

Farm Vehicle Health Check Scheme



BE SAFE ON ROAD

BE SAFE OFF ROAD

Code of Practice

Ensuring the safety of farm machinery - practical guidance on how to comply with PUWER

Introduction

The integral safety of machinery and its safety in use are of paramount importance. Agricultural motor vehicles, agricultural trailers and agricultural trailed appliances, because of their unique construction are covered by the *Health & Safety at Work Act* (HASAWA), are also exempt from the normal MOT or plating and testing requirement applied to many other types of road vehicles.

However, this does not mean that the integrity of such equipment is any less regulated or important than for those vehicles covered by an annual test. Agricultural motor vehicles, trailers and trailed appliances are covered under the PUWER (*Provision and Use of Work Equipment Regulations*).



The purpose of this Code of Practice is to assist operators who use such equipment to comply with the legislation in a practical manner using a common set of forms.

The guidance has been drawn up through a cross-industry initiative.

The partners in this initiative are:

-  British Agricultural and Garden Machinery Association (BAGMA)
-  Health & Safety Executive
-  Lantra Awards
-  National Association of Agricultural Contractors
-  NFU England and Wales
-  NFU Scotland

With guidance from:

-  The Vehicle Inspectorate
-  Association of Chief Police Officers



Training for users

Employers must ensure that all people who use, supervise or manage the use of equipment have received adequate training for purposes of health and safety. It should include training in the:

- 🔴 methods which should be adopted when using the work equipment
- 🔴 risks which may be encountered, and
- 🔴 precautions that need to be taken.

Training and supervision is particularly important for all young people because of their relative immaturity and unfamiliarity with the working environment. Employers must also ensure that casual workers receive appropriate training and instruction. Induction training is particularly important.

Details of recognised training course can found from your local training group, your local provider or via BAGMA on 01923 720 241 or by visiting www.bagma.com

Getting the operator involved

It is imperative that to comply with the legislation daily checks are carried out. The following cab sticker is designed to do just that. It allows you to plan the service schedule for the equipment and ensures that the operator is reminded to undertake the key daily checks.

It is available from your local BAGMA Dealer

Daily Vehicle Health Check

Report / repair all defects as soon as possible. Refer to owners manual for further details. Do not use machine until safety defects have been rectified.

Owner/Manager				Contact No:			
Service 1	Completed	Service 2	Completed	Service 3	Completed	Service 4	Completed

Check each day before you operate:

Flashing Beacon/ Warning Devices	Tyre Condition & Wheel Fixings	Safety Guards
Lights / Reflectors / Indicators	Correct attachment / coupling of Implements & Fitting	Correct coupling of external services
Wipers / Washers / Visibility	Brakes / Hand Brake	Fuel / Oil / Water Levels and Leaks
Mirrors	Steering and Lubrication	Driver's Seat

Keeping your skills current with Lantra Awards

Basic tips for helping to reduce machinery accidents

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

- 🚫 Check oil / fuel / water levels and leaks
- 🚫 Check tyre condition and wheel fixings
- 🚫 Check all the safety guards are fitted and working safely
- 🚫 Check the steering wheel is working correctly
- 🚫 Check the brakes and hand brakes
- 🚫 Check the flashing beacon and warning devices
- 🚫 Check all lights / reflectors / indicators are working correctly
- 🚫 Check that the mirrors both internal and external are in position and are clean
- 🚫 Check that all implements are attached correctly
- 🚫 Check that all external services are fitted correctly
- 🚫 Check the drivers seat is comfortable and in the correct place
- 🚫 Check that you can see clearly in all directions



Checking your brakes

There are many sophisticated pieces of equipment available for checking brakes. They often need calibrating or using in controlled and clean environments.





This is obviously a problem for most farms. There is obviously a need to check your brakes but a simple test should be employed to give an indication that they are sufficient before using the vehicle on, or indeed, off road.

Preparing a braking area

You will need to identify a suitable area to carry out a simple brake test. It should preferably be a flat area with sufficient run off in case of a problem with the brakes following the test.

