

**WAC 296-155-615 Material handling equipment. (1) General requirements for earthmoving equipment.**

(a) Scope.

These rules apply to the earthmoving equipment. Some examples of earthmoving equipment are:

- Scrapers;
- Loaders;
- Crawler or wheel tractors;
- Bulldozers;
- Off-highway trucks;
- Graders;
- Agricultural and industrial tractors;

**AND**

- Similar equipment.

(b) Seat belts.

• Seat belts must be provided and used by all operators and passengers on all equipment covered by this section.

• Seat belts must meet the requirements of the Society of Automotive Engineers, J386-1969, Seat Belts for Construction Equipment.

• Seat belts for agricultural and light industrial tractors must meet the seat belt requirements of Society of Automotive Engineers J333a-1970, Operator Protection for Agricultural and Light Industrial Tractors.

**Exemption:** Seat belts are not required for equipment designed only for standup operation.

• You must not use seat belts on equipment that does not have rollover protective structure (ROPS) or adequate canopy protection in place.

**Exemption:** Mechanics and persons in training may ride on the equipment without a seatbelt if one is not provided.

(c) Access roadways and grades.

• You must not operate equipment on access roadway or grades unless they are constructed and/or maintained to allow for the safe operation of the equipment.

• Every emergency access ramp and berm used by an employer must be constructed to restrain and control runaway vehicles.

(d) Brakes.

Earthmoving equipment must have brakes capable of stopping and holding the equipment fully loaded.

• Equipment mentioned in (a) of this subsection, General requirements for earthmoving equipment, must have brakes meeting the specifications in Society of Automotive Engineers SAE-J237, Loader Dozer-1971, J236, Graders-1971, and J319b, Scrapers-1971.

• Brake systems for self-propelled rubber-tired off-highway equipment manufactured after January 1, 1972, must meet the applicable minimum performance criteria set forth in the following Society of Automotive Engineers Recommended Practices:

Self-propelled scrapers	SAE J319b-1971
Self-propelled graders	SAE J236-1971
Truck and wagons	SAE J166-1971
Front-end loaders and dozers	SAE J237-1971

(e) Fenders.

• If pneumatic-tired earthmoving haulage equipment has a maximum speed that exceeds 15 miles per hour, then the equipment must be equipped with fenders on all wheels to meet the requirements of Soci-

ety of Automotive Engineers SAE J321a-1970, Fenders for Pneumatic-Tired Earthmoving Haulage Equipment.

- You may, at any time, seek to show under WAC 296-155-010, Variance and procedure, that the uncovered wheels present no hazard to personnel from flying materials.

**Note:** Examples of pneumatic-tired earthmoving haulage equipment may include:

- Trucks;
  - Scrapers;
  - Tractors;
- AND**
- Trailing units.

(f) Rollover protective structures (ROPS).

For requirements pertaining to rollover protective structures and overhead protection, see WAC 296-155-950 through 296-155-965.

(g) Audible alarms.

- All bidirectional machines must be equipped with a horn, distinguishable from the surrounding noise level. This horn must be:
  - Operated as needed when the machine is moving in either direction;

**AND**

- Maintained in an operative condition.

**Note:** Examples of bidirectional machines include:

- Rollers;
  - Compactors;
  - Front-end loaders;
  - Bulldozers;
- AND**
- Similar equipment.

- You must make sure that earthmoving or compacting equipment with an obstructed view to the rear in reverse is not operated unless:
  - A reverse signal alarm distinguishable from the surrounding noise level is used;

**OR**

- An observer signals that it is safe to back up.

- If the surrounding noise level is of such amplitude that reverse signal alarms are not effective, then you must use amber strobe lights.

(h) Operators must look in the direction of travel.

The driver must look in the direction of, and keep a clear view of the path of travel, when operating equipment in reverse.

**Exemption:** See (g)(ii) of this subsection, Audible alarms, for requirements pertaining to equipment that has an obstructed view to the rear.

(i) Scissor points.

Scissor points on all front-end loaders, which constitute a hazard to the operator during normal operation, must be guarded.

(j) Tractors.

- Tractor motors must be cranked only by operators or other experienced persons.

- You must provide waterproof and comfortable seat cushions on tractors at all times when working.

- Operator must not leave controls of tractor with master clutch engaged.

(k) Winch lines.

Winch lines must be maintained in good condition and provided with spliced eye, knob or hook in working end, except under conditions where unspliced end is required.

(l) Bulldozers and carry-all gates.

- You must not initiate repairs on blade or dozer equipment unless the motor has been stopped and dozer blade is resting on the ground or securely blocked. The same applies to carry-all gates.

• Bulldozer blades and carry-all gates must rest on the ground or on blocking when machines are not in operation.

(m) Moving equipment.

Personnel must not get on or off machine while machine is in motion.

(n) Hazardous conditions.

