

## Appendix F

### Safe Work Practices

#### General

- Operators shall not wear any loose clothing or any accessory that can catch in moving parts.
- Before machine is started, the operator must walk completely around the machine to ensure everyone and everything is clear of the machine.
- Articulating boom and extendable boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.
- Modifications and additions that may affect the capacity or safe operation of an aerial/scissor lift are strictly prohibited without the manufacturer's written approval. Capacity, operation, and maintenance instruction markings will be changed as necessary if the manufacturer approves a modification.
- EHS must be notified before modification takes place.
- The insulated portion (if applicable) of an aerial/scissor lift shall not be altered in any manner that might reduce its insulating value.
- Any signs, plates, or decals which are missing or illegible must be replaced.
- Welding operations on aerial/scissor lifts shall be conducted per UTK's Hot Work Permit Program.
- If the aerial/scissor lift becomes disabled, a "out of service" tag or equivalent shall be attached to the controls inside the platform in a conspicuous location.
- Aerial/scissor lift devices with noted, reported deficiencies shall not be operated until repairs are made and equipment is authorized for use.

#### Safe Work Practices Before Operation

- Consideration shall be given to the amount of wind. Follow the manufacturer's instruction regarding operation in windy conditions. As a general rule aerial/scissor lifts shall not be operated in winds exceeding 25 MPH although this can vary depending on the model of equipment.
- Guardrails must be installed and access gates or openings must be closed before raising the platform.
- Boom and platform load limits specified by the manufacturer shall not be exceeded.
- Before moving an aerial/scissor lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position.
- Consideration shall be given to the protection of bystanders via barricading, having another employee keep bystanders at a safe distance or by other means.
- Aerial/scissor lifts shall not be operated from trucks, scaffolds, or similar equipment.

#### Safe Work Practices During Operation

- Attention shall be given towards the direction of travel, clearances above, below and on all sides.
- Employees shall not sit or climb on the guardrails of the aerial/scissor lift.
- Planks, ladders or other devices shall not be used on the work platform.
- An aerial/scissor lift shall not be moved when the boom is elevated in a working position with employees in the basket, except for equipment which is specifically designed for this type of operation.
- Aerial/scissor lift shall not be placed against another object to steady the elevated platform.

- Aerial/scissor lift shall not be used as a crane or other lifting device.
- Aerial/scissor lift devices shall not be operated on grades, side slopes or ramps that exceed the manufacturer's recommendations.
- The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface.
- Speed of aerial/scissor lift devices shall be limited according to the conditions of the ground surface, congestion, visibility, slope, location of personnel and other factors that may cause hazards to other nearby personnel.
- Stunt driving and horseplay shall not be permitted.
- Booms and elevated platform devices shall not be positioned in an attempt to jack the wheels off the ground.
- The area surrounding the elevated platform shall be cleared of personnel and equipment prior to lowering the elevated platform.
- On boom-type machines, drive controls shall not be used to maneuver in close to an obstacle. The swing and boom functions shall be used for maneuvering.
- Operators are to call for assistance if the platform or any part of the machine becomes entangled.
- The operator shall maintain a clear view of the path of travel and a safe distance from other obstacles such as: debris, drop offs, holes, depressions, slopes, and overhead hazards. The following approach distances to energized electrical lines must be maintained:

<i>Voltage Range (Phase to Phase)</i>	<i>Minimum Safe Approach Distance (feet)</i>
0 to 300V	Avoid Contact
300V to 50 KV	10
>50KV to 200KV	15
>200KV to 350KV	20
>350KV to 500KV	25
>500KV to 750KV	35
>750KV to 1000KV	45

### Safe Work Practices After Operation

- Safe shutdown shall be achieved by utilizing a suitable parking area, placing the platform in the stowed position, placing controls in neutral, idling engine for gradual cooling, turning off electrical power, and taking the necessary steps to prevent unauthorized use.
- Aerial/scissor lifts shall be shut off prior to fueling. Fueling must be completed in well ventilated areas free of flames, sparks or other hazards which may cause fires or explosions.