

## SAFE WORK PROCEDURES BOOM LIFT






### SPECIAL INSTRUCTIONS:

1. Persons should not operate a boom lift unless they have been instructed in the precautions to be observed and the safe use of the machine.
2. **A Certificate of Competency for Boom type elevating work platform (class WP) is required to operate machines with boom length greater than 11 metres.**
3. Carry out safety checks as listed in manufacturer's instructions before use of machine, or check log book for inspections on hired-in equipment.

Task sequence	Identified hazards in task	Key processes to be followed	Precautions / PPE required
1. Pre-start checks	Loss of power  Loss of control Risk of falls Accidental movement	Ensure that battery is fully charged before using an electric-powered boom lift for any working at heights. Check liquid levels (fuel, oil, coolant, hydraulic oil, etc) before operation. Check all controls for correct operation before commencing use. Check all movements before commencing – should be smooth and steady. Check operation of brakes, stops, outriggers, etc to ensure that unit remains steady when boom is extended. Ensure that guard fence and gate/s is secure and closes securely. Ensure that suitable safety harnesses are available and that anchor points in platform are in sound condition.	Do not use if battery power is low. Recharge battery before use. Top up liquids if levels are low. Check top and bottom controls. Do not use if movements “jerky”. Do not use if brakes or stops do not prevent all movement of unit. Check operation of gate latch. Safety harness must be worn by persons in platform at all times.
2. Safety Harnesses and Fall Arrest Devices	Failure of components  Incorrect use and fitting  Suspension trauma	All fall arrest harnesses must comply with Australian Standard AS 1891.1 Industrial fall-arrest systems and devices – Safety belts and harnesses. All persons required to use a safety harness must receive instruction and training in their use before they are allowed to use the harness. Suitable equipment to rescue a person in the event of a fall must be available within a short period to minimise risk of suspension trauma.	Faulty or out-of-date equipment <b>must not be used</b> . <b>Harnesses must be fitted correctly</b> for safety in use. Other persons on site must be instructed in rescue procedures.
3. Travel	Instability	Check path that machine will be traversing to ensure adequate clearance and that surface will not cause machine to become unstable when travelling. Ensure that boom is retracted and lowered for travelling. Reduce speed when turning corners, on rough surfaces or where visibility is restricted (eg, blind corners, etc). Boom should be lowered before moving unit even for short distances. Keep body fully within confines of cage when traversing.	Remove obstacles and cover voids, drains, etc. Check for clearance for boom. Always travel at safe speed. Corner at slow speed only. Do not travel with boom raised. Ensure that gates on cage closed.
4. Security of worksite	Collision  Falling objects Unauthorised use	Use barricades, traffic cones and signs, etc, to prevent collision of other plant or vehicles working in vicinity with boom lift. Isolate and tag out travelling overhead cranes in area where boom lift used. Prevent access of persons into vicinity of machine when boom is raised. Store machine in secure area, lower fully, and remove key on completion.	Use signs barricades, cones, etc, to protect work area. Prevent movement of cranes. Prevent unauthorised entry. Prevent unauthorised use.

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5. Electrical hazards	Electric shock	Inspect work area to identify location of overhead electrical installations. Keep safe distance from electricity wires unless specifically authorised to access or carry out electrical work. <b>Observe safe clearance distances.</b> Ensure that electric wires are de-energised or insulated with matting and identified with “tiger tails” before work commences. Post competent observer when operating in vicinity of live electric wires.	Keep safe distance from electric catenary wires at all times. Ensure at least .5m clearance of tools or equipment from LV wires.
6. Working at heights	Instability Persons falling  Overloading of platform  Falling objects	Ensure that unit is on level surface (or is levelled with outriggers if working on uneven surfaces) before raising boom. Persons in EWP bucket must wear appropriate safety harness which will prevent them falling to ground or on to any part of the machine. Do not over-reach out beyond confines of cage when working at heights. Do not “rock” unit when platform is raised. Ensure that gates on platform guard rails are closed and locked in place. Ensure that total load in bucket of EWP (including personnel tools and equipment, and materials) does not exceed the safe working load of the unit. Do not use boom lift as a crane to lift materials – loads must be carried within confines of platform cage. Do not tie boom or platform to adjacent structures. Use lanyards, etc, to prevent tools and materials falling during use.	Ensure that unit is parked on a stable, firm surface before raising. <b>Parachute type harness</b> only to be worn – belts <b>must not</b> be used. Do not open gates when elevated. Avoid sudden or jerky movement. Do not sit, stand or climb on platform guard rails. <b>Never exceed the safe working load of the EWP.</b>  Do not place loads outside perimeter of platform,
7. Maintenance of electric boom lifts	Fire/explosion risk Instability of machine Harmful contact or exposure	Avoid shorting of terminals when inspecting or maintaining battery packs. Use approved battery charger set to correct voltage to charge batteries. Do not replace batteries with batteries that weigh less than those originally fitted to machine (used a counterweight, and critical to machine stability). Avoid spilling or contacting battery acid – neutralise spills and flush area. Battery pack must remain in upright position at all times. Do not expose batteries or charger to water or rain.	Remove rings, watches, etc before working on batteries. Ensure that total weight of battery pack is at least approved minimum. <b>Wear eye and hand protection.</b> Avoid tipping or dropping battery. Recharge in protected area only.

<p><b>PRECAUTIONS:</b> The following precautions are to be observed when operating or working in the vicinity of elevating work platforms and boom lifts.</p>				<p>Maintenance of battery packs in electric boom lifts</p>		
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