

FIX-N-FAX #90

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

No. 90

Equipment Standard

Mandatory Compliance

Date: October 1976

Construction Equipment - ROPS and Seat Belts

Forestry is now required by Occupational Safety and Health Standards to install and maintain Roll-Over Protective Structures (ROPS) and seat belts on certain types of mobile equipment:

“Scrapers, tractors, front-end loaders, bulldozers, motor graders, and water wagon prime movers having brake horsepower rating above 20 and all wheel type agricultural or industrial tractors used in construction.”

This directive will require installation of ROPS and seat belts on units not presently equipped and includes nursery tractors and surplus equipment.

All future ROPS installations shall bear a label with a California State approval number installed on the specific model tractor for which the approval was granted.

All ROPS will be marked with a label warning against welding or drilling on any of the structural members.

All seat belts installed on equipment covered by this directive shall meet the requirements of Chapter 4, Section 1596, Paragraph C, of the D.I.S. Construction Safety Orders. (Automatic seat belts will not meet this requirement.)

Seat belts installed after July 1, 1971 must meet the following requirements which parallel those of the SAE Recommended Practice J386:

1. **Adjustment:** The seat belt shall be capable of snug adjustment by the occupant by a means easily within his reach, or shall be provided with an automatic locking or emergency locking tractor.
2. **Marking:** Each seat belt shall be permanently and legibly marked or labeled with year of manufacture, model or style number, and name or trademark of manufacturer/distributor.
3. **Stiffness:** To minimize “roping”, the webbing shall be woven and/or treated to produce a stiffness in the transverse direction equal to or greater than that obtained with a weave of double plain with one up, one down binder without stiffeners. This stiffness shall be effective for the usable life of the webbing. The webbing shall be flexible in the longitudinal direction to permit adjustment down to --40° F.

4. Material: The webbing material shall have a resistance to acids, alkalis, mildew, aging, moisture, and sunlight equal to or better than that of untreated polyester fiber. The webbing shall not be less than three (3) inches in width, its ends shall be protected or treated to prevent unraveling, and breaking strength shall be at least 6,000 lbs.
5. Release: The buckle shall be designed so that it can be easily released with a single motion. It shall also be capable of being released with either available mittened hand.
6. Closure: The buckle shall be designed so that it can easily be closed with a mittened hand.
7. Location: When a two-piece belt is used, the adjustment means shall be on each half of the belt to allow for the entering of the buckle on the operator.
8. Operation: Each adjustment shall be capable of being made with the use of one mittened hand.

The Mobile Equipment Management Section will assist field personnel in complying with this directive.

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