



**Australian Government**

# **FWPSAW3212 Sharpen tipped circular saws**

**Release: 2**

## FWPSAW3212 Sharpen tipped 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 assess the tipped circular saw blade condition, set up for sharpening and sharpen saw blades with an automated grinder. 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 sharpening                        | 1.1 Review work order and where required check with appropriate personnel.<br><br>1.2 Select appropriate repair, maintenance and personal protective equipment and check for operational effectiveness in line with manufacturer's recommendations. |

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                     | 1.3 Plan sharpening process in line with work order..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2. Assess condition and set up sharpening equipment | <p>2.1 Follow organisational safety procedures throughout all maintenance and repair processes.</p> <p>2.2 Remove tipped circular saw blades or fit appropriate equipment to be sharpened in machinery.</p> <p>2.3 Assess cutting performance of blade and determine need to replace or sharpen.</p> <p>2.4 Assess condition of prior repairs, teeth and straightness of blade.</p> <p>2.5 Select sharpening machine with suitable wheel diameter and change or dress grinding wheel.</p> <p>2.6 Adjust machine settings to suit required blade geometry and set blade to manufacturer's recommendations.</p> <p>2.7 Set up saw while in machine to ensure tooth profile and geometry are maintained.</p>                         |
| 3. Sharpen tipped circular saw blade                | <p>3.1 Prepare grinding coolant system in line with manufacturer's instructions.</p> <p>3.2 Select saw and grinding wheel angles, speeds and feeds to suit.</p> <p>3.3 Grind teeth face and gullet to achieve required finish, maintaining original profile and pitch, according to industry standards.</p> <p>3.4 Ensure variations in tooth height and depth of cut are within industry tolerances for concentricity.</p> <p>3.5 Set wheel feeds and saw to minimise wear and avoid burn marks.</p> <p>3.6 Dispose of unserviceable tipped circular saw blades in line with environmental protection practices.</p> <p>3.7 Identify routine processing and equipment faults and resolve or report to appropriate personnel.</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>complete precise calculations to machine teeth to correct:             <ul style="list-style-type: none"> <li>angle</li> <li>pitch</li> <li>height</li> <li>depth.</li> </ul> </li> </ul> |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                    |                                                                                                                                                                                                                                                                                                    |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Oral communication skills to:      | <ul style="list-style-type: none"> <li>ask open and closed probe questions and actively listen to clarify content of work orders.</li> </ul>                                                                                                                                                       |
| Reading skills to:                 | <ul style="list-style-type: none"> <li>interpret documents:               <ul style="list-style-type: none"> <li>workplace health and safety and other organisational procedures</li> <li>work orders</li> <li>manufacturers' instructions and maintenance recommendations.</li> </ul> </li> </ul> |
| Writing skills to:                 | <ul style="list-style-type: none"> <li>complete basic accurate records for processing and equipment faults.</li> </ul>                                                                                                                                                                             |
| Planning and organising skills to: | <ul style="list-style-type: none"> <li>efficiently and logically sequence the stages of preparation and repair work using work order to guide activities.</li> </ul>                                                                                                                               |
| Problem-solving skills to:         | <ul style="list-style-type: none"> <li>assess blade condition and rectify faults through correct sharpening process</li> <li>identify and dispose of unserviceable blades</li> <li>recognise faulty equipment and resolve by reporting or rectifying.</li> </ul>                                   |
| Technology skills to:              | <ul style="list-style-type: none"> <li>select and use appropriate repair, maintenance and personal protective equipment for sharpening tipped circular saw blades</li> <li>efficiently and safely sharpen tipped circular saw blades.</li> </ul>                                                   |

## Unit Mapping Information

| Code and title<br>current version                          | Code and title<br>previous version                      | Comments                                 | Equivalence<br>status |
|------------------------------------------------------------|---------------------------------------------------------|------------------------------------------|-----------------------|
| FWPSAW3212<br>Sharpen tipped<br>circular saws Release<br>2 | FWPSAW3212<br>Sharpen tipped circular<br>saws Release 1 | Minor typographical errors<br>corrected. | Equivalent<br>unit    |

## Links

Companion Volume implementation guides are found in VETNet -  
<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>