Aerial Lift and Scaffolding Guidelines

January 2023

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Appendices

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B. Environmental Health & Safety

The following are the responsibilities of the Environmental Health & Safety Department:

- Evaluate and update the written Aerial Lift and Scaffolding Guidelines.
- Provide training as requested, for supervisors and employees.
- Collect and maintain completed inspection forms.

C. Operator

The following are the responsibilities of the operator under the aerial lift and scaffolding guidelines:

- Understand hazards specific to aerial lifts and scaffolding.
- Ensure modifications are not made to the equipment without the manufacturer's prior approval.
- Perform lift inspections before each use (See Appendices A, B, and C) and submit the completed form to the appropriate party as indicated on the form.
- Immediately report damage or irregularities of lift or scaffolding operations to their supervisor.
- Immediately report worn or damaged personal fall arrest system components to the supervisor.
- Attend and complete the required training.

III. Types of Aerial Lifts

There are multiple types of aerial lift equipment. Below are some different types of lifts and special hazards for each lift:

A. Bucket Truck

Bucket trucks and cherry pickers are types of aerial lifts that contain a bucket-like platform attached to a long arm (boom). As the arm unfolds, the platform rises.
Special Hazards: Insulating integrity, fall from above, tip over, collision, electrocution.

B. Scissor Lifts

Scissor lifts use cris-crossed braces that extend and stretch upward.
Special Hazards: Collision, fall from above, tip over, electrocution.

C. Articulated Boom Lift

Articulating boom lifts can extend up and over machinery and other obstacles and can reach elevated positions not easily approached by a straight boom lift.

Special Hazards: Insulating integrity, fall from above, tip over, collision, electrocution

D. Telescoping Boom Lift

Telescoping boom lifts are used for applications that require high-reach capability.
Special Hazards: Insulating integrity, fall from above, tip over, collision, electrocution

E. Man Lift

Manlifts consist of platforms or brackets and accompanying handholds mounted on, or attached to an endless belt, operating vertically in one direction only and being supported by, and driven through pulleys, at the top and bottom. These man lifts are intended for the conveyance of persons only. This section applies to man lifts used to carry only( )]TJ 0.002 Tc8un>>BDC T-10 (Li)6 >>BDC 0.004 Tc -0.002 Tw5.39 cTJ [(dhoDC)2

- Boom and basket load limits must be specified by the manufacturer or by any other equivalent entity.

D. Wind and Gusty Conditions

Each aerial lift will have manufacturer recommendations (either posted on the lift or in the operation manual) showing the maximum wind/gust speeds for operating the lift. (Excluding a boom truck, most aerial lifts cannot be lifted with wind or gusts exceeding 20 to 25 mph.)

E. Fall Protection

A fall arrest system is required if any risk exists that a worker may fall from an elevated position.

Exemption: Manlifts that have a metal frame completely around the working platform consisting of a 42” inch top bracing bar, the middle bar that traverses up and down to allow individuals to get into the platform, and a 3-4” inch toe board) do not require the use of fall protection. For those who do not meet these criteria, at a minimum, a fall arrest system consisting of a personal body harness and (6) six-foot lanyard will be worn while working with the lift.

Additional personal protective equipment may be requ

I. Outriggers

Outriggers are a type of stabilizing tool. If outriggers are used they should be positioned on “cribbing” pads or a solid surface.

When setting outriggers the following should be followed:

- When possible, position outriggers on a solid surface such as concrete or asphalt. Position outriggers on level ground.
- Always bring outriggers straight down, never at an angle.
- Never stand behind an outrigger or between an outrigger and another object when it is being retracted. (The center of gravity might have shifted during lifting activities and the sudden release of the outrigger could cause the vehicle to lunge.)
- If the outriggers are positioned on soil, ensure that the surface is stable and not recently backfilled.

J. Power Lines

Only aerial lifts with insulated buckets may be used for work on overhead power lines. Lifts that are not insulated must maintain at least a 15-foot distance between the boom and any energized electrical lines or source. Always treat power lines, wires, and other conductors as being energized even if they are inactive or appear to be insulated.
Operators that are not electrical workers must remain at least 15 feet from power lines.

K. Pedestrian Traffic

Operators must be constantly aware of their surroundings. Aerial lift operators are responsible for the safety of people in the vicinity of the lifting equipment. If aerial lift work needs to be conducted in the vicinity of pedestrian traffic, operators must take special precautions to ensure that the work is isolated from pedestrian traffic.

