



SAFETY PROGRAM

Tractor Safety

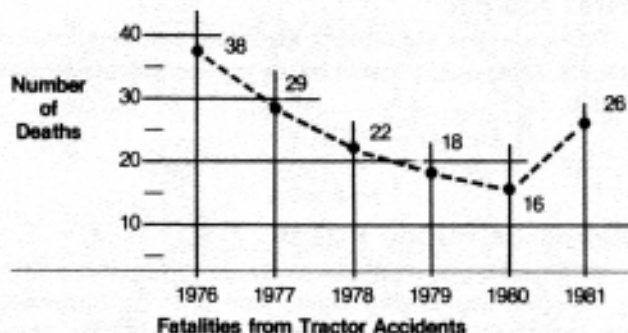
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This bulletin outlines common tractor accident and injury causes and recommends safety equipment and operating practices to help prevent them.

Tractor accidents are a major cause of farm work-related deaths and injuries. According to the National Safety Council Farm Department, tractor accidents in the United States account for an estimated 500-600 fatalities each year. Thousands more suffer disabling injuries. Millions of dollars are lost in property damage, medical bills, time off from work, reduced productivity and added insurance costs.

California has steadily reduced its tractor fatality figure from 38 in 1976 to 16 in 1980. However, the fatality rate again increased to 26 in 1981.

NEWS CLIPPING REPORTS



Tractor roll-overs account for more than half the tractor deaths while falls are another major type of tractor accident. Accidental falls involve both tractor operators and extra riders.

Thanks to roll-over protective structures (ROPS), improved shielding, hydraulic control systems, and rigorous education by manufacturers and safety leaders, tractor-related accidental injuries have decreased in number and severity in recent years. However, tractor accidents still claim many lives and are very costly. To control these losses, users should utilize safety equipment and adopt safe operating and maintenance practices.

No Extra Riders

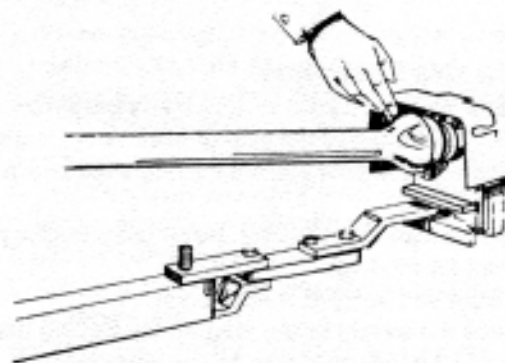
Tractors were designed for only the driver. Don't allow extra riders, young or old and don't ask to be one yourself. The only time a rider should be aboard is for instruction in how to operate the machine. Even cabs give riders only limited protection and an extra person may interfere with operation.



Observe the "no passengers" rule.

Keep PTO Guards, Shields in Place

A revolving power take-off (PTO) shaft that is unshielded or partially shielded can catch loose clothing and wrap a person or limb around it in a fraction of a second. The result can maim, cripple or kill.



Fully shielded power shaft.

- Keep a manufacturer's master shield and stub cap in place. Replace missing or damaged shields.
- Always stop the PTO if you must stand near it.

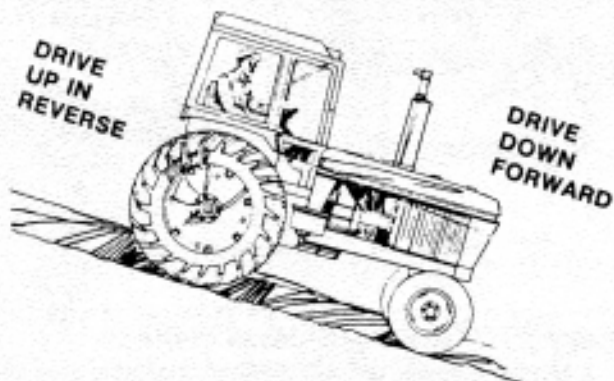
Prevent Tractor Upsets

Keep tractors and implements away from ditches, including irrigation ditches and embankment edges. Edges may be weak from weathering and break from the weight of the equipment. Implements slipping over an edge will tend to pull the tractor with them.

