



Lawn Care: Tractor Safety

Objective: To promote the safe use of compact tractors.

How to Use This Training Module – Steps to Success

- Read the operator's manual and understand tractor operation and safe practices.
- Ask your supervisor to point out the safety features on tractors.
- Ask your supervisor to demonstrate the safe use of tractors and their maintenance.
- Become familiar with the personal protective equipment (PPE) recommended when operating a tractor.
- Discuss common tractor accidents and ways to prevent them with your supervisor.
- Review the important points in the Review section of this module.
- Take a quiz — available at <http://connect.ag.vt.edu/safe-tractor> — to check your understanding of tractor safety.



Safety Tips for Operating a Tractor

- Always wear personal protective equipment such as hard hat, goggles or face shield, work gloves, safety footwear, and hearing protection when operating a tractor.
- Do not allow any riders on a tractor.
- Use tractors with a rollover protective structure whenever possible. The ROPS protects the tractor operator during tractor overturns.
- Always use the seatbelt when operating a tractor with ROPS.
- Read the operator's manual and understand the operation and safety features on the tractor.
- Clear the area of loose items (rocks, cans, wire, toys, etc.) before starting to mow.
- Be alert and watch for moving vehicles, people, and pets while operating a tractor.
- Avoid mowing too close to trees.
- Reduce speed when going over holes and bumps and when operating on embankments or taking sharp turns.
- Stay clear of ditches and ponds.

Background

Most tractors used in landscaping, lawn care, and golf course maintenance are compact tractors in the 20 to 40 horsepower range. Although these tractors are considerably smaller than farm tractors, they are susceptible to the same types of accidents, with potential for serious injuries or deaths. Causes for such serious accidents are often the same in both cases, and therefore, the steps to take to avoid the accidents are the same.

- Use the same low/slow gear when going up or down a hill.
- Make sure the path is clear when reversing a tractor.
- Disengage mower blades before crossing gravel patches.
- Do not drive compact tractors on streets or highways. Their small size makes them difficult to see.
- Never leave the operator’s seat while an attachment is running.
- Never operate a compact tractor under the influence of drugs or alcohol or while using a cell phone or music listening device.

Starting and Stopping Procedures

Consult the operator’s manual for proper starting and stopping procedures.

One of the most dangerous power transfer mechanisms on a tractor is the power takeoff. Report a missing or damaged PTO shield to the person in charge of equipment maintenance. Do not operate the tractor without a shield or with a damaged shield. The following safety practices may help to prevent the most common PTO accidents.

- Wait for all moving parts to stop before dismounting the tractor.
- Keep all parts of the PTO shielded.
- Periodically check the PTO shaft shields by spinning or rotating them to make sure they are not stuck to the shaft. **CAUTION: This should only be done with the engine turned off.**
- Never step over a rotating PTO shaft.

- Do not wear loose clothing near a rotating PTO. Make sure shoelaces are tied and long hair is secured.

Maintenance Checks

- Check the fuel level. Never refuel when the engine is hot or when the tractor is in a poorly ventilated area.
- Check the coolant level of liquid-cooled engines regularly. Do this only when the engine is cold.
- Check the battery’s electrolyte level. Make sure there are no open flames or sparks near the tractor when doing this.
- Adjust the tractor seat for the operator’s comfort.
- Check tire wear and adjust tire pressure, tractor weights, and cutting height for operation.
- Never disconnect (or bypass) factory-installed safety features.
- Make sure the brakes and lights are working.

Review

- Always wear PPE that are appropriate for operating a tractor.
- Never allow riders on tractors.
- Employ safe practices when operating a tractor.
- Employ safe practices when operating power takeoff.
- Follow proper maintenance procedures for tractors.

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