M. Dangerous Obstacles

Operators should never position themselves between overhead hazards; such as

A Driver Vehicle Inspection Report (Appendix A) shall be used before operating an aerial lift vehicle (bucket truck, crane, motorized vehicle, etc.). The completed Vehicle Driver Inspection form shall be submitted as stated at the bottom of the form.

All man lifts shall be inspected using the Manlift Inspection Certification Record (Appendix C) by a competent person at least once every quarter. This form should remain with the appropriate man lift until all available inspection slots have been filled out. Once completed, the form shall be turned in to the Environmental Health and Safety Department. These inspection forms shall be retained for a minimum of three years.

Manlifts found to be unsafe shall be removed from service immediately until properly repaired.

VI. Operating Requirements for Scaffolding

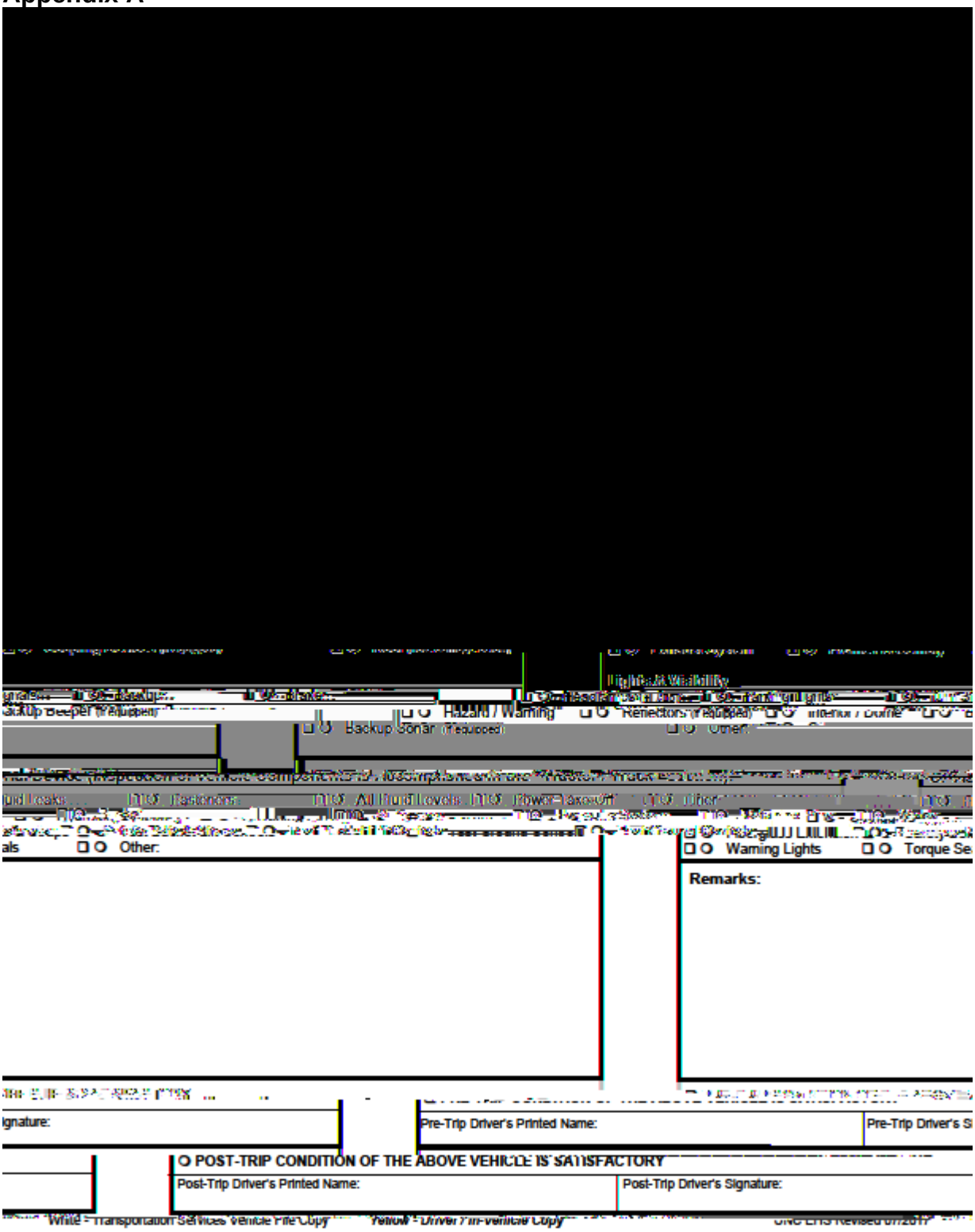
Scaffolds shall be furnished and erected for persons engaged in work that cannot be done safely from the ground or solid construction. The following general requirements shall be followed when erecting and using all scaffolding, however, additional specific conditions and guidelines shall be required depending on the type of scaffolding to be erected and utilized.