Remember to consider the general health and safety aspects of setting up such an area. Is it near to buildings or where pedestrians are likely to walk? Will there be any livestock likely to be moving across the area etc.?

Once you have identified a suitable area, preferably a level hard surface, mark out the check area by painting lines at appropriate intervals e.g. 10m apart. The following table gives the relevant approach speeds and stopping distances:

<i>Approach speed</i>	<i>S t o p p i n g d i s t a n c e</i>
10 mph (16 km/h)	 13' 5" (4.09m)
12 mph (19 km/h)	 19' 4" (5.89m)
15 mph (24 km/h)	 30' 3" (9.9m)
20 mph (32 km/h)	 53' 9" (16.38m)

Service Sheets

The following sheets will assist you if you should wish to undertake your own maintenance or utilise your dealer for maintenance provision. Again the key criteria is to ensure compliance with PUWER 1998.

Both these sheets are designed to help operators of the tractor/trailer/trailed appliance keep their machine in good working order at all times of the year.

Sheets can also be obtained from your nearest BAGMA member. BAGMA is the trade association for agricultural machinery dealers across the UK.



Vehicle Health Check

This check sheet is designed to help the user ensure that the relevant vehicle is correctly and safely maintained. Any items which are found to need specific rectification would normally be best dealt with by a qualified mechanic.

In the case of safety, critical items should always be rectified by a qualified mechanic. The responsibility for the provision of a safe vehicle and its safe use remains with the owner or driver.

Owners Name:	
Job Ref No:	Engineer:
Make:	Model:
Serial No:	Reg No:
Date:	Hours/mileage:
Is the vehicle under a suppliers warranty or insurance programme? Yes / No	

Key:	
Checked Completed	<input checked="" type="checkbox"/>
Needs Attention	<input checked="" type="checkbox"/>
Adjusted	<input checked="" type="checkbox"/>
Not Applicable	<input type="checkbox"/>

Vision	
Item	Code
<input type="checkbox"/> Front Windscreen Wipers & Washers	A1
<input type="checkbox"/> Front Windscreen	A2
<input type="checkbox"/> Rear Windscreen Wipers & Washers	A3
<input type="checkbox"/> Rear Window	A4
<input type="checkbox"/> Side Windows	A5
<input type="checkbox"/> Doors	A6
<input type="checkbox"/> Inside Mirrors	A7
<input type="checkbox"/> Wing Mirrors	A8

<input type="checkbox"/> Power Steering Unit	B15
<input type="checkbox"/> Pipe-Work & Fittings	B16
<input type="checkbox"/> Mechanical Couplings	B17
Lights	
Item	Code
<input type="checkbox"/> Flashing Beacon	C1
<input type="checkbox"/> Headlights	C2
<input type="checkbox"/> Front Side Lights	C3
<input type="checkbox"/> Rear Side Light	C4
<input type="checkbox"/> Front Indicators	C5
<input type="checkbox"/> Rear Indicators	C6

Miscellaneous	
Item	Code
<input type="checkbox"/> Radiator	E1
<input type="checkbox"/> Radiator Level	E2
<input type="checkbox"/> Radiator Cap	E3
<input type="checkbox"/> Fuel Filter	E4
<input type="checkbox"/> Hydraulic Oil Filter	E5
<input type="checkbox"/> Transmission Oil Filter	E6
<input type="checkbox"/> Engine Oil Filter	E7
<input type="checkbox"/> Air Filter	E8
<input type="checkbox"/> Cab Filter	E9

Wheels/tyres

Item	Code
<input type="checkbox"/> Front Tyres	B1
<input type="checkbox"/> Rear Tyres	B2
<input type="checkbox"/> Brake Connectors	B3
<input type="checkbox"/> Steering Mounting	B4
<input type="checkbox"/> Wheel Bearings	B5
<input type="checkbox"/> Front Axle Pins	B6
<input type="checkbox"/> Front Wheel Studs	B7
<input type="checkbox"/> Rear Wheel Nuts	B8
<input type="checkbox"/> Rear Wheel Rim Fixing	B9
<input type="checkbox"/> King Pin Grease Point	B10
<input type="checkbox"/> Front Axle Grease Points	B11
<input type="checkbox"/> Handbrake Function	B12
<input type="checkbox"/> Pedal Assembly	B13
<input type="checkbox"/> Master Cylinder	B14

