



Australian Government

TLIB3013 Maintain mobile cranes

Release: 1

TLIB3013 Maintain mobile cranes

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to carry out routine maintenance on a mobile crane, in compliance with licence/permit requirements, regulations and work requirements in a variety of operational contexts.

It includes obtaining and confirming job instructions and work specifications, coordinating loading of gear and equipment, assessing job requirements and work areas, designing job plan and setting up work area.

Work is performed under general supervision, with some accountability and responsibility for self and others in achieving the prescribed outcomes.

This unit applies to maintenance activity on equipment used by the operator and is limited to lubrication, fluid, filter and accessory changing and checks for cracks, surface or structural faults or other damage.

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

Pre-requisite Unit

Not applicable.

Competency Field

B – Equipment Checking and Maintenance

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan maintenance operations

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1 Tags, service records, logbooks and crane manufacturer information are read prior to commencing maintenance, and previously identified and manufacturer

- recommendations are noted
- 1.2 Maintenance schedules are read and maintenance tasks are confirmed to match schedule
 - 1.3 Step by step procedure is worked out to minimise time delays and to sequence maintenance processes consistent with manufacturer recommendations
- 2 Complete pre-maintenance checks**
- 2.1 Appropriate safe work area is selected for maintenance tasks
 - 2.2 Required tools, consumables and equipment are identified and assembled
 - 2.3 Equipment is inspected for visible faults and loose or damaged components
- 3 Identify and assess faults found**
- 3.1 Conditions found are compared with manufacturer information and intended use of crane
 - 3.2 Conditions noticed that may cause future difficulties are identified and potential effect on the safe and efficient operation of mobile crane is documented
 - 3.3 Potential fault conditions are reported to appropriate personnel
- 4 Conduct maintenance operations and safety checks**
- 4.1 Fluid replacements and lubrication operations are completed
 - 4.2 Fluid levels are checked and adjusted
 - 4.3 Mechanical components are checked to ensure attachments and tensions are secure
 - 4.4 Mechanical adjustments are made
 - 4.5 Maintenance plan is followed and appropriate adjustments are made to maintenance plan to deal with unexpected events
 - 4.6 Own work and crane system operations are checked to ensure crane's operational condition is in accordance with required specifications
 - 4.7 Tools, equipment and unused consumables are returned to appropriate locations and waste is disposed of in accordance with workplace policy and procedures

5 Complete maintenance records

- 5.1 Accurate reporting of safety check results and maintenance conducted, is completed and filed in accordance with procedures, industry guidelines and statutory requirements
- 5.2 Clear reference in reports is made to any items that may not yet require maintenance but may affect the future working condition or safety of the mobile crane

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIB3013A Maintain mobile cranes.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIB3013 Maintain mobile cranes

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria on at least one occasion and include:

- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- checking and replenishing fluids and carrying out lubrication processes
- communicating effectively with others
- completing relevant documentation
- dealing with internal and external customers
- identifying and correctly using relevant equipment
- identifying non-conformities that may compromise operational capability
- implementing contingency plans
- interpreting and following operational instructions
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned maintenance schedule
- operating and adapting to differences in equipment in accordance with standard operating procedures
- planning and prioritising own work, multi-tasking, predicting consequences and identifying improvements
- producing a comprehensive maintenance plan
- reading and interpreting relevant instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using appropriate personal protective equipment conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards
- servicing equipment in terms of maintenance schedule and standard operating procedures
- working collaboratively with others
- working systematically with required attention to detail without injury to self, others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and include knowledge of:

- application of relevant agreements, codes of practice or other legislative requirements
- guidelines for the safe use of machinery and equipment
- hazard management strategies 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
- mobile crane applications, capacities, configurations, safety hazards and control mechanisms
- operational crane systems and equipment
- operational safety and maintenance procedures for crane crews
- relevant WHS/OHS and environmental procedures and regulations
- relevant regulations, permit and licence requirements for mobile crane operational safety and maintenance
- use, characteristics, capabilities and limitations of lubrication and adjustment tools and equipment
- workplace procedures for planning mobile crane jobs and setting up work areas.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

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Assessment must occur in workplace operational situations where it is appropriate to do so. Where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions and involve the movement of equipment, goods, materials and vehicular traffic.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals, including relevant:
 - state/territory regulations pertaining to the maintenance and safety of mobile cranes
 - state/territory WHS/OHS legislation

- personal protective clothing and equipment, including:
 - gloves
 - safety headwear and footwear
 - sunscreen, sunglasses and safety glasses
 - two-way radios
 - high visibility clothing
- relevant materials, tools and equipment currently used in industry
- state/territory environmental protection legislation.

Links

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