Farm Vehicle
Health Check

Code of Practice

This guide aims to help users of farm equipment to comply with the law in a practical way, using a common set of forms. By doing this, your machinery should be better maintained and safer to use.
The Law

Agricultural vehicles, trailers and trailed appliances are covered by the Health and Safety at Work Act 1974 (HSW Act), which places a duty on companies and individuals to ensure that precautions are taken to make work as safe as practically possible.

These vehicles and appliances are exempt from the legal testing requirements of many road vehicles, which puts the emphasis on the owner, to make sure their equipment is safe and in good working order. As more farming transport accidents occur off road than on, the high standards for road going vehicles should also be applied to those used off road.

The Provision and Use of Work Equipment Regulations 1998 (PUWER) apply to any equipment that you use at work; this can include tractors, air compressors, chainsaws and even ladders. They require that equipment must be suitable for the task, properly maintained and guarded, and that adequate training and information about the equipment is available for employees.

These Regulations apply to employers, the self-employed and any person in control of work equipment. This includes the hirer or even someone who lends a machine out.

If these vehicles, trailers and trailed appliances are driven on the public highway, they must also comply with the Construction and Use Regulations 1986 and The Road Traffic Act as in regards to road worthy condition. If any vehicle, trailer or trailed appliances is stopped, any defects found would leave the driver and owner liable for prosecution by road traffic law enforcement agencies or Police.

Equipment Selection

You must ensure that equipment is constructed or adapted so that it is fit for the job, being both:
1. Suitable for the purpose for which it is used, and
2. Suitable for the conditions in which it is used.

A good indication of the equipment’s construction standard is to check for a CE mark. CE marking means the machine conforms to the legal requirements of EU Directives. When selecting equipment, you should consider the working conditions and the risks to health and safety which exist, if any, and the premises in which the equipment is being used.

You must ensure that everyone who uses, supervises or manages the use of work equipment has adequate safety information available to them and, where appropriate, written instructions. The information must be easy to understand and should include:

- How the equipment should be used;
- What to do if you have a problem with the equipment;
- Information on how to operate the machine/vehicle contained in the operator’s manual;
- Any other specific information based on previous experience of using the equipment.

You and your staff should also be adequately trained in:

- How to use the work equipment efficiently and safely;
- What risks may be encountered; and
- Precautions that need to be taken.

Training and supervision is particularly important for all young people because of their relative inexperience and possible unfamiliarity with the working environment. You must also ensure that casual workers receive appropriate training and instruction. Induction training is particularly important for none or limited English speaking employees.

The information must be easy to understand and, where appropriate, written instructions. Has adequate safety information available to them and, where appropriate, written instructions. The information must be easy to understand and should include:

- How the equipment should be used;
- What to do if you have a problem with the equipment;
- Information on how to operate the machine/vehicle contained in the operator’s manual;
- Any other specific information based on previous experience of using the equipment.

Training and supervision is particularly important for all young people because of their relative inexperience and possible unfamiliarity with the working environment. You must also ensure that casual workers receive appropriate training and instruction. Induction training is particularly important for none or limited English speaking employees.

Details of recognised training courses can be found from your local training group, your local provider or through BAGMA on 01295 713 344 or by visiting www.bagma.com.

Equipment Maintenance

Employers must ensure that equipment is maintained in good and efficient working order.

Here the “efficiency” of the equipment does not relate to productivity, but to the health and safety aspects of all parts of the machinery. Employers must ensure that PTO guards, brakes, hydraulic hoses etc are maintained to do their job at all times.

Employers may need to check equipment regularly to ensure that it will not deteriorate and become a risk. The frequency of checks is dependent on the equipment itself and the risk involved; it could be each day, every three months, or even longer. Only those who know what is faulty and have completed the appropriate level of training should carry out maintenance work. All equipment should undergo regular maintenance checks in accordance with the recommendations of the manufacturer.

Where machinery has a maintenance log it should be kept up to date. The Regulations do not require farmers to keep a maintenance logbook but they may find it helpful to do so for reasons other than health and safety. The logbook should provide information for future planning and inform maintenance personnel and others of previous action taken.

Record keeping

To comply with legislation, you should carry out daily checks to make sure the machinery you are about to use, or allow someone else to use, is safe and working correctly. These checks are quick and simple to carry out, using the check sheets provided in this booklet.

