

SKID STEER LOADERS

Skid steer loaders are useful but dangerous pieces of equipment. The National Institute for Occupational Safety and Health (NIOSH) found a number of fatalities associated with skid steer loader use, most often attributable to:

- Working or standing under a raised loader bucket
- Leaning out of the operator's compartment into the path of the moving lift arms
- Improper entering or exiting
- Rollovers

To reduce the potential for the above types of accidents, the following safety features are critical: liftarm supports, control interlock systems, seat belts, restraint bars, rollover protective structures (ROPS), falling object protective structures (FOPS) and side screens. Equipment that lacks the above operable safety features is not appropriate for use by UNL employees.

General Safety

- Operators should be trained by a knowledgeable person prior to operating a skid steer loader. This should include reading/understanding the owner's manual, operational safety, inspection, maintenance, who to report deficiencies to and demonstration of safe operation under anticipated conditions (e.g., terrain, load, etc.).
- Supervisory personnel should be trained to identify hazards, such as safety systems that have been bypassed, disabled, or that require maintenance.
- Never by-pass, modify or disable the safety devices.
- Even when the loader is equipped with interlocks, those interlocks are not foolproof.
- Before operating, clear the work area of by-standers and acquaint yourself with surrounding hazards (e.g., electrical lines, low clearance, uneven terrain, ramp edges, etc.).
- Many different attachments may be used on a skid steer loader that may be either attached on the front or rear including buckets, backhoes, augers, chippers, sweepers, trenchers and pallet forks. Operators should be trained to use each attachment and familiar with their controls. Make sure that each attachment is mounted and fastened correctly. The sudden release of an attachment can cause a load to drop, making the loader unstable and possibly injuring bystanders.
- Consult EHS to determine if hearing protection is warranted while operating the equipment.

Entry

- Do not operate if fatigued, injured, or while taking medications or other substances that may impede your ability to operate the equipment safely.
- Conduct a pre-operation safety check before entering to verify the integrity of safety devices, tires, structural components, and engine (e.g., no leaks, adequate fuel, etc.).

- Clear mud, ice, snow, and other debris from the controls, operator's compartment, and entry/exit footholds.
- Enter the equipment only when the bucket or other attachments are flat on the ground, or are locked in place with lift arm supports.
- Face the seat and keep three points of contact with the hand holds and steps.
- DO NOT use the operating controls as handholds or steps.
- Always wear the seatbelt when operating the equipment.

Operation

- Immediately after starting the engine, verify the working nature of the controls, brakes, horn, and alarms.
- Do not attempt to activate the skid-steer loader controls from outside the operator's compartment.
- Do not leave the operator's seat while the engine is on. Never attempt to activate the controls unless properly seated with the seatbelt fastened and the seat bar (if equipped) lowered.
- Keep all body parts inside the cab while operating a skid-steer loader.
- Avoid excessive speeds. Operate at a speed that is appropriate for conditions and equipment being used to keep control of the loader.
- Operate the equipment on stable surfaces. When possible, load, unload, and turn the equipment around on level ground.
- For maximum stability, travel and turn equipment when the bucket is in the lowest position possible.
- Never exceed the manufacturer's specified load limit. Take care to evenly distribute the load. In some cases, it may be necessary to secure the load to prevent falling or shifting.
- Avoid traveling across slopes and hills; if absolutely necessary, travel straight up or down with the heavy end of the machine pointed uphill. Do not make sharp turns on hills or the loader may roll over.
- Always look in the direction of travel.
- Avoid holes, large bumps, soft spots and weak floors.
- Stay away from steep edges on loading docks, ramps, ditches, retaining walls and near trenches, otherwise you could fall over the edge or the bank could cave in.
- Never allow passengers in the operator compartment, on an attachment or in the bucket of the skid steer loader.
- Never allow a person to position themselves under or near the bucket or frame while the skid steer loader is in operation.

Exit

- Before leaving the operator's seat, set the bucket on the ground, set the parking brake, and turn off the engine.
- Never work around the equipment when the bucket or fork attachment is raised unless it is supported and the brakes are set, and the key is removed from the ignition. Use lift arm supports when they are present on the equipment. If no supports are present, contact the equipment dealer or manufacturer for help in determining proper support procedures.
- Chock the wheels, if necessary.

Maintenance

- Establish a routine maintenance and inspection program in accordance with the manufacturer's recommendations. Inspect the skid-steer loader to ensure that all safety systems are functioning properly prior to operating the equipment.
- Follow the manufacturer's instructions for maintaining the skid-steer loader. Never attempt maintenance or other work while lift arms or attachments are raised without using an approved lift arm support device.
- Replace protective guards and shields after repairs or service.
- Do not service the equipment when the engine is running unless directed to do so by the operator's manual, and then only while observing stated safety precautions/procedures.
- Observe safe refueling procedures.

References

- OSHA Publication No. SHIB 01-12-2009, Hazards Associated with Operating Skid-Steer Loaders with Bypassed and/or Improperly Maintained Safety Devices
- DHHS (NIOSH) Publication No. 98-117, Preventing Injuries and Deaths from Skid Steer Loaders
- K-State Research and Extension, Skid Steer Loader Safety for the Landscaping and Horticulture Services Industry