



Farm Equipment Service Technician Killed When Servicing Front End Loader Attachment

INCIDENT

A farm equipment service technician was killed when his head was pinched in a silage grab that was fitted to the front end loader of a tractor.

CIRCUMSTANCES

The service technician was employed by a farm equipment supplier/service company. The company had been engaged by the farmer to service a crop feeder. After completing work on the crop feeder, the service technician and farmer decided to attend to a hydraulic leak on the tractor's silage grab.

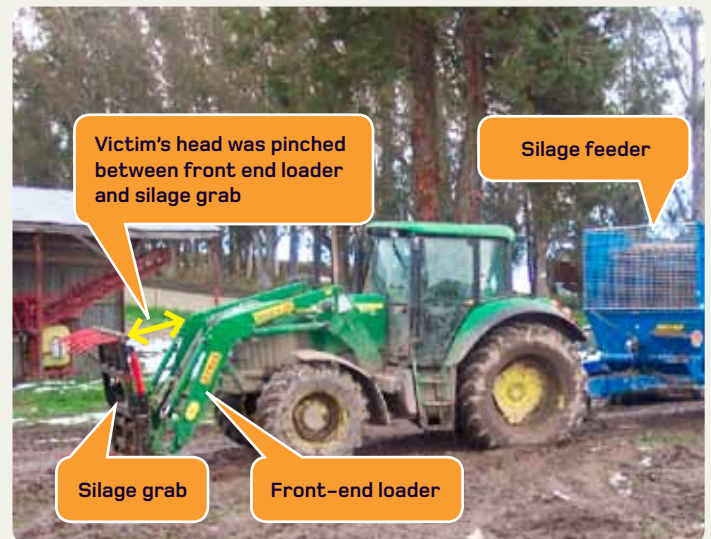
In order to tighten a loose hydraulic connection, the service technician stood between the pivoting arms of the front end loader/silage grab assembly. He tightened the hydraulic fitting on the front end loader/silage grab while the farmer, at the service technician's request, operated the controls from the cab steps of the tractor. The farmer could not see the service technician from this location; however on the service technician's instructions, he released the front end loader/silage controls.

The farmer did not know that the controls were not returning immediately to their neutral position. The silage grab rapidly closed and pinched the service technician's head.

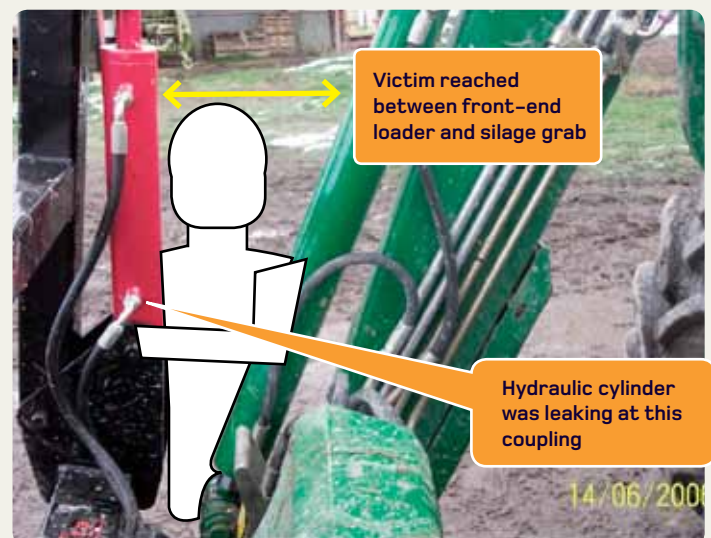
INVESTIGATION

The Department of Labour's investigation report into the event was submitted to the Coroners office and concluded:

- The deceased was considered to be a very reliable and experienced service technician.
- The equipment had been serviced regularly, and there were no apparent defects with the hydraulic system or controls. There was a bolt missing from the control mount; however it was unlikely that this would have affected its operation.
- There was an apparent stiffness with the hydraulic control joystick which delayed the control returning to its neutral position. This stiffness and subsequent delay was intermittent, and it could not be determined if this fault occurred at the time of the event. It was unlikely that regular users of the equipment would have noticed this stiffness in the control action.
- The service technician's employer had duties to:
 - ensure the health and safety of the employee while at work; and



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- as a person who controlled the place of work to ensure that no person in that place was harmed.

The employer had fulfilled this duty by sending a competent trained person to the farm. In this instance, the area around the tractor and its attachments were considered to be under the control of the service technician's employer.

- e. The company that owned the farm and equipment had duties:
- as a principal to ensure the safety of the service technician; and
 - as a person who controlled the place of work to ensure that no person in that place was harmed.

The whole of the farm, including the area around the tractor was under the control of the company at the time of the event. The company had fulfilled their duties by ensuring that a competent and experienced organisation was engaged to service their equipment.

- f. The service technician breached section 19 of the Health and Safety in Employment Act 1992 by placing himself in an unsafe position when servicing the farm equipment.
- g. The farmer, as an employee of the farm company, also breached section 19 of the Health and Safety in Employment Act 1992 by failing to ensure that the service technician was clear of the silage grab before he released the job stick. It was determined that this inaction was neither grossly negligent nor reckless.

Because of the circumstances of this accident, it was recommended that no action be taken by the Department of Labour against any of the parties involved in the event.

DEPARTMENT OF LABOUR ADVICE

Tractor implements such as front-end loaders and silage grabs use hydraulic rams to provide linear motion when activating the implements. Many nip and trapping points are present in such attachments, especially around hydraulic rams and where components pivot or come in close proximity to one another. During normal use, these nip and trapping points do not present a hazard, as the machine operators sit at a safe distance in the seat of the tractor.

Service technicians and operators should be aware of these nip and trap danger points, and use the following as a means of controlling the hazards:

- a. Turn the hydraulic power source off.
- b. Use blocks to prevent the equipment closing or opening, even when the power is turned off.
- c. Use hydraulic ram stops to prevent cylinders from closing.
- d. Service the equipment from safe locations.

Note: This material has been prepared using the best information available to the Department of Labour at the time of publication. Information may change over time and it may be necessary for you to obtain an update. This material is also only intended to provide general advice and does not constitute legal advice. You should make your own judgement about action you may need to take to ensure you have complied with your workplace health and safety obligations under the law.

WHICH INDUSTRIES/SECTORS OR MATTERS WILL THIS INFORMATION BE RELEVANT TO?

Agriculture, Farming, Horticulture, Suppliers and Maintainers of Farm Equipment

