



**Australian Government**

# **FWPCOT2237 Maintain chainsaws**

**Release: 1**

## FWPCOT2237 Maintain chainsaws

### Modification History

| Release | Comment                                                                                                                                                                                                                          |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Replaces equivalent unit FPICOT2237A Maintain chainsaws, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.<br><br>This is the first release of this unit in the new standards format. |

### Application

This unit of competency describes the outcomes required to maintain engine or electrically operated hand-held chainsaws. It includes sharpening chains and completing routine and frequently required service requirements as well as periodic servicing. Work is completed in a variety of work settings including a forest environment, agricultural, workshop, arboretum and horticultural settings.

The unit applies to chainsaw operators.

No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.

### Pre-requisite Unit

Nil

### Unit Sector

Common Technical

### Elements and Performance Criteria

| ELEMENTS                                         | PERFORMANCE CRITERIA                                                                                                                                                                                                                            |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>                                          |
| 1. Prepare for chainsaw maintenance              | 1.1 Select appropriate personal protective, maintenance and repair equipment and check for operational effectiveness in line with manufacturer's recommendations.<br><br>1.2 Plan repair and maintenance activities in line with manufacturer's |

| ELEMENTS                                     | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | instructions and recommendations and organisational requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 2. Complete chainsaw maintenance             | <p>2.1 Follow organisational safety procedures to lock out equipment.</p> <p>2.2 Complete routine and frequently required service requirements on chainsaws in line with manufacturer's instructions and organisational requirements</p> <p>2.3 Complete periodic service requirements on chainsaws in line with manufacturer's recommendations and organisational requirements</p> <p>2.4 Check chain for bluntness or damage.</p> <p>2.5 Remove, sharpen, adjust and replace chain and other components in line with manufacturer's recommendations.</p> <p>2.6 Identify, diagnose, tag and report chainsaw faults, malfunctions or irregular operation for repair or replacement.</p> <p>2.7 Reassemble serviced chainsaw components, check for operational effectiveness, tag and store.</p> |
| 3. Complete maintenance records and clean up | <p>3.1 Complete, process and maintain records and reports in line with organisational procedures.</p> <p>3.2 Clear and clean work area and tools, and dispose of and recycle waste materials in line with environmental protection practices.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

|                                    |                                                                                                                                                                                                                                                                 |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy skills to:                | <ul style="list-style-type: none"> <li>calculate ratios and measure quantities of oils and fuels.</li> </ul>                                                                                                                                                    |
| Reading skills to:                 | <ul style="list-style-type: none"> <li>interpret:               <ul style="list-style-type: none"> <li>workplace health and safety procedures</li> <li>work orders</li> <li>manufacturer's instructions and maintenance recommendations.</li> </ul> </li> </ul> |
| Writing skills to:                 | <ul style="list-style-type: none"> <li>complete basic accurate records of repairs, maintenance activities and equipment faults.</li> </ul>                                                                                                                      |
| Planning and organising skills to: | <ul style="list-style-type: none"> <li>efficiently and logically sequence stages of repair and maintenance work.</li> </ul>                                                                                                                                     |

## Range of Conditions

Not Applicable

## Unit Mapping Information

FPICOT2237A Maintain chainsaws

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

## Assessment Requirements for FWPCOT2237 Maintain chainsaws

### Modification History

| Release | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | <p>Replaces equivalent unit FPICOT2237A Maintain chainsaws, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.</p> <p>Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement. This is the first release of this unit in the new standards format.</p> |

### Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- complete these routine and frequently required service requirements on chainsaws in line with manufacturer's instructions:
  - 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 and nuts for tightness
  - checking safety devices
  - filling fuel tanks and chain oil tanks
- complete these types of periodic service requirements on chainsaws in line with manufacturer's instructions:
  - 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
- complete these activities to check and sharpen chain saw chains in line with manufacturer's instructions:
  - inspecting and adjusting chain
  - inspecting and replacing chain that is worn, damaged or incorrectly sharpened
  - sharpening chain types and setting of depth gauges.

## Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- types, purpose, features and operation of chainsaws for which repairs are completed
- features and names of different parts of chainsaws
- purpose, features and operation of tools and equipment used to repair and maintain chainsaws
- specifications and types of bars, chains and sprockets
- differences between frequent and periodic chainsaw maintenance requirements
- techniques for:
  - removing chains and other chainsaw components
  - assessing chain condition
  - sharpening chains to specified requirements
  - reassembling chainsaw components
- hazards for maintaining chainsaws and methods to minimise associated risks:
  - loud noise and exhaust fumes
  - mechanical vibration
  - handling hazardous substances
  - cuts and hot surfaces
  - rotating parts
- organisational procedures specific to repairing and maintaining chainsaws:
  - workplace health and safety with particular emphasis on equipment lock out and use of personal protective equipment
  - communication reporting lines
  - recording and reporting repairs, maintenance activities and equipment faults
- environmental protection practices for repairing and maintaining chainsaws:
  - cleaning plant, tools and equipment
  - disposing of, recycling and reusing materials
  - disposing of hazardous substances.

## Assessment Conditions

The following resources must be made available:

- engine or electrically operated hand-held chainsaws
- tools and equipment used to repair and maintain chainsaws
- consumable chainsaw parts, oil and fuel
- personal protective equipment suitable for repairing and maintaining chainsaws including:
  - Safety boots
  - Safety helmet
  - Cut resistant leg protection
  - First aid kit
  - Hearing protection
  - High visibility clothing
  - Eye protection
  - Apron
  - Chain mesh gloves
- manufacturers' instructions and recommendations for repair and maintenance of chainsaws
- template documents for recording repairs, maintenance activities and equipment faults.
- organisational procedures for repairing and maintaining chainsaws.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

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