



# FACE Fatal Facts: Skid-Steer Loaders

Fatality Assessment and Control Evaluation (FACE)  
 Safety & Health Assessment & Research for Prevention  
 Washington State Department of Labor and Industries

March 18, 1998

Report #47-1-98

## How do these fatalities occur?

Skid-steer loaders are used in many different work settings. **These small and versatile wheel loaders are potentially dangerous if operated or maintained improperly.**

Between 1992 and 1997, 37 workers in 10 states died while using or maintaining skid-steer loaders.

In addition, a fatality of this type recently occurred in Washington State. A 33-year-old garage mechanic was crushed to death while performing maintenance on a skid-steer loader. He had propped up the bucket-lift arm assembly with a piece of scrap metal to conduct his work. The scrap metal failed, allowing the bucket-lift arm assembly to fall and crush him between the bucket and the frame of the loader. **Use only lift arm support devices approved by the manufacturer of the skid-steer loader.**

### The 37 fatal incidents -

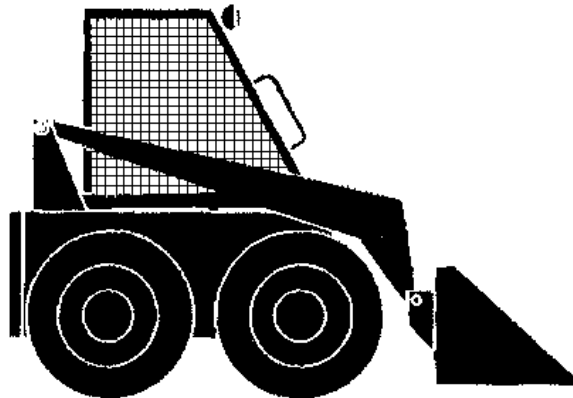
- Ten occurred while the worker was either working or standing beneath the raised bucket.
- Eleven of the workers were caught or crushed between the bucket and the machine's frame (five while entering or exiting).
- Eight incidents involved the worker leaning out of the operator's compartment into the path of the ascending or descending lift arms and being crushed between the frame and the arm.
- Six of the remaining 8 were rollover incidents.

## Skid-steer loader safety tips

### Getting in and out

Enter and exit the equipment according to the manufacturer's warnings and instructions.

- Park on level ground.
- Before leaving the seat, lower the lift arms and attachment flat on the ground.
  - Turn off the engine.
  - Engage the parking brake.
  - Move controls until locked (if applicable).



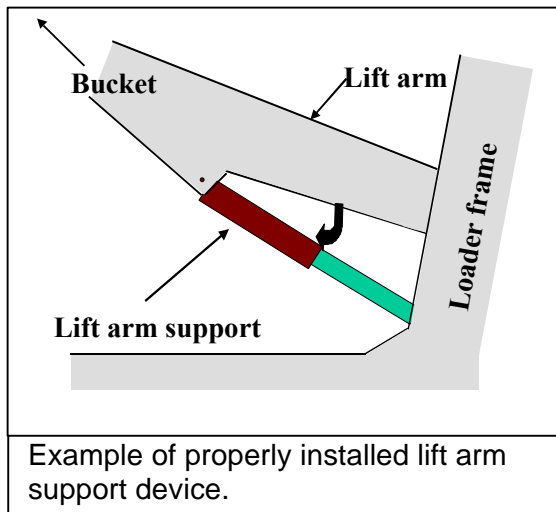
### Control levers

- Use the loaders' controls only from the operator's position.
- Do not use the controls as grab handles.

### Maintenance, inspection, and operation

- **Never** perform maintenance or service under a raised lift arm unless a manufacturer-approved lift arm support is used properly (see figure on next page for example).
- **Never** modify, bypass, or remove lift arm support devices, control interlocks, seat belts, safety bars, roll-over protection structure (ROPS), or side-screens.
- **Always** use a seatbelt and keep your head, arms, and legs inside of the cab while operating the loader.
- Maintain and inspect equipment according to the manufacturer's instructions.

- Prior to raising the lift arms and cage, support the skid-steer loader according to manufacturer's recommendations.



### Training

- Read and follow the manufacturer's operating and service procedures specified in the manuals and on machine decals.
- All operators and service personnel must be trained in the safe use and maintenance of the equipment and demonstrate competency in these activities.
- Obtain training courses and videos from equipment dealers or the manufacturer.

### Additional Information

#### WA FACE Program

Safety and Health Assessment and Research for Prevention (SHARP) Program  
 WA State Department of Labor and Industries  
 PO Box 44330  
 Olympia, WA 98504  
 (360) 902-5669 & 1-888-667-4277 (toll-free)  
<http://www.wa.gov/lni/sharp/face>  
[moor235@lni.wa.gov](mailto:moor235@lni.wa.gov)

#### WISHA Consultation Program

WA State Department of Labor and Industries

Everett (Region 1, Northwest Washington)  
 (425) 290-1431

Seattle (Region 2, King County)  
 (206) 281-5533

Tacoma (Region 3, Pierce, Kitsap, Clallam, and Jefferson Counties)  
 (253) 596-3917

Olympia (Region 4, Southwest Washington)  
 (360) 902-5472

East Wenatchee (Region 5, Central and southeastern Washington)  
 (509) 886-6570

Spokane (Region 6, Eastern Washington)  
 (509) 324-2543

**FACE** is an occupational injury prevention program operated by the Washington State Department of Labor and Industries' SHARP Program. FACE is not responsible for enforcement of safety standards or the adjudication of workers' compensation claims. FACE investigates workplace fatalities with the aim of identifying and preventing risk factors that lead to fatal injuries.

The FACE Program is funded by the National Institute for Occupational Safety and Health (NIOSH).

Many of the statistics and recommendations in this fact sheet come from an assessment of investigation reports and fatality data compiled in the Morbidity and Mortality Weekly Report (MMWR Vol. 45, No.29 pg. 624) and by NIOSH.

Many thanks to the individuals who helped develop this brochure.



## Safety Tips

# Skid-Steer Loaders

**1**

Get in and out safely

Enter and exit the equipment according to the manufacturer's warnings and instructions

- Park on level ground.
- Before leaving the seat, lower the lift arms and attachment flat on the ground.
- Turn off the engine.
- Engage the parking brake.
- Move controls until locked (if applicable).

**2**

Use control levers properly

- Use the loader's controls only from the operator's position.
- Do not use the controls as grab handles.

**3**

Maintain, inspect, and operate carefully

- **Never** perform maintenance or service under a raised lift arm unless a manufacturer-approved lift arm support is used properly.
- **Never** modify, bypass or remove lift arm support devices, control interlocks, seat belts, safety bars, roll-over protection structure (ROPS), or side-screens.
- **Always** use a seat belt and keep your head, arms and legs inside of the cab while operating the loader.
- Maintain and inspect equipment according to the manufacturer's instructions.
- Prior to raising the lift arms and cage, support the skid-steer loader according to manufacturer's recommendations.

**4**

Emphasize training

- Read and follow the manufacturer's operating and service procedures specified in the manuals and on machine decals.
- All operators and service personnel must be trained in the safe use and maintenance of the equipment and demonstrate competency in these activities.
- Obtain training courses and videos from equipment dealers or the manufacturer.

For more information, contact the SHARP Program at Labor and Industries: 1-888-667-4277.