

## Background

**Power Take Off**, or PTO units are the shaft that connects to the power unit that powers implements such as balers or mowers. A basic PTO unit is made up of a spline connector and U-joint at each end, and a shaft in the middle. PTO's can turn at either 540 or 1000 revolutions per minute, or RPM for short.

This can be extremely hazardous due to the fast rotation - an object or person could become entangled.

**Did you know?**  
*that a PTO turning at 540 RPM turns 9 times per second and one turning at 1000 RPM turns 16.6 times per second?*

## Work Activity

- Power down machinery and the implement before inspecting it. Lock it out if there is a chance of someone else starting the equipment during your inspection.
- Inspect the machinery, implement and PTO before use.
- Check the connection between the power unit stub, PTO and implement.
- Ensure that the master shield is in position before engaging the implement.
- Secure the shield with a small chain to an eye on the implement.
- If the PTO guard turns when the PTO is engaged, it may be damaged or disconnected from the anchor point.

## REMEMBER

**A revolving PTO moves faster than a person can react so keep your distance!  
A PTO entanglement will most likely have extreme consequences**

## Key Points

- The stub at the power unit requires a master shield
- All PTOs should have a guard
- Damaged PTOs or guards must be replaced before use
- Never step over a PTO – always walk around the power unit or implement
- Wear snug fitting clothes and remove jewelry before use
- Tie back and tuck in long hair before use
- Be careful not to kink the PTO or guard when making sharp turns or when going up or down steep inclines.

