



Australian Government

MEA317 Remove and install pressurised aircraft structural and non-structural components

Release: 3

MEA317 Remove and install pressurised aircraft structural and non-structural components

Modification History

Release 3. Equivalent to MEA317 Remove and install pressurised aircraft structural and non-structural components with amended prerequisite codes.

Application

This unit of competency requires application of hand skills and maintenance publications to remove and install structural and non-structural components from fixed wing aircraft with pressurised cabins during the performance of scheduled or unscheduled maintenance. Maintenance may be performed individually or as part of a team.

The unit is part of the Mechanical Certificate IV (Aircraft Maintenance Stream) training pathway and may also be part of a Structures Maintenance Certificate IV training pathway

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence Force (ADF) and the Civil Aviation safety Authority (CASA).

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

MEA369 Inspect and maintain structures and related components of non-pressurised small aircraft

OR

MEA398 Remove and install aircraft hydro-mechanical and landing gear system components

AND

MEA303 Remove and install aircraft pneumatic system components

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.

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|-----------------------|--|
| 1. Remove components | 1.1 Structure is supported and prepared in accordance with the applicable maintenance manual to ensure personnel safety and freedom from damage to aircraft or component during component removal |
| | 1.2 Component removal is carried out in accordance with the applicable maintenance manual 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) |
| | 1.3 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures |
| | 1.4 Removed components are tagged and prepared for transport in accordance with specified procedures |
| 2. Install components | 2.1 Structural components to be installed are checked to confirm correct part numbers, serviceability and modification status |
| | 2.2 Component installation is carried out in accordance with the applicable maintenance manual while observing all relevant WHS requirements, including the use of MSDS and items of PPE |
| | 2.3 Support/safety equipment is removed at an appropriate time to ensure personnel safety and freedom from structural damage |
| | 2.4 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.

Removable components of structure include:

- Those that are installed using bolts and/or screws. Where component removal and installation requires the removal and installation of rivets the applicable unit is either MEA339 Inspect, repair and maintain aircraft structures, MEA370 Repair the structure of non-pressurised small aircraft or MEA371 Perform major repairs and modifications to small aircraft metal structure.
- Structural components include:
 - removable components of wings, pylons, empennage, landing gear support structure, fairings, nacelles and thrust reversers
 - removable components or sections of pressurised aircraft fuselage
 - pressurised fuselage entry, cargo, access doors and associated pressure seals
 - pressurised fuselage windows, transparent panels and associated seals
 - trim panels, linings, seats, cabin equipment and consoles, floor panels and coverings (where applicable to the enterprise)
 - applicable emergency and safety equipment, including passenger escape systems, inflatable, slides, life jackets, rafts, location transmitters, beacons, and crew and/or passenger seat restraints

Installation includes:

- Checking and adjustment of all doors and access panels, including locking mechanisms, for correct fit and sealing

Sealant removal and application includes:

- The removal and application of faying (contact or overlapping) surface, pressure hull and fuel tank sealants (where applicable to the enterprise)

Procedures and requirements include:

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

Unit Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

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