

E Light Electric Services

Aerial & Scissors Lift Safety Program

Purpose

The purpose of this section is to outline policies and procedures for the safe operations of scissors lift and aerial lifts operated by E Light Electric Services employees. It applies to all operations, programs and locations that require employees to access elevated locations and/or use aerial work platforms; in particular steel erection and inspection.

Definitions

Aerial Lift – A piece of equipment, extendable and/or articulating, designed to position personnel and/or materials in elevated locations.

ANSI – American National Standards Institute.

Lanyard – ANSI approved line designed for supporting one person, with one end connected to a safety harness and the other end attached to a suitable anchorage able to support 5,400 pounds of force. The anchorage can be a structural steel member, an approved lifeline, or other approved anchorage points.

Full Body Harness – ANSI approved body device designed for fall protection, which by reason of its attachment to a lanyard and safety line or an approved anchorage point, which will limit a fall to six (6) feet or less. Employees shall only use 10 foot self-retracting type lanyards while operating lift equipment.

Fall Protection

Full body harnesses and lanyards shall only be used, as intended by the manufacturer, for employee fall protection. Appropriate devices shall be used to provide 100% fall protection. The "D" ring on the body harness shall be positioned in the back up between the shoulder blades to minimize impact forces of the body in the event of a fall.

All fall protection equipment shall be carefully inspected prior to each use and periodically throughout the day. Safety equipment showing any signs of mildew, torn or frayed fabric or fiber, burns, excessive wear, or other damage or deterioration which could cause failure shall be permanently removed from service. All fall protection equipment shall be properly maintained and stored when not in use. This includes keeping dry and out of sunlight, away from caustics, corrosives or other materials that could cause defects.

Hard hats and safety harnesses shall be worn by employees in the bucket or platform of any aerial lift device. Other safety personal protective items may be required by either company or client safety policies. High visibility clothing is NOT required for employees, but it is recommended while working in the air.

Consideration must be given to water hazards and appropriate precautions. When 100% fall protection is employed, OSHA water safety standards are not mandated. However it is advisable to take minimum precautions such as readily available buoy and safety line, and a rescue boat.

Equipment

Aerial lift devices shall conform to ANSI Standards applicable to the type of equipment being used – bucket truck, under-bridge inspection vehicle, portable and/or self-propelled personnel lift. Aerial lift devices shall only be used for the purpose(s) intended by the manufacturer. All manufacturer and maintenance department recommendations and warnings regarding operation, capacity and safety precautions shall be strictly followed. Permanent labeling must be conspicuously posted to indicate lifting capacity and travel height.

Only devices approved for lifting personnel shall be used as aerial lifts. Loaders, forklifts or other material lift devices shall NOT be used to transport employees to elevated locations nor as work platforms. Forklifts and cranes may ONLY be used as a last resort, and then only with approved personnel baskets.

Modifications shall not be made to any aerial lift device without the expressed written authorization from the manufacturer. Buckets and bucket liners shall not be drilled, cut, welded on, etc.

Procedures

Lift equipment shall be inspected upon delivery to the jobsite, and daily prior to use. The daily inspection will include testing the controls prior to use, and all inspections shall be documented on the Aerial Lift Daily Inspection form. All inspections shall be performed in accordance with the manufacturers operators manual. A log of the inspection shall be kept with the piece of equipment or shall be filed for review in the jobsite office. Records of inspection shall be filed with job records.

Equipment that does not pass all inspection points shall be taken out of service until repairs can be made.

Before extending or raising the boom or platform, outriggers (if so equipped), shall be positioned properly and the lift will be level. Outriggers shall be placed on mud mats or other SOLID surface, and shall not be used to level the vehicle. If the lift is on unlevelled ground, the wheels shall be chocked and the parking brake set. Sufficient clearance shall be checked before raising the lift. For under-bridge units, adequate clearance beneath the boom shall be assured.

Employees shall keep both feet on the floor of the bucket or platform at all times. When the lift has to be moved, it shall only be moved when the bucket or platform is at the lowered position. For scissorlifts, this is lowered all the way down, and for aerial lifts, this is lowered to the lowest point that the operator can safely see to drive the vehicle.

Employees are required to wear full body safety harnesses with lanyards. The lanyards shall be attached to an engineered anchorage point inside the lift. Do Not wrap the lanyard around a rail and tie back onto itself. Employees are Not to anchor on structural members outside of the lift, unless exiting the lift to get on the structural members.

Platform lifts (scissorslifts) shall have a top and mid rail and a kick plate (toe board), along with an engineered anchorage point to tie off. Employees shall not climb nor stand on the mid or top rails, keeping both feet on the floor of the platform.

Tools, parts or any materials shall not be dropped or thrown from the bucket or platform. When using welding or heating equipment from the bucket or platform, the vehicle shall be protected from sparks and slag and special care shall be taken to remove flammable objects away from the lifts.

Electrical Safety

When working near electrical lines or equipment, avoid direct or indirect contact. Direct contact is body contact. Indirect contact is when the body touches or is in dangerous proximity to any object that is in contact with energized systems. Always assume lines are "live" and carry high voltage. Electrical lines can only be considered "dead" when verified by licensed electricians from the utilities department, and proper lockout and tagout has been performed.

Employees shall not position any aerial lifts closer than ten (10) feet to a power line that carries up to fifty (50) kilovolts. For each kilovolt over 50, add four (4) inches.

Employees are to be trained concerning the hazards and precautions of working near power lines.

Ensure posted warning placards are in place concerning electrical lines.

If the operator is unable to assess the clearances while operating the aerial lift, then a "spotter" must be used to observe the clearances and warn the operator.

Modifications

No lift equipment shall be modified in anyway unless the modification is approved by the lift manufacturer in writing. Racks, temporary fittings, extensions and material holding items shall not be allowed unless they are produced by the lift manufacturer.

Lifts shall only be used for the purpose they are designed per the manufacturer.

Training

Aerial lift operators shall be trained and certified to use the various lifts on the jobsites. Training shall be general safety and operation training and then also specific to the type of lift and manufacturer.

Training may be obtained from the rental companies supplying the lifts. If not available from the rental companies, contact the Director of Education and Loss Prevention for training options.

All employees operating lifts shall be issued a E Light Electric Services operator's card, to be carried at all times on their person, when working on a E Light jobsite. Retraining shall be accomplished annually or when an employee shows a lack of understanding of aerial lift safe operating procedures.

All operators of lifts shall read the operators manual for their piece of equipment once before the first use of that piece of equipment. The operators manual must be located with the equipment at times while in use.