

EWP Yellow Card



Trainee Workbook

Responsibility for workplace health and safety

Workplace health and safety: legal requirements

There are laws in all Australian states and territories to protect people against the risk of being injured or made ill because of the work they do.

In most states and territories these laws are called the Occupational Health and Safety Act or the Workplace Health and Safety Act.

These laws set out who is responsible for safety and what they must do. The responsible person has what is called a 'duty of care' or obligation.

Different people in the workplace have different 'duties of care' or obligation.

The employer's duty of care or obligation

Occupational health and safety (OHS) laws in Australia are very clear about who has the main responsibility for workplace safety.

Employers create the work situations which bring people and work systems, plant, equipment, chemicals and/or other hazards together. Accordingly, employers must take all reasonable steps to prevent people from being hurt at work.

Some of the duties of employers are very broad, such as 'an employer must ensure the health, safety and welfare at work of all employees of the employer'.

Others duties are quite specific, such as 'ensuring that any plant or substance provided for use by the employees at work is safe and without risks to health when properly used'.

The OHS laws say an employer must ensure the safety of its employees in whatever tasks they undertake on behalf of the employer. This includes the operation of plant and equipment such as elevating work platforms.

The employer's duty of care includes a requirement to ensure that everyone who operates an elevating work platform is qualified to do so (i.e. has a certificate), but it does not end there.

The employer is also required to make sure everyone who operates an elevating work platform has all of the necessary information, training and instruction to operate the elevating work platform in all of the work situations which may arise.

When you obtain your elevating work platform certificate, this certificate will simply be a statement that you have met the minimum 'competencies' required for safe operation. It will not remove your employer's duty to ensure that the work you do with the elevating work platform can be, and is, done safely.

This means your employer must provide you with reasonable training and appropriate instruction and supervision even after you get your elevating work platform certificate.

In addition to having a duty of care for all employees, your employer is also responsible for the health and safety of other people in the workplace, including visitors, customers, contractors and casual workers. You need to be aware of this and understand the procedures used in your workplace to ensure the safety of others in the workplace.

You can see that the 'duty of care' obligations on employers are quite substantial and they must be diligent about safety in the workplace.

But this does not mean that you have no responsibilities. You do.

Your duty of care / obligation to your employer and others

You have a duty to take reasonable care for the health and safety of people who are at the employer's place of work.

You must also co-operate with your employer and anyone else at the workplace in order to enable your employer to meet his or her duties under the OHS laws.

The following is typical of the processes you may be required to do:

- Listen carefully to your employer's instructions. Know what you need to do and how you should do it.
- Follow the safety procedures applying at your workplace.
- Report any hazardous situations to your supervisor or employer.
- Advise your safety representative/supervisor or employer if there are any gaps in the safety procedures.
- Report any damage to equipment or plant to your supervisor.
- Tell your supervisor about any maintenance or repairs that need to be carried out on the equipment you are using and tag accordingly.
- Be aware of others in the workplace and co-operate with other work activities
- Use the elevating work platform in a manner that does not endanger others in the workplace.

Only lift loads that are within the load rating of your machine

You always need to be mindful of other work activities that may be taking place in your work area.

You have a duty to co-operate with others about how work is to be conducted and, at times, the order in which work is to be done. You may need to consult with other workers, plan your work activity and work co-operatively with other workers to make sure that the tasks are completed safely.

Elevating work platforms are potentially very hazardous items of plant. They move around workplaces in areas where people are also moving about. This combination can create hazardous situations.

You must always be aware of these hazards and make sure you do not operate the elevating work platform in a manner that puts yourself or others at risk.

Careless and reckless operation of an elevating work platform is a very serious matter. It may result in disciplinary action by your employer, as well as action by the authorities in your state or territory.

So be aware of the dangers, and always operate your equipment carefully and safely.

The duties of care of designers, suppliers and manufacturers

OHS laws in Australia also establish duties of care for designers, manufacturers and suppliers (including hirers) of plant, equipment and substances.

If you identify a design problem with the equipment you use, bring it to your employer's attention. Your employer can then take the matter up with the supplier or manufacturer, as they have an obligation to make sure that the equipment will not expose people to undue risk when used in accordance with the instructions.

Consultation in the workplace

An important feature about safety at work is the need for employers to consult with employees about the work they do. In some states and territories there are legal requirements for formal consultation mechanisms.

You may find that your workplace has a workplace health and safety committee or OHS representatives. The purpose of the committee and representatives is to allow health and safety issues to be meaningfully discussed and acted upon.

