

## **FATAL ALERT**

**December 8, 2006**

An experienced mechanic with numerous hours of technical training and numerous year of on-the-job training was working on a utility truck used to accomplish work on overhead utility lines owned by another company. The company allowed the mechanic to take on work as he saw fit for outside customers when the company did not have work for him to do on their vehicles. The utility truck had been inspected by an outside service company and was referred to this company for maintenance. The inspection revealed a faulty hydraulic system associated with the trucks man lift boom.

At the time of the fatal accident the mechanic was attempting to remove a valve associated with the hydraulics of the trucks man lift boom. This valve controlled fluid in the hydraulic system used to raise and lower the boom. The boom was designed so that when in a stored position the upper boom was positioned directly over the lower portion of the boom with only a few inches between the two sections. At some point the mechanic decided to raise the upper portion of the boom which allowed him access to an opening on the lower portion of the boom where the valve was located. The mechanic was straddling the lower portion of the boom with the upper portion of the boom directly above him. Once the valve was removed the hydraulic system provided no resistance to the weight of the upper boom and the upper boom essentially came down in a free fall to its nature resting position. The mechanic did not have time to react to the falling boom and was caught between the upper and lower portions of the boom. The boom came to rest on the mechanic in such a way that it prevented him from calling for help and prevented him from breathing, resulting in asphyxiation.

### **Significant Factors:**

- The employee typically worked on vehicles on his own.
- There was no formal oversight by management for the work accomplished on a day to day basis.
- There were no written specific instructions available for locking out the particular equipment.
- No formal training provided regarding the hydraulic repair process.
- The employee did not need to seek permission to work on an outside customer's equipment.
- No other employees know exactly what the worker was attempting to do.
- The part removed controlled the flow of hydraulic fluid between two chambers in the hydraulic ram associated with raising and lowering the upper boom.
- The Owner's Manual provided no warnings or instructions relating to the removal of the part.
- The Maintenance and Parts Manual does have a warning and instructions relating to working on the hydraulic system. But there is no specific warning relating to the removal of the part.
- The employer did not have a copy of the Maintenance and Parts Manual.
- No lockout measures were established to ensure the stored energy would not be released.
- The amount of damage to the part removed suggests the employee was having a difficult time removing the part or it was damaged some time prior to the employees efforts.
- When the part was removed the upper boom lowered to its natural resting position in a free fall mode of travel.

### **Recommendations:**

- Brief all employees on the facts and circumstances of this fatal mishap.
- Enforce the Wyoming OSHA rules relating to Lockout/Tagout of hazardous energy.
- Ensure specific Lockout/Tagout procedures are developed for each particular type of equipment with potential for unexpected release of hazardous energy.
- Incorporate the equipment's Owners and Maintenance manuals into the Lockout/Tagout program documentation and procedures.