

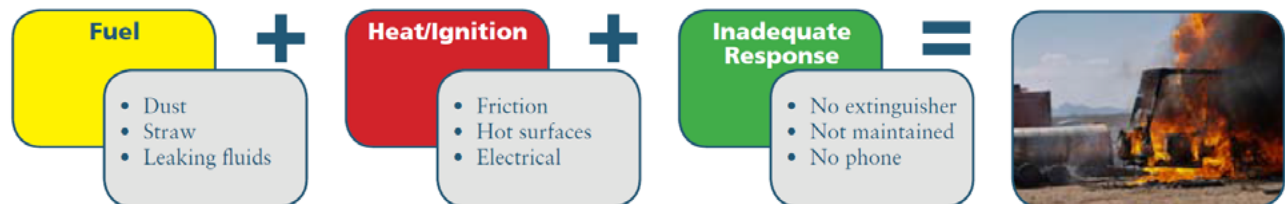
Farm Equipment Fire Prevention

Joe was having a great day at his farm. The weather was perfect and even though storms were expected in the next two days, his combine was working perfectly and the harvest of a bumper crop of wheat looked very good. Sure, it was hot and dusty, but who had time to stop and blow off or check equipment?

It was during a short stop in the afternoon that he noticed smoke coming from the engine compartment. As he watched, it quickly burst into flame. Joe grabbed a small fire extinguisher, but it ran out of agent before the fire was out. He called the fire department, but by the time they could find him, it was too late. The combine was lost as well as five acres of adjacent wheat that caught fire. Before he could find another combine, heavy storms struck, and part of Joe's remaining crop was destroyed. It couldn't be harvested because Joe hadn't taken the time to keep his combine safe from fire.

As this example demonstrates, the total potential impact on your farm involves much more than the insurable combine. Farmers' lives are endangered if they are in the cab when a fire starts or when they try to extinguish the flames. While farm equipment can be insured, other expenses are also incurred that must be covered by the farmer personally. These include crop loss, time loss, or other damage to the harvest.

Farm equipment fires start when a hot surface on the equipment ignites dust or other combustible material. The risk for fire increases when equipment is operated for long periods of time, which creates more heat.



The following risk factors should be considered:

- While in storage, bird nests may be built near engine compartments.
- Dust from combine operation collects around engine compartments or other hot surfaces.
- Fuel, oil, or other fluid lines break from lack of maintenance or physical damage and leak onto hot surfaces.
- Hot engine components overheat, especially after extended use or because of clogged air filters.
- Loose metal parts and moving parts that have frozen rub together and create friction or sparks.
- Loose wires can be damaged, leading to electrical shorts.
- Rodents also cause damage by chewing on insulation.

Taking some simple and cost-effective steps reduces the risk of a farm equipment fire or for controlling a fire immediately if one starts. These steps require minimal time and expense and will help reduce the risk for costly equipment fires that severely impact farm operations.

Fire Fighting

- What happens in the first minute of a fire is critical. It is likely that you will be in a remote location where the fire department will be unable to help initially.
- Carry at least one 4A60BC fire extinguisher on the machine at all times. Since you may be alone, two extinguishers are even better in case the fire rekindles before the fire department arrives or one unit is unable to fully extinguish the fire. Visually check your extinguishers monthly for cracks in the hose and inspect the gauge to verify that the extinguisher is fully charged.
- Carry a phone to call the fire department. Even though you are the first line of defense, the fire department is still critical to fully extinguishing a fire in the field or if the combine fire reignites.

Preventative Maintenance

- Check and replace fluid covers that are leaking.
- Clean up oil and fuel spills as they occur. This prevents chaff and trash from collecting on panel or work surfaces.
- Conduct pre-use and visual inspections before operation, during the day, and at the end of the day.
- Fix damaged lines promptly.
- Follow all manufacturer requirements for inspection, lubrication, and replacement of parts.
- Lubricate and maintain bearings and chains and replace as needed.
- Never fill the gasoline supply tank near an open flame, while smoking, or with the engine running.
- Overheated bearings are a major source of combine fires.
- Take a few minutes to inspect the combine for damaged or leaking hoses, loose electrical connections, or other problems.
- When refueling, always shut off the engine and let the equipment cool for 15 minutes before you refuel.

Dust Control

- Use a leaf blower to blow off the combine at least once a day per manufacturer specifications. As a general guideline, stopping every 3 hours to blow off the combine gets the driver out of the cab and moving to help circulation in the driver's legs. It also reduces the risk of fire.
- Mount or store gas-powered blowers so that hot surfaces don't touch areas where dust or chaff accumulates.
- Fire extinguishers can be purchased for less than \$80 and backpack leaf blowers for under \$200. This is a small investment to make when considering the potential loss of a \$250,000 combine or crop damage.

After Use

- Clean the combine with a water pressure washer periodically and after use.
- Conduct a quick inspection while waiting for the combine to cool down.