The process of consultation should allow people in the workplace to have a real say in matters that may affect their health and safety.

Employers should ensure there are established mechanisms for employees to be consulted about any hazards that may be present in the workplace and how these can best be controlled.

Similarly, employees need to have a say in the type of equipment or substances brought into the workplace.

The process of consultation also provides you with the opportunity to meet your OHS obligations and contribute to the safety of the workplace.

Make the most of your chance to have your say, by making your suggestions helpful and worthwhile.

Getting to know your Elevating Work Platform

Introduction

Here we describe a typical elevating work platform and explains a number of general terms associated with elevating work platforms.

For the purposes of this learning guide an elevating work platform (EWP) is defined as:

'A telescoping device, hinged device or articulated device, or any combination of these devices, which is used to support a platform on which personnel, equipment and materials can be elevated to perform work.'

Keep in mind that there are many different models and types of elevating work platforms. We will not attempt to list every type.



The main things you will learn here are:

Parts of an elevating work platform

You will become familiar with the different components of an elevating work platform.

Types of elevating work platforms

You will become familiar with the different types of elevating work platforms.

Typical elevating work platforms How to use these diagrams

- Familiarise yourself with the key parts of the type of elevating work platform on which you are being trained.
- Refer back to these diagrams as the various parts of an elevating work platform are referred to in this guide.

Self-propelled EWP with scissor arms

These Scissor Lift EWPs are self-propelled units for use on flat concrete surfaces or firm unsealed areas.

- The work platform is elevated by scissor arms which are powered by hydraulic cylinder(s). There are controls at ground level and on the platform.



- EWPs can be fitted with outriggers, and their maximum platform heights can be over 30 metres. (HRW licence required over 11m)



EWPs with telescoping boom.

Trailer mounted EWP with telescoping boom.



The work platform is elevated using a knuckle style **boom**.

Self-propelled EWP with telescoping boom.

These EWPs are **self-propelled** units for use on flat slabs or firm unsealed areas. The work platform is elevated using a straight extension (telescoping) **boom**.



21. When may a self-propelled EWP be driven in an elevated position?

- a. When moving an EWP, it should always be travelling at a creeping or extremely slow speed, or as per the manufacturer's specifications.
- b. When travelling with a self-propelled EWP up a hill, the boom and platform should be facing up hill (as a rule of thumb). Otherwise it should be done according to the manufacturer's specifications.
- c. You should only ever travel with an EWP across the slope/side of a hill according to the manufacturers specifications.

Before moving check:

- d. Path must be clear of objects (e.g. bricks, drums etc);
- e. Lower and retract the basket so you can see where you are going;
- f. Watch out for people on the ground;
- g. Turntable lock must be engaged;
- h. Axle lockouts must be activated (if the EWP has them);
- i. Make sure the warning devices are working; and
- j. Tyres must be pumped to the right pressure.

Checking the equipment and work area and planning the job

Introduction

What do you need to do before you start operating an EWP?

You will need to check the equipment and the worksite to make sure the machine is safe and hazards in the workplace are identified and suitably controlled.

It is very important for these checks to become part of your routine, something you naturally do before you start the job.

It is also vital to follow a set procedure in your preparations for work with an EWP, addressing all your work tasks in a systematic and orderly way.

An important part of this job planning is to prepare an operational plan for the EWP, very simply setting out the steps to be followed in the work process.

While it may not be compulsory to have an operational plan, it is often a good idea to write down your plan.

This way, you will make sure that you and others in the workplace know what you are going to do and when you will do it.

An operational plan also provides the basis for a work method statement, which will be required in some work situations.

Inspection of the work site

You will learn processes for planning your work, identifying hazards in your workplace and making sure there are appropriate control measures to prevent people getting injured.

Pre-operational checks

You will learn about the routine checks of the elevating work platform you need to carry out before you even start the motor.

Set up procedures

You will learn how to set up the machine and check that it will safely do the job required.

The 'work steps' in an operational plan

The 'work steps' in an EWP operational plan are likely to include those listed below. Each of these work steps is discussed in this chapter.

Job requirements

- Finding out what the job involves.

Priorities

- Determining the best order in which to carry out the different tasks you have to perform.

Workplace rules and procedures

- Finding out about any particular rules and requirements of the workplace.

Identifying hazards and control measures

- Identifying anything on the site that could cause harm and deciding what you need to do about each of these hazards.

