



Australian Government

MEAMEC0026 Maintain aircraft basic hydraulic and pneumatic components or component parts

Release: 1

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Modification History

Release 1. Application changed. Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA329 Maintain aircraft basic hydraulic and pneumatic components or parts.

Application

This unit describes the skills and knowledge required to apply hand skills and use maintenance documentation to maintain, repair and modify aircraft basic hydraulic and pneumatic components during scheduled or unscheduled maintenance under the guidance of a qualified person. Work under the guidance of a qualified person may be performed individually or as part of a team.

This unit applies to fixed and rotary wing aircraft components either attached to the aircraft or in a workshop.

Note that the scope of any repair or modification and the procedure to be followed will be provided by the qualified person, and be within the scope of the skills and knowledge included in the unit of competency MEA158 Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Civil Aviation Safety Authority (CASA) and the Defence Aviation Safety Authority (DASA).

Any other relevant legislation, industry standards and codes of practice within Australia must be applied.

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

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare to dismantle, inspect, maintain and assemble basic hydraulic and pneumatic components or component parts	1.1 Remove and disassemble components or component parts in accordance with enterprise procedures, relevant maintenance documentation and qualified person guidance 1.2 Confirm maintenance and repair requirements as defined by the qualified person, enterprise procedures and the relevant maintenance documentation are understood 1.3 Specify tagging and repair instructions in accordance with enterprise procedures and qualified person directions for parts requiring specialist repair 1.4 Select and prepare appropriate materials, tools, equipment and assembly or fabrication jigs, when required, for the particular maintenance and repair requirements in accordance with enterprise procedures and relevant maintenance documentation
2. Dismantle, inspect, maintain and assemble basic hydraulic and pneumatic components or component parts	2.1 Carry out routine maintenance, repair or modification procedures in accordance with manufacturers' bulletins, required enterprise procedures and specifications while observing all relevant work health and safety (WHS) requirements, including the use of material safety data sheets (MSDSs) and items of personal protective equipment (PPE) 2.2 Assemble component parts within specified tolerances and in accordance with enterprise procedures and the appropriate maintenance documents 2.3 Provide assistance, where applicable and as required by the qualified person, in the final adjustment and testing of components to confirm serviceability
3. Complete maintenance and repair activities	3.1 Complete required documentation and process in accordance with standard enterprise procedures 3.2 Tag, seal and pack components within specified procedures

Foundation Skills

- This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.
- Reading skills to interpret maintenance documentation and procedures.

- Writing skills to complete maintenance documentation.
- Numeracy skills to interpret and communicate technical information.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEA329 Maintain aircraft basic hydraulic and pneumatic 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>

Assessment Requirements for MEAMEC0026 Maintain aircraft basic hydraulic and pneumatic components or component parts

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Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- maintain components from each of the following groups:
 - hoses
 - pipes
 - simple check or shutoff valves
 - basic hydraulic and pneumatic actuators and valves
- follow the instructions provided by qualified persons and relevant documentation for the disassembly, routine replacement of component parts and seals and reassembly of components
- under guidance and in the training environment, make post-assembly adjustments, including length of stroke or operating pressure
- under guidance and in the training environment, perform simple tests involving pressure and function
- where post-assembly testing is applicable, set up components for testing and demonstrate understanding of the test procedures.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- component operation at a basic level
- standard and routine repair procedures and processes, including work health and safety (WHS)
- how to obtain material safety data sheets (MSDSs)
- use of personal protective equipment (PPE).
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Assessment Conditions

The following conditions of assessment represent the requirements of the regulators Defence Aviation Safety Authority (DASA) and Civil Aviation Safety Authority (CASA) and maintenance stakeholders and must be rigorously observed.

Skills must have been demonstrated under routine supervision in the workplace or in a simulated environment that reflects workplace conditions and contingencies encountered in maintaining aircraft basic hydraulic and pneumatic components or component parts. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials relevant to maintaining aircraft basic hydraulic and pneumatic components or component parts
 - components, parts, tools and equipment specified in maintenance documentation
 - general- and special-purpose tools found in most routine situations.

Evidence of tasks demonstrating competency must be recorded in a log of industrial experience and achievement.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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