

Safe use of rotary flail hedge cutters

HSE information sheet

Agriculture Information Sheet No 21 (Revision 1)

Introduction

This information sheet outlines typical hazards when using most types of tractor-mounted rotary flail hedge cutter. It gives guidance on reducing risks to the operator and others during work with hedge cutters and will help employers, employees and the self-employed comply with their duties under health and safety law.

All users of rotary flail hedge cutters need to be aware of the particular features of their make/model of hedge cutter when considering the hazards, risks and precautions.

Hazards

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

- entanglement on inadequately guarded power take-off shafts;
- contact with the cutter head parts, drive belts or pulleys;
- being struck by the cutting head or machine arm as it moves.

Other risks associated with tractor-mounted hedge cutters can include:

- being hit by material or other debris ejected by the cutters;
- being hit by component parts ejected from the machine;
- coming into contact with overhead electricity power lines (OHPLs);
- the tractor overbalancing when the machine arm is extended;
- injection of high-pressure oil from damaged hydraulic hoses or couplings;
- being struck by the machine overbalancing when un-hitched from the tractor;
- road traffic accidents due to collisions with other vehicles either directly or from debris on the road.

Control measures

It is extremely dangerous to carry out any work on a machine while it is under power. The most important safety measure is to follow the 'safe stop' procedure before dismounting, or carrying out any maintenance or adjustments, including dealing with a blockage or other problem:

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

Guards and machine safety

Check that all guards and other protective devices are in place before starting work. Don't use the machine if the guards are missing or damaged. Make sure:

- the power take-off (PTO) shaft is fully enclosed in a guard along its entire length from the tractor power take-off to the power input connection on the hedge cutter;
- the tractor rear and side(s) are fitted with protective glazing, metal mesh or polycarbonate guards of a size/strength specified by the hedge cutter manufacturer to protect the operator against thrown debris or other projectiles;
- tractor mesh/polycarbonate guards are suitable for the job, undamaged and maintained in accordance with the manufacturer's instructions;
- all hedge cutter guards and safety devices are in position, correctly fitted and maintained in accordance with the manufacturer's recommendations;
- flails and their fixing heads are the right size for the task. Flails, and their fixings, should be of the type recommended by the manufacturer, securely attached, and should not be missing or damaged;
- hydraulic pipes are carefully routed to avoid damage;
- machine fittings and couplings are in good condition.

General guidance on safe working practice

- Operators should receive adequate instructions and training to enable them to use the machine safely. Take advantage of relevant training/courses provided by manufacturers/dealers. They will help ensure your safety and that of your staff, and help you get the best performance from your hedge cutter.
- Make sure the operator reads, understands and follows the instruction manual.
- Follow the manufacturer's instructions when hitching or unhitching the machine from the tractor. Do not stand in any position where you may be at risk of being crushed, eg in the area between the back of the tractor and the cutter.
- Make sure the machine is left in a stable position when it is removed from the tractor, using any stands or props provided, and securing it further if necessary.
- Do not carry out maintenance on the hedge cutter with the cutting arm/dipper arm raised, unless the arm is properly supported.
- Check the tractor is at least the minimum weight recommended by the hedge cutter manufacturer. Use ballast as necessary.
- Inspect the hedge before starting to cut and remove wire, bottles, cans and other debris. Check for any telegraph/electricity pole stays. Damaged stays should be reported to the relevant Telecoms Company/Distribution Network Operator.
- Use appropriate warning signs to alert others to the hedge-cutting operation where necessary.
- Work at a safe speed, taking account of the conditions (eg terrain, proximity to the highway, or obstacles).
- Use safe practices when work needs to be done near OHPLs. Flailhead units on some dipper arms can reach over 5.2 metres, the minimum height of OHPLs above ground level (see Further reading).
- Clear up debris after cutting if it could be a hazard to others.

Roadside hedges

Take extra care if you are hedge/verge cutting along a road. Consider what measures you will need to control the risks to other road users (eg vehicles, cyclists, pedestrians, or horse riders). For roadside work (on the public highway) there are other legal requirements. For example, there may be obligations to:

- display specific warning signs in defined locations where work is carried out;
- fit flashing beacons to tractors/machines;
- clear debris from paths and roads;
- restrict your working hours.

Consult your local authority highways department and the Department for Transport for advice (see Further reading).

Further reading

Traffic signs manual 2009. Chapter 8. Traffic safety measures and signs for road works and temporary situations. Part 2: Operations DfT ISBN 978 0 11 553052 4 <http://assets.dft.gov.uk/publications/traffic-signs-manual/traffic-signs-manual-chapter-08-part-02.pdf>

Working safely near overhead electricity power lines AIS8(rev3) HSE Books 2012 www.hse.gov.uk/pubns/ais8.htm

Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

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.

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