

Machine Guarding Fatality Report

PREAMBLE

Machine guarding is a safety feature on or around [manufacturing](#) or other engineering equipment consisting of a shield or device covering hazardous areas of a machine to prevent contact with body parts or to control [hazards](#) like chips or sparks from exiting the machine. Machine guarding provides a means to protect humans from [injury](#) while working nearby or while operating equipment. It is often the first line of defense to protect operators from injury while working on or around [industrial machinery](#) during normal operations.

Manufacturers design their machines to protect operators from coming into contact with hazardous parts causing [amputations](#), lacerations, and crushing injuries. Many of these injuries were caused by unsafe operation or improper maintenance. **Machine guards**, or barriers between the operator and dangerous parts, are one of the most common strategies to prevent these injuries.

Types of Machine Guards

There are several different types of **machine guards**. The most common types of machine guards are:

- Fixed guards
- Interlocking guards
- Adjustable guards
- Self-adjusting guards

INCIDENT

On Nov. 16, 2016, Nissan North America sent 46-year-old maintenance technician Dennis Pinkston to investigate an equipment breakdown.

Pinkston, along with the rest of the maintenance crew at the company's Smyrna, Tenn. plant, discovered the roller drive motor for an elevator, which is designed to move car seat pallets from one conveyor system to another, was not working.

They removed some machine guarding and set to work. However, when checking whether the elevator correctly was functioning, the crew neglected to place the machine guarding back where it had been, according to Tennessee OSHA.

OSHA described the following actions that led to Dennis Pinkston's death:

"After replacing the drive motor, the employee was testing the lift table. He leaned into an opening to look under the lift table as the table was being raised. He was struck by a counterbalance weight that was descending as the lift table was elevated. A guard for the opening had been removed for the repair and not replaced to cover the opening before the lift table was activated."

Pinkston was struck in the back of the head. The counterweight, which weighed 1,275 lbs. pushed his head downward, where his head was caught between the weight and the top of the metal guarding system.

Emergency services were called, and he was transported to a nearby hospital but did not survive.

Pinkston had been a maintenance technician at Nissan North America since 2004 and was authorized to perform service on machines and equipment. He had received training on lockout/tagout procedures.

However, Tennessee OSHA's subsequent investigation revealed that while lockout/tagout steps were taken, the mesh machine guard was not replaced and Pinkston was not positioned far enough away from the machinery while performing a final test.

The agency discovered that Nissan North America had failed to perform routine equipment inspections or check whether it complied with the 29 CFR 1910.147 standard which details periodic inspections. In addition, Nissan received a **Repeat -Serious**

violation because lockout/tagout devices were not replaced once maintenance was completed. The company previously had been cited for this in 2014.

Nissan North America has 30 days to pay a total of \$29,000 as a result of the incident.

Despite Pinkston's death, the company received an overall "effective" rate for its safety and health program.

"The safety and well-being of our employees is always our top priority," the company said in a media statement. "We dedicate extensive time and resources to safety programs and training at the plant. Nissan is working through TOSHA's established process to contest these citations and bring this matter to a close. We also continue to work on determining what can be done to prevent future occurrences."

"I was mad at first, but once I read the report – I mean the way the reports wrote and all that, it's obviously just an accident," Pinkston's brother [told local TV outlet WSMV 4 in an interview](#). "It's an accident that could've been avoided if the guard had been put back in place. After reading that, that's going to bother me for a long time. It could've very well been avoided."

Download to read more...