

Operator seat restraints for tractors and mobile work equipment in agriculture and forestry

HSE information sheet

Agriculture Information Sheet No 37 (Revision 1)

Introduction

This information sheet advises employers and the self-employed on the requirements for fitting and using operator seat restraints in tractors, self-propelled machines and other mobile agricultural or forestry work equipment. The term 'operator seat restraint' usually means seat belts or lap straps. It does not deal with legal requirements for operators to wear seat restraints on the public highway (see 'Further information').

While safety cabs have dramatically reduced fatalities from machines overturning, there are still many serious and fatal injuries which could be avoided by operators using seat restraints, for example injuries caused by:

- being thrown from machines fitted with a roll bar;
- being ejected through cab doors or windows;
- being thrown around violently in the cab.

Properly fitted seat restraints reduce the likelihood of a person being seriously injured when used with rollover protective structures.

Hazards

Overturning accidents with agricultural/forestry machines are not confined to steep slopes. Many incidents have occurred on gentle slopes where various contributory factors have led to a loss of control resulting in an overturn.

Based on reported incidents, HSE considers the risk of overturning is foreseeable in the following situations.

- using a machine fitted with a roll bar or cab with no door where a 90° overturn is possible, such as on rough or sloping ground, or with attachments and/or conditions which could contribute to an overturn;
- using a cabbed tractor on sloping ground with attachments and/or conditions which could result in loss of control and overturning, eg loaded trailers, lime or fertiliser spreading, extracting timber in forestry;

- using a cabbed tractor for rolling silage clamps or mowing steep ditch sides;
- using a self-propelled machine designed for use on steep terrain, eg forestry machines;
- driving certain types of All Terrain Vehicle (ATV) such as sit-in or side by side types (not ATV quad bikes);
- using a rough terrain forklift truck on slopes or rough ground;
- using a counterbalanced forklift truck with a mast or roll bar/cage on uneven ground.

Controls

Seat restraints can reduce the likelihood of serious injury when provided and used in the circumstances described above. Seat restraints are also required for other situations where there is a risk of overturning in which the driver could be crushed between the machine and the ground. Using a seat restraint should therefore be based on an assessment of the risk for any particular task or circumstances.

Where seat restraints are fitted as standard equipment, consult the operator's manual for information about appropriate use.

Most tractor seats have provision for fitting lap straps (eg anchorage points), although these are not always obvious. Check with the manufacturer to find out where the correct mounting points are and follow fitting instructions.

Where existing seats have no mounting points for seat restraints, the only alternative may be to replace the seat. In such a case:

- Replacement seats fitted with integral lap straps are available from specialist manufacturers.
- Where a new seat is fitted, make sure the seat mounting points can withstand the additional stresses from a person being strapped to it during an overturn. Always ask the manufacturer's advice on this point.

- While it may be easier to replace the seat, the seat mounting points must be strong enough that the seat will not be detached during an overturn.
- You should never drill or weld cab frames or roll bars to fit mounting points for seat restraints. This could weaken the structure, reducing its ability to provide adequate protection and invalidate its safety certification.
- Where a replacement seat is not available, consider using an alternative machine fitted with rollover protection and seat restraints for work activities where there is a risk of an overturn.

Situations where seat restraints are not so likely to be needed or are inappropriate include:

- using self-propelled machines such as combine harvesters, self-propelled sprayers, sugar beet harvesters, forage harvesters or potato harvesters;
- using sit-astride ATVs such as quad bikes where rollover protection is not required and seat restraints would be dangerous;
- using any machine which does not have rollover protection fitted.

(NB The mast on a forklift ensures it can only turn over onto its side, so seat restraints can be fitted to these machines without additional rollover protection.)

Safe use of seat restraints

On trailed or mounted machines the same requirements for operator protection apply. If a rollover protection device is fitted and there is a risk of people being crushed between the machine and the ground from overturning, fit seat restraints. Remember:

- Seat restraints should be maintained so they work properly. Regular safety checks of mobile equipment and machines should include seat belt condition and operation, and be in line with the manufacturer's instructions.
- When buying replacement equipment, check to see if seat restraints are fitted or if they are not, whether it is possible to do so.
- Children under 13 are prohibited from riding on tractors or self-propelled agricultural machines. Causing or permitting a child to use a passenger seat in these machines, with or without a seat restraint, does not alter the legal position.
- Instruct staff how to use seat restraints correctly, so they know which circumstances to use them in.

Further information

For information relating to driving on the public highway visit www.dvla.gov.uk and www.dft.gov.uk

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.

This document is available at www.hse.gov.uk/pubns/ais37.htm.

© *Crown copyright* If you wish to reuse this information visit www.hse.gov.uk/copyright.htm for details. First published 10/12.