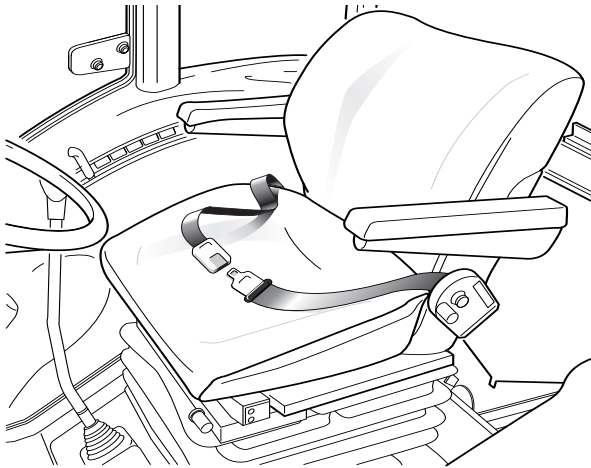


Operator seat restraints for mobile work equipment in agriculture and forestry

HSE information sheet

Agriculture Information Sheet No 37



Introduction

This information sheet gives advice to employers and the self-employed on the requirements to fit and use operator seat restraints in tractors, self-propelled machines and any other mobile agricultural or forestry work equipment. 'Operator seat restraints' usually means seat belts or lap straps.

What employers need to do

The Provision and Use of Work Equipment Regulations 1998 (PUWER 98) require employers to ensure that all mobile machines used at work have a suitable restraining system fitted to seats, including passenger seats, where there is a risk of anyone carried being crushed between the machine and the ground in an overturn.

What manufacturers need to do

Under the Supply of Machinery (Safety) Regulations 1992 (SMR) (as amended), where roll-over protective structures (ROPS) or mounting points for ROPS are fitted, manufacturers are required to fit seats, including passenger seats, with operator restraints which keep drivers in their seats without restricting any movements necessary for driving. (NB for mobile machines used at work, manufacturers are required to provide mounting points for ROPS where there is a risk of rolling over.) Tractors are NOT covered by SMR and there are no regulations directly requiring manufacturers to provide operator restraints for tractor seats.

Accidents

While safety cabs have dramatically reduced fatalities from machines overturning, there are still many injuries which could be avoided by using seat restraints, eg:

- drivers being thrown from machines with only a roll bar;
- drivers or passengers being thrown through cab doors or windows, or injured by being thrown around in the cab.

Overturning accidents are not confined to steep slopes. Fifty per cent of investigated overturning accidents occurred on slopes of 10° or less and half of these on slopes of 5° or less.

Fitting seat restraints

Employers should fit seat restraints if the machine is used for operations where there is a risk of overturning in which the driver could be crushed between the machine and the ground. Where a seat already has mounting points for a seat restraint, then fitting a lap strap or seat belt costs very little.

HSE considers such risks are foreseeable in the following situations, based on accident history. Seat restraints could reduce the likelihood of injury when:

- using a machine fitted with a roll bar or cab with no door where a 90° overturn is possible, eg 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 etc;
- using a cabbed tractor for rolling silage clamps or mowing steep ditch sides;
- using a self-propelled machine designed to be used on steep terrain, eg forestry machines and all-terrain vehicles (except for ATV quad bikes);
- using a rough terrain fork-lift truck on slopes or rough ground or using a counterbalanced fork-lift truck with a mast or roll bar/cage on uneven ground.

Most tractor seats have provision for fitting lap straps although these are not always obvious. Check with the manufacturer to ascertain the correct mounting points and follow fitting instructions.

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

- using self-propelled machines such as combine harvesters, self-propelled sprayers, sugar beet harvesters, forage harvesters or potato harvesters;
- using ATV quad bikes because they have no roll-over protection so seat restraints would be dangerous;
- using any machine which has no roll-over protection fitted. (NB The mast on a fork-lift ensures it can only turn over onto its side so seat restraints can be fitted to these machines without additional roll-over protection.)

Where existing seats have no mounting points for seat restraints, the only alternative may be to replace the seat. This may not need doing if you can show that the technical difficulties of fitting a new seat, of ensuring its mounting points are strong enough and the extra costs involved outweigh the risk of having no seat restraint, ie the risk of an overturn in the situations in which the machine is used.

Where a new seat is fitted ensure 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.

For passenger seats which have no mounting points for seat restraints it may be easier to replace the seat, but again the seat mounting points must be strong enough so that the seat will not become detached during an overturn.

NEVER drill or weld cab frames or roll bars to fit mounting points for seat restraints. This could weaken the structure and invalidate its safety certification.

Mobile trailed and mounted machines

On trailed or mounted machines the same requirements for operator protection apply, ie if there is a roll-over protection device fitted and there is a risk of employees being crushed between the machine and the ground from overturning, then seat restraints should be fitted.

Children

The Prevention of Accidents to Children in Agriculture Regulations 1998 prohibit children under 13 from riding on tractors or self-propelled agricultural machines which are designed or adapted mainly for

use in agriculture and are being used in the course of agricultural operations or going to or from such operations. Fitting a passenger seat lap strap in a tractor or self-propelled agricultural machine does not alter this legal position.

Although other self-propelled vehicles not designed or adapted mainly for use in agriculture, such as most all-terrain vehicles or some fork-lift trucks, are not affected by this prohibition, you should not normally carry children in or on such vehicles unless they are in a passenger seat and wearing a properly designed and fitted seat belt.

Duty to wear seat belts

The following legal duties under the Health and Safety at Work etc Act 1974 apply to employers, the self-employed and employees:

- Employers have a duty to ensure, so far as is reasonably practicable, the provision of information, instruction, training and supervision to ensure the safety of their employees at work.
- The self-employed have a duty to conduct their undertaking so as not to expose themselves to risk.
- Employees have a duty to take reasonable care for their own health and safety.

In each case these requirements could be applied to a failure to wear seat restraints where there was a foreseeable risk of injury from not wearing them.

Further information

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This document contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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