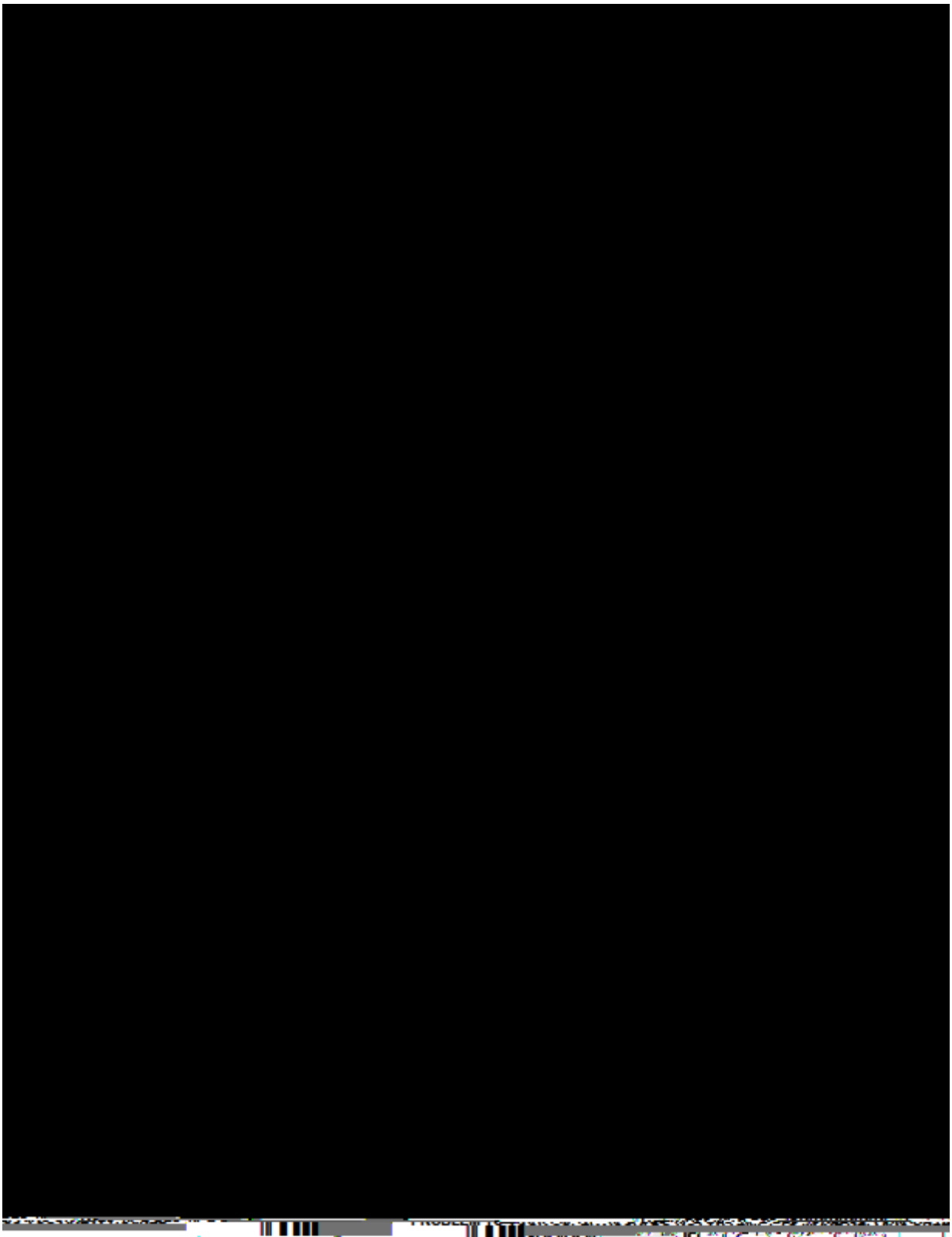
- The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling or displacement. Unstable objects such as barrels, boxes, loose brick brnes s001 Tc w 21.92 0 Td [(T)5 ba.d4f(br)-3 (i)60