<input type="checkbox"/> Function of Lights	C7
<input type="checkbox"/> Indicator Fixings	C8
<input type="checkbox"/> Brake Light Housing	C9
<input type="checkbox"/> Front Work Light	C10
<input type="checkbox"/> Rear Work Light	C11
<input type="checkbox"/> Registration Plate Light	C12
<input type="checkbox"/> 7 Pin Connector	C13
<input type="checkbox"/> Reversing Light/Alarm	C14
<input type="checkbox"/> Horn	C15

Superstructure

Item	Code
<input type="checkbox"/> Footsteps	D1
<input type="checkbox"/> Seat Fixings/ Adjustment	D2
<input type="checkbox"/> Seat Belt / Anchors	D3

<input type="checkbox"/> Fan Belt	E10
<input type="checkbox"/> Fuel Tank Cap	E11
<input type="checkbox"/> Trailer Hook Wear & Lock	E12
<input type="checkbox"/> Clevis Hitch Wear & Lock	E13
<input type="checkbox"/> Throttle Cable	E14
<input type="checkbox"/> Gear Selector Linkage	E15
<input type="checkbox"/> Battery Levels & Fixing	E16
<input type="checkbox"/> PTO Guard	E17
<input type="checkbox"/> PTO On/Off Controls	E18
<input type="checkbox"/> Check Chain Wear	E19
<input type="checkbox"/> Oil Leaks/ Water Leaks	E20
<input type="checkbox"/> Exhaust + Brackets	E21
<input type="checkbox"/> Heating System	E22
<input type="checkbox"/> Air Conditioning System	E23
<input type="checkbox"/> Fuel Leaks	E24
<input type="checkbox"/> Engine Cut Out	E25

Vehicle Comments/Notes

Please make notes on specific items using the relevant code or any other comments on the vehicle

Local Dealer Details



Trailed Appliances Health Check

This check sheet is designed to help the customer ensure that the relevant vehicle is correctly and safely maintained. Any items which are found to need specific rectification would normally be best dealt with by a qualified mechanic.

In the case of safety, critical items should always be rectified by a qualified mechanic. The responsibility for the provision of a safe vehicle and its safe use remains with the owner or driver.

Owners Name:

Job Ref No:

Make:

Serial No:

Date:

Engineer:

Model:

Reg No:

Is this trailer under a suppliers warranty or insurance programme? Yes / No

Key:

Checked Completed

Needs Attention

Adjusted

Not Applicable

Wheels / tyres

- | | | |
|--------------------------|-----------------------|----|
| <input type="checkbox"/> | Tyre Condition - N/S | A1 |
| <input type="checkbox"/> | Tyre Condition - O/S | A2 |
| <input type="checkbox"/> | Brake Connectors | A3 |
| <input type="checkbox"/> | Wheel Bearings - N/S | A4 |
| <input type="checkbox"/> | Wheel Bearings - O/S | A5 |
| <input type="checkbox"/> | Wheel Nuts | A6 |
| <input type="checkbox"/> | Rear Wheel Rim Fixing | A7 |
| <input type="checkbox"/> | Axle Grease Points | A8 |

Lights

- | | | |
|--------------------------|--------------------|----|
| <input type="checkbox"/> | Flashing Beacon | C1 |
| <input type="checkbox"/> | O/S Side light | C2 |
| <input type="checkbox"/> | N/S Side light | C3 |
| <input type="checkbox"/> | O/S Brake light | C4 |
| <input type="checkbox"/> | N/S Brake light | C5 |
| <input type="checkbox"/> | Left Indicator | C6 |
| <input type="checkbox"/> | Right Indicator | C7 |
| <input type="checkbox"/> | Function of Lights | C8 |
| <input type="checkbox"/> | Indicator Fixings | C9 |