Workplace consultation

- Working with others and ensuring everyone is consulted and informed about the work to be done.

Finding out the job's requirements

Knowing the requirements of each job is fundamental to carrying out the work safely. There should be a clearly written work specification detailing the type of work to be conducted and the expected results.

Among other things, determining the job's requirements will help you in selecting the right machine and working out how many people will be needed for the job.

For example, it is important to know the height of the work to be undertaken and the tasks to be performed at this height. Checking this out before the work starts can save a lot of time and effort.

3. Factors that must be considered when selecting an appropriate EWP are:
 - a. Terrain
 - b. Weight required to elevate
 - c. Height and reach required

The key elements to consider when you are working out what the job involves are: the type of work to be done the location of the job, including site and environmental issues and other work activities in the area the height of the job whether any approvals are required the time within which the job is to be completed, and the expected results or 'outcomes'.

It is best to make a visual inspection of the site as part of your pre-operational planning checks, if this is possible. If you or your employer cannot visit the site, you should try to gather as much information about the site before you agree to undertake the work.

This may involve asking a set of standard questions, developed by your employer, before you agree to do the job. These questions should address the matters listed above.

You also need to be aware of any special operating requirements, such as whether you will have to operate the EWP near power-lines, on a suspended floor or above staff facilities and whether solvents or other chemicals will be used on the work platform. (Responses to these special hazards are addressed later.)

Establishing work priorities

If the work you have to do involves a number of tasks, it is important to establish the order in which these tasks will be undertaken.

Often the nature of the work will determine the priority of the tasks. For example, you may need to complete tasks at the greatest height first and then complete other tasks at progressively lower elevations.

Your work plan should clearly set out the order in which you will do the required work.

Finding out about all relevant workplace rules and procedures

All workplace rules and procedures must be observed.

It is essential to consult with relevant workplace personnel to establish what the rules and procedures are at each particular site or workplace, and then to co-operate with others at the workplace by following these set procedures.

In planning your work you should consider whether you need to consult with:

- the owners of the building or site
- government authorities
- local councils
- the site manager
- supervisors, and other trades.

Consider the particular regulatory requirements that may apply to the type of work being undertaken from the EWP.

It is also helpful to speak with the site foreman/safety officer or the person responsible for the work program.

Some of the workplace procedures will be statutory requirements, e.g. the need to hold a certificate of competency.

Other important procedures are likely to include a need to undertake site induction training if the work is to be conducted on a construction site.

You should check with the occupational health and safety (OHS) authority in your state or territory (see Appendix B) to confirm local requirements.

Workplace procedures often require operators to wear appropriate personal protective equipment (PPE).

The type of safety equipment that should be worn at all times by a person working from an elevating work platform includes:

- a safety harness (a full body harness with an energy-absorbing lanyard)
- a safety helmet/hard hat
- steel capped, rubber soled shoes, a safety vest, and goggles.

Other PPE may also be required, depending on the nature of the work (e.g. a respirator, gloves, ear-muffs for hearing protection, sun screen and/or safety clothing).

First aid

You should locate and identify the first-aid kit and/or station that is available before starting work on any site. This is normally done during the site induction.

Managing risk in the workplace

Elevating work platforms are used in many situations that present unique hazards to the operator and others, including power-lines, trees and surrounding buildings.

You need to be aware of all the potential hazards on the site and make sure all necessary measures are taken to control the risks and prevent the hazards from causing any harm.

- 4. The Site Risk Assessment must be carried out:**
 - a. Every time prior to operation**

The processes described below are known as 'risk management', but as you will see there is nothing particularly difficult about what this means.

As explained in this learning guide, your employer must make sure your workplace is safe

and there are adequate controls to prevent accidents and injuries.

You can help your employer to manage safety in the workplace through these three simple steps.

IDENTIFY all potential hazards - What does this mean?

- There is a need to take a risk assessment of the area and look out for hazards or potential hazards that may cause a problem or endanger you or others.
- How do you do this?
- The easiest way is to walk around the work area, looking for anything that could be a problem (e.g. an open pit in the work area, power lines etc).

ASSESS the risks - What does this mean?

- This means that you work out which things are the most serious. How do you do this?
- Ask yourself how seriously things in your work area might hurt or injure people and how likely it is to happen.
- By doing this you work out which things you need to deal with first, especially if something is very dangerous and could seriously hurt people.
- For example, an open pit would pose a serious risk to anyone on an EWP working nearby.