- When traveling downhill use lower gears.
- Backing up a steep hill may increase your stability.
- Wear your seat belt.
- Prevent sharp turns at high speeds. High speed, rough ground and narrow wheel settings greatly increase the chance of a roll-over. Always slow down before turning.

Front End Loaders

- Always keep the bucket in low position while moving.
- Avoid jerky stops and starts.
- Keep the wheel settings wide and add weight to the rear as needed.
- Travel slowly on rough uneven surfaces.
- Always lower the bucket to the ground when not in use.
- Never allow anyone to ride in the bucket.



Direction of travel up and down slopes.

Hitch to Drawbar Only

• Tractors were designed to tow loads only from the rear hitch. Never hitch to the axle or seat. When hitching to other than the drawbar you are inviting a backward upset.

- Match the load to the tractor. Never use a tractor that is too small for the load.
- Add front end weights if necessary.
- Balance the weight of the load on the trailing implement. This will minimize stress at the hitch point.

Tractor Noise

Studies have proven that tractor operators exposed to normal operation noise over a course of time lose a per-

centage of their hearing, which creates nervous tension and fatigue.

- When shopping for new tractors regard quiet operation as a plus value.
- You can buy ear muffs or ear plugs from local safety supply companies, drug stores and equipment dealers.
- Tractor operators should wear eye protection on tractors without acoustically insulated cabs.

Stuck in the Mud

• When a tractor is stuck in the mud never chain a block to the wheel to increase traction. This old practice has resulted many times in a rear overturn. If the tractor cannot be driven out of the mud, have it towed out.

• When towing with a nylon rope or cable a special hazard exists. Making a running start can stress a nylon rope or steel cable to the breaking point. The heavy metal end connections have failed and have been slung toward the towing tractor with serious injury and death resulting.

Refueling and Fire Danger

• When refueling let the engine cool down a moment; do not drip fuel onto the hot manifold and never smoke while refueling.

• Have a tri class 2A, 10-B:C rated fire extinguisher with at least 5 to 6 lbs., capacity accessible near the fuel pump.

• Protect your expensive investment by mounting a tri class fire extinguishers, with a 2A, 10-B:C rating, on your tractor.

First Aid Kit

Provide a first aid kit in a dustproof container on the tractor. This could come in handy for operators in remote areas.

Safety on Public Roads

When operating on public roads, use all available safety devices and driving skills. Use roll-over protective structures (ROPS), seat belts, safety hitch pins, slow-moving vehicle emblems (SMV), rear view mirrors, signal lights, hand signals, clearance lights, reflectors or both. Make sure all loads are properly secured. Allow traffic to pass. Be considerate of others and pull over to the shoulder when necessary. Keep your tractor and equipment in your lane and near the shoulder.

Get On, Off Safety

Never mount or dismount while a tractor is still moving. Keep all handle hoods, mounting steps and the operator's platform clean and dry. Do not jump from a tractor.

Use Tractors as Intended

Tractors were meant to be power sources, transport units and remote power sources. Tractors were never designed for recreation, for running errands or herding cattle.

16-Year-Olds

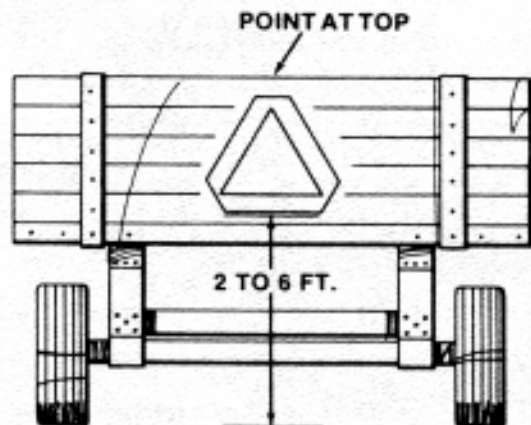
If you are under 16 years of age, federal labor law affects you. Except when working for your parent or guardian on a farm owned or operated by that person, you are not permitted to operate a tractor over 20 PTO-HP and certain other farm machinery, although these jobs can be started at age 14 with special training. Such training can be obtained through a 4-H project and Future Farmers of America programs.