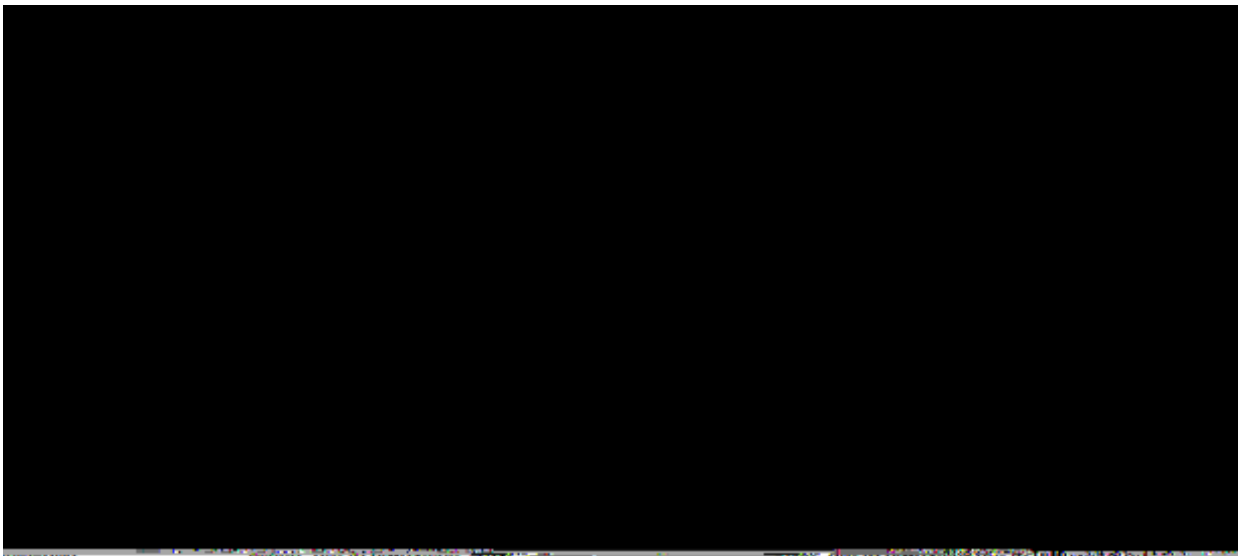
- An access ladder or equivalent safe access shall be provided.
- The poles, legs, or uprights of scaffolds shall be plumb, and securely and rigidly braced to prevent swaying and displacement.
- Materials being hoisted onto a scaffold shall have a tagline.
- Employees shall not work on scaffolds during storms or high winds, or when covered with ice or snow, unless all ice or snow is removed and planking sanded to prevent slipping.
- Wire or fiber rope used for scaffold suspension shall be capable of supporting at least six times the intended load.
- When acid solutions are used for cleaning buildings over 50 feet in height, wire rope supported scaffolds shall be used.
- Overhead protection is required for men exposed to overhead hazards. Additional personal protective equipment may be required depending on the specific hazards involved with the work being done.

The following are prohibhe c hazardsC -6 -1.ic0 (z)4 2.29 0 Td [pnCID 29 >>BDC -19.( )-10 (c)4 (l)

Appendix A


Backup Sonar (Required)
Other:
Warning Lights
Remarks:
Pre-Trip Driver's Printed Name:
POST-TRIP CONDITION OF THE ABOVE VEHICLE IS SATISFACTORY
Post-Trip Driver's Printed Name:
Post-Trip Driver's Signature:





inspection forms at all times)

illumination.

Inspector Signature	Comments	Date	Inspector Name	In

k Order immediately and reference the WO# in the ments box.

*If maintenance is needed, Call in the Wor Com

Return completed form to the Environmental Health and Safety Department

Appendix D | Locations of Aerial Lifts On UNC Campus | 1/20/2023

Location	Brand Name	Model #	Serial #	Inspecting Dept.
Kepner Hall	Genie Industries	PLC-19		