CONTROL the risks - What does this mean?

- This is the action that must be taken to prevent people from getting hurt. How do you do this?
- It depends on the risk and the circumstances.
- In the case of the open pit example, barricades would need to be placed around the pit to prevent unintended access to this area, or the EWP would need to be set up at a safe distance from this hazard

Inspecting the work area

5. When site hazards are identified:

a. Eliminate the hazards if possible, otherwise apply control methods

Your operational plan will need to have a risk control strategy addressing each of the following areas:

- the tasks to be performed
- identified site hazards (e.g. trenching, scaffolding)
- PPE requirements for EWP personnel barriers
- Signage - warning signs alerting people about the overhead work traffic controls
- lights/lighting, and public safety.

More details and a checklist are provided below.

In some situations specific types of warning/hazard signs may be required. Check whether you need to display these signs, and also whether the area needs to be barricaded or fenced off.

For example, in some work situations you may need to display 'OVERHEAD WORK IN PROGRESS' signs. Check the requirements with the site foreman/safety officer. ALWAYS be aware of public safety.

Note: In some states, traffic cones and barricades must be installed by a registered traffic controller.

Your hazard identification and control measures should not be confined to the EWP itself. For example, equipment and tools on the work platform are potential hazards, because they could fall during movement or impede safe access for the EWP operator, so all tools

should be placed in a fixed or removable box/basket and not left lying on the floor of the EWP.

17. What should be done with any tools that are taken into the EWP to prevent them falling?

a. Ensure tools are secured on tool lanyards or in tool boxes

- Any personnel working above or below the work platform/basket
- Be aware of others who may be working above, below or near the basket Check with the site supervisor or relevant contractor to determine if this is happening.
- Stagger working arrangements, if possible, to avoid other overhead workers.
- If this is not possible, take whatever action is necessary to ensure there can be no contact with personnel and no materials/substances can fall into the basket of the EWP.
- Bridges
- Check whether you will need to travel or work under bridges or walkways, including pipe and cable bridges between buildings, which may be a particular hazard because of their location and vulnerability.
- Keep clear of bridges.

Overhead Service Lines

The term 'overhead service line' has a particular meaning in the Electrical Safety Act 2002 (QLD) and is an overhead electric line, typically between the electricity distribution system and an electricity customer's building or pole.

Powerlines

- Inspect the site to see if there are power-lines in or near the work area.
- An EWP must not be operated within the exclusion zone prescribed for power-lines. This distance varies in different states and territories.

In QLD the following exclusions distances apply:

- 3 metres: Up to 132,000 volts
- 6 metres: Between 132,000 & 330,000 volts
- 8 metres: Above 330,000 volts

10. What are the minimum distances that operators must maintain from power lines?

- a. Up to 132,000 volts : 3m**
- b. Between 132,000 & 330,000 volts : 6m**
- c. Above 330,000 volts : 8m**

Exclusion zone

- The clearance distances prescribed are absolute clearances that must NOT be breached at any time. Any breach of the prescribed clearances puts you, and all those on your site in immediate danger of electric shock.
- If you are required to work closer than the minimum distances you must ensure the safety of all those on your site by:
 - Shutting off the power, or Insulating the power lines
 - Seeking an exemption from the relevant authority
 - Use a spotter
- Report all operations near power-lines to your supervisor/ employer. Your supervisor/employer must make sure that the work area is safe before work is carried out.
- Make sure that the EWP has appropriate barricades erected to keep members of the public and/or others from moving into the work area. Suitable PPE such as hard hats must be provided.

- Remember, you do not have to touch power-lines to be electrocuted. Electricity can jump a gap to the nearest conductive point.

More detailed advice is provided at the end of this checklist table. Members of the public and site visitors

Ensure members of the public and visitors to your place of work are not exposed to a risk of injury or illness from your work.

Before setting your machine up in an area where the public has access, contact the site manager, local council or other relevant organisation for instructions and site requirements.

Put barricades, bunting, signs and cones around the work area and make sure every feasible measure is taken to secure the area.

Make sure the rotating light and audible beeper on the machine is operating.

22. When should an EWP operator cease operation?

- a. Whenever it is unsafe to operate
- b. If the wind speed ever exceeds the manufacturer's specifications
- c. if an unsafe incident occurs which involves a defect with the equipment (such as hearing a loud noise, feeling the platform drop slightly, warning devices, cut-outs, alarms or feeling unsafe vibrations coming from the boom section), you should always cease work immediately.

