

WAC 296-155-77100 Hoists, elevators, excavators, and conveyors.

(1) Definitions applicable to this section.

Accessory. A secondary part or assembly of parts which contributes to the overall function and usefulness of a machine.

Appointed. Assigned specific responsibilities by the employer or the employer's representative.

Authorized person. A person approved or assigned by the employer to perform a specific type of duty or duties or be at a specific location or locations at the workplace.

Auxiliary hoist. A secondary hoist rope system used either in conjunction with, or independently of, the main hoist system.

Axle. The shaft or spindle with which or about which a wheel rotates. On wheel-mounted cranes it refers to a type of axle assembly including housings, gearing, differential, bearings, and mounting apertures.

Brake. A device used for retarding or stopping motion.

Clutch. A means for engagement or disengagement of power.

Commercial truck vehicle. A commercial motor vehicle designed primarily for the transportation of property in connection with business and industry.

Designated. Selected or assigned by the employer or the employer's representative as being competent to perform specific duties.

Job site. Work area defined by the construction contract.

Limiting device. A mechanical device which is operated by some part of a power driven machine or equipment to control loads or motions of the machine or equipment.

Payload. That load or loads being transported by the commercial truck chassis from place to place.

Qualified person. A person who, by possession of a recognized degree or certificate of professional standing, or who, by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter and work.

(2) General requirements.

(a) You must conspicuously post rated load capacities, and recommended operating speeds, and special hazard warnings, or instruction, on all equipment. Instructions or warnings must be visible to the operator while at the control station.

(b) The operator must avoid carrying loads over people.

(c) Operators must observe signals only from duly authorized persons. Under no circumstances must you move a load until the signal is received from authorized personnel.

(d) You must guard belts, gears, shafts, pulleys, sprockets, spindles, drums, fly wheels, chains, or other reciprocating, rotating, or other moving parts or equipment if such parts are exposed to contact by employees, or otherwise create a hazard. Guarding must meet the requirements of chapter 296-806 WAC, Machine safety.

(e) You must guard or insulate all exhaust pipes where contact by employees, in the performance of normal duties, is possible.

(f) Whenever internal combustion engine powered equipment exhaust is in enclosed spaces, you must perform and record tests to see that employees are not exposed to unsafe concentrations of toxic gases or oxygen deficient atmospheres. See chapter 296-62 WAC, General occupational health standards and chapter 296-841 WAC, identifying and controlling respiratory hazards.

(g) Fuel tank filler pipe must be located in such a position, or protected in such a manner, as to not allow spill or overflow to run

onto the engine, exhaust, or electrical equipment of any machine being fueled.

(i) An accessible fire extinguisher of 5BC rating, or higher, must be available at all operator stations or cabs of equipment.

Note: For additional requirements relating to portable fire extinguishers see WAC 296-800-300.

(ii) You must transport, store and handle all fuels to meet the rules of Part D of this chapter. When fuel is transported by vehicles on public highways, department of transportation rules concerning such vehicular transportation are considered applicable.

(h) Except where electrical distribution and transmission lines have been deenergized and visibly grounded at point of work or where insulating barriers, not a part of or an attachment to the equipment or machinery, have been erected to prevent physical contact with the lines, you must operate equipment or machines proximate to power lines only in accordance with the following:

(i) For lines rated 50 kV or below, minimum clearance between the lines and any part of the equipment or load must be 10 feet.

(ii) For lines rated over 50 kV, minimum clearance between the lines and any part of the equipment or load must be 10 feet plus 4/10 inch for each 1 kV over 50 kV, or twice the length of the line insulator, but never less than 10 feet.

(iii) In transit with no load and boom lowered, the equipment clearance must be a minimum of 4 feet for voltages less than 50 kV, and 10 feet for voltages over 50 kV up to and including 345 kV, and 16 feet for voltages up to and including 750 kV.

