

## Power Take-Off (PTO) Safety

- The PTO is a rotating drive shaft that transmits power from the tractor to the equipment
- A 540 rpm PTO turns 9 times per second and a 1000 rpm PTO turns 16 times per second
- Many farmers have lost their lives in PTO entanglements
- Many more farmers have lost limbs or become disabled in PTO entanglements



*Mock PTO entanglement demonstration*

### ***PTO Entanglements Occur When The Operator:***

- Is too close to the PTO
- Slips and contacts the shaft
- Gets distracted
- Steps or reaches over an operating PTO
- Does not ensure that shields are in place or functioning properly

# NYCAMH

A program of Bassett Healthcare Network



Established by the New York State Legislature in 1988. Recognizing the unacceptably high rates of occupational injury and illness in one of New York's largest industry, the legislature has charged NYCAMH to provide:

- Research into the causes and prevention of agricultural injury and illness
- Education and prevention activities within the farm community
- Education of professionals serving the farm community
- Clinical help for farm-related health problems

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**NYCAMH**

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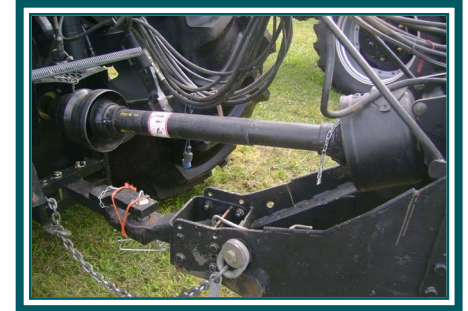
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**New York Center for Agricultural Medicine And Health**

## Power Take Off (PTO) Safety



*“Enhancing agricultural and rural health by preventing and treating occupational injury and illness.”*



Bassett Healthcare Network  
New York Center for Agricultural  
Medicine and Health

## PTO Master Shields

Ensure that all tractor and implement master shields are in place



Properly installed tractor master shield covering the PTO stub shaft

Master shields are sometimes removed during repairs and are not replaced. Missing shields mean operators are working around exposed PTO shafts and are at risk of entanglement.

- Always keep the tractor and implement master shields in place
- Replace shields after making repairs or servicing



Tractor without the PTO master shield

## Observe Safety Signs On Your Machine

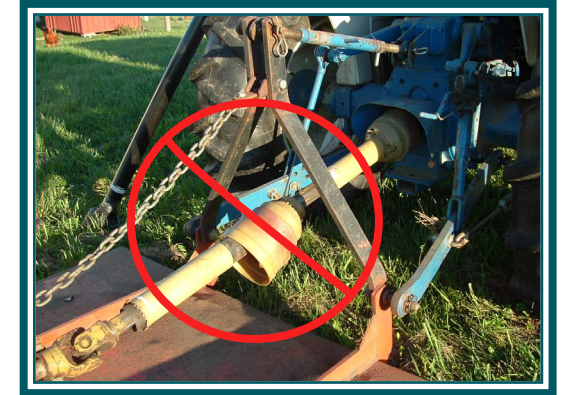


## Observe General Safety Rules

- Keep all shields in place
- Wear close-fitting clothing
- Tie long hair up, or tuck under a hat
- Stop engine and wait for the PTO driveline to stop completely before making adjustments, servicing or disconnecting PTO driven equipment
- If a PTO is operating while the tractor is stationary, be sure tractor is in neutral or park and parking brake is set
- Never allow children to get near PTO units
- Lubricate to keep rotating shields turning freely
- Check PTO shield before each use to ensure that it is working properly

## Observe the Condition of Your Equipment

Are shields **broken** or **missing**?



## A Properly Functioning PTO Shield

- Covers the total shaft and universal joints
- Is smooth, not dented or ripped
- Rotates freely from the shaft and cannot be pulled back from the yokes
- Has no enlarged holes for greasing
- Allows PTO shaft to telescope

**For the protection of you and your family, follow safety rules and repair or replace defective PTO parts immediately.**

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**To replace damaged or missing PTO driveline shields, contact NYCAMH and ask about the PTO shield retrofit program**

**800-343-7527**