

Farm Laborer Caught in Hay Baler

Industry: Hay farming

Task: Greasing baler gear box

Occupation: Hay farm laborer

Type of Incident: Caught in machinery





INJURY NARRATIVE

In June of 2016, a 29-year-old hay farm laborer's legs were seriously injured when they were caught in a hay baler's machinery.

This was the second season that the laborer had worked on his employer's hay farm. His job duties included driving tractors with pull-type hay balers.

On the day of the incident, the laborer had finished baling hay for the day. He then went to do routine maintenance on the baler by greasing its bull gears. These two gears are driven by a flywheel which is powered by the PTO. The gears in turn power the plunger and the feed fork which together produce bales. The manufacturer's specified method of spreading the grease on the gears was to put grease in the luber compartment while hand turning the flywheel and the lube pump crank.



INJURY NARRATIVE

The laborer could not get the hand crank on the bull gear luber to turn. His employer told him that if the crank would not turn to get up on the baler and grease the gears directly. The employer had made two holes on top of the shield surrounding the bull gear and plunger so that grease could be poured directly onto the gears. The employer's practice was then to turn on the power through the PTO to the baler to activate the gears and distribute the grease.

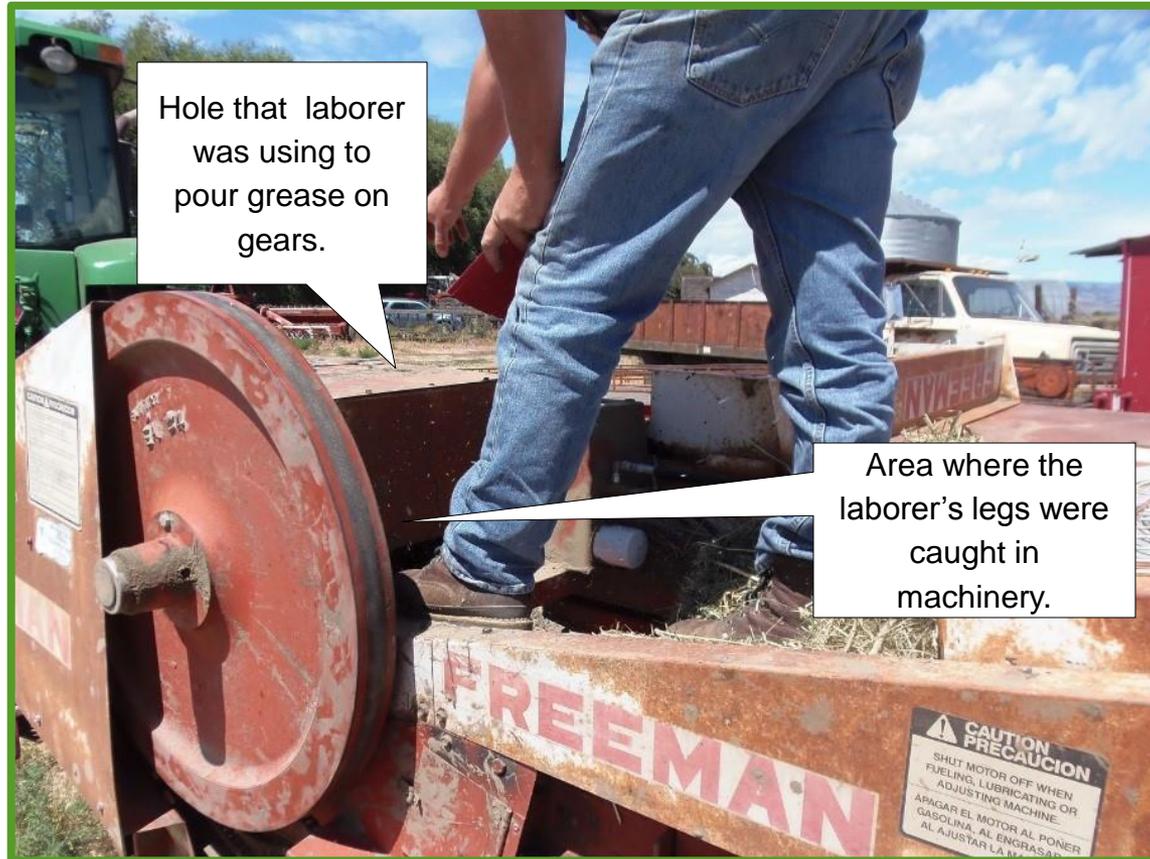
Both the manufacturer's operating manual and safety stickers on the baler stated that the tractor motor should be shut off when fueling, lubricating, or adjusting the machine. As the laborer was standing on top of the baler pouring grease through one of these holes, another worker thought he was signaling to turn on the PTO and did so. The laborer was standing on the plunger in a 4½-inch gap between a baler brace and the plunger when it started to move up and down. Both his legs were caught in the machinery. The operator realized what had happened and turned off the PTO.



INJURY NARRATIVE

First aid was given and emergency services personnel responded. He was taken to a hospital where he underwent surgery. His legs were broken in numerous places and he had other serious injuries to his legs. Four months later he was still unable to work.

INJURY NARRATIVE



Reenactment of incident scene on top of the baler showing where the laborer was standing when the PTO was activated by another laborer.

INJURY NARRATIVE



The laborer's legs were caught in the baler's machinery when the PTO was turned on while he was lubricating the gears. The bull gear/plunger shield is shown in its raised position. It was lowered during the incident.



INJURY NARRATIVE

Requirements

Employers must develop, document, and use procedures to control potentially hazardous energy when employees are engaged in the servicing and maintenance of machines and equipment in which the unexpected startup of the machine or equipment or release of stored energy could cause injury to employees.

See [WAC 296-307-32013\(1\)](#)



INJURY NARRATIVE

Recommendations

- Ensure that safe work practices are followed, including disengaging the PTO and shutting off the tractor engine prior to working on PTO powered equipment.
- Maintain and operate machinery according to the manufacturer's specifications.



INJURY NARRATIVE

Recommendations

- Equipment operators should familiarize themselves with the manufacturer's operating manuals. These manuals are critical sources of safety information and should be available for reference.
- Repair broken or malfunctioning equipment.
- Do not alter equipment or machinery unless approved and specified by the manufacturer.

INJURY NARRATIVE



The bull gear luber which is the manufacturer's specified method of lubricating the baler's bull gears. The hand crank (arrow) would not turn, so the laborer did not use this method.

INJURY NARRATIVE



Holes that employer made in bull gear shield to pour grease on the gears.



Sticker on baler with instructions for safe operation of baler.



Sticker on baler with instructions for safe operation of baler.



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This narrative was developed to alert employers and employees of a serious traumatic injury to 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 injury.

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