Tipping Systems

- | | | |
|--------------------------|---------------------|----|
| <input type="checkbox"/> | Hydraulic Hoses | D1 |
| <input type="checkbox"/> | Hydraulic Lift Rams | D2 |
| <input type="checkbox"/> | Tipping Brackets | D3 |
| <input type="checkbox"/> | Tipping Door Locks | D4 |
| <input type="checkbox"/> | Draw Bar | D5 |

Misc

- | | | |
|--------------------------|--------------|----|
| <input type="checkbox"/> | Sprung Axles | E1 |
|--------------------------|--------------|----|

Superstructure

- Frame B1
- Body B2
- Draw Bar B3
- Draw Bar Ring B4
- Trailer Bed B5

- Brake Light Housing C10
- Electric Cabling C11

- Air Brake Connectors E2
- Parking Brake Connectors E3
- Parking Brake Cabling E4
- Cable Mountings E5
- Silage Side Mountings E6
- Grain Chute E7
- Weight Specification Plate E8
- 7 PIN connectors E9
- Brake Hoses E10

Trailed Appliance Comments

Please make notes on specific items using the relevant code or any other comments on the trailed appliance

Local Dealers Details

The applicable legislation

Overview

To understand the legislative framework that ensures farm machinery is safe we must initially take account of the *Health and Safety at Work Act 1974*. This is effectively the umbrella Act under which other more specific pieces of legislation have been brought on to the statute book in the UK.

The Health and Safety at Work Act 1974 (HASAWA'74)

Section 2(1) of the HASAWA states that:

'It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees.'

Section 2(2) goes on to detail more specific requirements, and in particular notes that employers must ensure, so far as is reasonably practicable, the provision and maintenance of plant and systems of work.

This section clearly covers the safe maintenance of agricultural motor vehicles, agricultural trailers and agricultural trailed appliances.



The Provision and Use of Work Equipment Regulations 1998 (PUWER) - coverage and requirements

PUWER is one of the most significant regulations dealing with machinery safety that comes under the HASAWA. It was originally introduced as part of what became known as the 'six pack' regulations. All six came into operation on 1 January 1993 to implement EC Directives on various aspects of health and safety

The PUWER Regulations were revised in 1998 and the new Regulations came into effect on 5 December 1998 on a phased basis:

All Regulations except Regulations 25-30 apply to both new and existing work equipment from 5 December 1998.

New mobile work equipment from 5 December 1998 will have to comply with all PUWER Regulations 1998, including Regulations 25-30. For the purpose of the regulations new means 'new to the premises' i.e. hired, borrowed or bought in second hand in addition to normal newly purchased equipment.

Existing mobile work equipment in use before 5 December 1998 will have until 5 December 2002 to comply with Regulations 25-30.

The PUWER Regulations have general application to use of machinery in the workplace.

Key changes from the 1992 Regulations are the inclusion of new Regulations on inspection, training and mobile machinery.

Application

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

Machinery and Equipment Covered

Machinery and equipment of all types and ages are covered by the Regulations, with additional requirements to be phased in on in-use mobile machinery (see Introduction).

The following is a list of work equipment subject to these Regulations. It illustrates the vast range covered including:

- 🚗 Combine harvesters
- 🚗 dumper trucks
- 🚗 air compressors
- 🚗 computers
- 🚗 tractors
- 🚗 lift trucks
- 🚗 trailer
- 🚗 power harrows
- 🚗 scaffolding
- 🚗 pressure vessels
- 🚗 ladders
- 🚗 potato grading lines
- 🚗 portable drills
- 🚗 hammers
- 🚗 drill bits
- 🚗 socket sets
- 🚗 hand saws
- 🚗 grass cutting machinery
- 🚗 mobile cranes
- 🚗 materials handlers

and any other item of machinery at the place of work.

Suitability of work equipment

Employers must ensure that equipment is constructed or adapted so that it is:

- 🚗 suitable for the purpose for which it is used,
- and
- 🚗 suitable for the conditions under which it is used.

