

## **Aerial Lift Hydraulics Fire Hazard**

An injury accident involving the use of an aerial lift bucket working near a 120/240 volt residential service has raised concerns about the adequacy of equipment design, guarding, and safe operating procedures.

While in the process of moving an aerial lift bucket into position, an insulated secondary service line became entangled between the outer edge of the bucket and the hydraulic tool circuit manifold. The insulation on the service line was damaged, resulting in electrical



arcing. A hydraulic tool circuit fitting was burned through which allowed hydraulic fluid to escape and become ignited by the arc. Fire immediately engulfed the bucket, resulting in second and third degree burns to over 50 per cent of the operator's body, plus lung damage due to smoke inhalation.

## To prevent recurrence of such an accident the following recommendations are offered:

- With assistance and approval from the aerial lift manufacturer, evaluate all hydraulic fittings in close proximity to the bucket and eliminate any potential catch hazards.
- Whenever possible, and with the manufacturer's approval, cover and appropriately insulate all fittings which present a hazard of catching a line.
- Whenever operating an aerial lift near a potentially energized lines, continually check for proper positioning and possible contact with lines.
- Evaluate the intended use of all aerial lift equipment and, when appropriate, use hydraulic fluid with low ignition potential as recommended by the manufacturer.
- Turn the tool circuit off while it is not in use. This will reduce the flow of hydraulic fluid and lower the potential for ignition in the event of equipment failure or damage.
- Train all workers to be knowledgeable and competent in emergency response procedures for shutting off the flow of hydraulic fluid.

Hazard alerts provide information on unusual safety or health hazards or unusual or hazardous materials or practices. For more information contact the Oregon OSHA Standard and Technical Resources Section at (503) 378-3272, toll free at (800) 922-2689 or visit our Web site at www.orosha.org.



Oregon OSHA www.orosha.org (800) 922-2689

