



Know your limits

Don't work on equipment unless you have the proper training

The accident: An employee was repairing a 60-foot telescopic boom lift that had a malfunctioning counterbalance valve. He loosened the valve from underneath the rear of the lift and then climbed onto the lift's base to access the valve from the front of the lift, positioning him directly under the boom. He loosened the valve further, which released the pressure from the hydraulic system. The raised boom collapsed onto the worker, crushing him between the boom and the base. The cause of death was asphyxia from chest compression.

The bottom line: A post-accident investigation determined the company had not performed this type of repair work in the past, and the worker was not qualified to repair the lift. Furthermore, no lockout/tagout procedure had been implemented, allowing the lift's boom to fall when hydraulic components were removed.

Follow the rules

Never attempt to repair a piece of equipment you are not trained to work on. ANSI specifications require a qualified person to repair the aerial lift according to manufacturer's recommendations. Tony Groat, executive vice president of American Work Platform Training, notes that simply being a mechanic does not qualify you to work on all equipment. "Even being qualified on one model AWP does not qualify you to repair other types and models. They have different operating characteristics, safety devices and controls."

Your employer will also conduct a job safety analysis to identify potential hazards. In this instance, an analysis would have determined a failure to either block the boom while in a raised position or lockout the hydraulic system could result in a boom collapse.



Illustration by Don Lomax

Step by step

If you are qualified to make adjustments or repairs, take the following precautions:

- Power stopped, with starting means inoperative
- All controls in the off position
- All operating systems secured from inadvertent motion by breaks, blocks, etc.
- Elevating assembly lowered to down position or secured by blocking or cribbing to prevent dropping
- Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components
- Safety props or latches installed where applicable
- Any further precaution recommended by the equipment manufacturer.

Only after a job safety analysis is completed and lockout/tagout procedures have been implemented, should you begin work on the lift. **EW**

Information for this Safety Watch came from an accident report and the Center for Disease Control's NIOSH Fatality Assessment and Control Evaluation Program. Information on ANSI specifica-

tion A92.5-2006 was provided by Tony Groat, Executive Vice President, American Work Platform Training; IPAF North American Representative. It is meant for general information only.