

Loss Prevention Safety Tip



Loss Prevention
Program

By Red River Mutual

PREVENTING FARM EQUIPMENT FIRES

Most farms operate with multiple pieces of expensive agricultural equipment. Unfortunately many of these machines are damaged or destroyed by fire each year. Most, if not all, of these farm equipment fires are preventable.

Machinery Fires – Checking for Hazards

Checking for fire hazards before starting work each day will reduce the chance of costly fire to expensive equipment. All farm machinery needs to be checked for:

- Buildup of crop residue around the engine, exhaust system, belts and chains
- Damaged exhaust system components
- Worn or badly frayed drive belts
- Odor of burning electrical wiring
- Worn or misaligned moving parts can indicate a lack of lubricant
- Signs of leaking fluids, oil and fuel

Combines and balers can present other types of problems unique to their operation. Operators of these specialized machines should check for:

- Buildup of combustible crop residue around the engine and exhaust system
- Concealed drive belts and pulleys can contribute to the accumulation of crop residue which can overheat
- Electrical wiring can become worn or frayed resulting in sparks which can ignite grain dust or fuel vapors

Fire Extinguishers

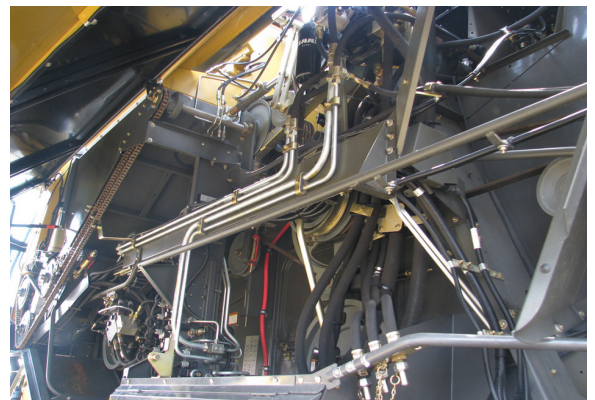
Fires on farm equipment are not uncommon, so all machinery should contain an approved fire extinguisher of adequate size. The cost of a fire extinguisher is minimal when compared to the replacement cost of a tractor or combine.

Fire extinguishers should be easily accessible and installed in the operator area. Pick-ups and trucks should have a fire extinguisher within easy reach of the driver. Always have a fire extinguisher on hand when using torches and welders.

Fire Extinguisher Inspection & Maintenance

Check your extinguishers every 30 days for the following:

- The extinguisher is not blocked by equipment or objects that could interfere with access in an emergency.
- The pressure is at the recommended level. The needle on the gauge should be in the green zone.
- The nozzle or other parts are not hindered in any way.



- The pin and tamper seal (if it has one) are intact.
- There are no dents, leaks, rust, chemical deposits or other signs of wear. Wipe off any corrosive chemicals, oil or dust that may have deposited on the extinguisher.
- Shake or use a rubber mallet to tamp the extinguisher once a month to prevent the powder from settling.

Fire extinguishers should be inspected annually by a certified service company and pressure tested (a process called hydrostatic testing) after 12 years to ensure that the cylinder is safe to use. Consult your owner's manual, extinguisher label or the manufacturer to see when yours may need such testing. If the extinguisher is damaged or needs recharging, replace it immediately!

Preventive Maintenance

Regular maintenance is the key to preventing many of the fires which occur on farm machinery. Good preventive maintenance not only prolongs equipment life but also reduces fire hazards. Here is what you can do to prevent equipment fires:

- Keep all bearings and gears well lubricated to prevent heat buildup.
- Remove crop residue from areas prone to generating heat.
- Replace worn and broken belts as soon as discovered.
- Keep lubricants at proper levels. - Repair any leaks in fuel systems.
- Repair or replace damaged or worn out exhaust systems and install a spark arrester to catch burning particles.
- Repair damaged electrical wiring.
- Keep oily rags in covered metal containers.
- Monitor static electricity, especially if large amounts of grain dust are present.



Safe Fueling

Too often during the busy planting or harvesting seasons, safe fueling practices are ignored in an effort to save a little time. The few seconds saved are insignificant when compared to the loss of expensive farm equipment due to carelessness. Follow these safety practices:

- Never refuel equipment with the engine running. Always shut engine off.
- Allow hot engines to cool 15 minutes before refueling.
- Extinguish all open flames and smoking materials before refueling.
- If fuel spills on an engine, wipe away any excess and allow the fumes to dissipate.
- Never put flammable liquids in glass or non-approved plastic containers.



Vehicles

Don't forget about the safety of vehicles used around the farm. Faulty exhaust systems and catalytic converters can cause a wildfire in areas with tall vegetation.

- Manifolds and exhaust pipes can easily reach temperatures of 250°C to 500°C. Dry grass will ignite within minutes at temperatures as low as 200°C.
- Catalytic converters reach temperatures of 600°C and can ignite dry vegetation such as tall grass, weeds or stubble, instantly.
- Vehicles with low ground clearance are especially prone to causing wildfire. Keep all vehicles in good repair.

See more loss prevention tips at www.preventingloss.com

While the safety recommendations in this report are based on apparent and obvious conditions that were found at the time of inspection, the report does not purport to identify all hazards or guarantee compliance with any standards, codes, ordinances or regulations. It is not legal or expert advice, and should not be used in place of consultation with appropriate professionals. Any person relying on this information does so entirely at their own risk. Red River Mutual denies all responsibility for any liability, loss, injury or risk which is incurred as a direct or indirect result of the use of any of the recommendations in this report.