Operator Run Over by Combine Harvester when Engine Started by “Hot-wiring”

INCIDENT FACTS

REPORT #: 71-206-2021s

REPORT DATE: April 6, 2021

INCIDENT DATE: September 7, 2020

VICTIM: 54 years old

INDUSTRY: Wheat farming

OCCUPATION: Combine harvester operator

SCENE: Wheat field

EVENT TYPE: Struck by/run over
A 54-year-old operator was run over by a combine harvester after he “hot-wired” the engine and the combine moved in reverse.

The operator was employed for 28 years at a wheat farm where his job duties included the operating of a combine harvester. He had 20 years’ experience operating combines.
On the day of the incident, the operator and the farm’s two owners went to a field where the operator had left the combine for a week waiting for a replacement solenoid for the engine’s starter.

The operator wanted to move the combine to the farm’s repair shop. The engine would sometimes start and sometimes not.
The operator entered the combine’s cab where he attempted to start the engine with a key in the ignition, but was unable to.

For an unknown reason or by accident, he put the propulsion control lever in reverse before exiting the cab. He then went to the rear of the combine where the engine was located. He used an electrical cable to “hot-wire” the leads off the starter solenoid. The engine started and the combine began moving backward.

He tried to climb down the ladder on the rear of the combine, but fell off it and landed on the ground between the tires. As the combine continued to move backward, the header ran over him. The combine stopped when it fell into a drainage ditch.

He died at the scene from his injuries.
Photo 1. Incident scene showing the combine harvester that ran over the operator.
Photo 2. After the operator hot-wired the harvester combine from the rear of the combine it moved in reverse. The operator attempted to climb down the rear access ladder, but fell and went under the combine. He was struck and dragged by the header. The combine came to rest in a drainage ditch.
Photo 3. Incident scene showing the rear of the combine harvester in a drainage ditch after it moved backward. The top arrow indicates the area where the operator “hot-wired” the starter solenoid. The bottom arrow indicates the ladder that he attempted to climb down and fell from as the combine moved backward.
Photo 4. Rear of the combine showing the ladder that the operator tried to climb down as the combine was moving in reverse after he “hot-wired” the starter. He fell to the ground and was run over by the combine’s header. (photo not taken at incident site.)
Photo 5. Combine harvester header. The operator was struck and dragged by the header after he fell off the rear of the combine, landing between its wheels as the combine moved backward.
Photo 6. Propulsion control lever shown in reverse position at the operator’s station in the combine’s cab.
Requirements

Employers must furnish and require employees to use any safety devices and safeguards that are needed to control recognized hazards. All agricultural methods, operations, and processes must be designed to promote the safety and health of employees.

See WAC 296-307-045(2)
Recommendations

• Follow the machinery or equipment manufacturer’s make and model operator’s manual for operating procedures and maintenance to ensure the safety of operators.

• Do not bypass machinery and equipment safety features by “hot-wiring” engines, as this disables safety mechanisms and may cause inadvertent movement of the machine, endangering workers. In this case, the combine’s propulsion control lever had to be in “neutral” in order to start the engine with a key at the ignition. Because the engine was “hot-wired” at the starter solenoid and the propulsion control lever was in “reverse” this safety feature was disabled.

• Repair machinery and equipment as required so that unsafe practices are not used to start them.
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.

Developed by Washington State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), Washington State Dept. of Labor & Industries. The FACE Program is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 5U60OH008487). For more information visit www.lni.wa.gov/safety-health/safety-research/ongoing-projects/work-related-fatalities-face.