

## Training Module: Loader Safety

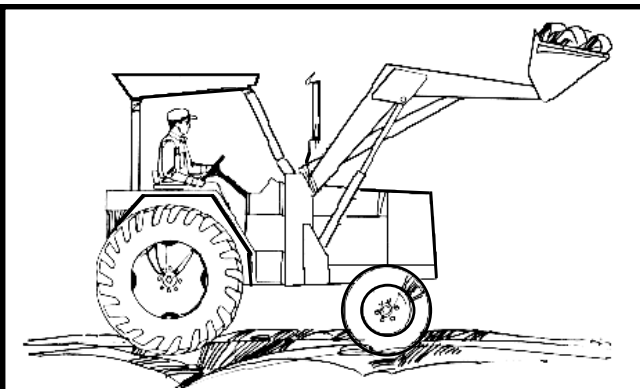
**Objective:** To be able to operate a tractor loader according to safe standards.

**Trainer's Note:** For this training session ask an experienced worker to demonstrate the equipment. Trainees should practice moving materials with the tractor loader. Each worker who uses the tractor loader should be checked to ensure that they are qualified to operate the equipment.

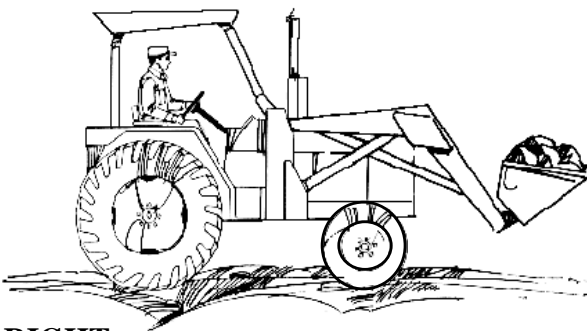
### Background

Tractor loaders are helpful for moving farm materials from one place to another, however, when fully loaded, they make the tractor “front heavy” and could cause an accident. Only install loaders designed specifically for the tractor to reduce the chances of an accident.

An elevated loader changes the center of gravity of the tractor and can cause the tractor to tip under conditions that would normally be safe. Also, tractor loaders often operate in confined areas that make short turns unavoidable. Both of these factors make loader-equipped tractors susceptible to rollovers caused by centrifugal force. (Centrifugal force: the force that resists change in direction).



**WRONG:**  
Bucket high while transporting.



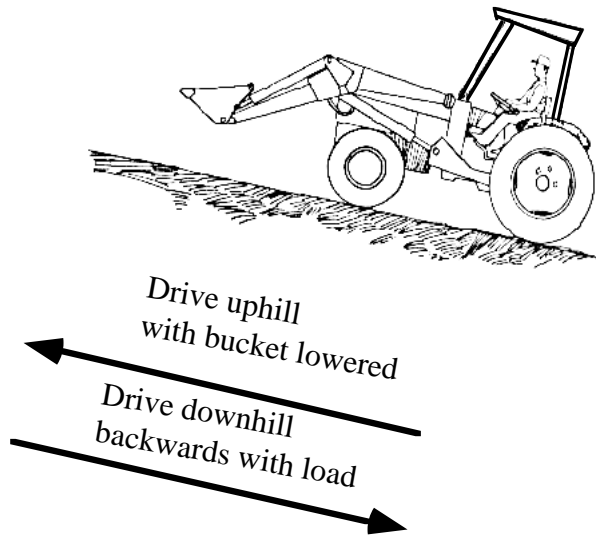
**RIGHT**  
Bucket low while transporting

### To avoid a rollover:

- Watch carefully for obstructions and depressions.
- Handle the rig smoothly, avoiding quick starts, stops, and turns.
- Keep the bucket as low as possible when turning and transporting.
- Ballast the tractor loader combination as recommended by the manufacturer, or wheel weights attached to the rear axles or wheel rims. Weight may also be carried by a three-point hitch.
- The width of the tractor should be adjusted to as great a width as is practical.
- Use a front end loader only for its specific purpose. It should not be used to remove fence posts, towing or knocking something down.

### Additional Safety tips for working with loaders:

- Lower loader arms slowly and steadily.
- Keep travel speed slow.
- When turning, adjust for the extra length of the loader.
- Raise the loader in an area free of overhead obstacles, such as power lines.
- Keep the loader low while carrying loads and/or while driving on an incline.
- Drive loaded buckets uphill rather than downhill, and stay off steep slopes to prevent bouncing and loss of control.
- Back filling (replacing dirt), can cause new construction to collapse.
- Watch for falling rocks and cave-ins when undercutting.
- Stay away from the outer edge of banks and slopes.
- Load the bucket evenly from side to side and keep within the normal capacity of the tractor and loader.
- Use the recommended amount of ballast to give the tractor extra stability.
- Never tow a tractor by attaching a tow chain or cable to the loader.
- Never allow people to ride in the bucket.
- A load should not be moved or swung with people in the work area.
- Operate controls only when seated on the tractor.
- Remove the loader from the tractor when loader is not in use.
- Physically block the bucket and/or arm if they have to be raised for maintenance.
- Never walk or work under a raised loader.
- Put the loader on the ground, turn off the engine/electric power, then dismount.



### Bale handling tips:

- Round bales should not be handled without the attachments recommended by the manufacturer, such as, bale forks, spears, grapples, or huggers.
- Bales that exceed the weight limitations of the loader should not be handled by the loader.
- Carry the bale slowly and as low as possible to the ground.
- When handling round bales on a slope, always approach the bale with the tractor facing uphill.
- Never use the tractor loader to stop a rolling bale.

### Review The Following Points

- Tractor loaders can be dangerous because they effect a tractor's center of gravity.
- Watch out for others when working with a loader.
- If the tractor is suitably ballasted and adjusted for the load being handled, many accidental rollovers can be prevented.
- Operate controls only when seated on the tractor.
- Keep travel speeds slow.

### True or False Answer Key

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

## Loader Safety Quiz

**True or False**

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

- |  |   |   |
|--|---|---|
| 1. The bucket should be kept as low as possible when turning and transporting. | T | F |
| 2. Stay away from the outer edge when working along high banks and slopes.     | T | F |
| 3. Never walk or work under a raised loader.                                   | T | F |
| 4. Drive loaded tractors with the bucket pointing downhill rather than uphill. | T | F |
| 5. Raised loaders can be dangerous because the center of gravity is changed.   | T | F |