



Safe use of skid-steer loaders on the farm

Mark A. Purschwitz

Many farm operators find the skid-steer loader extremely useful, especially for handling manure. The vehicle's maneuverability is unmatched by traditional tractor-loader combinations.

Because skid-steer loaders differ from farm tractors in everything from steering to mounting and dismounting, some operators are not aware of the unique hazards involved in operating them. This bulletin is intended to alert you to the primary risks of using a skid-steer loader and to encourage safe vehicle operation. It is not intended to replace the operator's manual and therefore cannot cover every possible hazard.

The operator

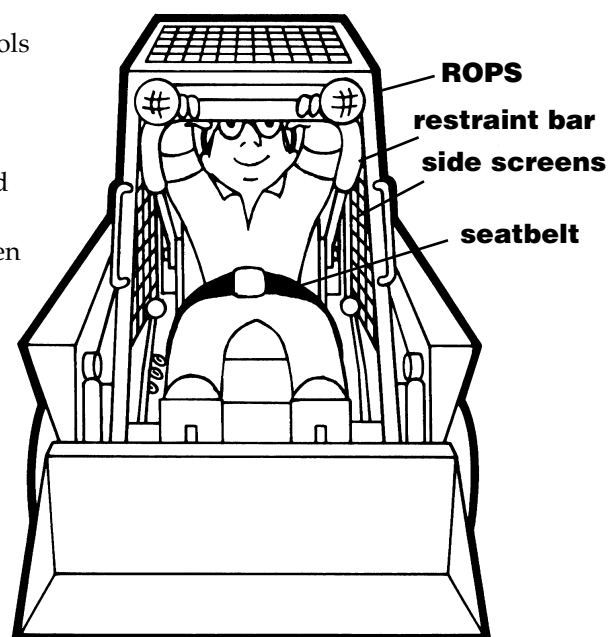
A skid-steer loader should never be operated by children or untrained adults. It is a powerful machine that requires understanding and skillful operation.

Always read the operator's manual before operating a skid-steer loader because it provides specific information about your particular machine. If the manual is not available, obtain a copy from your dealer. Warnings and other safety information in the operator's manual could save a life or prevent serious injury. Reading the operator's manual is the first step to becoming a skillful, safe operator.

The loader's warning decals also provide important information. It is a good practice to clean the loader periodically, especially when you use it for handling manure. Preserve the decals, and keep them visible.

Young children should not be allowed to operate skid-steer loaders. Just because they can physically manipulate the controls does not mean they have the judgment to handle new or unexpected situations. Most agricultural safety specialists and child development experts recommend waiting until children reach age 14 before permitting them to operate tractors.

As with any other equipment, thoughtful decisions must be made as to when young people are mature enough to operate skid-steer loaders competently. Teenagers must be trained and understand the hazards involved. According to federal labor law, young people ages 14–15 must have successfully completed a tractor and machinery operation certification course before they can operate a skid-steer loader on a farm run by someone other than a parent or legal guardian.



Safety equipment is extremely important.

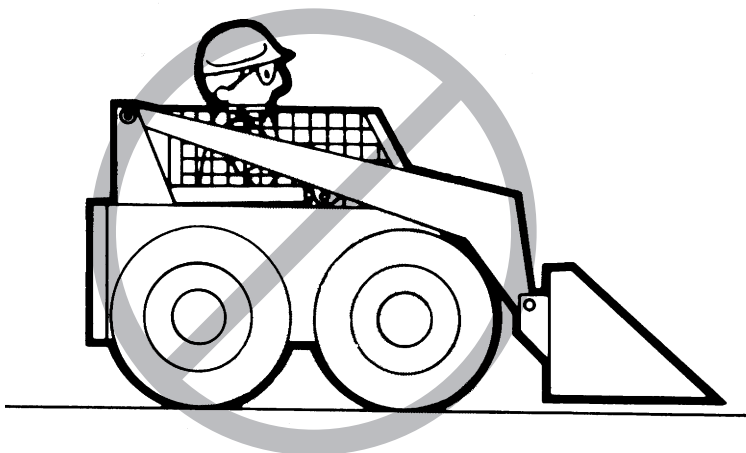
Necessary safety equipment

Rollover Protective Structures (ROPS), Falling Object Protective Structures (FOPS), side screens, and seatbelts or operator restraint bars are all necessary for safety. Without them, an operator is at substantial risk of being seriously injured or killed.

