

1. Title	Aircraft piston engine lubrication system components repair and/or overhaul
2. Code	EMAMBG427A
3. Range	The repair and/or overhaul activity is usually carried out in a specialist bay or workshop,e.g. pumps, valves, filters, reservoirs. This UoC covers reciprocating engine lubrication systems.
4. Level	4
5. Credit	8
6. Competency	<u>Performance Requirement</u>
	<p>6.1 Knowledge</p> <ul style="list-style-type: none"> ◆ Understand the working principles for the lubrication systems of piston engines, including: <ul style="list-style-type: none"> • properties and specifications of lubricants • operation of the systems • lay-out of the systems and their components <p>6.2 Methods and procedures</p> <ul style="list-style-type: none"> ◆ Able to review the maintenance documents and procedures to decide on maintenance task,e.g. confirm fault, repair, overhaul, modify. ◆ Able to confirm the component identity with documentation. ◆ Able to make preparation for the work area and obtain and check the resources in accordance with the procedures,e.g. publications, materials, tools, equipment, safety equipment, environmental conditions established,e.g. locate defects, repair, overhaul, test, adjust, complete the task.

	<ul style="list-style-type: none">◆ Able to prepare the component for repair and/or overhaul in accordance with the procedures,e.g. clean, inspect, assess economics of carrying out repair or overhaul.◆ Able to determine and record the next task in accordance with the procedures.◆ Able to locate the defects using troubleshooting techniques appropriate to the defects indications in accordance with the procedures.◆ Able to report and record the defects found during troubleshooting in accordance with the procedures.◆ Able to disassemble the component in accordance with the procedures,e.g. clean, label, preserve, segregate.◆ Able to report and record the defects found during disassembly in accordance with the procedures,e.g. inspect, use standards, specifications, precision measuring equipment.◆ Able to determine and record the rectification action in accordance with the procedures.◆ Able to procure the spare parts and verify their authenticity and serviceability in accordance with the procedures,e.g. identify, inspect.◆ Able to rectify the defects in accordance with the procedures,e.g. repair, replace, modify, adjust.◆ Able to assemble the component in accordance with the procedures.
--	---

	<p data-bbox="371 398 619 488">6.3 Test and adjustment</p> <ul style="list-style-type: none"> <li data-bbox="735 241 1484 331">◆ Able to perform inspections in accordance with the procedures. <li data-bbox="735 405 1484 495">◆ Able to prepare the component for test in accordance with the procedures. <li data-bbox="735 510 1484 600">◆ Able to perform the inspections in accordance with the procedures. <li data-bbox="735 616 1484 862">◆ Able to test and adjust the component in accordance with the procedures, e.g. troubleshoot, functionally test, calibrate, adjust, document adjustments and performance. <p data-bbox="371 936 639 1025">6.4 Professional approach</p> <ul style="list-style-type: none"> <li data-bbox="735 936 1484 1238">◆ 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. <li data-bbox="735 1254 1484 1344">◆ Able to complete the task within the stipulated duration. <li data-bbox="735 1359 1484 1561">◆ Able to prepare the component for use, storage or transit in accordance with the procedures, e.g. locking, inhibiting, blanking, packing. <li data-bbox="735 1576 1484 1778">◆ Able to check the resources for serviceability and return them to service or storage in accordance with the procedures, e.g. tools, equipment, safety equipment, publications. <li data-bbox="735 1794 1484 1883">◆ Able to complete the documentation in accordance with the procedures.
--	---

	<ul style="list-style-type: none"> ◆ Able to handle the unused parts and materials in accordance with the procedures, e.g. serviceable, unserviceable, surplus, waste, scrap, hazardous. ◆ Able to return the work area in a state which enables the next task to begin in accordance with the procedures.
7. Assessment Criteria	<p>The integral outcome requirement of this UoC are:</p> <ul style="list-style-type: none"> (i) Able to make preparation for the repair and/or overhaul of aircraft engine lubrication system components. (ii) Able locate the defects. (iii) Able to repair and/or overhaul the components. (iv) Able to test and adjust the components. (v) Able to complete all the requirements associated with the task.
8. Remarks	<p>(Ref: HKAR-66 Module 2.2.3, 2.2.4, 15.9, 15.10, 16.8 & 16.9)</p> <p>The Credit in this UoC is on the assumption of the person already possessed foundation knowledge in the constructional arrangement and operation of piston engines.</p> <p>Ref: NZQA - 3419</p>