Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
1. Inspect Piston Engine System and Components	a. Engine (all types), Main Components and Accessories/Drives	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Control System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Ignition and Starter Systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Isolation tags already attached to the system or related systems are checked and aircraft/engine configured for safe system inspection and operation in accordance with applicable maintenance manual.

1.2 ***Piston Engine*** and/ or components are visually or physically checked for signs of defects in accordance with 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).

Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
1. Cont'd Inspect Piston Engine System and Components	d. Fuel, Air Systems and Super/Turbo Chargers	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	e. Oil System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

1.1 Isolation tags already attached to the system or related systems are checked and aircraft/engine configured for safe system inspection and operation in accordance with applicable maintenance manual.

1.2 ***Piston Engine*** and/ or components are visually or physically checked for signs of defects in accordance with 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).

Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
2. Test Piston Engine System	a. Engine (all types), Main Components and Accessories/Drives	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Control System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Ignition and Starter Systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

2.1 Aircraft and ***Engine System*** are correctly prepared in accordance with applicable maintenance manual and connected to appropriate test equipment.
2.2 Built-in system test functions and status displays are activated, where applicable, outputs recorded and interpreted.
2.3 Assistance is provided with engine and/or system operation during prescribed test procedures to establish serviceability and correct function in accordance with applicable maintenance manual.

Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
2. Cont'd Test Piston Engine System	d. Fuel, Air Systems and Super/Turbo Chargers	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	e. Oil System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

2.1 Aircraft and ***Engine System*** are correctly prepared in accordance with applicable maintenance manual and connected to appropriate test equipment.
2.2 Built-in system test functions and status displays are activated, where applicable, outputs recorded and interpreted.
2.3 Assistance is provided with engine and/or system operation during prescribed test procedures to establish serviceability and correct function in accordance with applicable maintenance manual.

Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
3. Prepare for Troubleshooting	a. Engine (all types), Main Components and Accessories/Drives	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Control System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Ignition and Starter Systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

3.1 Relevant maintenance documentation and modification status, including system defect reports where relevant are used to identify unserviceability.

** **Note: Troubleshooting:** involves the use of fault finding charts or similar, to line replacement level.

Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
3. Cont'd Prepare for Troubleshooting	d. Fuel, Air Systems and Super/Turbo Chargers	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	e. Oil System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

3.1 Relevant maintenance documentation and modification status, including system defect reports where relevant are used to identify unserviceability.

**** Note: Troubleshooting:** involves the use of fault finding charts or similar, to line replacement level.

Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
4. Troubleshoot Piston Engine System	a. Engine (all types), Main Components and Accessories/Drives	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	b. Control System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	c. Ignition and Starter Systems	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

4.1 Available information from maintenance documentation and inspection and test results is used, where necessary, to assist in fault determination.
4.2 Maintenance manual fault diagnosis guide and logical processes are used to ensure efficient and accurate ***troubleshooting*** to line replacement level.
4.3 Specialist advice is obtained, where required, to assist with the troubleshooting process.
4.4 Piston engine system faults are located and the causes of the faults are clearly identified and correctly recorded in maintenance documentation, where required.
4.5 Fault rectification requirements are determined to assist in planning the repair.

**** Note: Troubleshooting:** involves the use of fault finding charts or similar, to line replacement level.

Name of Assessed Person: **Registration:**

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components					
4. Cont'd Troubleshoot Piston Engine System	d. Fuel, Air Systems and Super/Turbo Chargers	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No
	e. Oil System	No. of Entries	1	2	3
		Tail / Job No.			
		LAME Sign.			
		Date			
		Simulated	Yes No	Yes No	Yes No

Performance Criteria:

4.1 Available information from maintenance documentation and inspection and test results is used, where necessary, to assist in fault determination.
4.2 Maintenance manual fault diagnosis guide and logical processes are used to ensure efficient and accurate ***troubleshooting*** to line replacement level.
4.3 Specialist advice is obtained, where required, to assist with the troubleshooting process.
4.4 Piston engine system faults are located and the causes of the faults are clearly identified and correctly recorded in maintenance documentation, where required.
4.5 Fault rectification requirements are determined to assist in planning the repair.

** **Note: Troubleshooting:** involves the use of fault finding charts or similar, to line replacement level.

Name of Assessed Person: **Registration:**

Certification of Underpinning Knowledge and Skills to Inspect, Test and Troubleshoot Piston Engine Systems and Components

A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements of the unit of competency are being achieved under routine supervision on at least one (1) item of each group listed in the assessment conditions a) to e). This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Implementation Guide).

UNIT MEA313: Inspect, Test and Troubleshoot Piston Engine Systems and Components	**Date/ MTO Stamp**
Evidence has been confirmed of the attainment of the following pre-requisite units of competency (as they are related to attainment of the elements of competency specified in this unit). **306**	
Evidence has been confirmed of the knowledge requirements for this unit as delivered by a CASR 147 Approved Organisation. **OR** Assessment has been conducted to determine that the underpinning knowledge and skills have been achieved in accordance with the Competency Unit.	

Certification of Unit Completion

I certify that at the time of this assessment I have reviewed the candidates' evidence of experiences for the application of skills and knowledge that it meets the requirements specified in the elements and criteria for this unit of competency.

Signed: _____ **Assessor No.** _____ **MTO:** _____ **Date:** _____

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