A good indication of the equipment's construction standard is to check for a CE mark. CE marking conformity to the legal requirements of EU Directives.

In selecting the equipment employers should have regard to the working conditions and the risks to health and safety, which exist, in the premises in which the equipment is being used.

Maintenance of work equipment

Employers must ensure that equipment is maintained in:

- an efficient state
- efficient working order
- good repair.

Here the "efficiency" of the equipment does not relate to productivity, it relates 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 the 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 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.



Inspection

Under PUWER 98 the part of the Regulation that specifically mentions inspections has quite a narrow definition. The Regulation only applies where inspection is needed which is not part of the manufacturer's routine recommended maintenance schedule and not part of the operator's daily checking system.

Employers 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
- and
- 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, chain saw guards, tractor cab condition, and a roll bar damaged in an accident and parking brake.

Any inspection made under this Regulation must be recorded, and results retained until the next inspection under this Regulation is recorded.

Employers must also ensure that no work equipment:

- leaves their undertaking,
- and
- is obtained from another undertaking (borrowed or hired) and used, unless accompanied by evidence of its last inspection under this Regulation. Vehicle and Trailed appliance health check sheets provide a standard inspection sheet for operators to use.

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. Whoever undertakes the inspection must be competent to do so.

Specific risks of working equipment

Where the use of work equipment is likely to involve specific risk to health or safety, employers must ensure that:

- the use of that equipment is restricted to people who are given the task of using it e.g. telescopic handlers, fork-lift trucks, chain saws, and
- repairs, modifications, maintenance or servicing of equipment is restricted to people who have been specifically designated to carry out operations of that description.

The employer must also ensure that the person designated for the maintenance operation has received adequate training related to the operation.

Information and instructions for use

Employers must ensure that all people who use, supervise or manage the use of work equipment have adequate health and safety information available to them, and where appropriate written instructions. The information must be readily understood by all concerned and should include:

- the conditions in which, and the methods by which the equipment can be used
- the possibility of abnormal conditions arising and what should be done if they occur

and

- any conclusions drawn from previous experience using the equipment.

Further information

The following information is published by the Health and Safety Executive (HSE):

- *Farmwise* - MISC165
- *Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance* L22 HSE Books 1998 ISBN 0 7176 1626 6
- AIS 27 *PUWER 98. How the Regulations apply to agriculture and forestry*
- AIS 33 *Safe use of all-terrain vehicles*
- AIS 36 *Carriage of passengers on farm trailers*
- AIS 37 *Operator seat restraints for mobile work equipment in agriculture and forestry.*

HSE Books, PO Box 1999, Sudbury, Suffolk, CO10 6FS.

Tel: 01787 881165 Fax: 01787 313995

The main web information is available at:

www.hse.gov.uk/hsehome.htm

www.nfu.org.uk

www.bagma.com

www.naac.co.uk

Keeping your skills current with Lantra Awards...



Lantra Awards can trace its origins back to the Agricultural Training Board and has 30 years experience in providing training and or assessment for the land-based industry.

We provide training and/or assessment in:

- Tractors
- ATV's
- Lift trucks
- 4x4's/off-road vehicles
- Small hydraulic cranes
- Chainsaws
- Pesticides
- Vermin control
- First aid
- Manual handling
- Abrasive wheels
- Meat processing
- Fencing
- Traffic management

For further information on any of the above schemes, or any other courses, please contact Lantra Awards on 024 7641 9703 and we can put you in touch with your local Training Provider.

Lantra Awards are particularly keen to promote the safe use of all vehicles both on and off road and encourages training in all areas of vehicle and machine safety.

Please visit the Lantra Awards web site at www.lantra.co.uk/awards

For maintenance information on a specific machine contact your local BAGMA dealer:



To locate your local BAGMA dealer:
call BAGMA on 01923 720 241 , Fax 01923 896 063
or e-mail info@bagma.com.
The BAGMA website is at www.bagma.com

