
- Control rods, bellcranks, links and screwjacks
- Trim panels; linings; seats; cabin equipment and consoles; coverings; and emergency equipment stowage, including passenger escape systems, life jackets, rafts, location transmitters, cargo, crew and/or passenger seat restraints

**Maintain includes:**

- Cleaning, inspection for wear or damage and adjustment and lubrication, where applicable

**Repair includes:**

- Standard techniques for pipes and replacement of eye-ends, tubes or bearings for control rods/pulleys/sprockets and bushes or bearings for bellcranks and links
- The use of adhesives and appropriate patch materials for trim and upholstery repairs (more extensive repairs involving sewing are covered by MEA509 Manufacture, repair and alter aircraft-related fabric components)
- Replacement of restraint system components where sewing is not required (more extensive repairs are covered by MEA508 Maintain, install and remove restraint systems)

**Procedures and requirements include:**

- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

## Unit Mapping Information

Release 2. Equivalent to MEA364 Maintain and/or repair small aircraft mechanical components or parts

## **Links**

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>