Possible hazards, what you need to do to Control measures

<p>Dangerous materials</p>	<p>Check whether you and/or others may come into contact with hazardous substances on the site or have to work with this type of material. Obtain information and follow directions from the relevant Material Safety Data</p>	<p>Extreme care must be used when identifying, handling or applying hazardous materials. For example, do not mix a cocktail of different chemicals in the basket. If you get it wrong 20 metres up, you will have nowhere to escape. Mix the chemicals on the ground and take only the required amount up in the basket, in a sealed container. Make sure you are wearing the correct personal protective equipment (PPE). This can be identified by reading the material safety data sheet (MSDS). If you suspect or detect any hazardous substances, other than any you are working with, notify the site foreman/safety officer or an authorised person to have the materials removed. Do not attempt to move the materials yourself, as you may not have the correct personal protective equipment (PPE) and you could suffer permanent health damage.</p>
<p>Lack of Adequate Lighting</p>	<p>Ensure the work area will be well lit. If your work will be performed at night or under fading light, there may be a potential hazard.</p>	<p>If the work area is not well lit, sufficient artificial lighting must be supplied over the whole working area. If you have any difficulty seeing, all work must stop until suitable lighting is provided.</p>
<p>Obstructions</p>	<p>On construction sites, check whether other plant and equipment or site materials might obstruct the path of the EWP.</p>	<p>Refer to the site management plan, if one is available, and consult with the site foreman/safety officer to advise them of your work program.</p>
<p>Staff facilities</p>	<p>Check for any staff facilities in the work area, such as washrooms, toilets, lunchrooms, meeting areas, first-aid rooms, work sheds, etc.</p>	<p>Working may be carried out above these facilities provided there is adequate, sufficiently strong overhead protection and slewing is avoided or kept to a minimum. Provide any necessary fencing or barricades in an area beneath the EWP's basket and make sure an alternative access/exit is provided. Stow tools and gear safely, and use lanyards if this is possible.</p>
<p>Ground conditions</p>	<p>Inspect ground conditions in the site area. Check whether the ground surface has been affected by excavations or trenching which has now been filled or is wet and soft. Confirm the ground conditions with the site foreman/safety officer and/or other personnel on site.</p>	<p>Put adequate packing under the outriggers/stabilisers to spread the load over a larger area. If the ground level, extend the outriggers until the tyres area approximately 50mm off the ground. Otherwise, extend the outriggers fully and then lower the top side outrigger until the machine is level. The machine must be level at all times. When setting up an EWP close to an open trench, make certain that no part of the machine is closer to the trench than the depth of the trench (e.g. if the trench is 1m deep, set up at least 2m away). If the ground is white sand or unstable, you may have to be much further away. If you are not sure how far away you will need to be, ask a competent person to assess the ground conditions.</p>
<p>Staff facilities</p>	<p>Check for any staff facilities in the work area, such as washrooms, toilets, lunchrooms, meeting areas, first-aid rooms, work sheds, etc.</p>	<p>Working may be carried out above these facilities provided there is adequate, sufficiently strong overhead protection and slewing is avoided or kept to a minimum. Provide any necessary fencing or barricades in an area beneath the EWP's basket and make sure an alternative access/exit is provided. Stow tools and gear safely, and use lanyards if this is possible.</p>

Surrounding structures

- Check the locations of buildings, towers, sheds, warehouses, advertising hoardings and other types of structures within or near the EWP's work zone.
- Take care when operating near structures. Do not elevate the EWP into a position where it may come into contact with a surrounding structure.

Weather conditions

- The machine must not be used outside during wind, rain, snow or stormy conditions.
- Later model machines (1990s onwards) have a wind speed capability on their compliance plate. If the maximum wind speed for your machine is less than 12.5 metres per second, the machine is for indoor use only!

9. How would you determine if an EWP is suitable for outdoor use?

- a. If the maximum wind speed for your machine is less than 12.5 metres per second, the machine is for indoor use only!

11. What is the meaning of Side Force?

- a. Wind loadings resulting from wind speeds up to the maximum permitted, taking into account the degree of the exposure of the site
 - b. pushing & pulling on a fixed structure when working from the platform causes side force
 - c. The maximum allowable side force will be marked on platform/data plate/operators manual.
- During high winds, conductors will sway with the breeze. This needs to be considered in maintaining exclusion zones.
 - The machine must not be used if there is a potential for a lightning strike.
 - If you need to shut the machine down because of rain, recheck the ground conditions before starting up again, and if necessary relocate the EWP to more stable ground.

