

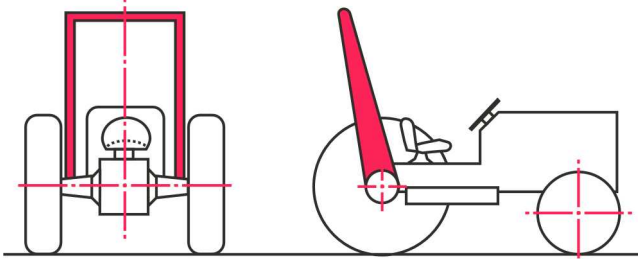
## §1926.1002

### Protective frames (roll-over protective structures, known as ROPS) for wheel-type agricultural and industrial tractors used in construction

#### (a) General.

- (1) *The purpose of this section* is to set forth requirements for frames for the protection of operators of wheel type agricultural and industrial tractors to minimize the possibility of operator injury resulting from accidental upsets during normal operation. These frames shall meet the test and performance requirements of the Society of Automotive Engineers Standard J334a-1970, Protective Frame Test Procedures and Performance Requirements, which is incorporated by reference. The incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the Society of Automotive Engineers, 485 Lexington Avenue, New York, NY 10017. Copies may be inspected at the OSHA Docket Office, U.S. Department of Labor, 200 Constitution Ave., NW., Room N2634, or at the Office of the Federal Register, 800 North Capitol St., NW., Suite 700, Washington, D.C. The standard also appears in the 1971 SAE Handbook, which may be examined in each of OSHA's Regional Offices. With respect to agricultural and industrial tractors, the provisions of §§1926.1001 and 1926.1003 for rubber-tired dozers and rubber-tired loaders may be utilized in lieu of the requirements of this section.
- (2) *The protective frame* which is the subject of this standard is a structure mounted to the tractor that extends above the operator's seat and conforms generally to Figure W-14
- (3) *If an overhead weather shield* is attached to the protective frame, it may be in place during tests: Provided, That it does not contribute to the strength of the protective frame. If such an overhead weather shield is attached, it must meet the requirements of paragraph (i) of this section.

Figure W-14. Typical Frame Configuration.



- (4) *For overhead protection requirements*, see §1926.1003.
  - (5) *If protective enclosures are used* on wheel-type agricultural and industrial tractors, they shall meet the requirements of Society of Automotive Engineers Standard J168 (July 1970), Protective Enclosures, Test Procedures, and Performance Requirements. This standard appears in the 1971 SAE Handbook and may be examined in each Regional Office of the Occupational Safety and Health Administration.
- (b) **Applicability.** The requirements of this section apply to wheel-type agricultural tractors used in construction work and to wheel-type industrial tractors used in construction work. See paragraph (j) of this section for definitions of agricultural tractors and industrial tractors.
- (c) - (i) [Reserved].
- (j) **Definitions applicable to this section.**
- (1) SAE J333a, *Operator Protection for Wheel-Type Agricultural and Industrial Tractors* (July 1970) defines **agricultural tractor** as a "wheel-type vehicle of more than 20 engine horsepower designed to furnish the power to pull, carry, propel, or drive implements that are designed for agricultural usage." Since this Part

## §1926.1002

(j)(1) 1926 applies only to construction work, the following definition of "agricultural tractor" is adopted for purposes of this subpart: "Agricultural tractor" means a wheel-type vehicle of more than 20 engine horsepower, used in construction work, which is designed to furnish the power to pull, propel, or drive implements.

(2) **Industrial tractor** means that class of wheeled type tractor of more than 20 engine horsepower (other than rubber-tired loaders and dozers described in §1926.1001), used in operations such as landscaping, construction services, loading, digging, grounds keeping, and highway maintenance.

[44 FR 8577, Feb. 9, 1979; 44 FR 20940, Apr. 6, 1979, as amended at 61 FR 9251, Mar. 7, 1996]

## §1926.1003

### Overhead protection for operators of agricultural and industrial tractors

#### (a) General.

(1) *Purpose.* When overhead protection is provided on wheel-type agricultural and industrial tractors, the overhead protection shall be designed and installed according to the requirements contained in the test and performance requirements of Society of Automotive Engineers Standard J167-1970, Protective Frame with Overhead Protection-Test Procedures and Performance Requirements, which pertains to overhead protection requirements and is incorporated by reference. The incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the Society of Automotive Engineers, 485 Lexington Avenue, New York, NY 10017, Copies may be inspected at the OSHA Docket Office, U.S. Department of Labor, 200 Constitution Ave., NW., Room N2634, or at the Office of the Federal Register, 800 North Capitol St., NW., Suite 700, Washington, D.C. The standard also appears in the 1971 SAE Handbook, which may be examined in each of OSHA's Regional Offices. The provisions of §1926.1001 for rubber-tired dozers and rubber-tired loaders may be used in lieu of the requirements of this section. The purpose of this standard is to minimize the possibility of operator injury resulting from overhead hazards such as flying and falling objects, and at the same time to minimize the possibility of operator injury from the cover itself in the event of accidental upset.

(2) *Applicability.* This standard applies to wheel-type agricultural tractors used in construction work and to wheel-type industrial tractors used in construction work. See §1926.1002 (b) and (j). In the case of machines to which §1926.604 (relating to site clearing) also applies, the overhead protection may be either the type of protection provided in §1926.604 or the type of protection provided by this section.

(b) **Overhead protection.** When overhead protection is installed on wheel-type agricultural or industrial tractors used in construction work, it shall meet the requirements of this paragraph. The overhead protection may be constructed of a solid material. If grid or mesh is used, the largest permissible opening shall be such that the maximum circle which can be inscribed between the elements of the grid or mesh is 1.5 in. (38 mm.) in diameter. The overhead protection shall not be installed in such a way as to become a hazard in the case of upset.

[44 FR 8577, Feb. 9, 1979; 44 FR 20940, Apr. 6, 1979, as amended at 61 FR 9251, Mar. 7, 1996]

## §1926 Subpart W

### Authority for 1926 Subpart W

*Authority:* Sec. 107, Contract Work Hours and Safety Standards Act (Construction Safety Act), 40 U.S.C. 333; secs. 4, 6, and 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), or 1-90 (55 FR 9033), as applicable.