(iv) You must designate a person to observe clearance of the equipment and give timely warning to insure that the required separation is maintained for all operators where it is difficult for the operator to maintain the desired clearance by visual means.

(v) You must consider any overhead wire to be an energized line unless and until the person owning such line or the electrical utility authorities indicate that it is not an energized line and it has been visibly grounded.

(vi) Prior to work near transmitter tower where an electrical charge can be induced in the equipment or materials being handled, you must deenergize the transmitter or perform tests to determine if electrical charge is induced on the machine.

(i) Reserved.

(j) You must take the following precautions when necessary to dissipate induced voltage:

(i) The equipment must be provided with an electrical ground directly to the upper rotating structure supporting the boom; and

(ii) You must attach ground jumper cables to materials being handled by boom equipment when electrical charge is induced while working near energized transmitters. You must provide crews with nonconductive poles having large alligator clips or other similar protection to attach the ground cable to the load.

(k) You must not make any modifications or additions which affect the capacity or safe operation of the equipment without the manufacturer's or a qualified engineer's written approval. If such modification or changes are made, you must change the capacity, operation, and maintenance instruction plates, tags, or decals, accordingly. In no case must the original safety factor of the equipment be reduced.

(3) Excavation machines.

(a) In all power driven shovel operations the person in charge must issue instructions necessary to prevent accidents, to detect and

correct unsafe acts and dangerous conditions, and to enforce all safety rules and regulations. The person in charge must also issue instructions on the proper method of using tools and handling material.

(b) Where the ground is soft or uneven, you must use timbering and planking to provide firm foundation and distribute the load.

(c) In case of a breakdown, you must move the shovel away from the foot of the slope before repairs are made.

(d) All persons must keep away from the range of the shovel's swing and must not be permitted to stand back of the shovel or in line with the swing of the dipper during operation or moving of shovel.

(e) You must not allow unauthorized persons on the shovel during operations, and the operator must not converse with other persons while operating machine.

(f) The shovel dipper must rest on the ground or on blocking during shut down periods.

(g) You must inspect shovels daily and all defects promptly repaired.

(h) You must perform oiling and greasing under safe conditions with machine at rest, except when motion of machine is necessary.

(i) All steps, running boards, and boom ladder must be of substantial construction and in good repair at all times.

(j) Operators must not leave the cab while master clutch is engaged.

(k) Fire extinguishers must be readily accessible and within reach of operator at all times.

(l) You must keep all shovel cabs clean and free of excess oil and grease on floor and machinery. You must dispose of oily and greasy rags immediately after use and not allowed to accumulate.

(m) You must not leave tools on the cab floor. You must not store spare cans of oil or fuel, and spare parts, in cabs, except in approved racks provided for that purpose.

(n) You must use mats or planking in moving shovels over soft or uneven ground.

(o) You must securely block shovels setting on steep grades or secure them with a tail hold.

(p) You must prohibit smoking while fueling or oiling machines.

(q) You must stop gasoline powered motors during refueling.

(r) You must accomplish handling of movable feed line (bologna) with insulated hooks and lineman's rubber gloves.

(s) Where cables cross roads you must elevate or place them in a trench.

(t) On all power shovels, including back-hoe types, of 1/2 cubic yard capacity or over, two persons constitute the minimum working crew. It is mandatory that one be a qualified operator of the equipment in use. The job title of the other crew member may be oiler, rigger, signal person, or a laborer. The primary purpose of the second crew member is to signal the operator when the operator's vision is impaired or obscured and to be on-hand in case of an emergency.

(i) You must properly train second-crew persons in their second-person required skills.

(ii) The second crew member must be close enough to the machine in operation to be aware of any emergency, if one arises, and to assure the machine is operated with necessary and appropriate signals to the operator.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-77100, filed 4/19/16, effective 5/20/16.]

Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.440, 49.17.060, and 29 C.F.R. 1926, Subpart CC. WSR 12-01-086, § 296-155-77100, filed 12/20/11, effective 2/1/12.]