Planning emergency procedures

- Before starting any work you must be sure your operational plan includes procedures for responding to emergencies.
- This is to make sure you know what to do, and what sequence to do it in, should an emergency arise.
- The types of situations you need to consider are described under 'emergency procedures'.
- In addition, you must be aware of any site-specific emergency procedures for the work area.

1. Prior to work commencement you need to:

- a. Consult with site supervisor/foreman for relevant workplace policies/procedures/safe work methods
- b. Reference relevant WHS regulations for current WHS/Environmental information
- c. Coordinate work activities with other trades person

Workplace consultation

Consultation with other people at the work site and anyone else that may be involved or affected by the work you do is essential, because it:

- informs these people about what will be happening
- allows them to alert you to any particular hazards or other problems, and
- Informs you about their work, allowing the work program to be properly organised and coordinated.

The people and groups with whom you will need to consult when you are planning your work have already been described in the discussion of job requirements, workplace rules, hazards and control measures above.

Refer back to these sections to make sure you know who needs to be involved in the consultation process.

Conducting routine equipment checks before setting up the EWP

Once you have determined that the EWP can operate safely on the site and have agreed to undertake the work, it is time to check the machine to make sure it is in good working order.

These pre-operational checks are essential, and must be carried out before you set up the machine at the site and before any work commences.

The main purpose of checking the equipment is to identify any defects. If a defect which might affect the operation of the machine is found, the machine must be secured against operation, the defect must be tagged and you must report the defect to your supervisor or the person in charge of the operation. The tag should clearly note that the machine is out of order and is not to be used.

The pre-operational checks must be conducted in accordance with the manufacturer's specifications, which you will find in the service log book.

- 2. The first item to check when conducting a pre-operational inspection on an EWP is:**
 - a. Logbook for EWP serviceability****Followed by:**
 - b. Compliance Plate/operators manual for EWP specifications**
 - c. Metal components for cracks, fatigue and damage**
 - d. Emergency lowering device**

So the first thing you need to do is check the log book. Every elevating work platform will have a log book.

The log book provides three important sets of information for the operator:

- records of regular service checks
- a pre-operational checklist and
- records of any faults or defects.

It is important to check each section of the log book, and in particular the service records, to make sure that all aspects of the pre-operational checks have been covered and that regular servicing, maintenance and repairs have been undertaken.

If a service is overdue, inform the owner of the machine and do not use the machine. In addition to checking for defects, you must check the safe working load (SWL) of the EWP (i.e. the maximum weight that can be safely supported in the basket).

6. The 3 sections of the EWP operator logbook are:

- a. Record of regular service checks
- b. a pre-operational checklist and
- c. record of any faults or defects.

This is important, because the major function of any EWP is to safely elevate personnel and materials.

The SWL will be shown in the EWP's operating instructions manual, and must also be clearly marked in the platform.

8. Where will you always find the Safe Working Load (SWL) of an EWP?

- a. The SWL will be shown in the EWP's operating instructions manual, and must also be clearly marked in the platform and on the Compliance plate on the base.

You must then estimate the total weight of all the materials and personnel to be carried, including all protective equipment, and make sure that the SWL will not be exceeded. If the SWL were exceeded there could be a structural failure to the boom or the machine could tip over.

15. What does the Safe Working Load (SWL) include?

- a. Everything carried in the basket including the operator, tools, parts etc

16. Is the operator ever allowed to exceed the Safe Working Load (SWL)?

- a. No

Routine pre-set-up equipment checklist

7. Items that need to be inspected and/or tested during pre-operational checks are:

- a. All load-bearing parts
- b. Operating instructions and log book
- c. Emergency descent equipment
- d. Ground controls

The pre-operational checks which you need to undertake on the machine include, but are not limited to, the following:

All load-bearing parts

- The load-bearing parts of the EWP are found along the boom arm of the EWP. Check that all parts are in good condition and are not bent, distorted or fractured. If the boom is insulated, check that it is in test and that the insulation is not compromised by foreign matter.
- Report any damaged load-bearing sections to your employer or the person in control of the EWP. The machine must not be operated and must be shut down with appropriate signs to make sure others will not operate it.

Operating instructions and log book

- Locate the operating instructions/service manual and log book. Make sure the log book has been completed and is up to date and all service requirements have been met.
- If a service is overdue, inform the owner of the machine and do not use the machine.

