



Australian Government

AHCARB213 Perform ground-based rigging

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 5.0.

Application

This unit of competency describes the skills and knowledge required to select, check and install rigging systems to support aerial tree work for the controlled descent of loads to drop zone. This unit does not cover crane operations.

The unit applies to individuals working in a broad range of arboriculture contexts who undertake defined routine activities under supervision. They exercise limited autonomy within established and well known parameters, providing solutions to a limited range of predictable problems.

The arboriculture industry requires that all ground-based tree rigging work is undertaken according to preferred industry practices (as outlined in the Companion Volume).

Legislation, regulations and by-laws relating to the treatment and removal of trees apply in some states and territories.

Pre-requisite Unit

Nil

Unit Sector

Arboriculture (ARB)

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. Assist in preparation of work site	1.1 Confirm work instructions and location of worksite with supervisor 1.2 Confirm workplace health and safety hazards and controls in job safety analysis (JSA) with supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm availability of first aid and emergency personnel, equipment and procedures
2. Prepare for rigging	2.1 Identify tree defects and contribute to tree assessment process 2.2 Discuss and confirm rigging method with work team 2.3 Confirm rigging method complies with identified risk controls with supervisor 2.4 Select rigging equipment and check for defects, removing defective equipment from service 2.5 Select, check and use personal protective equipment
3. Perform rigging operations	3.1 Communicate with work team during operations according to work site and environmental conditions, using methods agreed with work team 3.2 Tie, dress, set and finish rigging knots and hitches according to rigging system requirements 3.3 Monitor rigging system, work team movements and environmental conditions to ensure safe working conditions 3.4 Control load to drop zone and adjust rigging according to aerial worker directions 3.5 Disconnect load from rigging system 3.6 Re-check rigging equipment components for defects, and remove defective equipment from service 3.7 Return rigging components to aerial work team
4. Complete rigging operations	4.1 Confirm completed rigging operations with aerial work team 4.2 Remove and dismantle rigging system from tree 4.3 Clean, check and store tools, equipment and machinery according to workplace procedures 4.4 Report and tag defective tools and equipment 4.5 Clean and store personal protective equipment 4.6 Record and report rigging operation outcomes according to workplace procedures

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	Complete reports and records using clear language and industry terminology to ensure clarity of meaning
Oral communication	- Use open and closed questions logically to clarify work instructions - Use industry terminology to communicate with team members
Get the Work Done	Respond to routine problems using step-by-step procedures when safely setting and preparing rigging and checking and maintaining rigging equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCARB213 Perform ground-based rigging	AHCARB207 Perform ground based rigging	Prerequisite unit removed Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent
AHCARB213 Perform ground-based rigging	AHCARB311 Tie, dress, set and finish arborist knots	Some content is covered in this redesigned unit	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCARB213 Perform ground-based rigging

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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 has installed rigging equipment and controlled at least six loads from an aerial location to the drop zone using ropes, knots and rigging system appropriate for the load dimensions and mass.

There must also be evidence that the individual has:

- confirmed work instructions and location of worksite
- identified site hazards, assessed risks and confirmed controls with supervisor including:
 - selected, checked and used appropriate personal protective equipment
 - confirmed the availability of first aid and emergency equipment, personnel and procedures
 - implemented workplace health, safety, environmental and traffic control measures
 - contributed to tree assessment process by assessing trees for defects
 - checked and removed defective equipment from service
 - monitored rigging system, work team movements and environmental conditions for safe work conditions
- communicated with work team and discussed and confirmed rigging method and rigging equipment during operations using agreed communications methods
- tied, dressed, set and finished arborist knots according to rigging task, including demonstrating the following knots:
 - alpine butterfly knot
 - bowline on the bight
 - cow hitch with better half
 - clove hitch and two half hitches
 - half hitch pre-knot
 - klemheist friction knot
 - marline pre-knot

- marline spike hitch
- riggers knot and two half hitches
- running bowline
- sheet bend
- slippery sheet bend
- timber hitch
- zeppelin bend
- controlled load to drop zone, adjusting rigging according to aerial worker instructions and disconnected load from rigging system
- returned rigging components to aerial work team after checking components for defects
- confirmed completion of rigging operation with aerial work team and removed and dismantled rigging system including:
 - cleaned, checked and stored tools and equipment from worksite
 - reported and tagged defective tools and equipment
- recorded and reported rigging outcomes according to workplace procedures.

All ground-based tree rigging work is required to be performed according to preferred industry practices (as outlined in the Companion Volume).

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:

- current industry practices (as outlined in the Companion Volume) for ground-based tree rigging work and tree dismantling
- safe operations in ground-based rigging, including:
 - first aid, emergency personnel, equipment and procedures
 - workplace health, safety, site, environmental and traffic control measures
 - identification of ground-based hazards
 - above ground hazards and risk
 - personal protective equipment
 - monitoring the safety of working conditions
- procedures for tree assessment before rigging operations, including tree examination for tree defects
- ground-based rigging procedures and practices, including:
 - rigging equipment and its performance
 - rigging methods and rigging systems
 - examination of rigging equipment for defects, and procedures to manage defective equipment
 - assembling and installing rigging equipment
 - checking rigging equipment
 - tying, dressing, setting and finishing arborist knots for rigging

- communications strategies used in arboriculture, including:
 - voice
 - hand
 - whistle signals
 - electronic communications
 - communications specific to the rigging task
- techniques for controlling, raising, lowering and redirecting loads, including balancing load on centre of gravity
- cleaning, storing and maintaining tools and equipment
- records and reporting procedures for rigging operations.

Assessment Conditions

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

- physical conditions:
 - worksite with aerial tree operations or environment that accurately represents workplace conditions
- resources, equipment and materials:
 - rigging equipment
 - static and dynamic rope systems
 - harnesses
 - lowering and friction devices
 - high decibel whistle
 - personal protective equipment
 - first aid and emergency kit
 - rescue kit
- specifications:
 - access to current preferred industry practices (as outlined in the Companion Volume) for ground-based tree rigging work and tree dismantling
 - workplace and manufacturer instructions for safe operation of rigging equipment
- relationships:
 - supervisor and aerial work team.

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

- arboriculture vocational competencies at least to the level being assessed
- current arboriculture industry skills directly relevant to the unit of competency being assessed.

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