Where excessive dust conditions are created, you must sprinkle such areas with water or an environmentally safe solution to keep dust at a minimum.

**Reference:** When dust presents a hazard, see chapter 296-841 WAC, Respiratory hazards for additional requirements.

(2) **Excavating and other equipment.**

(a) Tractors covered in subsection (1) of this section must have seat belts as required for the operators when seated in the normal seating arrangement for tractor operation.

(b) For the purposes of this part and of Part L of this chapter, the names and descriptions for measurement of dimensions of machinery and attachments must be as described in Society of Automotive Engineers 1970 Handbook, pages 1088 through 1103.

(c) You must comply with the safety requirements, ratios, or limitations applicable to machines or attachment usage covered in Power Crane and Shovel Association's Standards No. 1 and No. 2 of 1968, and No. 3 of 1969, and these requirements must also apply to cranes, machines, and attachments under this part.

(3) **Lifting and hauling equipment (other than equipment covered under Part L of this chapter).** Industrial trucks (including forklifts) must meet the requirements of chapter 296-863 WAC, WAC 296-155-605 and the following:

(a) Lift trucks, stackers, etc., must have the rated capacity clearly posted on the vehicle so as to be clearly visible to the operator. When auxiliary removable counter-weights are provided by the manufacturer, corresponding alternate rated capacities also must be clearly shown on the vehicle. These ratings must not be exceeded.

(b) No modifications or additions which affect the capacity or safe operation of the equipment must be made without the manufacturer's or professional engineer's written approval. If such modifications or changes are made, you must change the capacity, operation, and maintenance instruction plates, tags, or decals accordingly. In no case can the original safety factor of the equipment be reduced.

(c) If a load is lifted by two or more trucks working in unison, the proportion of the total load carried by any one truck must not exceed its capacity.

(d) Steering or spinner knobs must not be attached to the steering wheel unless the steering mechanism is of a type that prevents road reactions from causing the steering handwheel to spin. The steering knob must be mounted within the periphery of the wheel.

(e) All high lift rider industrial trucks must be equipped with overhead guards which meet the configuration and structural requirements as defined in paragraph 502 of American National Standards Institute B56.1-1975, Safety Standards for Powered Industrial Trucks.

(f) All industrial trucks in use must meet the applicable requirements of design, construction, stability, inspection, testing, maintenance, and operation, as defined in American National Standards Institute B56.1-1975, Safety Standards for Powered Industrial Trucks.

(g) You must not permit unauthorized personnel to ride on powered industrial trucks. You must provide a safe place to ride where riding of trucks is authorized.

(h) When a forklift truck is used for elevating workers you must specifically build a platform for that purpose and it must comply with the following requirements:

(i) The platform must be securely attached to the forks and must have standard guardrails and toeboards on all open sides.

(ii) The hydraulic system of the forklift must be so designed that the lift mechanism will not drop faster than 135 feet per minute in the event of a failure in any part of the system. Forklifts used for elevating platforms must be identified that they are so designed.

(iii) A safety strap must be installed or the control lever must be locked to prevent the boom from tilting.

(iv) An operator must be at the controls of the forklift equipment while persons are on the platform.

(v) The operator must be in the normal operating position while raising or lowering the platform.

(vi) The vehicle must not travel from point to point while workers are on the platform except that inching or maneuvering at very slow speed is permissible.

(vii) The area between workers on the platform and the mast must be adequately guarded to prevent contact with chains or other shear points.

(viii) You must visually inspect all platforms daily or before each use by the person in charge of the work being performed, and you must test them as frequently as is necessary to maintain minimum safety factors.

(ix) Whenever a truck, except for high lift order picker trucks, is equipped with vertical hoisting controls elevatable with the lifting carriage or forks, you must take the following precautions for the protection of personnel being elevated.

(A) Provide a platform secured to the lifting carriage and/or forks.

(B) Provide means whereby personnel on the platform can shut off power to the truck.

(C) Provide such protection from falling objects as indicated necessary by the operating conditions.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-615, filed 4/19/16, effective 5/20/16; WSR 07-03-163, § 296-155-615, filed 1/24/07, effective 4/1/07; WSR 04-24-089, § 296-155-615, filed 12/1/04, effective 1/1/05. Statutory Authority: RCW 49.17.010, [49.17].040 and [49.17].050. WSR 00-01-176, § 296-155-615, filed 12/21/99, effective 3/1/00. Statutory Authority: RCW 49.17.010, [49.17].040, [49.17].050 and [49.17].060. WSR 98-05-046, § 296-155-615, filed 2/13/98, effective 4/15/98. Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-155-615, filed 7/20/94, effective 9/20/94. Statutory Authority: RCW 49.17.040 and 49.17.050. WSR 86-03-074 (Order 86-14), § 296-155-615, filed 1/21/86; Order 74-26, § 296-155-615, filed 5/7/74, effective 6/6/74.]