



Australian Government

MEA204 Remove and install basic aircraft instrument system components

Release: 2

MEA204 Remove and install basic aircraft instrument system components

Modification History

Release 2 - Remote reading gyro compasses and gas turbine engine indication system components added to Range of Conditions

Release 1 - New unit of competency

Application

This unit of competency requires application of hand skills and the use of maintenance documentation/publications in the removal and installation of basic aircraft instrument system components of fixed and rotary wing aircraft that have basic instrument systems during scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

The unit is part of the Avionic Certificate IV (Aircraft Maintenance Stream) 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

MEA201 Remove and install miscellaneous aircraft electrical hardware/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 basic aircraft instrument system | 1.1 System is rendered safe and prepared in accordance with the applicable maintenance manual and isolation tags are |
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components	fitted, where necessary, to ensure personnel safety
	1.2 Instrument component removal is carried out in accordance with the applicable maintenance manual while observing all relevant work health and safety (WHS) requirements
	1.3 Required maintenance documentation is completed and processed in accordance with standard enterprise procedures
	1.4 Removed components are tagged and packaged in accordance with specified procedures
2. Install basic aircraft instrument system components	2.1 Instrument components to be installed are checked to confirm correct part numbers, modification status, serviceability and shelf life
	2.2 Physical installation of instrument components is performed in accordance with the applicable maintenance manual and regulatory requirements, ensuring appropriate adjustment/alignment is carried out
	2.3 System is reinstated to correct operational condition in preparation for testing, as necessary
	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.

Instrument components include:

- Pitot/static system components, airspeed indicators (ASIs), vertical speed indicators (VSIs) and counter pointer altimeters
- Directional gyros (DGs) and artificial horizons (AHs),

both air and electrically driven

- Turn and bank and slip/turn coordinators
- Direct reading compasses
- Remote reading gyro compasses (where applicable to the enterprise)
- Piston engine indication system components (direct reading measuring instruments and temperature indication)
- Gas turbine engine indication system components (where applicable to the enterprise)
- Outside air temperature gauges (OAT)
- Electrical systems indication (voltage, current, power and frequency)
- Basic fuel quantity indication system components
- Pneumatic/vacuum indication system components
- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Procedures and requirements include:

Unit Mapping Information

Release 2 – Remote reading gyro compasses and gas turbine engine indication system components added to Range of Conditions and Assessment Requirements. No change in outcome

Release 1 – equivalent to MEA204C Remove and install basic aircraft instrument system components

Links

Companion Volume implementation guides are found in VETNet -

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