

Case 221. 34-year-old construction laborer electrocuted during demolition activities of a light industrial building.

34-year-old male construction laborer was electrocuted during demolition activities of a light industrial building. The decedent was elevated approximately 10 feet in a Grove SM2232BE aerial work platform (scissors lift) with rubber tires. He was using a 3-foot long metal crowbar to break through a layer of drywall near a metal support beam. Lying on the floor of the elevated lift was a reciprocating saw which he was using to horizontally cut the drywall. The saw was plugged into an extension cord. It is unclear if the extension cord was plugged into a ground fault circuit interrupter (GFCI) pigtail and it is also unclear if the pigtail was plugged into an energized 120-volt wall outlet. The decedent was facing the wall to be demolished with both hands on the crowbar when Coworker #1 saw a flash. He called to the decedent, who did not answer. He called to the decedent again, and then saw the decedent's hands slide off of the crowbar (which remained wedged in the wall) and slump toward the wall over the rail of the scissor lift. His coworker yelled for help. Two other coworkers entered the area. Coworker #1 stated he unplugged the GFCI from the wall. The two coworkers who arrived attempted to lower the scissors lift via the emergency controls. They were unable to lower it because a knob for the valve was missing. Procuring a pair of bolt cutters, they gripped the valve, lowered the decedent, and removed him from the bucket to the floor. The three coworkers began CPR and emergency response was called. The decedent was transported to a local hospital where he was declared dead. The MIOSHA compliance officer noted soot and burn marks on both the female end of the extension cord and the prongs of the reciprocating saw. The saw had been plugged into the cord, but possibly something narrow and conductive separated the two plugs or they were already partially separated and the electricity arced between them. Additionally, electric arc marks were noted by the compliance officer on the thin metal toe-board of the scissors lift, the side of the crowbar, and the side of the steel wall stud. The city electrical inspector plugged the GFCI into another energized outlet and found it to be functioning when its test button was pushed. The electrical inspector also used an outlet tester to induce a fault and found the GFCI functioning.

MIOSHA Construction Safety and Health Division issued the following Serious and Other-than-Serious citations:

SERIOUS: ELECTRICAL INSTALLATIONS, PART 17.

- **RULE 1725(8)(a)**
Trailing cords and extension cords shall be protected against damage.-

Energized trailing cord and extension cord are on the floor of a Grove SM2232BE aerial work platform, conductors made contact with the steel toe-plate on the fly section resulting in an electrical short. Employee was using the reciprocating saw to horizontally cut drywall for interior wall demolition.

- RULE 1725(11)
A portable electric tool used in a wet atmosphere or environment shall be protected by an approved ground-fault interrupter.

No GFCI protection was provided for an employee doing demolition work.

SERIOUS: AERIAL WORK PLATFORMS, PART 32.

- RULE 3205(5)
Emergency ground level controls were not clearly marked as to their intended function and capable of overriding the platform controls.

Emergency lowering valve, for a Grove SM2232BE aerial platform, is missing lowering knob. Employee using the elevated lift to perform interior wall demolition approximately 14 feet above the floor.

- RULE 3206(a)
Each aerial work platform was not inspected, maintained, repaired, and kept in proper working condition in accordance with the manufacturer's or owners operating or maintenance and repair manual or manuals.

No annual inspection has been done on the unit since May of 2005 (Grove Model SM2232BE). The employees are using aerial work platforms for demolition of the west wall, approximately 14 feet above the floor.

- RULE 3206(b)
An aerial work platform found not to be in a safe operating condition was not removed from service until repaired.

The Grove SM2232BF elevating aerial work platform:

- Is missing the emergency descent handle.
- Has damage to the control wire umbilical cord.
- Has a sticking pothole protector
- Needs new warning decals
- Needs replacement of the ground control push button

The employees are using aerial work platforms for demolition of the west wall in a light industrial building, 14 feet (approximately) above the floor.

OTHER-THAN-SERIOUS: GENERAL RULES, PART 1, RULE 114(2)(a)

The accident prevention program did not:

Designation (sic) the qualified employee or person who is responsible for administering the program.

Within the current company safety/accident prevention program, no person is named as the administrator of said program.

OTHER-THAN-SERIOUS: RECORDING AND REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES, PART 11, RULES 1109(1):

A record of each fatality, injury, and illness was not kept.