

Proper shielding and caution should prevent PTO accidents

A PTO shaft revolving at 1000 rpm revolves 16 times in less than a second. Little wonder that driveline entanglement nearly always results in devastating injury or death!

Missing or damaged shielding is the main reason for PTO entanglement. *All* shielding components must be correctly installed and properly maintained to prevent injury in case of accidental contact.

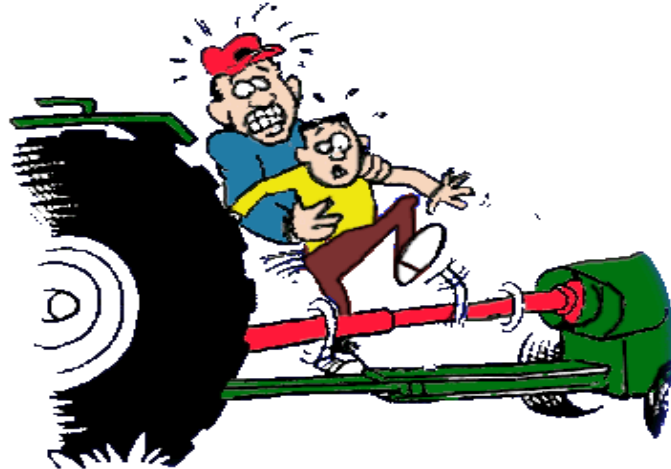
Operator awareness and constant vigilance are also crucial if PTO accidents are to be avoided. Clear safety rules must be established for everyone who works with farm machinery. Making repairs while equipment is operating, stepping over or onto revolving shafts, and wearing loose or frayed clothing are actions that set the stage for entanglement.

No shielding shortcuts

Never operate a tractor with a missing or damaged master shield. Integral shields on equipment power shafts must be kept in place and well maintained to protect against the “grabbing” action of drivelines and U-joints.

Both shaft attachment ends must be shielded. Universal joints and stub shafts need to be well covered.

Some older machines have tunnel shields over their power shafts. This design offers only limited protection. Because tunnel shielding is open at the bottom, clothing, shoelaces, hair, etc. can be caught by the shaft or U-joints. There is a strong case to be made for putting such equipment out of service. If it must be used, power shafts and shielding should be replaced with safer, modern components.



Proper installation

A PTO shaft may break or separate during operation if improperly adjusted or misused. If it does, the tractor-driven end can swing violently, with potential for severe equipment damage and operator injury.

Make very sure that all replacement driveline components meet manufacturer specifications.

The tractor drawbar should be adjusted to the length specified in the manual for the driven machine. This insures that the telescoping power shaft and shield will stay together when they lengthen in operation, and prevents driveline “bottoming out.”

Good PTO safety habits

Following are key considerations for preventing PTO entanglement:

1. Always disengage the PTO, shut off the engine and remove the keys before leaving the tractor seat. You can't be injured by the PTO or other machine parts if the driveline isn't rotating!

2. Keep tractor master shields in place at all times.
3. Check frequently to confirm that integral shields are in good condition. With the powershaft stopped, you should be able to rotate the shield freely by hand. Look for nicks, dents or bends that could catch clothing. Damaged shields, shafts, bearings, etc. must be repaired or replaced *before* the machine is operated.
4. Never step across a rotating powershaft. Some equipment (e.g. forage wagons and blowers, grinder-mixers, etc.) must be operated in a stationary location where you are working. Always walk around the revolving shaft. Safety devices are usually reliable, but could malfunction.
5. Dress for safety. Wear close fitting clothes and keep long hair covered. Raggy old coats and long boot laces can easily be grabbed by rotating parts.