



Australian Government

Department of Education, Employment and Workplace Relations

TLIB3017A Assemble and dismantle boom or jib

Release: 1

TLIB3017A Assemble and dismantle boom or jib

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to assemble and dismantle a boom and jib on a lattice boom mobile crane, including planning the assembly/dismantling and following correct procedures for the boom/jib assembly and disassembly. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

Work must be carried out in compliance with the licence/permit requirements and regulations of the relevant state/territory authorities pertaining to mobile crane operations.

Work is performed under general supervision, with some accountability and responsibility for self and others in achieving the prescribed outcomes. It involves the application of routine principles and procedures to assembly and dismantling of booms and jibs on lattice boom mobile cranes in a variety of operational contexts.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Plan assembly/dismantling	1.1 Site selected to assemble/dismantle the boom and/or jib is as level as possible and unobstructed 1.2 A plan for the assembly and dismantling of the crane is developed in accordance with the appropriate Australian Standard, other statutory regulations, licensing requirements and manufacturers specifications including any licensing requirements
2 Assemble/dismantle boom or jib	2.1 Equipment, including personal protective equipment, is assembled and used as appropriate for the requirements of the task 2.2 The plan for assembly or dismantling of the boom/jib is carried out in accordance with manufacturers specifications, appropriate Australian Standards and other relevant statutory regulations and guides 2.3 All connections on boom and jib pendants and rope anchorages are checked before boom is raised to ensure they are in good order, tight and secure

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Relevant road rules, regulations, permit and licence requirements pertaining to mobile crane assembly and dismantling
- Relevant OH&S and environmental procedures and regulations
- Mobile crane applications, capacities, configurations, safety hazards and control mechanisms
- Operational procedures for crane crews concerning the assembling and dismantling of booms and jibs on lattice boom mobile cranes
- Defects that may be identified when assembling and dismantling a boom/jib and appropriate action that should be taken
- Guidelines relating to the safe use of machinery and equipment
- Focus of operation of work systems and equipment
- Application of relevant agreements, codes of practice or other legislative requirements

Required skills:

- Communicate effectively with others when assembling and dismantling mobile crane booms and jibs
- Read and interpret instructions, procedures, information and signs relevant to the assembling and dismantling of mobile crane booms and jibs
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to work activities
- Operate electronic communication equipment to required protocol
- Work collaboratively with others during the assembly and dismantling of mobile crane booms and jibs
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions that may occur during the assembly and dismantling of mobile crane booms and jibs in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events that may occur during the assembly and dismantling of mobile crane booms and jibs
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Monitor condition of equipment during the assembly and dismantling of mobile crane booms and jibs and take appropriate action if required

Evidence Guide**EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment • The evidence required to demonstrate competency in

EVIDENCE GUIDE

and evidence required to demonstrate competency in this unit

this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:

- the underpinning knowledge and skills
- relevant legislation and workplace procedures
- other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment at the registered training organisation, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Operations may be conducted:

- day or night
- in a variety of weather conditions

RANGE STATEMENT

Environment may include:	• movement of equipment, goods, materials and vehicular traffic
Customers may be:	• internal or external
Mobile crane may be any lattice boom mobile crane involved in work in a range of industry sectors including:	• construction and demolition • manufacturing • waterfront • mining • primary industry • utilities (electricity, gas, water) • arboricultural • swimming pool • quarrying
Hazards may include:	• power lines • noise, light, energy sources • overhead service lines • surrounding buildings, structures, facilities • underground services • obstructions • uneven or unstable ground and recently filled trenches • stationary and moving machinery and equipment • hazardous or dangerous materials • traffic hazards and congestion • other vehicles and personnel
Hazard management is:	• consistent with the principle of hierarchy of control with elimination, substitution, isolation and engineering control measures being selected before safe working practices and personal protective equipment
Consultative processes may involve:	• other employees and supervisors • management • union representatives • clients • industrial relations and OH&S specialists • other professional or technical staff
Requirements for assembly may include:	• site restrictions and procedures • authorities and permits • hours of operation • slings, chains, nets, brackets and other specialised lifting equipment • personal protective equipment • support trucks

RANGE STATEMENT

Personal protective equipment may include:

- gloves
- safety headwear and footwear
- sunscreen, sunglasses and safety glasses
- two-way radios
- high visibility clothing

Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:

- company procedures
- enterprise procedures
- organisational procedures
- established procedures

Documentation/information may include:

- Safe Working Load (SWL) and Working Load Limit (WLL)
- operations manuals including load charts and crane and rigging manuals
- induction documentation
- competency standards and training materials
- job specifications and procedures
- manufacturers specifications
- workplace operating procedures and policies
- supplier and/or client instructions
- communications technology equipment, oral, aural or signed communications
- personal and work area work procedures and practices
- conditions of service, legislation and industrial agreements including:
 - workplace agreements and awards
 - occupational health&safety procedures
 - standards and certification requirements
 - quality assurance procedures
 - emergency procedures

Applicable regulations and legislation may include:

- relevant state/territory regulations and licence/permit requirements pertaining to the assembly of mobile cranes
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field

B - Equipment Checking and Maintenance