

Significant Incident Summary No. 9

Skid steer loader crush incident

Background

In 2022, a farmer suffered fatal injuries when he was crushed between the body of a skid steer loader and the lifting arms of the machine. At the time of the incident, there was an attachment referred to as a 'scrub grapple' fitted to the arms of the loader to pick up cut down branches and move these to another location.

A skid steer loader is often used to excavate or move dirt and sand. The sudden dropping of the lift arm of skid steer loaders has resulted in serious injuries and deaths to both operators and maintenance workers across Australia.

Contributory factors

The examination of the skid steer loader and parts indicate that:

- the risk of being crushed between the skid steer loader and the lift arms is high when the lift arms are in the raised position when entering or exiting the cabin
- the lift arm stops, which prevent the lift arms from lowering, were not in a serviceable condition
- safety design features, such as a safety lap bar, were not available on this model of skid steer loader
- the lift arms may lower unexpectedly if the operator inadvertently rests their foot on the pedal controls while exiting the loader.

Actions

Measures to minimise the risk of being crushed between the bucket or lift arms and the loader structure include:

- ensuring the operator is familiar with the safe systems of operation
- entering and exiting the skid steer loader only when the lift arms and attachment is flat on the ground
- engaging the lift arm stops if there is a need to enter and exit the skid steer loader when the arms are raised (e.g. for maintenance)
- inspecting and testing the safety systems daily, including the lift arm stops, seat belt, seat belt buzzer and seat bar
- installing a seat bar, which sits on the operator's lap and ensuring it is operational. When the seat bar is raised, no powered movements are possible, intentionally or otherwise

- installing interlock systems to the seat and the seat belt preventing any powered movement of the lift arms and attachment when the operator is not seated and or secured by a seat belt
- never using foot or hand controls as steps or handholds
- maintaining the skid steer loader in accordance with the manufacturer's instructions
- always reading the instructions provided by the manufacturer and follow all safety directions
- removing attachments before raising the lift arm for maintenance.

References and further information

Work Health and Safety Commission

• Managing risks of plant in the workplace: Code of practice

SafeWork NSW

• Skid steer loaders safety alert

WorkSafe Victoria

• Controlling risks from skid-steer loaders