

Job Name: \_\_\_\_\_ Job Site Location: \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

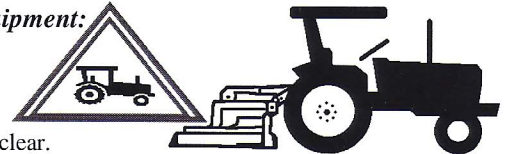
## Topic 232: Safe Operation of Mowing and Brush-cutting Equipment

**Introduction:** Mowing and brush-cutting equipment has many sharp moving parts which can be extremely dangerous if operated in a careless manner. It is vital that all operators of such equipment are fully trained for the safe operation and use of the equipment that will be used. Most accidents involving machinery of this type are due to inadequate training. Mowing and cutting implements are either PTO-driven (driveshaft) or hydraulic motor driven.

There are several types of mowing and cutting implements including the sickle bar, rotary deck, flail, and the reel type. Careful inspection of the equipment must be done prior to use to ensure that shrouds and shields are in place and that all reciprocating assemblies are intact and secure. Open cutting equipment such as the sickle bar and the reel must be operated without obstructions or spectators. In case of jamming, the cutting assembly must be bled of any stored power (such as pressurized hydraulic pumps and lines) before attempting to clear the bind. All mowing and cutting equipment must be fully shrouded or shielded, according to manufacturer's specifications, before commencing operations.

Following are important guidelines for safe operation of mowing and brush-clearing equipment:

- Machines must be started and operated only by authorized personnel.
- Operators must receive instruction and comply with the manufacturer's recommendations for machine operation, maintenance, safe work practices, and site operating procedures.
- Before starting or moving any machine, the operator must determine that personnel are in the clear.
- Operators must inspect their machines each day before starting work.
- Machine operations must be a sufficient distance from personnel and other machines to not create a hazard for any person.
- No person, other than the operator, may ride on a machine unless seated and seat belts must be provided.
- Never operate machines with defective steering, braking, or other parts/components that are necessary for safe operation.
- Defective hydraulic hoses, lines and fittings that affect the safe operation of the machine must be immediately replaced.
- Never operate machines until all guards are reinstalled, safety devices reactivated, and equipment removed after adjustments or repairs are made.
- Machine operators must start and operate machines only from the operator's station.
- Before dismounting, the machine operator must apply the parking brake, brake locks, or other equivalent means to hold the machine stationary.
- Blades or cutting implements must be turned off and lowered to the ground if the operator leaves the work station.
- If a hydraulic or pneumatic storage device can move machine elements, such as, but not limited to, blades, sickle bars, or shears, after the machine is shut down, the pressure or stored energy from the element must be discharged as specified by the manufacturer.
- Machine decks, drums and other surfaces where workers walk or stand must be constructed of or covered with a non-slip material.
- Guards must be provided on machines to protect employees from flying chunks, chips, bark, limbs and other material.
- All exposed moving parts, such as shafts, pulleys, belts, conveyers and gears on machinery and equipment must be guarded.
- Machines must be kept free of excess flammable and combustible material that may create a fire. (Clean any fuel spills prior to operation.)
- Guard all power take-off shafts with a master shield or by other protective guarding.
- Tractors must have a master shield or guard strong enough to support the operator if they get on or off the tractor using the shield as a step.
- Equipment driven by a power take-off must be guarded to protect against employee contact with rotating parts of the power drive system. Where power take-off driven equipment requires removal of the tractor master shield, ensure the equipment includes protection from that portion of the tractor power take-off shaft that protrudes from the tractor.
- There must be signs on tractors and power take-off driven equipment to remind operators to keep safety shields in place.
- Guard the mesh or nip points of all power driven gears, belts, chains, sheaves, pulleys, sprockets, and idlers with protective shield.
- Guard all revolving shafts, including projections such as bolts, keys, or set screws to protect against employee contact with rotating parts.
- All machine engines must be off during inspection or repair except where necessary for adjustment or checking fluids. When a moving machinery part presents a hazard during servicing or maintenance, stop the engine, disconnect the power source, and wait for all machine movement to stop before proceeding.



**Conclusion:** Mowing and brush-cutting equipment comes in many different sizes and types for an assortment of applications. However, if operated in a careless manner, machinery of this type can cause serious injury. Follow these guidelines for safe mowing and brush-cutting operations.

### Work Site Review

Work-Site Hazards and Safety Suggestions: \_\_\_\_\_

Personnel Safety Violations: \_\_\_\_\_

Employee Signatures:

(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)

_____	_____	_____
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_____	_____	_____
_____	_____	_____
_____	_____	_____

These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.