

MAFES Dawg Tracks



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Combine Harvester Safety



The time is drawing nigh when the combines will be rolling and business will definitely be in high gear. Reminders of maintaining a safe environment around farm equipment is always good to remember and a memory jogger to carry us through the season. Between 1996 and 2000, Health and Safety Executive (HSE) investigated over 60 incidents involving combine harvesters.

Following are the results of their investigation:

- Ten deaths & 40 injuries
- Six of the deaths were from persons being run over
- Four deaths and 14 serious injuries resulted from clearing blockages or working on the running combine
- Slips, trips and falls from the combine accounted for 15 injuries.

Identification of the risks involved and precautions to reduce these risks need to be put in place. **Safe Stop** is the most important safety action of all precautions.

- Handbrake on
- Controls in neutral
- Stop engine
- Remove the ignition key before entering the grain tank, working behind, inside or under the machine.

Combines with rotary heads or stripper heads may have some features that justify assessing the individual risks for each type, and these surely need to be considered; but some general precautions are common to both types, such as:

- Making sure that operators are aware of the risks, the safe operating procedures, and be totally familiar with the manufacturer's instruction manual. The manual will give instructions on the proper method of clearing blockages, cleaning the machine and the grain tank between uses.
- With new employees or operators, the time would be well spent to have an allotted time to review the proper handling and use of the machine.

As a **memory jogger** it will be worth the time to review hazards that can be involved with combine use:

- Entanglement – Becoming entangled in the leveling or discharge augers in the grain tank
- Falling from the combine, especially during pre/post season cleaning
- Contact with overhead power lines
- Being overrun
- Contacting the knife, reel or stripper rotor
- Contacting the straw chopper or spreader
- Being trapped under the header or injured by the header falling off its transport trailer
- Being injured by the drive mechanisms or trapped when the automatic sensors are operating.
- Other possible hazards are dust, fires and noise.

PRECAUTIONS FOR COMBINE USE (DO'S & DON'TS)

DON'T:

- Climb or reach into the grain tank unless the engine and augers are stopped and the ignition key has been removed.
- Climb around areas of the machine that weren't designed for passing (use steps, ladders, etc.).
- Carry passengers unless the machine is designed with propriety seating.
- Let people jump on or off the machine while it is running.
- Work under an unsupported header.
- Carry out maintenance or adjust automatic sensors with the engine running.
- Park, carry out maintenance or extend the unloading auger under overhead power lines.
- Run the combine with the guards raised or removed.
- Allow children on or near the combine.
- Brake suddenly, especially on slopes.

DO:

- Make sure all operators working on the combine have read and understand the operator's manual.
- Practice the **Safe Stop** procedure before doing any type of machine maintenance.
- Install a program for maintenance checks for brakes, guards, and other safety devices that all are in good working order.
- Use any grain sampling mechanism that is provided.
- Have a system of work for working in fields where there are overhead power lines, such as: knowing the height of the machine and the power lines off the ground, using farm maps relevant to when the daily work will be done, and routes of entry where power lines aren't present, when possible.
- Follow proper procedure for working under a header (extra caution to use locking supports).
- Follow correct procedures for unloading header from transport trailer.
- Work with the cab door shut.
- When using reverse gear, be sure that no one is behind you (sound the horn before moving backwards).
- Keep the engine compartment, belts and pulleys clean of straw and debris. (This should be a part of the daily maintenance routine).
- Make sure that there is compliant fire-fighting equipment installed on the machine.
- Don't operate the machine above its capability (refrain from overloading).
- Use the instruments and listen for possible blockages (it's easier to avoid blockages than to clean them).

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