



Australian Government

FWPCOT3317 Use chainsaw within a tree

Release: 1

FWPCOT3317 Use chainsaw within a tree

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to operate a chainsaw at heights within a tree safely.

The unit applies to individuals who use chainsaws off ground when conducting tree trimming or dismantling work whilst working at height in arboriculture settings. They work under some supervision, generally within a team environment.

Individuals who use this unit will have had experience in using arborist climbing techniques and chainsaws in an arboriculture, forestry or related work context. This unit is not intended for use by novice or inexperienced chainsaw operators.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation, standards and industry codes of practice that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Common Technical (COT)

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.</i>
1. Prepare for work	1.1 Determine job requirements from work order or instruction and, where required, seek clarification from appropriate personnel

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Confirm safety and environmental protection requirements according to workplace procedures 1.3 Identify, assess and take actions to mitigate risks and hazards associated with using chainsaws off ground 1.4 Identify emergency plan procedures to follow in the event of an emergency 1.5 Erect warning and prohibition signs to indicate a hazardous worksite and that unauthorised access is prohibited according to workplace safety procedures 1.6 Identify, assess and determine cutting requirements according to work order or instruction 1.7 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.8 Select, fit and use personal protective equipment 1.9 Obtain chainsaw appropriate for the task, height access equipment and other tools and equipment needed for the work, and check for correct operation and safety according to manufacturer recommendations and workplace procedures 1.10 Confirm with appropriate personnel that one person is present on the ground during working at height operations and this person is competent and equipped to perform aerial rescue
2. Assess site conditions and surroundings	2.1 Inspect site for conditions likely to affect safe use of chainsaw off ground 2.2 Observe weather conditions and assess likely impact on safe use of chainsaw off ground 2.3 Identify and report site environmental conditions to appropriate personnel 2.4 Determine work area and implement control measures to minimise risks and hazards in the area according to safe work procedures 2.5 Monitor location and activity of other personnel on the worksite, and implement control measures according to workplace safety procedures
3. Pre-start chainsaw	3.1 Fuel and lubricate saw on the ground according to manufacturer instructions and workplace procedures 3.2 Perform pre-start checks on chainsaw according to manufacturer

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	instructions and workplace procedures 3.3 Start chainsaw using cold and warm starting methods on the ground according to workplace safety procedures 3.4 Confirm the chainsaw is running effectively prior to ascending tree 3.5 Select, communicate to team members and apply appropriate method for sending chainsaw to the operator according to workplace health and safety procedures
4. Carry out safe chainsaw operation	4.1 Access tree safely and confirm that body positioning and movements are safe and ergonomically efficient according to current Australian Standards and workplace safety procedures 4.2 Secure chainsaw whilst at height by means of a suitable lanyard 4.3 Obtain the best available working position to minimise risk of being struck by saw or by severed pieces of wood 4.4 Check that the chain of the saw is clear of obstructions, including climbing equipment, protective clothing or parts of the tree, before restarting in the tree 4.5 Start chainsaw according to manufacturer instructions and workplace safety procedures 4.6 Obtain confirmation from ground crew before performing cuts, using the call and response protocol 4.7 Maintain proper control of the saw by gripping with two hands and keeping saw well clear of body and climbing equipment at all times according to workplace safety procedures 4.8 Select and accurately apply a range of appropriate cuts according to current Australian Standards and industry codes of practice, to achieve required behaviour of cut piece according to workplace procedures 4.9 Confirm the chainsaw is switched off, or the chain brake applied, after each cutting operation 4.10 Apply safe technique for freeing a trapped chainsaw according to workplace safety procedures 4.11 Apply safe cutting techniques according to current Australian Standards, and work positioning, to complete operational tasks according to work order or work instructions 4.12 Apply safe methods for returning chainsaw to the ground for refuelling according to workplace safety procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Carry out machine operator maintenance	5.1 Follow workplace safety procedures and manufacturer instructions to lock out equipment 5.2 Inspect chainsaw on completion of cutting activities 5.3 Identify damage to chainsaw and cutting attachments, and tag for repair, service or replacement according to workplace requirements and manufacturer recommendations 5.4 Remove, clean, adjust, sharpen or replace chain and other components according to workplace requirements and manufacturer recommendations

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Writing	Use technical and enterprise specific vocabulary to accurately and legibly complete workplace records and forms
Numeracy	Interpret numerical and graphical information in manufacturer manuals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3317 Use chainsaw within a tree	Not applicable	This unit has been created to address an emerging skill or task required by industry	Newly created

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPCOT3317 Use chainsaw within a tree

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual planned, prepared and safely and effectively operated a chainsaw at height in two trees and performed cuts according to a work order or work instructions and current Australian Standards and industry codes of practice applicable to the safe use of chainsaw in trees.

