

Australian Government

MEA303 Remove and install aircraft pneumatic system components

Release: 2

MEA303 Remove and install aircraft pneumatic system components

Modification History

Release 2. Equivalent to MEA303 Remove and install aircraft pneumatic system components with amended prerequisite codes.

Application

This unit of competency requires application of hand skills and the use of maintenance publications to remove and install aircraft pneumatic system components from pressurisation systems, air cycle air conditioning systems and fire-extinguishing systems of fixed and rotary wing aircraft during scheduled and unscheduled maintenance.

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

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.	Remove pneumatic system components	1.1	Pneumatic 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 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, sealed and packaged in accordance with specified procedures		
2.	Install pneumatic system components	2.1	Components to be installed are checked to confirm correct part numbers, serviceability and modification status		
		2.2	Installation is carried out to pneumatic system in accordance with the applicable maintenance manual while observing all relevant WHS requirements, including the use of MSDS and items of PPE		

2.3 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.

Pneumatic components include:	•	Filters, valves, pumps, motors, actuators and regulators Gauges (direct reading), temperature sensors, pressurisation controllers and temperature controllers Heat exchangers, pressure vessels, condensers, compressors, expansion turbines and humidifiers Rigid and flexible pipelines, hoses and fittings Ducting Fire-extinguishers, including those containing ozone depleting substances (ODS) or synthetic greenhouse gas (SGG) extinguishing agents (e.g. BCF) (where applicable to the enterprise)
Procedures and requirements include:	•	Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 2. Equivalent to MEA303 Remove and install aircraft pneumatic system components

Links

Companion Volume implementation guides are found in VETNet https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371