



Australian Government

Department of Education, Employment and Workplace Relations

FPICOT2237A Maintain chainsaws

Release: 1

FPICOT2237A Maintain chainsaws

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to carry out maintenance of hand-held chainsaws. It relates to the maintenance and servicing requirements of chainsaw powerheads and cutting attachments; chain sharpening, cleanup, storage procedures and recording requirements

General legislative, regulatory and workplace requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPICOT2204B Maintain chainsaws

Application of the Unit

Application of the unit

The unit involves maintaining chainsaws in a variety of work settings including a forest environment, agricultural, workshop, horticultural and domestic settings

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for maintenance	1.1. Applicable <i>Occupational Health and Safety (OHS)</i> , environmental, <i>legislative, organisational requirements</i> and manufacturer's specifications relevant to the maintenance of <i>chainsaws</i> are identified and followed 1.2. Suitable personal protective equipment and/or clothing is selected, used and maintained 1.3. Job requirements are reviewed and clarified with <i>appropriate personnel</i> 1.4. Tools, equipment and materials are selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations and site operating procedures 1.5. Potential and existing risks and <i>hazards</i> in the work area are identified and controlled
2. Conduct chainsaw maintenance	2.1. <i>Frequent/daily services</i> are carried out in line with manufacturer's recommendations and organisational requirements 2.2. <i>Periodic services</i> are carried out in line with manufacturer's recommendations and organisational requirements 2.3. Chain and other components are removed, sharpened, <i>maintained</i> , adjusted or replaced in line with manufacturer's recommendations 2.4. Serviced chainsaw components are reassembled and checked for operational effectiveness 2.5. Chainsaw is tagged and stored
3. Complete maintenance records and clean up	3.1. <i>Records and reports</i> are accurately completed, processed and maintained in line with workplace procedures 3.2. Chainsaw faults, malfunctions or irregular operation are identified, tagged and reported for repair or replacement 3.3. Work area is cleared and waste materials disposed of, or recycled, in line with organisational <i>environmental policies and procedures</i>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to use and maintain relevant tools, machinery and equipment, conduct routine maintenance procedures and to apply mechanical reasoning
- Communication skills sufficient to discuss work orders with colleagues and others
- Literacy skills sufficient to read and interpret work requirements and specifications and to accurately locate, record and report information
- Numeracy skills sufficient to estimate, measure, calculate time required to complete a task and calculate fuel/oil ratios
- Problem solving skills sufficient to troubleshoot and identify problems and equipment faults, and apply appropriate response procedures

Required knowledge

- Applicable Commonwealth, State or Territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for maintaining chainsaws
- Environmental protection requirements, including the safe disposal of waste material
- Organisational and site standards, requirements, policies and procedures for maintaining chainsaws; organisational communication channels and protocols; and procedures for the recording and reporting of workplace documentation and information
- Types of tools and equipment required for the maintenance of hand-held chainsaws and the procedures for their safe use, operation and maintenance
- Types, functions, specifications and operational principles of chainsaws
- Specifications and types of bars, chains and sprockets
- Chainsaw routine maintenance procedures
- Potential hazards and risks when maintaining chainsaws including fire hazards and prevention
- Problem identification and resolution strategies and common fault finding techniques

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the

EVIDENCE GUIDE

performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely carry out a maintenance service and adjustment of hand-held chainsaws

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 and satisfy all of the requirements of the elements of this unit and include demonstration of:

- following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice, including OHS and environmental and manufacturer's specifications relevant to maintaining chainsaws
- following organisational policies and procedures relevant to workplace requirements when maintaining chainsaws
- communication with others in the workplace
- maintenance and adjustment procedures of chainsaws in line with manufacturer's recommendations
- selection and use of appropriate tools, equipment and materials to carry out maintenance of chainsaws
- identification and diagnosis of chainsaw faults, malfunctions or irregular operations
- sharpening and tensioning of saw chain
- application of tagging, repairing, reporting and recording processes
- maintenance, storing and cleaning of tools and work area
- safe disposal of waste materials

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:

EVIDENCE GUIDE

- workplace location or simulated workplace
- materials and equipment relevant to undertaking work applicable to this unit
- specifications and work instructions

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment must be by direct observation of tasks with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different

RANGE STATEMENT

work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

OHS requirements: are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying

Legislative requirements: are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- Australian Standards
- OHS
- the environment
- equal opportunity
- relevant industry codes of practice
- award and enterprise agreements
- industrial relations
- confidentiality and privacy
- duty of care
- heritage and traditional land owner issues

Organisational requirements may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals

RANGE STATEMENT

- quality and continuous improvement processes and standards
 - OHS
 - emergency and evacuation procedures
 - fire prevention procedures
 - recording and reporting requirements
 - equipment use and maintenance and storage requirements
 - environmental management requirements (waste disposal, recycling and re-use guidelines)
 - access and equity principles and practices
- Chainsaws** may include:
- engine or electrically operated hand-held chainsaws
- Appropriate personnel** may include:
- supervisors
 - clients
 - colleagues
 - line management
- Hazards** may include
- exposure to:
- loud noise and exhaust fumes
 - mechanical vibration
 - hazardous substances (fuel)
 - cuts and hot surfaces
 - rotating parts
- Frequent/daily services** are to be conducted in line with manufacturer's instructions and may include:
- removing, checking and cleaning air filter for damage and penetration of foreign material
 - cleaning saw body, air intake vents and cooling fins
 - cleaning chain brake
 - inspecting chain and guide bar
 - checking screws/nuts for tightness
 - checking safety devices
 - filling fuel tanks and chain oil tanks
- Chain checks are to be conducted in line with manufacturer's instructions and may include:
- inspecting and adjusting chain
 - inspecting and replacing chain that is worn, damaged or incorrectly sharpened

RANGE STATEMENT

- sharpening a range of chain types and setting of depth gauges without supervision

Periodic services

are to be conducted in line with manufacturer's instructions and may include:

- replacing drive sprocket
- cleaning or replacing and setting spark plug
- checking and replacing fuel filter
- checking chain brake, oil system, flywheel assembly, anti-vibration system, muffler and spark arrestor
- inspecting and replacing starter cord and starter spring
- matching pitches and gauges of cutting components
- dressing and cleaning cutter bar
- cleaning fly wheel
- removing and cleaning exhaust and fire screen
- sharpening

Maintenance must include:

Records and reports may include:

- log book recording of maintenance outcomes, faults, malfunctions and damage, hazards and incidents
- may be compiled using a computer-based system or other appropriate organisational communication system to record and report

Environmental policies and procedures may relate to:

- waste disposal
- recycling
- re-use

Unit Sector(s)

Not Applicable

Competency field

Competency field

Common Technical