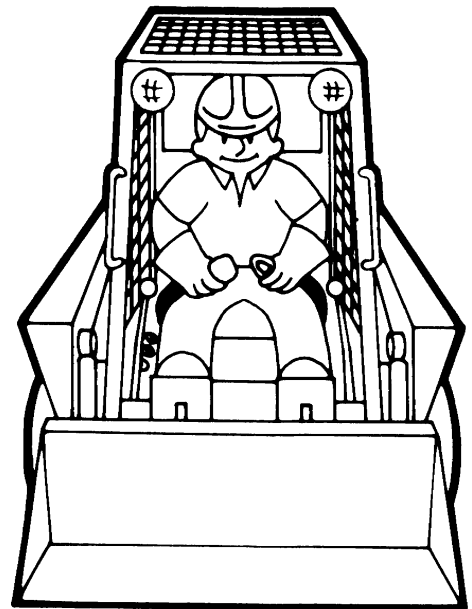
A skid-steer loader can overturn, killing an operator whose vehicle is not equipped with a ROPS. The relatively short wheelbase and narrow width aid the skid-steer's maneuverability, but also make it less stable on side slopes and more prone to bouncing. Hitting holes or obstacles can lead to loss of control and overturns, particularly when the bucket is loaded or raised. **A ROPS should never be removed or modified in any manner.** If it must be removed for maintenance, reinstall it promptly. If your loader lacks a ROPS, contact your dealer to see if you can get one installed.

The side screens on skid-steer loaders are designed to protect operators from the lift arms. Amputations, head injuries and even decapitations have occurred when operators reached or leaned over the sides of their loaders and the lift arms came down. Many skid-steer loaders have a ROPS/FOPS combination; that is, the ROPS has an overhead screen or shield to protect operators from falling objects, including any falling from the bucket. **Side screens and overhead shields should never be removed.** If you must take them off for maintenance, reinstall them promptly. If your loader lacks these screens and shields, contact your dealer about adding them.

The seat belt or restraint bars on skid-steer loaders are also necessary for the operator's safety. They keep the operator inside the zone of protection created by the ROPS and side screens. Without the seat belt, the operator could be thrown out the front if the machine strikes an obstacle or hole, or stops suddenly. It's possible for an operator to be run over or pinned under a falling bucket. In most cases these restraints also provide increased safety by inactivating the controls when the restraints are opened. **Seat belts and restraint bars should always be used and never modified or bypassed.** If your loader lacks these devices, contact your dealer about installing them.



WRONG! Never remove ROPS.

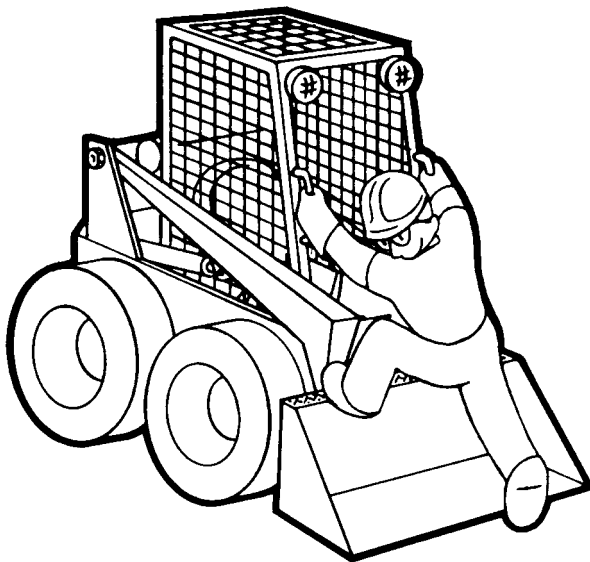


Use seat belt or restraint bar.

Mounting and dismounting

Amputations, spinal cord and fatal crushing injuries have occurred when operators mounted or dismounted their skid-steer loaders with the lift arms up. This happens when the bucket comes down unexpectedly. **Never mount or dismount a skid-steer loader with the lift arms up, unless they are held up by a restraining device other than the hydraulic system.** Bumping or moving the controls while entering or exiting the operator's station could result in the bucket falling with tragic results. The only time lift arms should ever be left in the raised position is when they are physically held in place.

