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

SUMMARY
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 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.

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
FACE investigators concluded that, to help prevent similar occurrences:

• 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 narrative is an alert about the tragic loss of life of a worker and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or the cause of the injury. Developed by WA State Fatality Assessment and Control Evaluation (FACE) Program and the Division of Occupational Safety and Health (DOSH), WA 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-fatalsities-face.