Keeping a record of when checks have been carried out and what work has been done is very important. These records can help show that a machine is well maintained and regularly checked, particularly in the event of an inspection or accident.

The checks may also help reduce the risk of an accident occurring in the first place, as possible defects may be highlighted and should be repaired immediately. Regular maintenance may also extend the life of the machine and help prevent severe deterioration of parts, which could lead to expensive repair bills.

The sheets provided in this booklet will help you carry out your own maintenance and keep your machine in good working order at all times of the year.
## Brakes

### Testing your brakes

Trailer brakes are a wearing part and need adjustment to keep performing well. The standard at which your brakes operate is known as the braking efficiency and is the maximum force capable of being developed by the brakes expressed as a percentage of the maximum gross weight of the vehicle.

Measurement of braking efficiency requires specialised equipment not normally present in farm workshops, but may be available from your local approved brake test provider.

### Agricultural vehicle brakes

Agricultural vehicles which do not travel faster than 20mph (32km/h) are required to have a minimum braking efficiency of 25%.

Agricultural vehicles travelling faster than 20mph (32km/h) will need higher specification brakes, including ABS, dual-line fail safe braking systems and a minimum brake efficiency of 50%.

### Agricultural trailer brakes

In general, agricultural trailers which do not travel faster than 20mph (32km/h) must:
- Be capable of applying the brakes to at least two wheels on a trailer with no more than four wheels and to at least four wheels on a trailer with more than four wheels.
- Have a parking brake capable of preventing at least two of the wheels from revolving when the trailer is not being pulled; and
- Achieve a brake efficiency of at least 25%.

In general, agricultural trailers which do travel faster than 20mph (32km/h) must:
- Be capable of applying the brakes to at least two wheels on a trailer with no more than four wheels and to at least four wheels on a trailer with more than four wheels.
- Have a two-line fail-safe braking system for trailers not equipped with over-run brakes.
- Have ABS
- Achieve a braking efficiency of at least 45%.

### Agricultural trailed appliance brakes

Agricultural trailed appliances do not need brakes unless their maximum gross weight exceeds twice its unladen weight or the gross weight exceeds 14,230kg. Many load carrying appliances such as slurry tankers, muck spreaders and sprayers may come into this category and need brakes equivalent to those on agricultural trailers if manufactured after 1/12/1985.

## Testing your brakes

Under PUWER 98, inspections should be carried out when a significant risk to the operator or other workers from the installation or use of the work equipment has been identified. The need for inspections under this Regulation will depend on the nature of the equipment, where and how it is to be used and the level of potential risk from its use.

Inspections might range from a simple visual check to a detailed inspection and test, but will not form part of the manufacturer’s routine recommended maintenance schedule and not part of the operator’s daily check.

Users must ensure that:
- Where safety of equipment is dependent on installation conditions, it is inspected after installation and before use, or after assembly at a new site;
- Where conditions may cause deterioration, it is inspected at suitable intervals and each time any exceptional occurrences, such as damage or serious breakdown occur.

Examples of safety critical items under the above, which may need regular inspection, include PTO guards, chainsaw guards, tractor cab condition, a roll bar damaged in an accident and the parking brake. Any inspection made under this Regulation must be recorded and results retained until the next inspection under this Regulation takes place.

Employers must also ensure that no work equipment leaves their undertaking or is obtained from another undertaking (borrowed or hired) and used, unless accompanied by evidence of its last inspection under this Regulation.

---

### Daily Check

Before you start work in the morning walk round the machine or vehicle and check the following:

- Oil / fuel / water levels and leaks
- Tyre condition and wheel fixings
- All safety guards are fitted and working safely
- The steering is working correctly
- Brakes and hand brakes
- Flashing beacon and warning devices
- All lights / reflectors / indicators are working correctly
- Mirrors, both internal and external, are in position and are clean
- All implements are attached correctly
- All external services are fitted correctly
- You can see clearly in all directions

### Thorough examination of lifting equipment

If you are an employer or self-employed person providing lifting equipment for use at work, or if you have control of the use of lifting equipment, you must make sure the lifting equipment is safe. The main requirements for you as a ‘duty holder’ are in the Provision and Use of Work Equipment Regulations 1998 (PUWER) and the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

**LOLER requirements**

LOLER addresses the specific risks associated with the use of lifting equipment. Thorough examination and inspection are key requirements of the Regulations. To meet these legal requirements, duty holders must:

- Ensure lifting equipment (including lifting accessories) exposed to conditions causing deterioration which could lead to dangerous situations undergoes regular thorough examination by a competent person; and
- Ensure all supplementary inspections and tests recommended by the competent person are carried out within the timescale stated.

