INCIDENT FACTS

REPORT #: 71-166-2018s

REPORT DATE: February 7, 2018

INCIDENT DATE: January 3, 2017

VICTIM: 54 years old with 25 years’ experience

INDUSTRY: Site Preparation Contractors

OCCUPATION: Equipment operator

SCENE: Commercial construction site

EVENT TYPE: Crushed between equipment
A 54-year-old skid steer loader operator died when he was pinned between the lift arms cross bar and the frame.

The victim had 25 years’ experience operating many types of equipment, including skid steer loaders.

His employer was a site preparation subcontractor responsible for digging trenches for water pipes.

He had been working at the job site for two weeks.
On the day of the incident, the site foreman sent the victim and another worker to get a skid steer loader to backfill trenches. The other worker gave the victim the key to the loader and told him the “dead-man” (safety interlock) switch for the lap bar was not working properly. This switch prevents the machine from starting unless the bar is in the “down” position.

As the other worker was walking away, he heard the machine start. He turned around and saw the victim pinned between the lift arms cross bar and the loader’s frame. The worker ran to the loader and tried to move the arms off the victim, but the controls did not respond. He called his supervisor and then 911. Several workers rushed to the scene and after multiple tries were able to extract the unconscious victim. He did not regain consciousness and died four days later.
Investigators were unable to determine why the lift arms lowered on the victim.

The lap bar safety interlock was found to be not working. The victim was able to start the machine with the lap bar in the “up” position, instead of the normal “down” position. He started the loader while standing on the ground outside of it. When he reached in to start the machine he may have unintentionally activated the boom arm’s control, causing the arms to lower.

Workers had reported that they needed to warm up this loader for a few minutes because of cold temperatures. The loader had been rented by another subcontractor from an equipment supplier. It did not have an operator’s manual.
Photo 1. Skid steer loader at incident scene showing its approximate position when the victim while standing on the ground in front of the loader reached into the cab and turned the ignition key to start the machine, presumably to warm it up. As he was doing this, the arms came down and crushed him against the loader’s frame.
Photo 2. The approximate position of the skid steer loader after its arms came down crushing the victim against the frame. As the arms lowered they caused the front of the machine to become elevated.
Photo 3. Skid steer loader at incident scene showing the arms in the lowered position for entry into the cab. The correct, safe way to enter the operators cab is for the operator to step up on to the manufacturer provided step on the bucket and then onto a step on the loader’s front and then turn around and sit in the operator’s seat.
Photo 4. Demonstration of where to enter the operator’s cab of the skid steer loader.
Photo 5. Front of skid steer loader with arms lowered.
Photo 6. Lap bar in the “up” position in the operator’s cab. The operator must be in the seat and the bar placed in the “down” position in order for the skid steer loader controls to be operational.
**FATALITY NARRATIVE**

**Photo 7.** Controls viewed from the operator’s seat.

**Photo 8.** Key in ignition located above the operator’s controls.
FATALITY NARRATIVE

Photo 9. Arm lift control which the victim may have activated when he reached in to turn on the machine.
Label warning of crush hazard from skid steer loader arms.
Requirements

Equipment whether or not owned by, or under control of the employer.

(1) It is the employer’s responsibility to ensure that any defective equipment or tools are not used.

(2) When any tool of piece of equipment fails to meet the requirements of any safety standard or recognized safe practice, you must not use the tool or equipment.

See WAC 296-155-009
Recommendations

- Follow the manufacturer’s operator manual procedures for safe operation of equipment.

- Start loader only when seated in the operator’s seat.

- Maintain equipment in good working condition and inspect prior to each use. Never operate equipment that is not fully operational. If maintenance is required or equipment malfunctions, inform the appropriate person or contact the equipment supplier.
Recommendations

• Be sure all safety interlocks are functional. Do not override or defeat interlocks.

• Park skid steer loaders with the arms lowered and the bucket flat on the ground.

• When renting equipment, ask the rental company to supply an operator’s manual and maintenance records.
Resources

Hazards Associated with Operating Skid-Steer Loaders with Bypassed and/or Improperly Maintained Safety Devices. OSHA.

www.osha.gov/dts/shib/shib011209.html
This bulletin was developed to alert employers and employees of a tragic loss of life of a worker in Washington State and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.

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