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Vehicle-Mounted Work Platforms 076

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076. VEHICLE-MOUNTED ELEVATING AND ROTATING WORK PLATFORMS. (7-1-97)

01. Scope: (7-1-97)

a. Vehicle-mounted elevating and rotating work platforms for building maintenance shall conform to all other applicable requirements of this standard, as well as the following provisions. Nothing in this standard shall be construed to prohibit better or otherwise safer conditions than specified herein. (7-1-97)

b. The requirements of this section do not apply to firefighting equipment or to the vehicles upon which aerial devices are mounted, except with respect to the requirement that a vehicle be a stable support for the aerial device. (7-1-97)

02. Definitions. For definitions of other terms used in this section, see sub-section 010 of this standard.

a. Aerial Device is any vehicle-mounted device, telescoping or articulating or both, which is used to position workmen and/or materials. (7-1-97)

b. Aerial Ladder is an aerial device consisting of a single- or multiple-section extensible ladder. (7-1-97)

c. Articulating Boom Platform an aerial device with two or more hinged boom sections. (7-1-97)

d. Extensible Boom Platform is an aerial device (except ladders) with a telescopic or extensible boom. Telescopic derricks with personnel platform attachments shall be considered to be extensible boom platforms when used with a personnel platform. (7-1-97)

e. Electric Line Truck is a truck used to transport men, tools and materials, and to serve as a traveling workshop for electric power line construction and maintenance work. It is sometimes

equipped with a boom and auxiliary equipment for setting poles, digging holes and elevating material and/or personnel. (7-1-97)

f. Insulated Areal Device is an aerial device designed for work on or near energized lines and apparatus. (7-1-97)

g. Mobile Unit is a combination of an aerial device, its vehicle and related equipment. (7-1-97)

h. Platform is any personnel carrying device (basket or bucket) which is a component of an aerial device. (7-1-97)

i. Vehicle is any carrier that is not manually propelled. (7-1-97)

j. Vertical tower is an aerial device designed to elevate a platform in a substantially vertical axis. (7-1-97)

03. General Requirements: (7-1-97)

a. Unless otherwise provided in this section, aerial devices (aerial lifts) acquired on or after July 1, 1975, shall be designed and constructed in conformance with the applicable requirements of the American National Standard for "Vehicle Mounted Elevating and Rotating Work Platforms," ANSI A92.2, including appendix. Aerial lifts acquired for use before July 1, 1975 which do not meet the requirements of ANSI A92.2, may not be used after July 1, 1976 unless they shall have been modified so as to conform with the applicable design and construction requirements of ANSI A92.2 Aerial devices include the following types of vehicle-mounted aerial devices used to elevate personnel and/or material to job sites above ground: extensible boom platforms; aerial ladders; articulating boom platforms; vertical towers; and a combination of any of the above. (7-1-97)

b. Aerial equipment may be made of metal, wood fiberglass reinforced plastic (FRP), or other material; may be powered or manually operated and are deemed to be aerial lifts whether or not they are capable of rotating about a substantially vertical axis. (7-1-97)

c. Aerial lifts may be "field modified" for uses other than those intended by the manufacturer, provided the modification has been certified in writing by the manufacturer or by any other equivalent entity, such as a nationally recognized testing laboratory, to be in conformity with all applicable provisions of ANSI A92.2 and this section, and to be at least safe as the equipment was before modification. (7-1-97)

d. When operating aerial lifts proximate to, under, over, by or near electric power lines, the requirements of this section 150 this standard shall apply. (7-1-97)

e. The following clearances shall be maintained: for lines rated at fifty-kilo-Volts (50kV) or less, the minimum clearance between the lines and any part of the aerial lift shall be at least ten (10) feet; when the lines are rated in excess of fifty-kilo-Volts (50kV), the minimum clearance between the lines and any part of the aerial lift shall be at least ten (10) feet plus zero-point-four

(0.4) inch for each kilovolt in excess of fifty-kilo-Volts (50kV), or twice the length of the line insulator, but never less than ten (10) feet. (7-1-97)

f. Where the electric power transmission or distribution lines have been de-energized and visibly grounded at the point of work, or where insulating barriers, not a part of or an attachment to the aerial lift, have been erected to prevent physical contact with the lines. (7-1-97)

g. Proximity warning devices may be used but not in lieu of meeting the requirements contained in this section. (7-1-97)

h. The owner of the lines or his authorized representative shall be notified and provided with all pertinent information before the commencement of operations near electric lines. (7-1-97)

i. Any overhead wire shall be considered to be an energized line until the owner of the line or his authorized representative states that it is deenergized. (7-1-97)

04. Specific Requirements. (7-1-97)

a. Before ladder trucks and tower trucks are moved for highway travel, aerial ladders shall be secured in the lower traveling position by the locking device above the truck cab, and the manually operated device at the base of the ladder, or by other equally effective means (e.g. cradles, which prevent rotation of the ladder in combination with positive acting linear actuators). (7-1-97)

b. Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition. (7-1-97)

c. Only trained persons shall operate an aerial lift. (7-1-97)

d. Belting off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted. (7-1-97)

e. Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position. (7-1-97)

f. A body belt shall be worn and a lanyard attached to the boom or basket when working from an aerial lift. (7-1-97)

g. Boom and basket load limits specified by the manufacturer shall not be exceeded. (7-1-97)

h. The brakes shall be set, and outriggers, when used, shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline. (7-1-97)

i. An aerial lift truck may not be moved when the boom is elevated in a working position with personnel in the basket, except for equipment which is specifically designed for this type of operation. (7-1-97)

j. Articulating boom and extensible 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. (7-1-97)

k. Climbers shall not be worn while performing work from an aerial lift. (7-1-97)

l. Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position, except as provided in sub-section 076.04.i. of this section. (7-1-97)

m. Electrical tests shall be made in conformance with the requirements of ANSI A92.2. However, equivalent DC voltage tests may be used in lieu of the AC voltage test specified in ANSI A92.2. DC voltage tests which are approved by the manufacturer or equivalent entity shall be considered an equivalent test for the purpose of this subsection. (7-1-97)

n. All critical hydraulic and pneumatic components shall comply with the provisions of the American National Standards Institute Standard ANSI A92.2, Bursting Safety Factor. Critical Components are those in which a failure would result in a free fall or free rotation of the boom. All noncritical components shall have a bursting safety factor of at least two (2) to (1) one. (7-1-97)

o. Welding Standards. All welding shall conform to the following Automotive Welding Society (AWS) Standards, as applicable: Standard Qualification Procedure AWS B3.0-41; Recommended Practices for Automotive Welding Design, AWS D8.4; Standard Qualification for Welding Procedures and Welders for Piping and Tubing AWS D10.9; or Specifications for Welding Highway and Railway Bridges, AWS D2.0; (7-1-97)

077. -- 079. (RESERVED)