**LOLER coverage**

The scope of the Regulations is very wide and includes a range of equipment. There are two important definitions you need to know:

- ‘lifting equipment’ means work equipment for lifting and lowering loads. The definition includes attachments used to anchor, fix or support; and
- ‘accessory for lifting’ means lifting equipment for attaching loads to machinery for lifting.

**Examples**

- Foreloaders, fork-lift trucks and telescopic material handlers;
- Workshop hoists and rope hoists;
- Cranes on machines (e.g. on lorries or fertilizer spreaders); and
- Lifting attachments and accessories for all of the above.

Equipment which lifts loads over or in close proximity to people should be thoroughly examined. However, foreloaders on tractors with safety cabs, telescopic loaders and forklift trucks with operator protection and where no other people work in the vicinity will not normally need thorough examination.
### General Trained Appliance Health Check

This check sheet is designed to help the user ensure that the relevant machine is correctly and safely maintained. Any items which are found to need specific rectification would normally be best dealt with by a qualified technician. The responsibility for the provision of a safe machine and its safe use remains with the owner and driver respectively.

<table>
<thead>
<tr>
<th>KEY</th>
<th>Job complete</th>
<th>Not applicable</th>
<th>Attention needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Checked by</th>
<th>Serial or Reg No.</th>
<th>Hours/Mileage</th>
</tr>
</thead>
</table>

#### Vision

<table>
<thead>
<tr>
<th>Q1</th>
<th>Front windscreen/wipers</th>
<th>Side windows</th>
<th>Inside mirrors</th>
<th>Rear hitch mirror</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Wheels and Tyres

<table>
<thead>
<tr>
<th>Q2</th>
<th>Front tyres and pressures</th>
<th>Wheel bearings</th>
<th>King pin / grease points</th>
<th>Master cylinder</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rear tyres and pressures</td>
<td>Front wheel nuts</td>
<td>Front axle grease point/pins</td>
<td>Power steering unit</td>
</tr>
<tr>
<td></td>
<td>Brake connections</td>
<td>Rear wheel nuts</td>
<td>Handbrake function</td>
<td>Pipework and fittings</td>
</tr>
<tr>
<td></td>
<td>Steering mounting</td>
<td>Wheel rim fixings</td>
<td>Pedal assembly</td>
<td>Mechanical couplings</td>
</tr>
</tbody>
</table>

#### Lights

<table>
<thead>
<tr>
<th>Q3</th>
<th>Flashing Beacon</th>
<th>Incidators fixings</th>
<th>Registration plate light</th>
<th>Rear reflectors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Headlights</td>
<td>Hazard lights</td>
<td>Reversing light/alarm</td>
<td>Fog light</td>
</tr>
<tr>
<td></td>
<td>Front and rear side lights</td>
<td>Brake lights</td>
<td>Horn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Front and rear indicators</td>
<td>Work light</td>
<td>7 pin connector</td>
<td></td>
</tr>
</tbody>
</table>

#### Superstructure

<table>
<thead>
<tr>
<th>Q4</th>
<th>Footsteps</th>
<th>Seat belt/anchors</th>
<th>Valid road tax licence disc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ROPs</td>
<td>Number plate</td>
</tr>
</tbody>
</table>