12. If you are unsure about any of the operations of the EWP, where can you look for assistance?

- a. Operators manual

Emergency descent equipment

- Check the work platform. Make sure the emergency descent equipment is secure and the safety release clips are in place, have not been tampered with and can be removed by hand. Also check that warning signs are in place and have not been tampered with.
- Correct any defects before commencing work.

Ground controls

- Check the ground-level operating controls to make sure they are free of damage. Operate and become familiar with each function, so that you will be able to instruct someone to lower you down in an emergency. Locate the emergency lowering control and make sure it is able to be operated with ease.
- If the ground controls are damaged or appear to be not operational, report the defect(s) to your supervisor.

- 23. Whilst up in the EWP the controls cut out and the ground controls are not functioning, how do you lower the EWP?**
- a. Use the emergency lowering function**

Setting up the EWP

Once you have inspected the site, identified its hazards, satisfied yourself that the site is suitable and completed your pre-operational checks on the EWP, you are ready to set up the machine so you can begin the work.

The set-up procedure involves quite a number of steps. You must be familiar with all of these steps and be competent in performing them.

If it is some time since you carried out your site inspection, you will need to do a final check of the work site, before you start to set up the machine, to make sure there have been no changes since your first inspection.

The starting point is to decide where you will set up the machine.

This area should be flat and able to stand the weight of the machine. If it is not flat, or if it has a soft base or has been backfilled etc, you will need to make sure you have the required ground cover, such as steel plates and/or sleepers, to control the hazards associated with loose or unstable ground.

The set up procedure then involves the following tasks:

- Notify the relevant people (site foreman, safety officer, etc) of your arrival and intentions, discuss your work program with them and seek their advice.
- Check the environmental conditions, including the wind speed, to ensure they are within the manufacturer's specifications.
- Set the EWP up as close as possible to the work that you are required to do, in such a way that it will fully meet your requirements but at the same time create the least possible disturbance to others working close by. An observer may be needed to assist you in positioning the EWP. Make sure the EWP will not be on a slope that exceeds the manufacturer's recommendations.

19. What is the meaning of gradeability?

- a. The maximum gradient allowed to be positioned on, found on compliance plate.**

- Firmly apply the parking brake and place the transmission in neutral (or in accordance with the manufacturer's recommendations).
- Place all the required traffic control displays and warning devices. Warning signs at the front and rear should be placed at least 50 metres, but not more than 150 metres, from the vehicle.
- Ensure any necessary barricades or road marker cones are placed along the side of the vehicle. Road marker cones should be arranged to keep traffic clear of the area where the elbow of the boom will be operating.
- Set the rotating flashing lights in motion.
- If the EWP does not have outriggers/stabilisers, chock one pair of its wheels, by firmly placing suitable obstructions against each wheel to prevent the machine from moving in any direction.
- If the EWP has outriggers, chock the front wheels and set the outriggers onto a firm surface or the appropriate packing. Make sure the area is clear of personnel before lowering the outriggers/stabilisers. The outriggers need to be fully extended, unless they are also being used to level the machine. Never reset the outriggers while the machine is elevated, because this can cause major instability and allow the machine to overturn. Remember to avoid soft ground, sloping surfaces or other conditions that may affect the stability of the unit.
- If the EWP is being set up on a sloping surface, position the outriggers/stabilisers on the lower sloping side first, again making sure the area is clear of personnel before lowering the outriggers/stabilisers. This will allow you to level the platform and then engage the remaining stabilisers.

- 14. What must you do if outriggers/stabilisers are to be set on soft or unstable soil?**
- Relocate if possible, otherwise use appropriate packing under foot plate to spread the weight**

Check that all the necessary safety harnesses and lanyards are on the machine and that they comply with the relevant standards and are in good working order. Re- check the anchor points for the lanyards, ensuring they are sound and not bent or broken. Check that the lanyards are the correct length for their anchor point(s) on the machine.



Make sure all personnel are clear of the basket and boom while the basket is being lowered to the entry position.

Starting up the EWP and making sure everything is working properly

Once you have completed all pre-operational checks and you have set the EWP up for work, it is time to start up the machine and conduct further checks to make sure that all the controls and movements of the machine are functioning correctly, before commencing work.

These final checks are an important part of making sure the work can be conducted safely.

Your supervisor or trainer will take you through each of the things that you need to check.

Remember that you must locate and read the operations manual before you carry out these start-up checks.

