



Australian Government

MEA3000 Maintain small piston engine aircraft pressurisation systems

Release: 1

MEA3000 Maintain small piston engine aircraft pressurisation systems

Modification History

Release 1. Equivalent to MEA356 Maintain light piston engine aircraft pressurisation systems. Revised as a result of changed prerequisites. Unit codes updated.

Application

This unit of competency describes the skills and knowledge required to inspect, test, troubleshoot and replace components of small piston engine aircraft pressurisation systems during maintenance activities. It requires the application of hand skills, and the applied knowledge of systems and components and of applicable maintenance publications and test equipment. Maintenance may be performed individually or as part of a team.

The unit applies during the scheduled and unscheduled maintenance of all types of small fixed wing piston engine aircraft that have cabin pressurisation systems. Where aircraft types have pressurisation and air cycle air conditioning systems the applicable units are MEA208 *Remove and install aircraft pressurisation control system components*, MEA219 *Inspect, test and troubleshoot aircraft pressurisation control systems and components*, MEA303 *Remove and install aircraft pneumatic system components* and MEA310 *Inspect, test and troubleshoot aircraft pneumatic systems and components*.

This unit forms part of the Civil Aviation Safety Authority (CASA) requirement for maintenance certification licences under Civil Aviation Safety Regulation (CASR) Part 66. Where a CASA licensing outcome is sought, users must refer to the licensing provisions in the MEA Aeroskills Companion Volume Implementation Guide.

Pre-requisite Unit

Nil.

Competency Field

Aviation maintenance

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Inspect small piston engine aircraft pressurisation system

PERFORMANCE CRITERIA

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

- 1.1 Use relevant maintenance documentation and modification status, including system defect reports where relevant, to identify specific inspection requirements

ELEMENTS**PERFORMANCE CRITERIA**

- 1.2 Check isolation tags and configure aircraft for safe system inspection and operation according to applicable maintenance manual
- 1.3 Visually or physically check pressurisation system components for external signs of defects according to maintenance manual procedures and work health and safety (WHS) requirements
- 1.4 Identify and report defects using organisational reporting processes
2. Test/adjust small piston engine aircraft pressurisation systems and components
 - 2.1 Prepare aircraft and system according to applicable maintenance manual for the application of power/system operation
 - 2.2 Functionally test pressurisation system for evidence of serviceability or malfunction according to maintenance manual
 - 2.3 Adjust system according to maintenance manual
3. Troubleshoot small piston engine aircraft pressurisation systems
 - 3.1 Use available information from maintenance documentation, inspection and test results where necessary to assist in fault determination
 - 3.2 Use maintenance manual fault diagnosis guides and logic processes to ensure efficient and accurate troubleshooting to line replacement level
 - 3.3 Obtain specialist advice, where required, to assist with troubleshooting process
 - 3.4 Locate pressurisation system faults, and identify and record their causes in maintenance documentation where required, according to standard organisational procedures
 - 3.5 Determine rectification requirements
4. Remove and install small piston engine aircraft pressurisation system components
 - 4.1 Render system safe according to applicable maintenance manual, and fit isolation tags where necessary to ensure personnel safety
 - 4.2 Remove pressurisation system component according to applicable maintenance manual and WHS requirements
 - 4.3 Complete and process required maintenance documentation

ELEMENTS**PERFORMANCE CRITERIA**

- 4.4 Tag, seal and package removed components according to specified procedures
- 4.5 Check components to be installed to confirm correct part numbers, serviceability, and modification status
- 4.6 Carry out installation according to applicable maintenance manual
- 4.7 Complete and process required maintenance documentation according to standard organisational procedures

Foundation Skills

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

Unit Mapping Information

Release 1. Equivalent to MEA356 Maintain light piston engine aircraft pressurisation systems.

Links

Companion Volume implementation guides are found in VETNet -

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