



MAFES Dawg Tracks

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Safety Tips: Know the Dangers of a PTO



An important part of a tractor is the Power Takeoff or PTO. It (PTO) provides a means of transmitting power between a tractor and another piece of farm machinery. Some examples of PTO-driven equipment are hay balers, rotary cutters, weed mowers, forage blowers and irrigation pumps.

THE DANGER OF POWER TAKE OFFS-

- ✓ PTO shafts rotate at a very high speed – 540 or 1000 revolutions per minute when they are operating at normal operating speed.
- ✓ Most PTO accidents happen when folks get too close to the rotating shaft, especially if the guards are missing or damaged.
- ✓ Hair, loose clothing, such as pant legs, drawstring in “hoodies”, sweatshirts or jackets can get caught on the shaft and wrap around it.
- ✓ The chance of this happening increases if there are nicks, dried mud or manure on the guard.
- ✓ Hair or clothing can also catch in the U-joints or other fastening devices and wrap around the PTO shaft.
- ✓ Once the hair or clothing gets caught in the shaft or U-joint it is virtually impossible to escape. The more you try to pull away the tighter the wrap becomes.
- ✓ It only takes a fraction of a second for hair or clothing to be torn off or your body wrapped around a spinning shaft.

SAFETY DEVICES WILL HELP-

- ✓ PTO shields cover the shafts which help one from getting entangled.
- ✓ Check to see that the shields or guards are in place on the equipment with PTO drives.

- ✓ Don't assume that a guard or shield will automatically protect you from an accident. The shields or guards may be missing, damaged or cover only part of the shaft.
- ✓ Report any problem that you see or detect with equipment that is missing the shields or guards.
- ✓ Don't try to operate the machinery if the shields or guards are damaged or missing. (*We see equipment in some of our research units being used with missing or damaged shields as if they don't belong on the shaft or U-joints*).

TIPS ON SELF-PROTECTION -

- ✓ When you finish a job, turn off the PTO before you get off the tractor. Stop the tractor, turn off the key and take it out.
- ✓ Don't go near the PTO drive line until all parts have stopped moving.
- ✓ Obviously, don't try to check, adjust, unplug or grease any PTO powered equipment while the PTO shaft is turning.
- ✓ Check the manufacturer's instructions on how to hook up an implement to the PTO. Make sure no one is on or around the equipment when you're hooking it up.
- ✓ If a PTO is working while the tractor is stationary, be sure that the tractor is in neutral or park and the parking brake is on.
- ✓ Don't wear loose clothing around a PTO (2nd reminder). If you have long hair, pull it back and tie it up or wear a hat and tuck it in.
- ✓ Each time that you hook up an implement, be sure that the shields are in place and are working properly.

SAFETY-THE MEASURE OF SUCCESS
THINK SAFETY <><>ACT SAFELY

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