



Australian Government

Department of Education, Employment and Workplace Relations

AHCMOM302A Perform machinery maintenance

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of maintaining machinery and equipment that is used principally in agriculture, horticulture, and conservation and land management work and defines the standard required to: carry out engine/equipment checks according to operator manuals and enterprise requirements; carry out lubrication and replacement of oils and filters according to operator manuals; carry out transmission checks, including drive and steering clutches and oil levels; check machinery and equipment components for wear and tear, and replace, tag and report defects if necessary; dispose of replaced parts and oils according to legislation and enterprise procedures; and record all details of maintenance and requirements for monitoring.
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Application of the Unit

Application of the unit	This unit applies to workers in agriculture, horticulture and land management who ensure that machinery and equipment for the enterprise is maintained in a way that allows the core business of the enterprise to continue with minimal disruption. Some problem solving and organisational skills are also required.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Carry out engine/equipment checks	1.1. Timed and regular engine equipment checks are carried out on specialised machinery and equipment as specified in operator manuals. 1.2. All relevant grease or lubricant points are lubricated according to manufacturer specifications. 1.3. Oils and filters are changed at intervals prescribed in operator manuals. 1.4. Hydraulic hoses and systems checked for deterioration and defects actioned in line with supervisor's instructions. 1.5. Occupational Health and Safety (OHS) hazards are identified, risks assessed and risk controls are implemented.
2. Carry out transmission checks	2.1. Drive and steering clutches are checked for operation and adjustment in line with operator manual. 2.2. Transmission oil levels are checked in line with operator manual. 2.3. Tracks/wheels and undercarriage are checked for oil leaks and wear. 2.4. Faulty seals or leaks are identified and corrective actions taken according to operator's instructions. 2.5. Machine is regularly cleaned as an integral part of maintenance checks.
3. Maintain components and attachments	3.1. Personal protective equipment (PPE) is selected, used and maintained according to procedures. 3.2. Machine operational replacement wear components are checked for wear and condition. 3.3. Worn or unserviceable replacement components are replaced as part of daily routines. 3.4. Component inspection and replacement activities are completed safely following enterprise and industry guidelines. 3.5. Moving operational components are checked for wear and condition and adjusted to the tolerances specified in operator manuals where applicable. 3.6. Work areas are cleaned, returned to operating condition and maintained according to enterprise and OHS requirements.
4. Record maintenance	4.1. Identified faults and defects are recorded in machine record.

ELEMENT	PERFORMANCE CRITERIA
	4.2. Maintenance procedures including duplicates usage are recorded in workshop record. 4.3. Service or repair requirements are reported and actioned according to prescribed procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- identify hazards and implement safe work procedures
- carry out engine/equipment checks
- carry out transmission checks
- replace parts and carry out lubrication required at servicing
- maintain machinery and equipment components
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record information collected accurately and legibly, and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- engine function principles
- turbo charging and after cooling
- assessing engine specifications in line with power requirements
- all engine electric and hydraulic indicators and gauges
- transmission and drive systems
- machinery and equipment operation principles
- environmental impacts of machinery servicing and legislation covering disposal of fuels, oils and other wastes
- OHS and environmental legislation, enterprise requirements and codes of practice.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:

- carry out engine/equipment checks according to operator manuals and enterprise requirements
- carry out lubrication and replacement of oils and filters according to operators manual
- carry out transmission checks including drive and steering clutches and oil levels
- check machinery and equipment components for wear and tear, and replace, tag and report defects, if necessary
- dispose of replaced parts and oils according to legislation and enterprise procedures
- record all details of maintenance and requirements for monitoring.

Context of and specific resources for assessment

Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole.

Types of machinery may include:

- machinery and equipment that is used on diverse agricultural, horticultural and rural enterprises. This includes:
- heavy earthmoving equipment

RANGE STATEMENT

	• tractors • vehicles and trucks • skid steer loaders • self-propelled harvesters and pickers • front end loaders • forklifts • land levellers • pumps • grain handling equipment.
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Unit Sector(s)

Unit sector	Machinery operation and maintenance
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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