Safe dismounting means always lowering the bucket, turning off the engine, putting the controls in neutral, using the proper handholds (control levers should not be used as handholds), using both hands and facing the machine when dismounting—not jumping—off.



Dismount properly.

Operating the loader

Covering every possible safe operating practice for every skid-steer loader is a task beyond the scope of this bulletin. Consult your operator's manual for in-depth information. Some major points about safety when operating a loader are covered below.

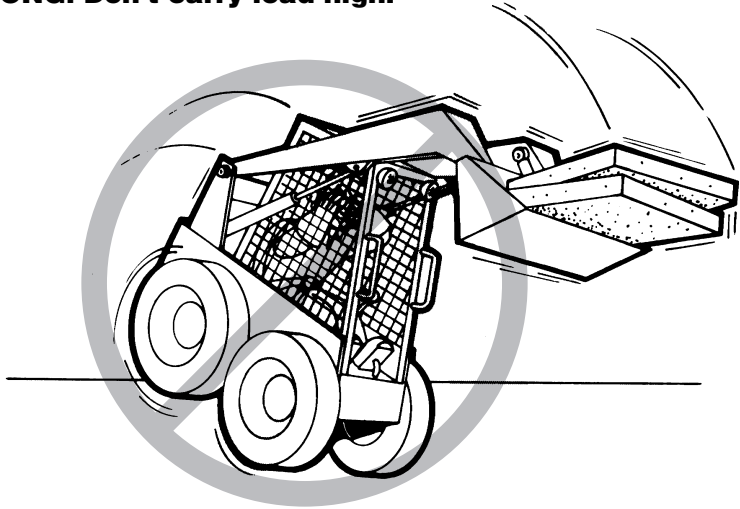
Always stay completely inside the operator's compartment. Never stick your hands or feet out the front, or put your fingers through the screen. Never allow extra riders, including children. It is too easy for an extra rider to be thrown from the machine, hit a control at an unexpected moment, or come in contact with the bucket or lift arms. Extra riders also distract you from operating the controls.



WRONG! Don't lean out or exit with the bucket raised.

With any type of loader, the load should always be carried low. The higher the load, the higher the center of gravity, which makes the loader more likely to tip. Don't carry unsecured items which could fall or roll off easily.

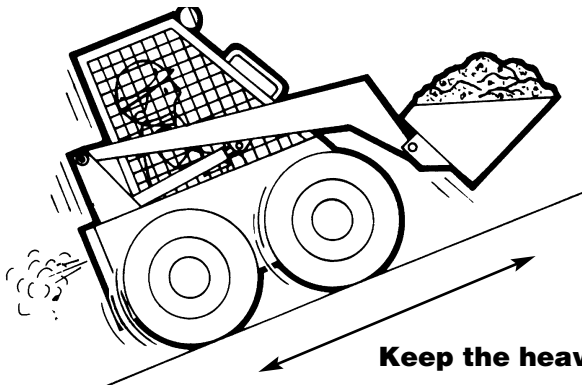
WRONG! Don't carry load high.



Avoid driving across steep slopes. When traveling up and down slopes, always point the heavy end of the loader uphill. When the bucket is loaded, point it uphill; when the bucket is empty, point it downhill.



WRONG! Avoid side slopes.

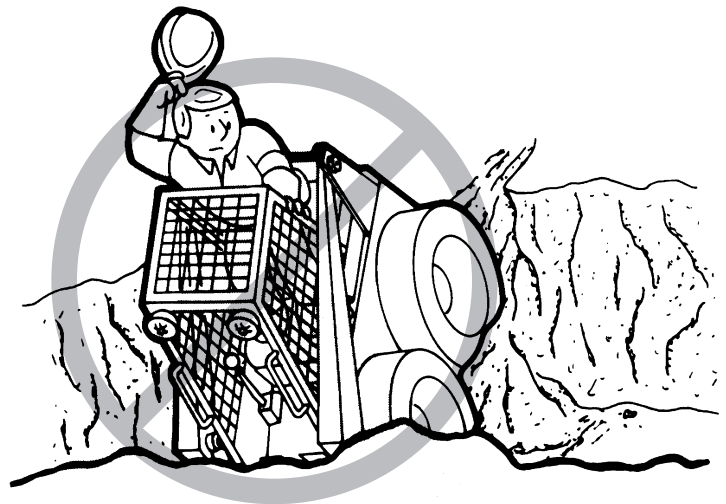


Keep the heavy end uphill.

