

1. Module details

Module name

Introduction to Elevated Work Platforms (E.W.P.)

Module duration

It is expected that students with the appropriate entry knowledge and skills will successfully complete this module in 18 – 20 hours.

Module code

NUE261

Discipline code

0789120

2. Module purpose

The purpose of this module is to provide participants with the skills and knowledge to inspect, set up and operate an elevating platform vehicle (EWP) in accordance with industry safety standards

3. Prerequisites

NBB002 Occupational Health and Safety.
NUE258 First Aid.

4. Relationship to competency standards

NES101, NES450, NES604, RUH HRT207

5. Content

Acts and regulations governing the operation of EWPs

Maintenance and safety device checks

Drive systems

Levelling and supporting the EWP for operations

Operating techniques

Shutting down and securing the EWP for travel

Accident reporting procedures

Emergency electrical contacts - procedures

Engine and hydraulic failures

6. Assessment strategy

Assessment methods

More than one learning outcome may be assessed at once. If appropriate, learning outcomes in this module may be assessed in conjunction with learning outcomes in other modules. Skills based learning outcomes should be assessed by practical demonstration with oral or written evidence where underpinning knowledge is required. Learning outcomes which do not require practical demonstration should be assessed using oral and/or written evidence such as assignments, reports, exercises, projects or presentations.

Conditions of assessment

Access to appropriate site, resources materials and equipment. Learning outcomes may be assessed on the job or off the job. Skills based learning outcomes may be assessed on the job, or a simulated work environment. (Note) when this unit is used for ground based streams the EWP can be used at low heights.

7. Learning outcome details

Learning outcome 1

Identify the Acts and Regulations and Occupational Health and Safety requirements relating to EWP operations.

Assessment criteria

- 1.1 List the requirements of the WorkCover Plant Regulations in regard to EWP operations.
- 1.2 Detail the requirements relating to incidents and accidents.

Learning outcome 2

Identify the machine electrical safety requirements when preparing for operation of an EWP.

Assessment criteria

- 2.1 Check vehicle has a current electrical test certificate.
- 2.2 List the minimum distances of plant in relation to electrical conductors.
- 2.3 Detail the correct procedures to break an electrical contact with the EWP.
- 2.4 Identify and list the insulating features and properties of an insulated boom EWP.
- 2.5 Identify tasks to be undertaken by safety observer.
- 2.6 List the personal safety protection items required to be worn by EWP operators.

Learning outcome 3

Assessment criteria

Undertake pre-start checks for an EWP and vehicle.

- 3.1 Identify the major operational parts of a EWP and state their functions.
- 3.2 Inspect EWP and truck for any signs of obvious damage which will effect roadworthiness or operational serviceability including tyre pressure, lights, hydraulic hoses and safety guards.
- 3.3 Check hydraulic fluid levels and engine oil, consult operations manual for oil specifications and top up fluid and oil levels if necessary.
- 3.4 Check and top up radiator.
- 3.5 Check and add fuel as required.

Learning outcome 4

Assessment criteria

Set up an EWP for operation.

- 4.1 Describe why tyre pressures are critical for EWP operating without stabilisers.
- 4.2 Check ground conditions and slope to ensure stability for operation of EWP.
- 4.3 Position vehicle in accordance with “limits of approach” and safety for extension of stabilisers.
- 4.4 Engage drive train, lower stabilisers and install pig-sty stacking where appropriate and level for operation.
- 4.5 Check all safety devices prior to operation.

Learning outcome 5

Assessment criteria

Operate EWP.

- 5.1 Locate operating position and establish safe working environment by installing appropriate signage.
- 5.2 List general operating requirements and any restrictions for safe operation of an EWP in an electrical environment.
- 5.3 Re-check stabiliser legs for ground subsidence.
- 5.4 Release bucket and boom.

Learning outcome 6

Assessment criteria

- 5.5 Check bucket load limit (SWL) and calculate weight of operator and equipment.
- 5.6 Check and fit safety harness, enter bucket and connect lanyard.
- 5.7 Identify controls, raise bucket and apply all functions in fluent movements.
- 5.8 Elevate basket to work position.
- 5.9 Retrieve to stowing position.

Shut down machine and secure EWP for transport.

- 6.1 Identify potential hazards encountered in lowering boom for shut down.
- 6.2 Retract and secure booms, secure basket and isolate controls.
- 6.3 Retract stabilisers and lock where applicable.
- 6.4 Stow equipment and tools.
- 6.5 Shut down operating systems.
- 6.6 Retrieve and stow safety signs.

Learning outcome 7

Assessment criteria

Demonstrate emergency procedures for EWP.

- 7.1 Identify nature of emergency and determine appropriate action.
- 7.2 Communicate with observers and proceed with emergency procedure.
- 7.3 Demonstrate use of manual bleed valves, auxiliary/electrical power, and emergency decent device (EDD) from basket.

8. Delivery of the module

All or part of this module may be delivered through full and part time, on and off the job. Practical components should be delivered in a way that ensures participant safety

Delivery methods must provide for the demonstration of skills and associated knowledge specified in all learning outcomes, either in work place or simulated work place conditions

Delivery should take into account current legislation, regulations and by-laws and be consistent with existing industry standards

References

Videos from local electricity supply companies

Operator manuals

O.H.&S. Guidelines

Brown, A., Lawler, B., 1994, Rural Safety Inkata Press, Australia

Occupational health and safety requirements

Practices must comply with state and federal occupational health and safety legislation and codes of practice