

MAFES Dawg Tracks

August 1, 2011



Hydraulic System Safety



Technology in farm equipment has changed so much in recent years and the entire industry has changed with it. Along with all the technologic changes in methods and equipment, the multi-tasks use of hydraulic systems application has increased as well. Hydraulic systems are flexible, simple, compact, and safe to use, but they too will malfunction without proper maintenance and repairs.

Following are some key points to consider that can help to reduce the potential of an injury and improve maintenance on equipment that has a hydraulic system:

- ✓ Always wear eye protection and appropriate clothing when working on hydraulic systems.
- ✓ Block up working units, such as combine headers, when you are working on hydraulic systems with the unit raised. Don't ever rely on the system to keep you safe in this type of situation.
- ✓ Never service the hydraulic system with the engine running unless it is absolutely necessary, such as bleeding the system.
- ✓ Do not remove cylinders until the working units are resting on the ground or floor, on safety stands or on blocks. Be sure that the machine's engine is shut off when performing this procedure.
- ✓ Store the fluids in a safe and clean area to keep them out of the dirt and moisture. Inside protection is always the best. Try to cover them with a tarpaulin if outside is the only choice.
- ✓ Be sure that pulleys, belts and rotating shafts have the proper guards over them.
- ✓ Before disconnecting all the oil lines relieve all hydraulic pressure and discharge the accumulator, if one is used.
- ✓ Be sure all line connections are tight and the lines aren't changed. Escaping oil under pressure is a potential fire hazard and can penetrate the skin causing serious injury. Keep your hands and body away from pinhole leaks and nozzles which ejects fluids under pressure. Use pieces of paper or cardboard when checking for leaks. Do not ever use your hands or fingers, for obvious reasons. If any fluid is injected into your skin, it must be removed within a couple of hours by a doctor familiar with this type of injury or gangrene can set in.
- ✓ Always lower hydraulic units to the ground before leaving them.
- ✓ When transporting machines with hydraulic systems, lock the cylinder stops to hold work units in place. Before you start to remove them, be sure to have a means of support for them such as a chain hoist, floor jacks or stands.
- ✓ Keep the hydraulics in proper adjustment to maintain proper control of the unit.
- ✓ Be sure to couple the hoses correctly. If the hoses are interchanged it is possible for the equipment to work backwards and cause injury.
- ✓ Always repair the components with external leaks and clean up the oil spill from the leak to avoid the potential for a slip or fall hazard.

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Excerpts: www.nasdonline.org
1/31/2011*