Ground compartment checks

To commence your start-up checks, open the ground compartment; turn the select switch to 'ground' and start the motor.

Operate each of the ground control levers in turn, to make sure you know what it does and it is operating properly. You need to do the following:

- Lift and lower the boom. Note that some machines have emergency lowering taps, which allow the machine to lower to the folded position at a controlled speed. If these taps are fitted, raise the machine slightly and open the taps to allow the machine to lower again. This will ensure you know where the lowering valves are located and that they are operational.
- Slew the boom to the left and right, making sure there are no potential hazards in performing this function. If the boom cannot be slewed, check that the slew locking pin has been removed.
- Telescope the boom out to the range required for the tasks to be undertaken and back again.
- Check the auxiliary power unit on diesel and gas machines. This is important because if you run out of fuel for the primary unit or the motor fails, you will be relying on the auxiliary power unit to supply the power required for the vital functions that will allow you to descend.
- If the machine does not have an auxiliary power unit or emergency lowering valves (taps), refer to the operator's manual for instruction on how to lower the machine in the event of an emergency.

Checks from the platform

Once you have completed your checks at the ground compartment, it is time to test the operational performance of the machine from the basket or platform. You need to:

- turn the select switch to platform/basket,
- attach your harness and put on your hard hat (safety helmet), rubber-soled steel cap shoes and other PPE as required. (The first two items of safety equipment need to be worn by all personnel using the work platform)
- make sure the self-closing action of the platform gate is working
- test the dead man switch to make sure it is functional

18. What is the purpose of the dead man control?

a. Safety switch, nothing will operate unless depressed

- test the automatic levelling device check all alarm systems

20. You are elevating the EWP and the tilt alarm sounds, what should you do?

- a. Cease work immediately;
- b. Notify persons in the immediate area;
- c. Lower the EWP (if applicable);
- d. Tag machine out of service;
- e. Remove the keys (to prevent use by other persons);
- f. Report the incident to appropriate personnel;
- g. Log the incident within the EWPs logbook; and
- h. Have an inspection carried out to identify whether damage has occurred.

- confirm the 'Safe Working Load at Driving' positions, and
- test each of the control levers in the basket to make sure all operations are functioning correctly and smoothly.

13. When wearing a safety harness, what should be done upon entering the EWP?

- a. Attach your harness to the rated safety points and put on your hard hat (safety helmet), rubber-soled steel cap shoes and other PPE as required. (The first two items of safety equipment need to be worn by all personnel using the work platform)
- b. make sure the self-closing action of the platform gate is working
- c. test the dead man switch to make sure it is functional
- d. test the automatic levelling device check all alarm systems
- e. confirm the 'Safe Working Load at Driving' positions, and
- f. test each of the control levers in the basket to make sure all operations are functioning correctly and smoothly.

Check the emergency lowering system before elevating

The ground controls must not to be used while personnel are working in the basket. They should be used **only** for:

- checking the machine's operation before using the machine carrying out maintenance on the machine, or
- Emergency purposes (e.g. lowering the basket).

Post-operational safety checks

Check the machine for breakages, other damage or leaks. More specifically, you need to check:

- all the hydraulic arms, to make sure they have not been damaged or bent during the machine's operation
- the boom, for dents or cracks in its welds and joints the slew ring, for any bending or other damage
- the basket, to make sure it is in good working order and has not been damaged
- the outriggers/stabilisers, to make sure they are in good order and all safety devices, to make sure that they are intact and operational.

Report any faults or damage to your supervisor/employer immediately, make sure they are noted in the log for corrective action and, where necessary, make sure warning tags are attached to the machine.

24. What would you do if you detect a fault before, during or after operation?

- a. Stop operating EWP immediately, report to an authorised person, fill out logbook and place a 'Do Not use' tag on EWP

Securing the site

Secure the machine against unauthorised use, either by chaining the machine to a post or girder or by removing the platform control panel (as is possible with some machines) and locking it in a safe place.

Most construction sites are fenced, with the gates being locked after hours. However, leaving a machine in a mall or shopping centre car park overnight is always a high risk. Instead, try to leave it inside the shopping centre buildings, if possible, or fence the machine off with a temporary fence that can be locked.

25. On completion of a job, the EWP has been littered with debris.

What should be done before leaving the EWP?

- a. EWP and equipment should be cleaned and waste disposed of appropriately

26. What should be done with the EWP upon completion of operation?

- a. Park the EWP in a suitable location, remove key and refuel/recharge if required