AE604



Safe Tractor Operations: Tractor Operator Checklist¹

Serap Gorucu, Carol J. Lehtola, and Charles M. Brown²

An operator checklist is provided at the end of this publication. This checklist is designed so that it can be kept as a record of a tractor operator's training.

Safe and competent tractor operators are important to agriculture. Incidents that cause injury and death and damage tractors, equipment, or crops are costly.

Many tractor incidents can be prevented by putting safer drivers on safer tractors in a safer environment. Safer tractor operations should be the goal of owners, managers, supervisors, and tractor operators.

All agribusinesses that fall under the jurisdiction of the Occupational Safety and Health Administration (OSHA) must meet the following requirement:

- All tractor operators shall be informed of certain safe operating procedures when first assigned to operate a tractor and at least annually thereafter. These points are:
 - Securely fasten your seat belt if the tractor has a ROPS.
 Where possible, avoid operating the tractor near ditches, embankments, and holes.
 - Reduce speed when turning, crossing slopes, and moving on rough, slick, or muddy surfaces.
 - Stay off slopes too steep for safe operation. If necessary, back up a slope and drive forward going downhill.

- Watch where you are going, especially at the end of rows, on roads, and around trees.
- Do not permit others to ride.

Tractor Operator Checklist

Directions: This checklist is designed to evaluate a tractor operator's abilities to safely maintain and operate a tractor.

Mark (X) in the Yes column if the operator can perform the activity, or in the No column if the operator cannot perform the activity. Mark the Not Applicable (N/A) column if the activity is not appropriate for this tractor or operation.

Make of Tractor	
Model	

- 1. This document is AE604, a publication of the Department of Agricultural and Biological Engineering, UF/IFAS Extension. Original publication date June 2024. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication. © 2024 UF/IFAS. This publication is licensed under CC BY-NC-ND 4.0.
- 2. Serap Gorucu, assistant professor, Department of Agricultural and Biological Engineering; Carol J. Lehtola, professor emerita (deceased), Department of Agricultural and Biological Engineering; and Charles M. Brown, writer and editor, research communications, University of Florida Transportation Institute Technology Transfer Center (UFTI-T2), UF Herbert Wertheim College of Engineering; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Andra Johnson, dean for UF/IFAS Extension.

Activity or Condition		No	N/A
Personal Safety Precaution			
Only operate the tractor if you are physically and mentally alert.			
Wear close-fitting clothes and proper shoes.			
Eat and drink in moderation, and do not operate the tractor if you have been drinking alcohol or taking drugs or medication.			
Use basic hand signals.			
Preparing the Tractor and Equipment for Safer Operation			
Do not operate the tractor in closed buildings.			
Check the location and condition of the fire extinguisher.			
Check the location and condition of the first aid kit.			
Read and understand decals on the tractor.			
Make sure that the shield for the PTO and other parts are in place.			
Keep steps and platform free of dirt, grease, and debris.			
Check if the slow-moving vehicle emblem is in place, clean, and not faded.			
Test lights to be sure they are working.			
Check for loose tools and parts.			
Clean the windows.			
Read and understand all controls.			
Check the condition and pressure of all tires.			
Check oil level; add oil as needed.			
Check coolant level; add coolant as needed. Do not remove radiator cap when hot.			
Check the battery electrolyte level and add battery water as needed. Do not use matches around the battery and do not smoke.			
Check, clean, coat, and tighten battery connections.			
Clean and oil PTO shaft and splines.			
Clean, connect, and disconnect hydraulic lines.			
Connect and disconnect electrical connections.			
Locate all grease fittings and clean and lubricate them.			
Refuel the tractor, making sure that the engine is cool. Do not smoke.			
Adjust wheel width.			
Add or remove weights.			
Check if equipment has been properly serviced and adjusted.			
Starting, Operating, and Stopping Tractor and Equipment			
Never operate the tractor from the ground.			
Make sure that the area is clear of people, pets, and obstacles.			
Adjust seat for comfort.			
Start the tractor.			
Check gauges for proper readings.			
Listen for unusual sounds and shut off the engine if you hear any.			
Check brakes.			
Warm engine before applying a heavy load.			
Raise, lower, and extend the drawbar.			
Check hydraulic controls for proper operation.			

Activity or Condition	Yes	No	N/A
Engage PTO slowly; check for proper operation.			
Operate equipment at proper forward speed.			
Operate equipment at proper PTO speed.			
Watch and listen to equipment; shut off power at the first sign of a malfunction.			
Do not unclog, adjust, or service equipment while it is running.			
Observe all traffic rules when traveling on the road.			
Lock brakes together for high-speed travel.			
Shift gears properly.			
Watch for obstructions in the field.			
Back out slowly and watch behind.			
When stuck, back out or have the tractor towed.			
Leave the tractor in a low gear going down hills.			
Cool engine, then shut it off.			
On the following lines, add additional specific checklist items important for your workplace.			
Tractor Operator Instructions			
1. Securely fasten your seat belt 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 moving on rough, slick, or muddy surfaces.			
4. Stay off slopes too steep for safe operation. If necessary, back up a slope and drive forward going dow	nhill.		
5. Watch where you are going, especially at the end of rows, on roads, and around trees.			
6. Do not permit extra riders.			
7. Operate the tractor smoothly—no jerky turns, starts, or stops.			
8. Hitch only to the drawbar and hitch points recommended by the manufacturer.			
9. When the tractor is stopped, set brakes securely, and use park lock if available.			
Tractor Machinery Certification Record			
(Employee's Name)			
is certified to operate the following tractors or equipment:			
1			
2			
3			

Supervisor

Date