



# SHAPE SAFETY BULLETIN #22

(Safety & Health In Arts Production & Entertainment)

## ELEVATING WORK PLATFORMS (SCISSOR LIFTS) AND AERIAL EXTENSIBLE BOOM PLATFORMS

1. These guidelines are applicable to vertically operated elevated work platforms or "Scissor Lifts" and boom mounted, telescoping and rotating, elevating work platforms, such as "Condors."
2. Only persons trained and qualified (OHS Regulation Part 1 "*qualified*" means being knowledgeable of the work, the hazards involved and the means to control the hazards, by reason of education, training, experience or a combination thereof;) in the safe use of elevating work platforms are authorized to operate these devices.
3. Aerial/elevating equipment is designed to position employees and tools at the worksite.

Within strict manufacturer's defined limits and model specific only, lighting, camera and diffusion equipment may be rigged in the basket: in such case additional training is required, and specific aerial/elevating equipment is required for this procedure. Consult the manufacturers "Operators Supplemental Manual for Authorized and trained operators" (available for model specific JLG, Genie and Snorkel only). Note: A cutout switch **must** be installed before the supplements for cribbing may be used.

4. Elevating work platforms shall be inspected prior to operation for satisfactory condition, damage and defects. This shall include all operational controls, which shall be in proper functioning condition. Any defect that affects safe operation shall be remedied before the platform is used. The operator is required to perform a pre-shift inspection of the equipment.
5. Operators shall report all discrepancies to their supervisors.
6. Operators shall consider the job to be performed and shall evaluate the job site location for potential hazards.

This equipment shall not be operated within 3 metres (10 feet) of an energized, high voltage source unless danger from accidental contact with that source has been effectively guarded against. The most important thing when working near electricity is to identify the voltage. Once known, then the specific additional clearance distances can be determined in accordance with OHSR 19.24.

7. The operator should ensure appropriate measure should be taken to ensure that the job site's surface is stable and will support the equipment and that there are no hazardous irregularities or accumulation of debris, which might cause a moving platform to overturn.

Survey the route to be traveled, checking for overhead obstructions; traffic; holes in the pavement, ground or shoulder; ditches; slope of road; etc. Operation of these devices on inclined surfaces shall NOT exceed manufacturers' ratings.

**Safety Bulletins Are Recommended Guidelines Only; Consult All Applicable Rules and Regulations**



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**Wheel chocks shall be used on inclined surfaces.**

**Cribbing may be used for JLG, Genie and Snorkel (model specific) by trained personnel.**

8. An employee, while in an elevated aerial device, shall be secured to the boom, basket or tub of the aerial device must use a personal fall arrest system by all occupants of boom supported elevating work platform. Although WCB does not require a worker of a scissor lift-type device to use personal fall protection equipment if the manufacturer supplied guardrails and the surface is flat and supportive, it is still recommended.
  - a. The personal fall protection equipment shall be securely attached to a suitable and substantial anchorage point such as the boom basket, tub or platform to an approved attachment point.
  - b. When a body harness is used in a fall arrest system, a lanyard may be rigged with a deceleration device to limit maximum arresting force on an employee to 4kN (kilonewtons) (900 lbs force), prevent the employee from hitting any levels or objects below the basket or platform, and shall limit free fall to a maximum of 6.5 (2 m) feet maximum, or less if specified by the manufacturer of the device.
  - c. Attaching the personal fall protection equipment to an adjacent pole, structure or equipment while working from the basket, tub or platform is **NOT PERMITTED.**
  - d. Objects or production equipment, which could fall from the aerial basket/platform, shall be secured with an adequate safety tie-down device or sling.
9. The basket, tub or platform **shall not** be loaded beyond its rated capacity, which must be clearly marked on the machine. The load consists of all people, equipment and material in the cage of the machine including the weight of any trailing cable (eg. Electrical cords) that hang from the machine.
10. Ladders, planks or other objects shall NOT be placed in, or on top of the platform or guardrail to gain greater height. Employees shall NOT sit or climb on the edge of the basket/platform.
11. "Climbers" (pole climbing equipment) shall NOT be worn while performing work from an aerial device. The risk of falling while climbing in or out of the basket is too great.

**Under no circumstances may an operator climb down the boom.**

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12. Workers shall NOT work from aerial work platforms when:
  - a. Exposed to extreme weather conditions (thunderstorms, heavy rain, extreme heat or cold) unless provisions have been made to ensure protection and safety of the workers.
  - b. Winds exceed 40 kilometers (25 miles) per hour or less if the manufacturer guide requires.
13. Aerial baskets, tubs or platforms shall NOT be supported by, or attached to, any adjacent structures.
14. Where moving vehicles or pedestrian traffic is present, flags, signs, traffic cones or other means of traffic control, shall mark the work area around the aerial equipment.
15. To prevent creep the braking system shall be set when elevating employees and when wheel chocks are used. Never leave this equipment unattended if you have stopped it on a ramp, grade or incline until you have chocked the wheels.

**NOTE: These vehicles will creep if not on a level that can be set to prevent creeping. Avoid stopping on a grade if possible. Never rely on brake system alone.**
16. When equipped with outriggers the operator ensures they must be on solid footing. They shall be equipped with hydraulic holding valves or mechanical locks at the outriggers.
17. Operate all controls slowly to ensure smooth platform movement.
18. DO NOT use an aerial device as a welding ground. DO NOT weld on an aerial device without first disconnecting both positive and negative battery terminals. Refer to manufacturer's equipment manual.
19. DO NOT attempt to raise platform/basket beyond its rated maximum height or reach.
20. Many lifts are designed to "bump" ahead small distances while in the raised position so that the lift does not have to fully retract to make small adjustments to position. That practice is permissible if the manufacturer of the machine allows. "Towering" (Traveling with a worker in an elevated basket) is **NOT** permitted.
21. Aerial platforms, when in operation, shall be solely under the control of the **operator in the basket**. At no time shall the equipment be moved, lowered, or otherwise controlled from the secondary (ground control) panel unless the operator in the basket makes a request that it be done, or the operator is ill or otherwise incapacitated (review the manual for lowering from the ground instructions , and have a plan in place to perform that procedure).

**Switching controls and moving the equipment in any manner without the consent of**

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the operator while the operator is in the basket is prohibited.

22. Boom-mounted telescoping and rotating aerial platforms shall **not** be used as a crane (objects slung below the basket).
23. When moving scissor lift-type platforms, operators shall first position themselves on board the platform, then conduct all moving operations from that position.
24. When moving this equipment forward, do not engage the **reverse** switch until the vehicle has come to a complete stop. Use the **reverse** only as an emergency measure should the equipment continue to crawl after releasing the stop switch.

**CAUTION: Do not use either of these emergency measures if doing so will endanger anyone in the vicinity.**

**These are only guidelines. Refer to the Manufacturer's operating manual on each type of equipment you operate. Operational differences, location of controls, safety devices and load capacity may vary to each model or equipment manufacturer.**

