

**WAC 296-45-375 Mechanical equipment, including aerial manlift equipment.** (1) General requirements.

(a) Other applicable requirements. Mechanical equipment must be operated in accordance with applicable requirements in other chapters, including chapter 296-155 WAC, Parts L, M, and R, and chapter 296-869 WAC, except that WAC 296-155-605 (1)(h) and 296-155-77100 (1)(h) do not apply to operations performed by qualified electrical employees.

(b) The critical safety components of mechanical elevating and rotating equipment must receive a thorough visual inspection and operational test before use on each shift.

Note: Critical safety components of mechanical elevating and rotating equipment are components whose failure would result in a free fall or free rotation of the boom.

(c) No vehicular equipment having an obstructed view to the rear may be operated on off-highway job sites where any employee is exposed to the hazards created by the moving vehicle, unless:

(i) The vehicle has a reverse signal alarm audible above the surrounding noise level; or

(ii) The vehicle is backed up only when a designated employee signals that it is safe to do so.

(d) The operator of an electric line truck cannot leave their position at the controls while a load is suspended, unless the employer can demonstrate that no employee (including the operator) might be endangered.

(e) Rubber-tired, self-propelled scrapers, rubber-tired front-end loaders, rubber-tired dozers, wheel-type agricultural and industrial tractors, crawler-type tractors, crawler-type loaders, and motor graders, with or without attachments, must have rollover protective structures that meet the requirements of chapter 296-155 WAC, Part V.

(2) Outriggers.

(a) Vehicular equipment, if provided with outriggers, must be operated with the outriggers extended and firmly set as necessary for the stability of the specific configuration of the equipment. Outriggers cannot be extended or retracted outside of clear view of the operator unless all employees are outside the range of possible equipment motion.

(b) If the work area or the terrain precludes the use of outriggers, the equipment may be operated only within its maximum load ratings for the particular configuration of the equipment without outriggers.

(3) Applied loads. Mechanical equipment used to lift or move lines or other material must be used within its maximum load rating and other design limitations for the conditions under which the work is being performed.

(4) Hydraulic fluids. All hydraulic fluids used for the insulated section of derrick trucks, aerial lifts, and hydraulic tools which are used on or around energized lines or equipment must be of the insulating type.

(5) Mechanical adjustment or repairs must not be attempted or performed in the field except by a person qualified to perform such work.

(6) Malfunction or needed repairs of manlift equipment must be reported to the employee responsible for such repairs as soon as is reasonably possible. Use of equipment which is known to be in need of repairs or is malfunctioning is prohibited when such deficiency creates an unsafe operating condition.

(7) When any aerial manlift equipment is parked for operation at the job site, the brakes must be set. Wheel chocks must be used to prevent accidental movement while parked on an incline.

(8) Employees must not sit or stand on the basket edge, stand on materials placed in or across the basket, or work from a ladder set inside the basket.

(9) The basket must not be rested on a fixed object(s) so that the weight of the boom is either totally or partially supported by the basket.

(10) Operations near energized lines or equipment.

(a) Mechanical equipment must be operated so that the minimum approach distances of Table 2, located in WAC 296-45-325, are maintained from exposed energized lines and equipment. However, the insulated upper portion excluding the basket/bucket of an aerial lift operated by a qualified electrical employee in the lift is exempt from this requirement.

(b) A designated employee other than the equipment operator must observe the approach distance to exposed lines and equipment and give timely warnings before the minimum approach distance required by subsection (10)(a) of this section is reached, unless the employer can demonstrate that the operator can accurately determine that the minimum approach distance is being maintained.

(c) If, during operation of the mechanical equipment, the equipment could become energized, the operation must also comply with at least one of the following:

(i) The energized lines exposed to contact must be covered with insulating protective material that will withstand the type of contact that might be made during the operation.

(ii) The equipment must be insulated for the voltage involved. The equipment must be positioned so that its uninsulated portions cannot approach the lines or equipment any closer than the minimum approach distances specified in Table 2, located in WAC 296-45-325.

(iii) Each employee must be protected from hazards that might arise from equipment contact with the energized lines. The measures used must ensure that employees will not be exposed to hazardous differences in potential. Unless the employer can demonstrate that the methods in use protect each employee from the hazards that might arise if the equipment contacts the energized line, the measures used must include all of the following techniques:

(A) Using the best available ground to minimize the time the lines remain energized;

(B) Bonding mechanical equipment together to minimize potential differences;

(C) Providing ground mats to extend areas of equipotential; and

(D) Employing insulating protective equipment or barricades to guard against any remaining hazardous potential differences.

Note: Appendix B of this chapter contains information on hazardous step and touch potentials and on methods of protecting employees from hazards resulting from such potentials.

(11) While working in aerial equipment, employees must wear a full body harness and a lanyard attached to the boom or basket, in a secure manner.

(12) No component of aerial devices must be operated from the ground without permission from the employee in the basket except in case of emergency.

(13) Operating levers or controls must be kept clear of tools, materials or obstructions.

(14) Employees must not climb into or out of the basket or platform while it is elevated or change from one basket to another on dual basket equipment, except in case of emergency or when the employees involved agree that this is the safest way to perform the work. This exception must not be used to circumvent safety rules.

(15) Existing safety rules governing the use of hot line tools, rubber and other protective equipment and safe work practices while performing work from poles or structures must also apply to work done from aerial manlift equipment.

(16) The basket must be kept clean and all tools not in use must be secured or removed.

(17) Approved warning light must be operating when the boom leaves the cradle. This light must be visible to approaching traffic when the boom is in position over any traveled area.

(18) All aerial manlift equipment must have both upper and lower controls (except ladder trucks need not have upper controls). The upper controls must not be capable of rendering the lower controls inoperable. The lower controls should be located at or near the base of the aerial structure. If the lower controls are used, the operator must have a view of the elevated employee(s) or there must be communication between the operator and the employee in the elevated aerial structure: Provided, That no employee must be raised, lowered, or moved into or from the elevated position in any aerial manlift equipment unless there is another employee, not in the elevated aerial structure, available at the site to operate the lower controls, except as follows:

(a) Where there is a fixed method permanently attached to or part of the equipment which will permit an employee to descend from the elevated position without lowering the elevated structure; or

(b) Where there is a system which will provide operation from the elevated position in the event of failure or malfunction of the primary system.

Note: This section must not be interpreted as an exception to any other rule in this chapter.

(19) Controls in aerial manlift equipment must be protected from accidental operation. Controls of the outriggers must also be protected from accidental operation. Such protection may be by guarding or equivalent means.

(20) The manufacturer's recommended maximum load limit must be posted at a conspicuous place near each set of controls and must be kept in a legible condition.

(21) The manufacturer's operator's instructional manual must be kept on the vehicle.

(22) Operating instructions, proper sequence and maintenance procedures prescribed by the manufacturer for operation of the equipment must be followed.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060 and chapter 49.17 RCW. WSR 19-13-083, § 296-45-375, filed 6/18/19, effective 8/1/19; WSR 16-10-082, § 296-45-375, filed 5/3/16, effective 7/1/16. Statutory Authority: RCW 49.17.010, [49.17].040, [49.17].050 and [49.17].060. WSR 98-07-009, § 296-45-375, filed 3/6/98, effective 5/6/98.]