

Backhoe Operator Crushed by Boom

Industry: Hay Farming

Task: Clearing rocks from field

**Occupation: Heavy equipment
operator/laborer**

**Type of Incident: Machine-related/crushed
between**





FATALITY NARRATIVE

On October 15, 2013, a 37-year-old heavy equipment operator/farm laborer died when he unintentionally caused a backhoe's boom to move, crushing him between the boom and a stabilizer.

The victim worked at a hay farm where he had worked for two seasons operating heavy equipment and providing other labor as needed. He had 20 years' experience operating heavy equipment. His employer had provided on-the-job training to the victim to ensure that he understood how to safely operate the equipment he was assigned to operate.

On the day of the incident, he was assigned the task of clearing a field of large rocks. Another worker had used a chisel plow to till the field. The victim was using a backhoe's loader to scoop up the rocks and carry them from the field. As he was doing this task, he noticed a metal chisel which had broken off the plow lying on the ground. He stopped the backhoe and set its brakes, but did not turn off the engine. He got out of the cab and walked over to the curved three-foot long, 50 lb. chisel and picked it up. He then walked to the rear of the backhoe and while standing between the raised boom and the raised stabilizer, he placed the chisel in the cab. The chisel struck the right boom-swing foot pedal which activated the boom causing it to move, pinning and crushing him between the boom and the stabilizer.

FATALITY NARRATIVE



A backhoe operator was caught and crushed in the pinch point between the boom and stabilizer (large red circle) when he placed a broken chisel in the cab (small red circle) which accidentally activated the boom swing pedal.



FATALITY NARRATIVE

Requirements

- The manufacturer's instruction manual must be the source of information for the safe operation and maintenance of field equipment.
See WAC 296-307-076(2).
- Develop a written accident prevention program tailored to the needs of your agricultural operation and to the types of hazards involved.
See WAC 296-307-030(2).
- Provide employee safety education and training programs which include information about agricultural equipment hazards and safe work practices.
See WAC296-307-018(6).

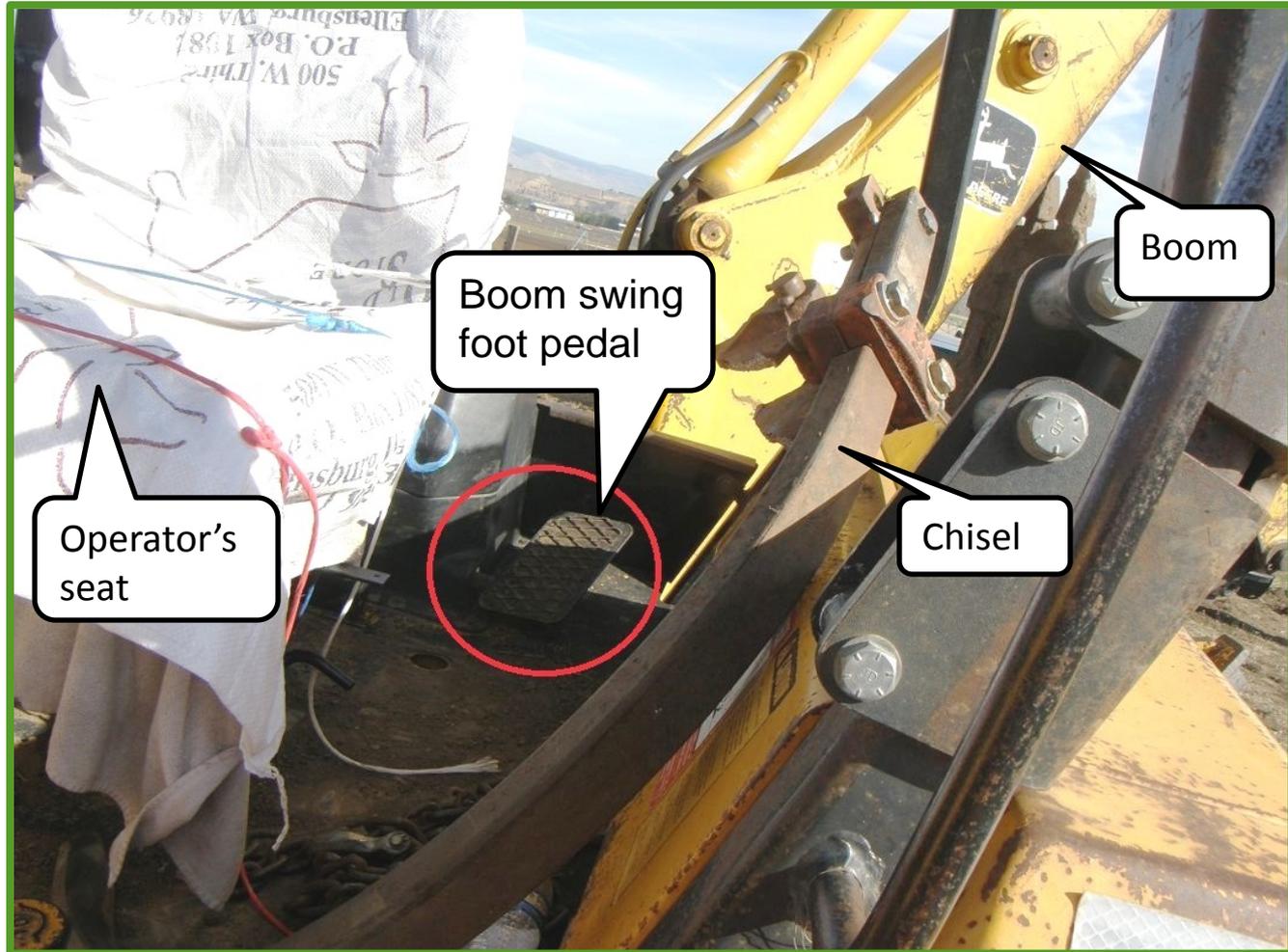


FATALITY NARRATIVE

Recommendations

- Ensure that backhoe boom and swing lock pins are installed when backhoe is not being used.
- Do not place objects in the cab which could accidentally depress the boom foot pedal.
- Shut down the equipment's engine and follow the manufacturer's recommended parking procedures before leaving the operator's station.
- To prevent unintentional activation of the backhoe boom foot pedal, manufacturers and regulators should consider requiring the use of foot pedal guards or some other method to disable the control when not in use.

FATALITY NARRATIVE



Backhoe operator's cab at the incident scene showing the chisel that the operator placed on the right boom swing foot pedal. (The chisel was moved after the incident.)

FATALITY NARRATIVE



Metal, three-foot long, 50 lb. chisel that had broken off of a chisel plow. When the backhoe operator placed this in the cab it landed on and accidentally activated the boom swing foot pedal.



FATALITY NARRATIVE

Statewide Statistics: This was number 41 of 54 work-related fatalities in Washington State during 2013, and was number 4 of 6 agriculture-related fatalities.

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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