



Australian Government

FWPSAW3218 Replace tungsten tips

Release: 2

FWPSAW3218 Replace tungsten tips

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 remove worn tungsten tips from saw blades and to braze, anneal, clean and prepare replacement tips for grinding and return to service. 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 replacement	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 replacement process in line with work order.
2. Remove worn tips	2.1 Follow organisational safety procedures throughout all maintenance and repair processes. 2.2 Clean foreign matter from saw and check for defects. 2.3 Identify and mark broken tips. 2.4 Remove broken tips minimising damage to the tooth seat and dispose of in line with environmental protection practices. 2.5 Repair tooth seats to specified tolerance and dimensions.
3. Replace tips	3.1 Set up saw in brazing jig in line with manufacturer's instructions. 3.2 Select brazing material and suitable technique for application and heat control. 3.3 Select appropriate replacement tip and braze into position. 3.4 Trial weld one tip and adjust to confirm weld pressure, current temperature and annealing settings against specifications. 3.5 Segregate and dispose of tips with sub-standard welds in line with environmental protection practices. 3.6 Set manual or automatic feeds in line with number of tips to be welded. 3.7 Complete tip replacement regularly; check and adjust annealing process temperatures to keep within specified range. 3.8 Remove surplus brazing material from saw surfaces and dress tip faces for sharpening. 3.9 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:	- complete routine calculations to: - measure amounts of brazing materials - select temperatures for annealing process - estimate tolerances.
Oral communication skills to:	ask open and closed probe questions and actively listen to clarify contents of work orders

Reading skills to:	- interpret documents: - workplace health and safety and other organisational procedures - work orders - manufacturers' instructions and maintenance recommendations.
Writing skills to:	complete accurate basic records of processing and equipment faults.
Planning and organising skills to:	efficiently and logically sequence stages of preparation and repair work using work order to guide activities.
Problem-solving skills to:	- assess tip condition and rectify faults through correct welding process - identify and dispose of tips with sub-standard welds. - recognise faulty equipment and resolve by reporting or rectifying.
Technology skills to:	- select and use appropriate repair, maintenance and personal protective equipment for welding tungsten tips - efficiently and safely replace tungsten tips.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSAW3218 Replace tungsten tips Release 2	FWPSAW3218 Replace tungsten tips Release 1	Minor typographical errors corrected.	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509f8d3d47>