Persons under 14 may be employed to do any job that is not classified as particularly hazardous if they have the written consent of a parent or guardian. There is one exception: those under 12 are not permitted to work on farms that use 500 or more man-days of farm labor during any quarter of the preceding calendar year. Check with Farm Bureau Office for up-to-date information.

OSHA Regulations

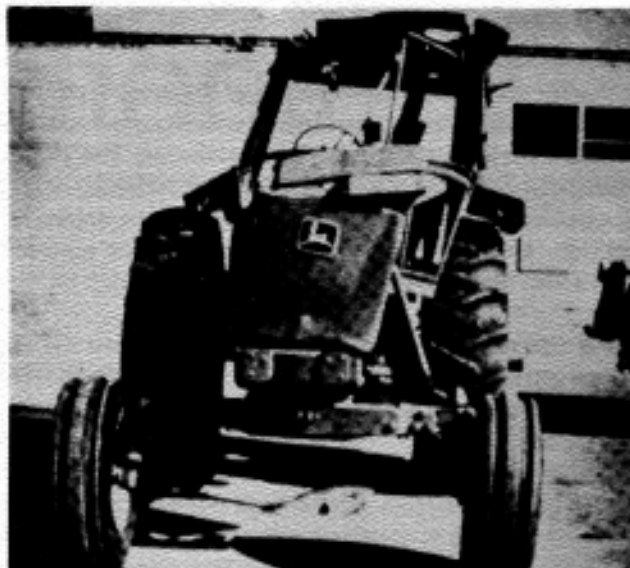
Two Federal OSHA regulations affect farm tractors.

SMV Emblem — This is a unique emblem intended for a specific purpose. It is a federal requirement that all vehi-



The SMV emblem correctly displayed.

cles traveling 25 mph or less on all roads and highways display the emblem. The material, make-up, size and color of the emblem shall be in accordance with the American Society of Agricultural Engineer's specifications. The emblem shall be displayed as near to the rear and centered left of center of the vehicle or equipment as practicable. It shall be located 2 to 6 feet above the ground, measured from the lower edge of the emblem.



This ROPS enclosure is beyond repair but did its job.

ROPS — All agricultural tractors of more than 20 horsepower are required to have roll-over protective structures. Seat belts must also be supplied and worn. Employees should be initially trained in safe tractor operation and potential hazards and their skills reviewed once annually thereafter.

Further information about these regulations can be obtained from the Farm Bureau Office in your county.

Safety Order 3664

Cal/OSHA General Industry Safety Order 3664 — Employees shall be trained the following nine tractor rules:

1. Securely fasten your seatbelt if the tractor has a ROPS.
2. Where possible, avoid operating the tractor near ditches, embankments and holes.
3. Reduce speed when turning, crossing slopes and on rough, slick or muddy surfaces.
4. Stay off slopes too steep for safe operation.
5. Watch where you are going, especially at row ends, on roads, and around trees.
6. Do not permit others to ride.
7. Operate the tractor smoothly — no jerky turns, starts or stops.
8. Hitch only to the drawbar and points recommended by tractor manufacturers.
9. When tractor is stopped, set brakes securely and use park lock if available.

Machinery Accidents

Tractor accidents have been one of the leading causes of death on farms and ranches; the most common type results from the tractor overturning sideways. The victim must be dug free or the tractor lifted off.

- Before rescuing the victim make sure the engine is shut off. All gas engines and a few diesels will shut off with a key. Most diesels have a fuel shut off knob on the dash.

- A CO₂ type fire extinguisher discharged into the air intake will stop any of these engines; a dry chemical type will not necessarily plug the air cleaner and stop the engine.