To prevent sliding into a manure storage facility or over a push-off ramp, place guard rails capable of stopping the loader where they will keep it from going into the storage, yet still allow manure to be scraped beneath or lifted over the top.

Operating any loader requires frequent back-and-forth and turning motions. Bystanders, especially children, should not be allowed in the area. Always look back when operating in reverse, because bystanders may appear unexpectedly. Children may not understand that they need to get out of the way; unfortunately, some fatalities have resulted because of this lack of clear communication. Even an adult may not be able to anticipate a loader's actions.

The same caution and visibility are needed when you turn or swing the bucket around. The bucket should never be swung over someone's head.



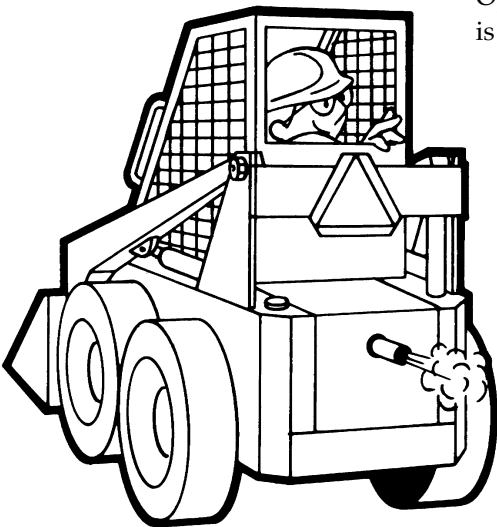
WRONG! Stay away from banks or drop-offs. Use guardrails at push-off points.

Other safety practices include using safe speeds, especially on rough surfaces; using extra caution near slopes or drop-offs; checking the machine before operating it; and having plenty of ventilation when operating inside a building. **All operators should read the operator's manual for safety information.**

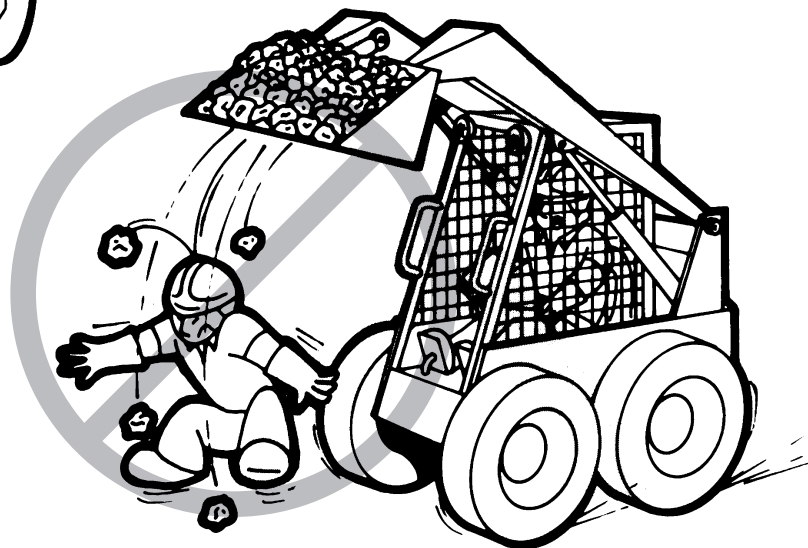
Summary

Skid-steer loaders have proven to be very useful on the farm. However, a lack of safety precautions has resulted in the deaths and serious injuries of both operators and bystanders. Operators must understand how skid-steer loaders work and how to mount, dismount and operate the equipment safely. These machines are not for children. To ensure safe operation, loaders must be equipped with a ROPS, side and overhead screens or shields, and a seat belt or other operator restraint. Operating a skid-steer loader safely is a serious responsibility.

In addition to your operator's manual, detailed safety information is available in the *Skid-Steer Loader Safety Manual* published by the Equipment Manufacturers Institute (EMI) in Chicago. This 47-page manual is specifically written for users and operators of skid-steer loaders. Contact your dealer or manufacturer for a copy.



Look behind when backing and watch for bystanders.



WRONG! Never swing the bucket over someone.



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Author: Mark A. Purschwitz is an associate professor of biological systems engineering at the University of Wisconsin-Madison, and an agricultural safety specialist with Cooperative Extension, University of Wisconsin-Extension.

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