WAC 296-155-950 Rollover protective structures (ROPS) for material handling equipment. (1) Coverage.

- (a) This section applies to the following types of material handling equipment: To all rubber-tired, self-propelled scrapers, rubber-tired front-end loaders, rubber-tired dozers, wheel-type agricultural and industrial tractors, crawler tractors, crawler-type loaders, and motor graders, with or without attachments, that are used in construction work. This requirement does not apply to sideboom pipelaying tractors.
- (b) The promulgation of specific standards for rollover protective structures for compactors and rubber-tired skidsteer equipment is reserved pending consideration of standards currently being developed.
- (2) Equipment manufactured on or after September 1, 1972, Material handling machinery described in subsection (1) of this section and manufactured on or after September 1, 1972, must be equipped with rollover protective structures which meet the minimum performance standards prescribed in WAC 296-155-955 and 296-155-960, as applicable.
 - (3) Equipment manufactured before September 1, 1972.
- (a) All material handling equipment described in subsection (1) of this section and manufactured or placed in service (owned or operated by the employer) prior to September 1, 1972, must be fitted with rollover protective structures.

Machines manufactured before July 1, 1969; Reserved pending further study, development, and review.

- (b) Rollover protective structures and supporting attachment must meet the minimum performance criteria detailed in WAC 296-155-955 and 296-155-960, as applicable or must be designed, fabricated, and installed in a manner which will support, based on the ultimate strength of the metal, at least two times the weight of the prime mover applied at the point of impact.
- (i) The design objective must be to minimize the likelihood of a complete overturn and thereby minimize the possibility of the operator being crushed as a result of a rollover or upset.
- (ii) The design must provide a vertical clearance of at least 52 inches from the work deck to the ROPS at the point of ingress or egress.
- (4) Remounting. ROPS removed for any reason, must be remounted with equal quality, or better, bolts or welding as required for the original mounting.
- (5) Labeling. Each ROPS must have the following information permanently affixed to the structure:
 - (a) Manufacturer or fabricator's name and address;
 - (b) ROPS model number, if any;
- (c) Machine make, model, or series number that the structure is designed to fit.
- (6) Machines meeting certain existing governmental requirements. Any machine in use, equipped with rollover protective structures, must be deemed in compliance with this section if it meets the rollover protective structures requirements of the U.S. Army Corps of Engineers, or the Bureau of Reclamation of the U.S. Department of the Interior in effect on April 5, 1972. The requirements in effect are:
- (a) U.S. Army Corps of Engineers: General Safety Requirements, EM-385-1-1 (March 1967).
- (b) Bureau of Reclamation, U.S. Department of the Interior: Safety and Health Regulations for Construction, Part II (September 1971).

(7) ROPS meeting the criteria set forth in SAE J1040 a and SAE J1040 b must be regarded as substantially meeting the requirements of this section, even if they do not meet all the criteria set forth in earlier criteria documents on which the present standard is based.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-950, filed 4/19/16, effective 5/20/16. Statutory Authority: Chapter 49.17 RCW. WSR 91-03-044 (Order 90-18), § 296-155-950, filed 1/10/91, effective 2/12/91. Statutory Authority: RCW 49.17.040 and 49.17.050. WSR 86-03-074 (Order 86-14), § 296-155-950, filed 1/21/86; Order 76-29, § 296-155-950, filed 9/30/76; Order 74-26, § 296-155-950, filed 5/7/74, effective 6/6/74.]