



Australian Government

FWPSAW3213 Level and tension circular saws

Release: 2

FWPSAW3213 Level and tension circular saws

Modification History

Release	Comments
Release 2	This version released with FWP Forest and Wood Products Training Package Version 3.0.
Release 1	This version released with FWP Forest and Wood Products Training Package Version 2.0.

Application

This unit of competency describes the outcomes required to level and tension circular saw blades and includes inspecting saws, repairing defects such as dished blades, damaged teeth and cracks, levelling ridges and lumps, and tensioning the saw. Work is completed in a forest products factory setting.

The unit applies to Sawdoctor, Saw Repairer.

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

Pre-requisite Unit

Nil

Unit Sector

Sawmilling and Processing

Elements and Performance Criteria

Element	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 repair	1.1 Review work order and where required check with appropriate personnel. 1.2 Select appropriate repair, maintenance and personal protective equipment and check for operational effectiveness in line with manufacturer's recommendations.

	1.3 Plan levelling and tensioning process in line with work order.
2. Assess saw condition	2.1 Follow organisational safety procedures throughout all maintenance and repair processes. 2.2 Handle saws to avoid damaging teeth. 2.3 Clean foreign material on saw surfaces for inspection. 2.4 Inspect saw to assess condition of teeth and saw plate. 2.5 Declare saw unserviceable where hazardous defects are found. 2.6 Segregate and dispose of unserviceable saws in line with organisational procedures and environmental protection practices.
3. Level saw blades	3.1 Assess and match radial and circular ridges or lumps on both sides of blade. 3.2 Use gauges and straight edges in radial and circular directions and monitor for accuracy. 3.3 Remove ridges or lumps progressively through levelling and use stretcher or levelling rolls to flatten. 3.4 Control hammering and rolling patterns to reduce internal blade stresses and avoid spring back and re-occurring defects.
4. Tension saw blades	4.1 Assess consistency of required blade curvature with straight edge or tension gauge. 4.2 Tension and check blade to ensure tension amount, distribution, placement and level are in line with manufacturer's recommendations. 4.3 Complete repairs to damaged saw blades and dispose of irreparable saw blades in line with and environmental protection practices. 4.4 Identify routine processing and equipment faults and resolve or report to appropriate personnel.

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:	• use gauges and straight edges to measure results of hammering and/or rolling the blade • complete precise calculations to correctly level and tension blades.
Oral communication	• ask open and closed probe questions and actively listen to clarify contents of work orders.

skills to:	
Reading skills to:	- interpret documents: - workplace health and safety and other organisational procedures - work orders - manufacturers' maintenance recommendations.
Writing skills to:	complete accurate basic records for processing and equipment faults.
Planning and organising skills to:	efficiently and logically sequence the stages of preparation and repair work using work order to guide activities.
Problem-solving skills to:	- assess saw condition and complete necessary levelling and tensioning adjustments - identify and dispose of unserviceable saws - recognise faulty equipment and resolve by reporting or rectifying.
Technology skills to:	- select and use appropriate repair, maintenance and personal protective equipment for levelling and tensioning circular saws - efficiently and safely level and tension circular saws.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSAW3213 Level and tension circular saws Release 2	FWPSAW3213 Level and tension circular saws Release 1	Minor typographical errors corrected.	Equivalent unit

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 FWPSAW3213 Level and tension circular saws

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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:

- follow organisational policies and procedures relevant to levelling and tensioning circular saws
- level and tension circular saws in line with a work order and within prescribed organisational requirements
- remove and replace circular saws from equipment
- assess circular saw conditions in line with standard operating procedures.

Knowledge Evidence

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

- purpose, features and operation of circular saws for which blades are levelled and tensioned:
 - circular saws
 - hot saws
 - cold saws
- features and names of different parts of circular saw blades
- purpose, features and operation of tools and equipment used to level and tension circular saw blades:
 - hammers
 - stretcher rolls
 - levelling rolls
 - tensioning instruments

- gauges and straight edges
- importance of levelling blades, setting tension and applying curvature to match requirements for:
 - characteristics of various materials sawn
 - speed of the sawing process
 - direction of the sawing process
 - cutting angle for sawing
 - saw blade specifications
- methods for:
 - removing saw blades from circular saws
 - assessing saw blade condition
 - levelling and tensioning blades to specified requirements
 - applying curvature
- characteristics of metal used in circular saw blades and range of force which can be applied without damaging blades
- organisational policies and procedures specific to levelling and tensioning circular saw blades:
 - workplace health and safety with particular emphasis on equipment lock out and use of personal protective equipment
 - communication reporting lines
 - recording and reporting processing and equipment faults
- environmental protection practices for repairing and maintaining tools and equipment in forest products factory settings:
 - reducing water and energy use
 - cleaning plant, tools and equipment
 - disposing of, recycling and reusing materials.

Assessment Conditions

The following resources must be made available:

- tools and equipment used to level and tension circular saw blades:
 - hammers
 - stretcher rolls
 - levelling rolls
 - tensioning instruments
 - gauges and straight edges
- circular saws to be repaired or maintained:
 - circular saws
 - hot saws
 - cold saws
- circular saw blades to be levelled and tensioned:

- circular cross cut blades used for cutting timber products
- rip saw blades used for cutting timber products
- personal protective equipment suitable for levelling and tensioning circular saw blades
- manufacturers' instructions for use, repair and maintenance of equipment
- work order for repair and maintenance activities with specific instructions for levelling and tensioning circular saw blades in specified equipment
- document, spreadsheets and commonly used proformas for recording processing and equipment faults
- relevant personnel for the purposes of communicating information
- organisational policies and procedures for levelling and tensioning circular saw blades.

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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