1. Title	Aircraft reciprocating powerplants maintenance
2. Code	EMAMBG416A
3. Range	The maintenance activities referred to in this UoC are those normally carried out on the aircraft in the hangar. This UoC does not cover engine running and testing.
4. Level	4
5. Credit	9
6. Competency	Performance Requirement
	6.1 Knowledge ◆ Understand the working principle of the reciprocating powerplants.
	 ♦ Able to review the maintenance documents and procedures to decide on maintenance task. ♦ Able to obtain and check the resources for serviceability in accordance with the procedures, e.g. tools, equipment, safety equipment, publications, spare parts, materials. ♦ Able to confirm the powerplant to be maintained is matched with the aircraft registration and documentation. ♦ Able to prepare the ground and/or support equipment for aircraft powerplant maintenance activities in accordance with the procedures.

- ♦ Able to prepare the aircraft and powerplant for the application of power and system operation in accordance with the procedures, e.g. cockpit controls match component positions, clearances, isolation tags, warning signs, other systems for the application of power, other personnel warned of power being applied, permission obtained to apply power.
- ◆ Able to determine the serviceability in accordance with the procedures, e.g. inspect, assess.
- ◆ Able to locate the non-conformities using troubleshooting techniques appropriate to the defects indications in accordance with the procedures.
- ◆ Able to report and record the non-conformities in accordance with the procedures.
- ◆ Able to determine the method of rectifying non-conformities in accordance with the procedures.
- ◆ Able to procure the replacement parts and verify their authenticity and serviceability in accordance with the procedures, e.g. identify, inspect.
- ◆ Able to rectify the non-conformities in accordance with the procedures, e.g. repair, replace, modify, adjust, calibrate, lubricate.
- Able to assess the powerplants to verify their serviceability in accordance with the procedures.

- ◆ Able to complete the servicing activities required as a consequence of the maintenance activity in accordance with the procedures.
- ◆ Able to perform the inspections in accordance with the procedures

6.3 Professional approach

- ♦ Able to understand the legislative requirements, aviation authority requirements, manufacturers' publications and the maintenance organizations' approved maintenance practices and requirements in carrying out the task.
- ◆ Able to complete the task within the stipulated duration.
- ◆ Able to complete the documentation in accordance with the procedures.
- ◆ Able to complete the task in the work area in accordance with the procedures, e.g. tool control, cleanliness, tidiness, return of publications, systems and aircraft left for next activity.
- ♦ Able to check the resources for serviceability and returned to service or storage in accordance with the procedures, e.g. tools, equipment, safety equipment.
- ◆ Able to handle the unused parts and materials in accordance with the procedures, e.g. serviceable, unserviceable, surplus, waste, scrap, hazardous.

7. Assessment Criteria	The integral outcome requirement of this UoC are: (i) Able to make preparation for the maintenance of powerplants.
	(ii) Able to locate the non-conformities in aircraft reciprocating powerplants.
	(iii) Able to restore the powerplant airworthiness.
	(iv) Able to complete all the requirements associated with the task.
8. Remarks	Ref: NZQA - 3410