#### Miscellaneous

<table>
<thead>
<tr>
<th>Q5</th>
<th>Pick up hitch</th>
<th>Engine oil level and filter</th>
<th>Fuel tank cap</th>
<th>Heating system</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hydraulic arms</td>
<td>Transmission oil level and filter</td>
<td>Oil or water leaks</td>
<td>Air conditioning</td>
</tr>
<tr>
<td></td>
<td>Top link</td>
<td>Hydraulic oil level and filter</td>
<td>Battery levels and fixing</td>
<td>Engine cut off</td>
</tr>
<tr>
<td></td>
<td>Trailer hook wear and lock</td>
<td>Radiator level and cap</td>
<td>Throttle cable</td>
<td>Operators manual</td>
</tr>
<tr>
<td></td>
<td>Clevis Hitch wear and lock</td>
<td>Fuel filter</td>
<td>Gear selector linkage</td>
<td>Warning stickers</td>
</tr>
<tr>
<td></td>
<td>Lift arm assembly</td>
<td>Cab filter</td>
<td>PTO guard and on/off controls</td>
<td>Control stickers</td>
</tr>
<tr>
<td></td>
<td>Check chain wear</td>
<td>Fan belt</td>
<td>Exhaust and brackets</td>
<td>Safety interlocks</td>
</tr>
</tbody>
</table>

#### Tipping system

<table>
<thead>
<tr>
<th></th>
<th>Hydraulic hoses</th>
<th>Tipping brackets</th>
<th>Tipping door locks</th>
</tr>
</thead>
</table>

#### Miscellaneous

<table>
<thead>
<tr>
<th></th>
<th>Air brake connections</th>
<th>Weight specification plate</th>
<th>Depth wheels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hydraulic brake connectors</td>
<td></td>
<td>Guards</td>
</tr>
<tr>
<td></td>
<td>Parking brake connectors/levels</td>
<td>Brake actuator return springs</td>
<td>2nd towing hitch</td>
</tr>
<tr>
<td></td>
<td>Parking brake tubing</td>
<td>Points/discs</td>
<td>Strap/robe fixings</td>
</tr>
<tr>
<td></td>
<td>Cable mounting</td>
<td>Blades</td>
<td>Load cover mechanism</td>
</tr>
<tr>
<td></td>
<td>Sillage side mountings</td>
<td>Hitching points</td>
<td>Load sensor cable</td>
</tr>
<tr>
<td></td>
<td>Grain chutes</td>
<td>PTO guard and shaft</td>
<td>Trailer rams</td>
</tr>
<tr>
<td></td>
<td>Registration plate</td>
<td>Marker boards</td>
<td>Transport locking devices</td>
</tr>
<tr>
<td></td>
<td>Guads fitted to dangerous projections</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Work equipment and working practices need to be assessed for the risks involved and decide which items need thorough examination in your particular circumstances.

Thorough examination

An examination scheme involves a thorough examination and would include a detailed schedule of checks, appropriate examination techniques and testing requirements, drawn up to suit the operating conditions of a specific item of lifting equipment.

A thorough examination is a systematic and detailed examination of the lifting equipment by a competent person to detect any defects that are, or might become, dangerous.

Competency

A competent person:
¬ Should have enough appropriate practical and theoretical knowledge and experience of the lifting equipment so that they can detect defects or weaknesses, and assess how important they are in relation to the safety and continued use of the equipment;
¬ Should not be the same person who performs routine maintenance as they would be responsible for assessing their own work;
¬ Should be sufficiently independent and impartial to make objective decisions;
¬ May be employed by a separate company, or selected by an employer from members of their own staff.

Defects

If the competent person finds a defect with the lifting equipment during the thorough examination and/or inspection which in their opinion is, or could become, a danger to people, they must tell you immediately and confirm this in the report of thorough examination/inspection.

If the competent person discovers a defect that involves an existing or imminent risk of serious personal injury, then they must tell you immediately and send a copy of the report to the relevant enforcing authority (HSE or the local authority).

Examination intervals

You must have lifting equipment thoroughly examined:

<table>
<thead>
<tr>
<th>Type of equipment</th>
<th>6 months</th>
<th>12 months</th>
<th>Examination scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessory for lifting</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Equipment used to lift people</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>All other lifting equipment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Non-lifting parts of the equipment

PUWER requires all work equipment that is exposed to conditions causing deterioration which may result in dangerous situations to be inspected. For some lifting equipment, such as forklift trucks, you will need to inspect both the distinct lifting elements as well as the non-lifting elements.

Record keeping

You must keep records of all thorough examinations and inspections for all your lifting equipment.

SUPPORTED BY:

BAGMA
Tel: 01295 713 344  Fax: 01295 711 665
Website: www.bagma.com  Email: info@bagma.com

NFU

Prepared by NFU© and working in partnership with BAGMA© 2011