

5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.
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MAINTAIN AGRICULTURAL PNEUMATIC SYSTEMS

UNIT CODE: ENG/OS/AME/4/CR/05/4/A

UNIT DESCRIPTION

Learners will display knowledge of agricultural pneumatic systems, diagnose malfunction of agricultural pneumatic systems, perform service and maintenance of agricultural pneumatic systems, perform adjustments to agricultural pneumatic systems and optimize the operations of the agricultural pneumatic systems.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes which make up workplace function (to be stated in active voice).	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements (to be stated in passive voice). NOTE: <i>Bold and italicized terms are elaborated in the Range</i>
1. Demonstrate knowledge of agricultural pneumatic systems	1.1 Select appropriate PPE for specific contexts 1.2 Identify characteristics of a safe work environment in specific context 1.3 Identify pneumatic systems 1.4 Identify components of pneumatic system components 1.5 Interpret schematic representation of pneumatic system components
2. Diagnose malfunction of agricultural pneumatic systems	2.1 Verify power supply to the pneumatic system 2.2 Perform sensory inspection on pneumatic systems 2.3 Perform pre-operation check on pneumatic system 2.4 Detect indicators of malfunction in pneumatic system 2.5 Diagnose cause of malfunction in pneumatic system
3. Perform service and maintenance of agricultural pneumatic systems	3.1. Perform maintenance operations on agricultural pneumatic systems 3.2. Perform routine service on agricultural pneumatic systems in accordance with specified standards

	<p>3.3 Write service report on pneumatic systems according to industry standard</p> <p>3.4 Determine required actions such as repairs, replacements or adjustments based on service report</p>
4. Perform adjustments to agricultural pneumatic systems	<p>4.1 Identify necessary adjustments to the agricultural pneumatic system in specific contexts</p> <p>4.2. Perform adjustments indicated in agricultural pneumatic systems</p>
5. Optimize the operations of the agricultural pneumatic systems	<p>5.1 Select appropriate <i>tools and equipment</i> for specific contexts</p> <p>5.2 Perform test on pneumatic system circuits</p> <p>5.3 Analyze test results of pneumatic system circuits</p> <p>5.4 Perform adjustments to pneumatic system circuits as indicated by results</p>

RANGE

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variable	Range
1. PPE (personal protective equipment) include but not limited to:	<ul style="list-style-type: none"> • Dust coats/overalls • Gloves • Eye shields • Boots, • Helmets/hats • Masks
2. Pneumatic systems components include but not limited to:	<ul style="list-style-type: none"> • Compressors • Valves • Air lines • Pumps • Actuators • Attenuators • Dryers • Air bags • Air suspension • Brake pots

3. Tools and equipment include but not limited to:	<ul style="list-style-type: none"> • Hand tools • Measuring, testing and diagnostic equipment • Power tools
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REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate ability related to:

- Communication
- Team work
- Problem solving
- Planning and organizing
- Self-management
- Measurement
- Use of tools and equipment

Required Knowledge

The individual needs to demonstrate knowledge of:

1. Types of tools, equipment and PPEs
2. National legislations and regulations
3. Safe working practices and procedures to be followed when operating and servicing pneumatic systems
4. Safety and environmental hazards associated with pneumatic systems
5. Operating pneumatic systems
6. Basic maintenance and servicing of pneumatic system

EVIDENCE GUIDE

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> • Diagnose and repair pneumatic systems • Perform operation of pneumatic systems • Diagnose and service pneumatic systems
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2. Resource Implications	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> • Tractor • Land • Farm implements • Tools and equipment • A functional agriculture machinery workshop
3. Methods of Assessment	<p>Competency in this unit may be assessed through:</p> <p>3.1 Observation</p> <p>3.2 Oral</p> <p>3.3 Written</p> <p>3.4 Third party report</p>
4. Context of Assessment	<p>Competency may be assessed on the job, off the job or a combination of these. Off the job assessment must be undertaken in a closely simulated workplace environment.</p>
5. Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.</p>

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range