

Mobile Elevating Work Platforms (MEWPs)

ACTSAFE SAFETY BULLETIN #22



This bulletin provides guidelines and requirements for mobile elevating work platforms (MEWPs), formerly known as aerial work platforms (AWPs). MEWPs are machines that are used to move people, tools, and material to working positions at heights. At minimum, they consist of a work platform with controls, an extending structure, and a chassis. MEWPs include scissor lifts and boom lifts.

For more information on safe operating practices, refer to the manufacturer's operating manual for each type of equipment you operate. Operating methods, locations of controls, safety devices, and load capacity may vary between models and equipment manufacturers. The employer must ensure that manufacturer operating and maintenance manuals are physically available on the machine and should be in a weatherproof container.

HAZARDS

Hazards when operating a MEWP include:

- Tip-overs (e.g., holes in the ground surface, drop-offs, ditches, sloped or uneven road surfaces, wind)
- Collisions (e.g., dimly lit stages, vehicle traffic, nearby structures, rain or snow)
- Electrocutation (e.g., overhead power lines, lightning)
- Carbon monoxide and other gases (e.g., operating on stages or in other enclosed areas)
- Bodily injury (e.g., stages with spikes, screws, or other objects sticking out, falls from heights, pedestrian traffic)

While in an elevated aerial device, crew members must be secured to an approved anchorage point with a personal fall arrest system.

CONTROL MEASURES

Here are some control measures that may help mitigate hazards.

Workers

- Operators must be trained on the mobile equipment in accordance with all applicable regulations and standards and be qualified for the work. Being qualified means being knowledgeable about the work, the hazards, and the control measures for the hazards.
- Workers must not sit or climb on the edge of the basket or platform.
- Workers must not exit the basket at height.
- There should be a 100% tie-off procedure and rescue plan in case a worker becomes stranded at height (i.e., the MEWP won't lower).
- Operators and other workers must not climb on the boom.
- Operate all controls slowly to ensure smooth platform movement.
- Don't use an aerial device as a welding ground. Don't weld on an aerial device without first disconnecting both positive and negative battery terminals. Refer to the manufacturer's equipment manual.
- Don't attempt to raise the platform or basket beyond its rated maximum height or reach.
- During operation, aerial platforms must be solely under the control of the operator in the basket. The equipment must not be moved, lowered, or otherwise controlled from the secondary (ground-control) panel unless the operator in the basket requests that it be done, or the operator is ill or otherwise incapacitated. (See the manual for instructions on lowering from the ground. Have a plan in place to perform a rescue of an incapacitated operator.)



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Switching controls and moving the equipment without the operator's consent while the operator is in the basket is prohibited.

- When moving scissor-lift-type platforms, operators must first position themselves on the platform, then conduct all moving operations from that position.
- Use the reverse only as an emergency measure in case the equipment continues to crawl after releasing the stop switch.

Equipment

- The equipment operator (driver) is required to perform a pre-start inspection of the MEWP. Any defect that affects safe operation must be remedied before using the platform.
- Work platforms must not be operated within 3 m (10 ft.) of an energized, high-voltage source unless danger from accidental contact with that source has been effectively guarded against. For information on minimum clearance distances when working around energized lines, see the safety bulletin [Power Line Distance Requirements](#).
- The basket, tub, or platform must not be loaded beyond its rated capacity, which must be clearly marked on the machine. (Overloading a MEWP may make it unstable and cause it to become "locked out.") The load includes all people, equipment, and material in the cage of the machine, including the weight of any trailing cables (e.g., electrical cords) that hang from the machine.
- Manufacturers' ratings must not be exceeded when operating on inclined surfaces.
- Wheel chocks must be used on inclined surfaces.
- Aerial baskets, tubs, or platforms must not be supported by or attached to any adjacent structures.
- Objects or production equipment that could fall from the aerial basket or platform must be secured with an adequate safety tie-down device or sling.
- Ladders, planks, or other objects must not be placed in or on top of the platform or guardrail to gain greater height.

- Ladders should not be used to enter or exit a lift.
- Avoid stopping on a grade if possible. To prevent creep, the braking system must be set when elevating workers and when wheel chocks are used. Never leave the equipment unattended when stopped on a ramp, grade, or incline unless you have chocked the wheels. Never rely on the brake system alone.
- When using a machine with outriggers, the operator must ensure it is on solid footing. The lift must be equipped with hydraulic holding valves or mechanical locks at the outriggers.
- Don't travel with a worker in an elevated basket. Many lifts are designed to "bump" ahead small distances while in the raised position so the lift does not have to fully retract to make small position adjustments. This is permissible if the manufacturer of the machine allows it.
- Boom-mounted telescoping and rotating aerial platforms must not be used as a crane (i.e., with objects slung below the basket).

Environment

- The equipment operator should survey the job site surface to make sure it's stable and will support the equipment.
- Workers must not work from aerial work platforms when exposed to extreme weather conditions (e.g., thunderstorms, snow and ice, extreme heat or cold), unless provisions have been made to ensure worker safety.
- Workers must not work from an elevated work platform when winds exceed 40 km/h (25 mph), or less if the manufacturer specifies it.
- If there are moving vehicles or pedestrian traffic present, then flags, signs, traffic cones, or other means of traffic control must mark the work area around the aerial equipment.
- It's a good idea to use a spotter when moving MEWPs if there are other workers and bystanders, unless the work area has a delineated "no entry" zone, no other workers are present, and the operator has an unobstructed view.



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Rigging and cribbing

Manufacturers generally don't allow the attachment of equipment to the exterior of lift platforms or the use of cribbing to level lifts. In some cases, though, manufacturers' supplemental manuals give directions on how to safely rig lights and light diffusion panels, and how to use cribbing correctly to level lifts.

If there is a supplemental manual for the make and model of lift being used — and the operators and riggers are authorized, trained, and follow the instructions in the supplemental manuals — the rigging and cribbing activities described in the manual are allowed.

Note: Lifts that are levelled with cribbing must have a functioning lockout switch to prevent hazardous movement while raised on cribbing blocks.

Fall protection systems

If the manufacturer has supplied guardrails and the surface is flat and supportive, WorkSafeBC does not require workers in scissor lift-type devices to use personal fall protection equipment. However, personal fall protection is still recommended, and productions can make it mandatory for scissor lifts.

Attaching personal fall protection equipment to an adjacent pole, structure, or equipment while working from the basket, tub, or platform is not permitted.

RELATED RESOURCES

- [JLG Supplemental Manual for Authorized & Trained Set Lighting Technicians & Studio Grips \(Part No. 3128151\)](#)
- [JLG Supplemental Manual for Cribbing of Approved JLG Products \(Part No. 3128168\)](#)
- [Genie Special Supplement to Genie Operator's Manual: For Authorized and Trained Set Lighting Technicians and Studio Grips \(Part No. 1314078GT\)](#)
- [Genie Special Supplement to Genie Industries Operator's Manual: For Authorized and Trained Set Lighting Technicians and Studio Grips \(Part No. 97636\)](#)
- [Genie Operator's Manual Supplement: Cribbing Instructions \(Part No. 82943GT\)](#)
- [Snorkel Boom Lift Platform Capacity Reduction Manual: For Set Lighting Technicians and Studio Grips \(Part No. 0075625\)](#)

REGULATORY REFERENCES

- [Part 11: Fall Protection](#)
- [Guidelines G11.1–11.10, Fall Protection](#)

Actsafes Safety Association

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