One tree must be in close proximity to a structure or other asset or replicated structure or asset and have a minimum height of 15 metres and canopy spread with a minimum of 10 metres. There must be a designated drop zone and cut material must be placed within this zone.

There must also be evidence that for each tree the individual has:

- applied safe and effective fall arrest positioning and cutting positioning to perform cuts
- applied safe and effective cutting techniques to achieve the required behaviour of cut piece for:
 - a horizontal branch with a diameter greater than 100 mm
 - a head or section of vertical timber with a diameter greater than the bar length of the saw
 - a leaning section or leader
- selected and used appropriate zone drops as required to ensure that all cut pieces land within the drop zone
- carried out routine maintenance on a chainsaw on two occasions.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of

- types, cc rating, bar length and operation of chainsaws
- features and names of different parts of chainsaws

- workplace health and safety requirements according to the AS 2726.2 and AS 2727 or successor:
 - personal protective equipment (PPE) and clothing
 - safety equipment
 - first aid equipment
 - firefighting equipment
 - hazard and risk control procedures
 - fatigue management procedures
 - safety signage
 - safe workplace practices
- hazards and related risks associated with chainsaw use off ground, and methods to minimise associated risks:
 - physical conditions of the site
 - falls
 - strains
 - slips
 - dehydration
 - fire
 - overhead services
 - carrying saw and equipment
 - traffic
 - features and cutting actions of chainsaw
 - falling branches
 - overreaching
 - operating saw above head height
 - saw nicking
 - kickback
 - user complacency and fatigue
 - one-handed chainsaw use
 - structures
 - hazardous materials
 - insects and animals
 - people on or near worksite
 - machinery on or near worksite
- height access equipment:
 - belt and harness condition
 - adjustment on user
 - lanyard adjustment
 - chainsaw securing hook
 - specification

- maintenance
- purpose, features and operation of tools and equipment used in chainsaw use and maintenance activities
- specifications and types of bars, chains and sprockets
- techniques for:
 - removing chains and other chainsaw components
 - assessing chain condition
 - reassembling chainsaw components
- hazards associated with maintaining chainsaws, and methods to minimise associated risks:
 - noise
 - fumes
 - mechanical vibration
 - hazardous substances
 - cuts
 - burns
 - rotating parts
- cutting techniques according to the AS 4373 and AS 2727 or successor, and industry codes of practice
- safe procedures for raising and lowering chainsaw to and from ground
- workplace procedures specific to chainsaw use off ground:
 - workplace health and safety, with particular emphasis on equipment lock-out and use of PPE
 - communication reporting lines
 - recording and reporting repairs, maintenance activities and equipment faults
- heritage-listed trees protected by legislation in relevant jurisdictions
- environmental protection practices relevant to chainsaw use and maintenance:
 - protection of natural and cultural assets
 - cleaning plant, tools and equipment
 - disposing of, recycling and reusing materials
 - disposing of hazardous substances.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in an arboricultural workplace or environment that accurately represents workplace conditions
- resources, equipment and materials:
 - chainsaws
 - height access equipment

- other tools and equipment needed for using chainsaws off ground and chainsaw maintenance
- chainsaw consumables
- trees
- person who is competent and equipped to perform aerial rescue
- PPE required in using chainsaws off ground and chainsaw maintenance
- specifications:
 - access to work order or instruction detailing off ground chainsaw operations to be carried out by operator
 - access to workplace policies and procedures that cover current workplace health and safety and environmental protection legislation and related industry standards and codes of practice applicable to off ground chainsaw operations
 - access to site emergency procedure
 - access to workplace safe operating procedures for off ground chainsaw operations.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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