

Tractor power take-off guarding

What is the problem?

Tractor power take-off (PTO) driven attachments that are not properly guarded.

What are the risks?

If a rotating PTO stub and shaft are not guarded or insufficiently guarded, workers can become entangled if loose clothing or hair is caught on the PTO shaft. This could cause death or serious injuries, such as amputations, lacerations or de-gloving.

What is a solution to the problem?

The risk of being entangled in a rotating PTO output stub and shaft can be reduced or eliminated by doing the following:

- ensure PTO output stub master guards and shaft guards are fitted and fixed, including covering universal joints and clutches
- replace damaged or inadequate guarding. Guarding must meet the requirements of Australian Standard 1121–2007: *Agricultural tractor power take-offs (Parts 1–4)*
- ensure the guard around the PTO shaft is designed so it does not rotate
- ensure the PTO is disengaged and the engine turned off when working near the PTO
- do not wear loose clothing and jewellery. Clothing should not have dangling cords
- tie back long hair
- ensure workers and bystanders stand clear of the PTO operating area
- regularly inspect, maintain and replace (if damaged) plastic or PVC shaft guards. These guards wear, depending on use and UV exposure. Maintenance should be carried out in accordance with manufacturer specifications. Inspections and maintenance should be documented and a history of maintenance records should be kept while the machinery is in use.

Each worker must understand and be able to demonstrate safe operation of the PTO attachments. No worker should be permitted to operate the tractor unless they are properly trained and supervised. Records of provided training should be kept as verification.

Further Information

WorkSafe Advisory Service

Toll-free: 1800 136 089

Email: info@worksafe.vic.gov.au

worksafe.vic.gov.au

Australian Standard

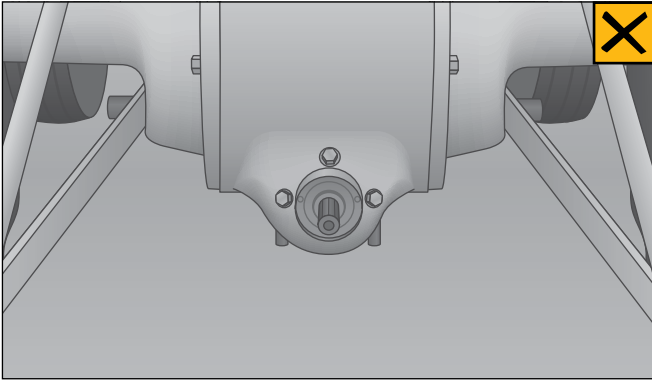
Australian Standard 1121-2007:

Agricultural tractor power take-offs (Parts 1–4)

(Health and Safety Solution continued overleaf.)

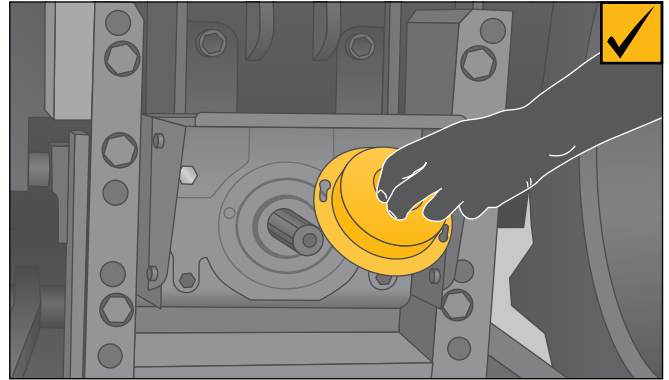
A Health and Safety Solution

The problem

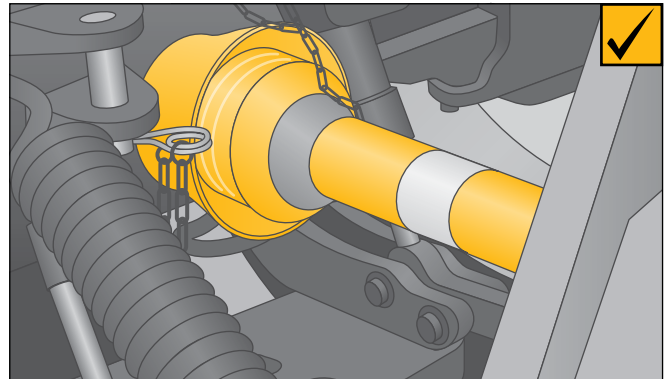


Workers are at risk of entanglement if the tractor PTO output stub is not fitted with a master guard and, when not in use, an output stub guard.

The solutions



A PTO fixed master guard should be fitted and the output stub guard should be in place when the PTO is not in use.



Ensure the PTO output stub, universal joints, clutches and PTO are fitted with suitably restrained guards to prevent rotation.