



Australian Government

MEA372 Perform mechanical elementary maintenance

Release: 2

MEA372 Perform mechanical elementary maintenance

Modification History

Release 2 - Additional items added to Range of Conditions to align with CASR Part 66 MOS and related changes made to Assessment Requirements

Application

The unit of competency provides skills and knowledge required by small aircraft maintenance B1 and B2 Licence holders to perform and certify mechanical elementary maintenance on small fixed and rotary wing aircraft.

The unit is part of the Aeroskills Mechatronics Certificates IV small aircraft maintenance training pathways.

Where a Civil Aviation Safety Authority (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

MEA301 Perform aircraft flight servicing

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. Remove mechanical components	1.1 System is rendered safe and prepared in accordance with the applicable maintenance manual and isolation tags are fitted, where necessary, to ensure personnel safety
	1.2 Removal of components is carried out in accordance with approved maintenance data while observing all relevant work health and safety (WHS) procedures including the use of material

- safety data sheets (MSDS) and personal protective equipment (PPE)
- 1.3 Required maintenance documentation is accurately compiled and correctly processed
 - 1.4 Removed components are tagged, sealed and packaged in accordance with specified procedures
2. Install mechanical components
- 2.1 Components to be installed are checked to confirm correct part numbers, serviceability and modification status
 - 2.2 Installation is carried out in accordance with approved maintenance data while observing all relevant WHS procedures, including the use of MSDS and PPE
 - 2.3 Required maintenance documentation is accurately completed and correctly processed
3. Repair mechanical non-structural components
- 3.1 Extent of damage is correctly assessed to assist in determining repair procedure
 - 3.2 Appropriate repair scheme is identified in accordance with structural repair manual and/or approved data
 - 3.3 All required materials and equipment are organised
 - 3.4 Repairs are performed in accordance with approved repair scheme, ensuring that aircraft standard practices are used and process requirements are carried out while observing all relevant WHS procedures, including the use of MSDS and PPE
 - 3.5 Work area is cleaned of all waste material or contaminants
 - 3.6 Required maintenance documentation is accurately completed and correctly processed

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.

Mechanical elementary maintenance tasks include:

- Replacement of defective locking wire or split pins used on other than flight control systems
- Removal and installation of passenger and crew seat safety restraints
- Removal and installation of co-pilot control levers
- Removal and installation of simple hose connections not requiring special tools or bench assembly (excludes hydraulic connections and engine compartment fuel and oil pressure or scavenge hose connections)
- Removal and installation of prefabricated fuel lines
- Removal and installation of aircraft wheels or skids, including servicing and inspection of wheel bearings and replacement of tyres
- Removal and installation of landing gear elastic shock absorber cords
- Removal and installation of engine cowls not requiring propeller removal or disconnection of engine controls
- Removal and installation of induction system baffles
- Removal and installation of non-structural passenger cabin partitions
- Replacement of side windows in non-pressurised cabins
- Removal and installation of spark plugs, includes cleaning and setting of gap clearance
- Performance of cylinder compression tests
- Removal and installation of fuel and oil strainers or filter elements, includes element disassembly and cleaning, where applicable
- Removal, checking and installation of magnetic chip detectors
- Removal and installation of doors on non-pressurised aircraft
- Small simple repairs to fairings, non-structural cover plates and cowlings
- Simple fabric patches not requiring rib stitching or the removal of structural components (not on flight controls)
- Minor repairs to cabin trim and upholstery
- Restoration of finish after repairs and minor touch-up of decorative coatings

Procedures and requirements include:

- Adding oil, air or both to non-retractable landing gear shock struts
- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 2 - Additional items added to Range of Conditions to align with CASR Part 66 MOS and related changes made to Assessment Requirements. Equivalent.

Release 1 - New unit

Links

Companion Volume implementation guides are found in VETNet -

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