



**Farm Safety Association**  
**March 2000**  
**Tailgate-Mowers**

## **Agricultural/Industrial mower safety**

**Instructor:** *The following script can be used to deliver a 15-minute training session to employees. You may wish to have equipment on hand to point out safety features and demonstrate correct operating procedures.*

*The text emphasizes important points related to agricultural/industrial mower safety. It is suggested that you try to stay strictly on topic. Obviously, you will need to be prepared to answer questions.*

### **POINTS TO EMPHASIZE:**

- **Operators need to be thoroughly familiar with mowing equipment—its operating characteristics, capacity, and safety features.**
- **Work sites need to be prepared in advance.**
- **Operators are responsible for their personal safety *and* that of others.**

#### **Know your machine**

Safe use of agricultural and industrial mowers depends on gaining an understanding of each machine's capacity and operating characteristics. For example, you need to find out which materials a particular unit can cut safely.

Study the operator's manual in detail before starting to use equipment. You must know how to use the mower, tractor, and various accessories. Determine the purpose of all the controls, gauges, and dials. Learn the safe speed, slope capabilities, braking and steering characteristics, turning radius, and operating clearances.

Confirm that all guards, shields, and safety signs recommended by the manufacturer are installed. Study the danger, warning, and caution decals affixed to the machine.

#### **Don't operate a machine with missing or damaged protective devices.**

Before the start of each workday, make the following checks:

- Repair or replace any loose, broken, missing, or damaged parts on both mower and tractor.
- Sharpen or replace cutting blades as recommended by the manufacturer.

Damaged blades do a poor job, and can cause dangerous imbalance.

- Make sure that all guards and shields are in place and tightly fastened.
- Check tractor and mower hydraulic systems. Have any leaks or damaged parts repaired.

#### **Prepare the work area**

Look for any condition that might be hazardous—ditches, potholes, drop-offs, steep slopes, stumps, etc. Remove any objects which could be thrown by the mower. Remember that obstacles are harder to see in tall grass, weeds, or brush. Check for overhead clearance when operating boom or wing-type mowers.

Determine the best and safest way to proceed with cutting. Consider the height and type of material to be mowed, and the terrain over which you must operate. Plan a pattern that will allow you to travel straight forward as much as possible.

#### **Protect yourself**

Steel-toed safety footwear is mandatory. Full length, close-fitting clothes should be worn. A hat, safety eyewear, hearing protection, and gloves round out the proper garb for this type of work.

#### **Watch out for others**

Make sure no one is under, on, or near the machinery. Let other workers and bystanders know you will be starting up. **Under no circumstances should children or pets be anywhere near the work area—NO RIDERS!** If anyone comes near the area while you are mowing, shut off the equipment. An object hurled by a mower could cause serious or fatal injury.

#### **Safe mowing practices**

1. Be sure the transmission is out of gear and the mower blade clutch disengaged before starting the engine.
2. Engage the mower drive at low engine RPM

and the equipment at maximum cutting height. Check for excessive vibration and unusual noises. If there is any indication of trouble, shut the machine down and carry out an inspection. Mower blades may continue to rotate for some time, so wait until *all* movement has stopped before leaving the tractor seat. Block the raised mower before inspection.

3. Raise speed to rated RPM, and lower the mower to the desired working height.
4. Proper ground speed will depend on the height, type and density of material to be cut, and the nature of the terrain.
5. Slow down on slopes and when turning sharply to avoid a rollover. Be alert for holes or other hidden dangers.
6. With under mount, rear mount, pull-type, and wing mowers, always try to mow down slopes, never up or across the face.
7. With side mount, offset, and sicklebar mowers, always mow across the slope with the mower on the uphill side. Never operate with the mower pointed downhill. Avoid turning uphill quickly or sharply with this class of mowers.
8. Use extreme caution when operating on very uneven terrain. Ground speed should be slow, and turns wide and gradual.

9. Pass diagonally through sharp dips. Avoid sudden drop-offs to prevent "hanging up" of the tractor and mower.
10. Extreme caution is required when mowing ditch banks. If a wing or side mount mower hits an obstruction, the front of the tractor will usually swerve toward the ditch.
11. Do not mow in reverse unless specifically recommended in the operator's manual. Always look behind *before* backing up. Small children or bystanders may have strayed into the area without your knowledge.
12. Keep feet and hands away from v-belts, shafts, and other moving parts. In fact, the mower should not be running unless the operator is sitting on the seat.
13. Follow recommended shutdown procedures before leaving the mower. Set the brakes, disengage power to the mower, turn off the engine, and remove the key. Never leave a mower on a slope.

**Are there any questions?**

**Finally, let's take a moment to review some of the "Do's" and "Don'ts" of agricultural and industrial mower safety.**

<b>DO:</b>	<b>DON'T:</b>
Learn which materials the mower you are using can safely cut.	Operate a machine without all guards and shields in place.
Remove obstacles from the work site before starting to mow.	Allow children, bystanders, or pets in the work area.
Wear safety footwear and other protective gear.	Turn uphill when mowing on a slope.

The information and recommendations contained in this publication are believed to be reliable and representative of contemporary expert opinion on the subject material. The farm safety Association Inc. does not guarantee absolute accuracy or sufficiency of subject material, nor can it accept responsibility for health and safety recommendations that may have been omitted due to particular and exceptional conditions and circumstances.

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Farm Safety Association Inc.  
22-340 Woodlawn Road West, Guelph, Ontario N1H 7K6 (519) 823-5600

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