

## Training Module: Safely Starting and Stopping a Tractor

**Objective:** To be able to start and stop a tractor the proper way.

**Trainer's Note:** Have an experienced tractor operator demonstrate the proper techniques for safely starting and stopping a tractor. An extra rider is only allowed for training purposes.

### Background

Before mounting the tractor, make sure guards and shields are in place and in good working condition. Use provided handrails for mounting and dismounting. Adjust the operator's seat for fit and easy access to controls.

Before starting the engine remember to:

- Place the gearshift lever in "neutral" or "park."
- Place all hydraulic controls in neutral.
- Disengage the PTO.
- Apply the brakes.
- Depress the clutch pedal.



Tractors will start in gear if normal starting circuitry is bypassed. Start the engine from the operator's seat with the transmission in park. Do not start the engine by shorting across starter terminals. **Never** start the engine while standing on the ground.

If jumper cables are needed to start the engine, make sure polarity is correct. Reversed polarity will damage electrical system. Always connect the positive cable first and then the negative cable. Avoid sparks around the battery because escaping gas can cause an explosion. Avoiding sparks is difficult, so position the ground connection away from battery. This will help keep sparks away from the battery. Follow the instructions in the tractor operator's manual. Always wear eye protection when working around batteries.

Stopping the tractor safely involves more than just applying the brakes and turning off the engine. Use the following safety suggestions to avoid accidents:

- Apply the brakes evenly.
- Disengage the PTO.
- Lower all hydraulically powered equipment to the ground.
- Put the gearshift lever in "park" or "neutral", and set the brakes.
- Turn the ignition key off and remove it to prevent tampering or accidental starting.

### **Additional Safety Hints:**

- Keep a copy of the operator's manual on the tractor.
- To prevent falls, keep the surface area of the tractor free of oil, grease, and mud.
- Keep trash away from the exhaust system to prevent a fire.
- Keep tires properly inflated.
- Maintain control lights and gauges.
- Ventilate to avoid asphyxiation, when operating tractors indoors.

### **Review The Following Points**

- No extra riders (except for specific training purposes).
- Never start the engine by shorting across starter terminals.
- When jump starting an engine, avoid sparks around the battery, and wear eye protection.
- Always apply brakes evenly and disengage the PTO before when stopping the tractor.

**True or False Answer Key**

1. T, 2. T, 3. T, 4. T, 5. F

## **Safely Starting and Stopping a Tractor Quiz**

**True or False**

**Name** \_\_\_\_\_

- |  |   |   |
|--|---|---|
| 1. Never start the engine by shorting across starter terminals.                      | T | F |
| 2. If jumper cables are needed to start the engine, avoid sparks around the battery. | T | F |
| 3. Follow the instructions in the operator's manual.                                 | T | F |
| 4. Never start the engine when standing on the ground.                               | T | F |
| 5. To stop the tractor just apply the brakes and quickly shut off the engine.        | T | F |