

Safe use of agricultural mowers

HSE information sheet

Agriculture Information Sheet No 25 (Revision 1)

Introduction

This information sheet describes typical hazards when using agricultural mowers. It provides guidance on minimising risks to the operator and others during mowing work and is intended to help employers, employees and the self-employed comply with their duties under health and safety legislation. It does not cover the use of these machines at working demonstrations where it is extremely important to assess and control the risks to bystanders.

There are different types of mower commonly used in agriculture. This information sheet covers the typical hazards likely to be found when using most types of drum or disc mower mounted on or trailed behind a tractor, and describes appropriate control measures.

Hazards

The greatest risk of injury comes from contact with the machine's moving parts including:

- moving blades or flails;
- moving drive mechanisms;

- rotating power take-off (PTO) shafts;
- rapidly moving blades, flails or other attachments ejected from the machine.

Other risks created by mowing work include:

- contact with moving parts when clearing blockages;
- being trapped or crushed while moving the mower between the work and transport positions;
- being crushed below a raised machine while replacing blades or carrying out other maintenance work;
- being struck or run over by the tractor and mower;
- overturns when working on slopes or banks; and
- being struck by objects or debris ejected from the machine.

Control measures

It is extremely dangerous to carry out work on a machine while it is under power. The most important safety measure is to follow the 'safe stop' procedure