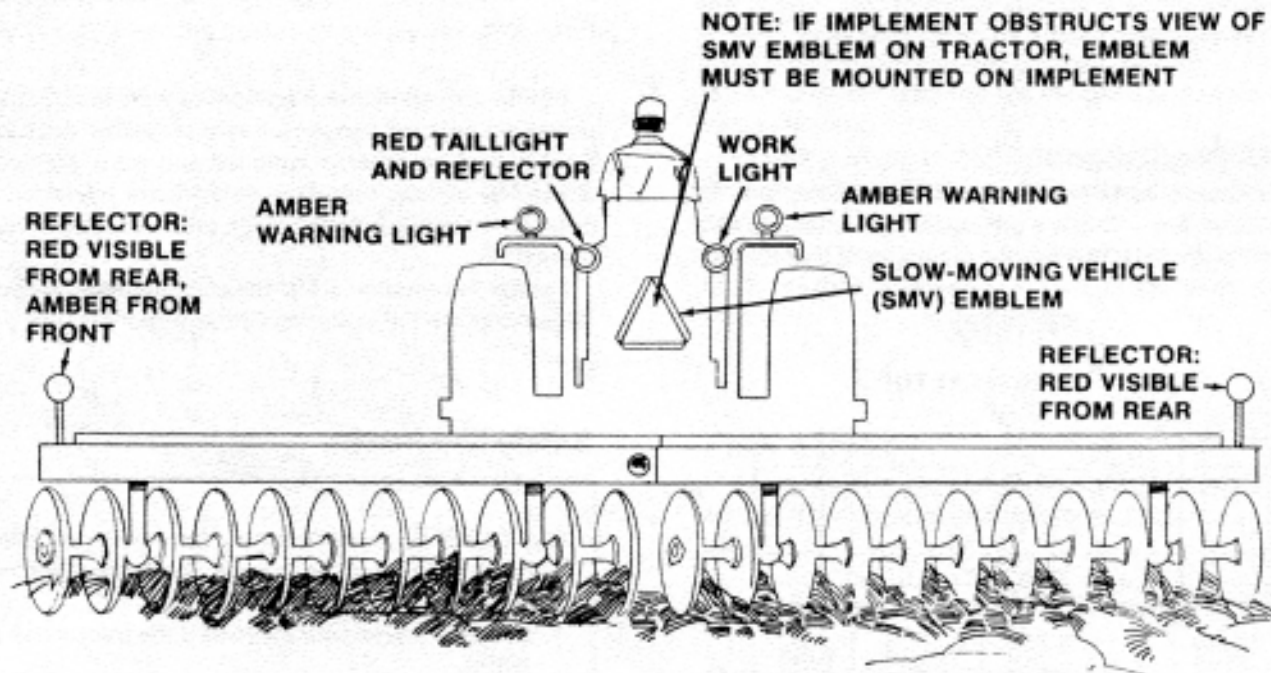
- Pulling off the coil to the distributor wire can also stop a gasoline engine. This should not be attempted if gasoline leakage is detected; a fire may result. Also, do not smoke near an upset tractor for possible gas vapors may be present.

- When digging someone out from under a tractor, be sure to block the tractor to prevent further rolling of the tractor on the victim or endangering the rescuers.

- When the victim cannot be dug out by hand, use a tractor or tow truck to pull the upset tractor off if possible. Make sure the chain or cable is fastened securely and that any bystanders stay at least a cable length away in case the cable should break.

Side and rear tractor overturns often result in a broken or crushed pelvis. Do not twist the victim. Broken bones may puncture the intestines, bladder or abdominal cavity. Shock may also be present. Usually the best position in which to transport a victim is in the position in which he was found.

Torso injuries often occur in turnover accidents. These injuries include broken ribs, crushed chest and collapsed lung. If a back injury is suspected, do not move the victim unless properly immobilized.



Recommended lighting and marking for towed equipment (check local and state regulations). Illustrations in this publication were furnished by Deere & Company, Technical Services, Moline, Ill.

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