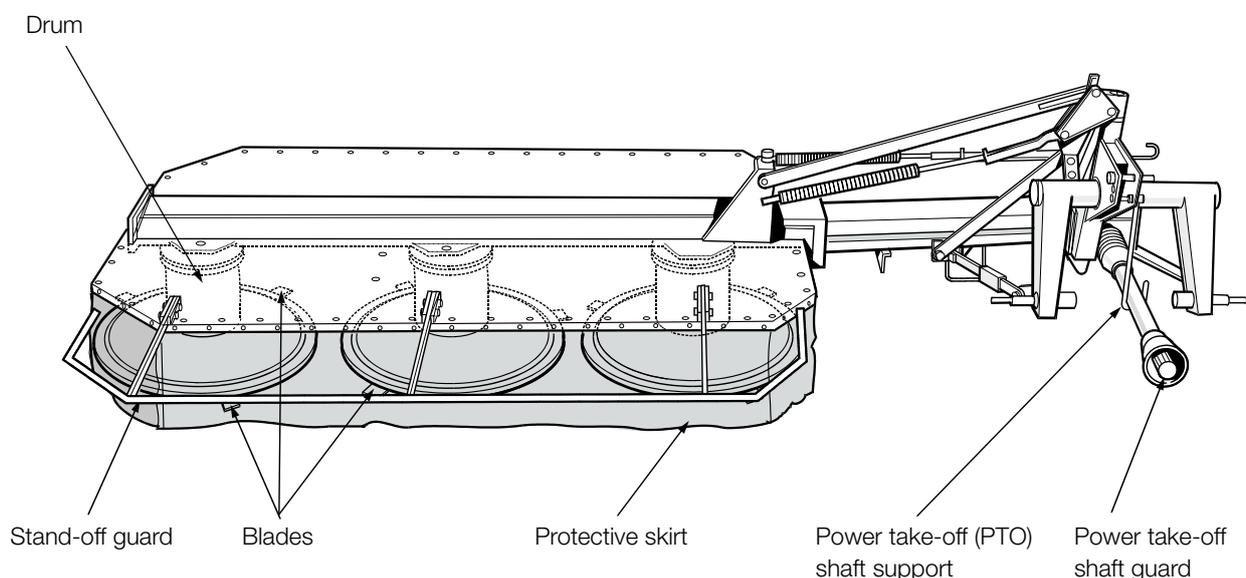


Figure 1 Typical drum mower

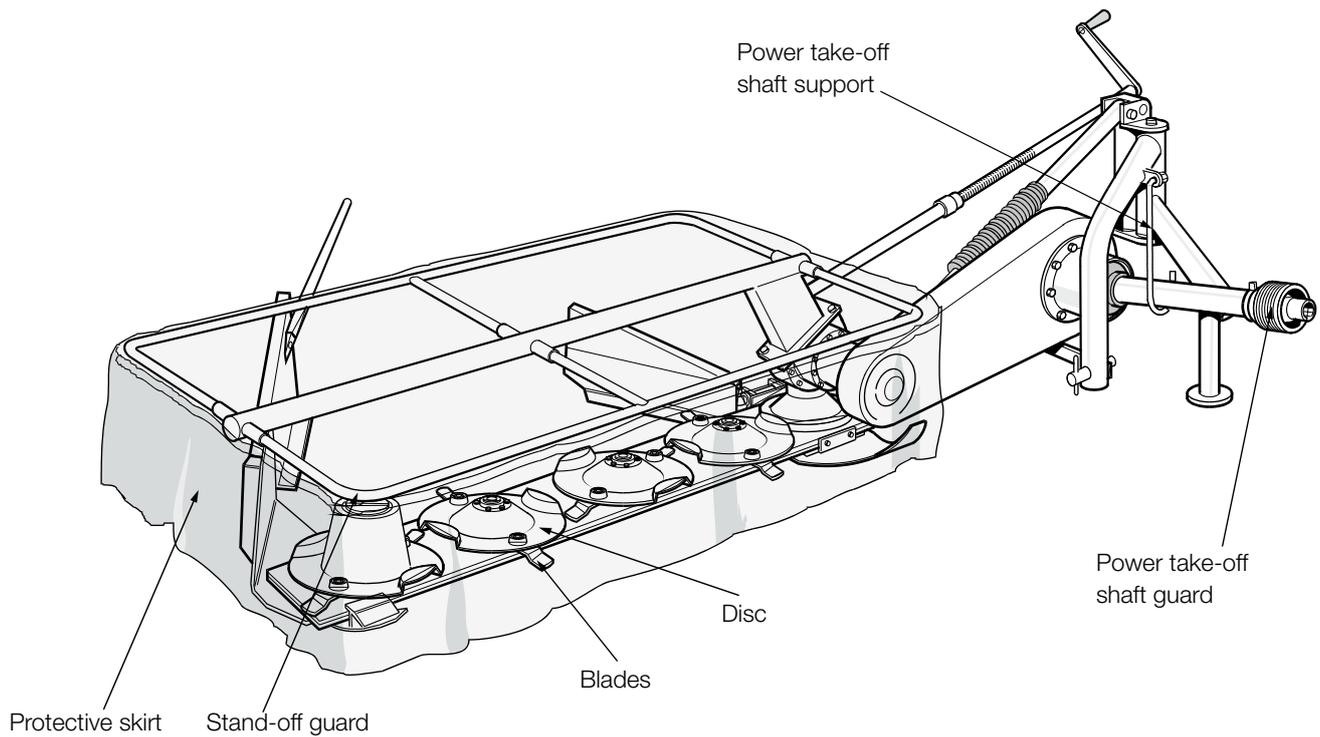


Figure 2 Typical disc mower

before carrying out any maintenance or adjustments, including dealing with a blockage or other problem:

- Handbrake on.
- Controls neutral.
- Stop engine.
- Remove key.

Always allow sufficient run-down time for blades and cutting mechanisms before approaching or working on the machine.

Everyone who works for you needs to know how to work safely. You must provide clear instructions, information and adequate training for your employees on:

- the risks they may face;
- measures in place to control the risks;
- how to follow any emergency procedures.

It is particularly important to consider the training needs and supervision of:

- new recruits and trainees, including young people who are particularly vulnerable to accidents;
- lone workers;
- people changing jobs, or taking on new responsibilities;
- health and safety representatives, who have particular laws relating to them.

Guarding

- The power take-off shaft must be fully enclosed in a guard along its entire length from the tractor power take-off to the power input connection on the mower.
- Guards should prevent contact with any dangerous part of the machine when it is in motion or use. Stand-off guards should be properly secured, and positioned front and rear to prevent contact with the blades.
- Make sure all guards are in position, correctly fitted and secure before starting work. Do not continue work with the guards missing or damaged.
- Make sure that the protective skirt or other device to stop objects or debris from being ejected is in place and in good condition.
- Remember that other parts of the mower, such as conditioners, need to be guarded to the same standard as the rest of the mower.

General guidance on safe working practice

- Make sure anyone operating a mower has received adequate instructions and training. Suitable training courses may be available from reputable sources such as local training providers, agricultural colleges, and through machinery dealers and suppliers.
- Follow the instructions and precautions set out in the operator's manual.

- Do not operate a mower if there are bystanders who are likely to be hit by broken blades or ejected debris (these may travel considerable distances).
- Stop work if you see someone approaching you when mowing is taking place.
- Take care when working on steep ground, particularly when turning, and especially with mounted mowers (see 'Further information').
- Watch out for potential blockages – avoiding blockages is easier than clearing them.

Maintenance

- Follow the manufacturer's instructions for replacing blades and flails.
- Ensure replacement parts meet the manufacturer's specifications.
- Always use a purpose-made prop or stand to carry out maintenance work safely beneath a mower. Do not rely on the tractor hydraulics alone.
- Remember that even when working under a supported machine, heavy parts may also need additional support.
- Suitable protective gloves may be needed when changing blades and carrying out similar maintenance.

Further information

Five steps to risk assessment Leaflet INDG163(rev3)
HSE Books 2011 www.hse.gov.uk/pubns/indg163.htm

Using tractors safely: A step-by-step guide Leaflet
INDG185(rev3) HSE Books 2012
www.hse.gov.uk/pubns/indg185.htm

Power take-offs and power take-off drive shafts
Agriculture Information Sheet AIS40 HSE 2012
www.hse.gov.uk/pubns/ais40.htm

Safe use of round balers Agriculture Information Sheet
AIS4(rev1) HSE 2011 www.hse.gov.uk/pubns/ais4.pdf

Safe use of forage harvesters Agriculture Information
Sheet AIS24(rev1) HSE 2012
www.hse.gov.uk/pubns/ais24.htm

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This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory, unless specifically stated, and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance.

This leaflet is available at:
www.hse.gov.uk/pubns/ais25.htm.

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