

# AFAG606

## Mobile stump grinders

### Introduction

This leaflet covers the safe working practices to be followed when using mobile stump-grinding machinery.

You can use this leaflet, along with the manufacturer's handbook, as part of your risk assessment to help identify the controls to put in place when using mobile stump grinders.

You must assess the effect of the site and the weather, as well as following this guidance.

All operators must have had appropriate training in how to operate the machine and how to carry out the tasks required.

### Personal protective equipment (PPE)

Use the following PPE:

- A safety helmet (complying with BS EN 397), if identified as required in the risk assessment.
- Hearing protection (complying with BS EN 352) where the noise level exceeds 85dB(A) (see HSE pocket card INDG363 *Noise: Don't lose your hearing!*).
- Eye protection (a mesh visor complying with BS EN 1731 or safety glasses to BS EN 166).
- Protective boots with good grip and ankle support (complying with BS EN ISO 20345).
- Gloves with reinforced palms and fingers.
- Non-snag outer clothing. The use of high-visibility clothing may also be appropriate.

Each person should carry a personal first-aid kit, including a large wound dressing (see HSE leaflet INDG214 *First aid at work: Your questions answered*).

Hand-cleaning material such as waterless skin cleanser or soap, water and paper towels should be readily available.

## The machine

Ensure any belts, shafts and fan blades are guarded on both the machine and power source.

Ensure the debris curtains around the cutting head are present, intact and adequate.

For machines driven by a power take-off (PTO) shaft, before starting make sure:

- the PTO shaft is fitted with a suitable guard, complying with BS EN ISO 5674, that encloses the shaft along its full length from tractor to machine;
- the guard is correctly fitted and in effective working order (see AIS40 *Power take-offs and power take-off drive shafts*);
- the PTO speed is suitable for the machine.

Ensure there is a clearly marked and working engine-stopping device readily accessible to the operator from the normal working position.

Ensure a suitable fire extinguisher is readily accessible.

## Fuelling

Stop the engine and, if necessary, allow to cool before refuelling.

Petrol vapour is invisible and can travel considerable distances from spillage or fuelling sites. Maintain a safe distance from all sources of ignition at all times.

Store fuel to avoid vapour ignition from any source such as fires, people smoking or the stump grinder. Select a site shaded from direct sunlight and away from watercourses and drains.

Ensure containers are clearly labelled and have securely fitting caps. Plastic containers must be designed and approved for use with petrol or diesel fuel.

Replace the fuel cap securely.

Keep fuel from contacting the skin. If fuel gets into the eyes wash out with sterile water immediately and seek medical advice as soon as possible.

## Preparing to work

On all reasonably foreseeable approaches to the worksite, erect warning and prohibition signs conforming to the Health and Safety (Safety Signs and Signals) Regulations 1996 indicating a hazardous worksite. In areas of high public access, your risk assessment may show that additional controls (eg barrier tape, barriers/screens, extra manning) are required.

Stop work if the safe working area is breached.

Ensure all operations near to highways are adequately signed with the appropriate notices, as specified in the Department for Transport's *Safety at street works and road works: A Code of Practice* (available from The Stationery Office).

Select as firm and level a surface as possible and stabilise the machine. If this is not possible, consider creating a level site or an alternative means of stump removal.

If the machine is detached from the tow vehicle, make sure the grinder's parking brake is applied.

When working at the roadside, position the cutting head to direct wood chips away from passing pedestrians and traffic.

To protect people and property at risk from flying debris, always use supplementary screening.

Ensure the cutting mechanism rotates freely, without fouling.

## Operating the machine

Check the site for underground services.

Check the stump(s) to be ground is free from stones and metal as far as is reasonably practicable.

Manually excavate and reveal buttress roots.

Operate the machine from a point that gives a clear view of the cutting operation.

Never approach the cutting mechanism until it has come to a complete stop.

Clear wood chips as necessary to ensure the safe and efficient operation of the grinder.

Ensure any excavations do not create a tripping hazard to pedestrians once the operation is completed.

When leaving the machine unattended, always remove the engine start key.

## Repositioning the machine

Disengage the drive to the cutting mechanism and wait for the mechanism to stop rotating before repositioning on site.

Stop the engine and remove the start/stop key before repositioning to a new site. Place all guards and operating panels into the transport position before towing or securing to a trailer.

Check the towing bracket, attach, then lift and secure the jockey wheel.

Connect the electrics and the safety chain(s) to the towing vehicle and check the lights before moving off.

Ensure the load is secure and people are in a safe position before moving off.

## Maintenance

Ensure maintenance is carried out in accordance with the manufacturer's handbook.

Before working on the cutting mechanism, make sure the engine-stopping device is applied, the key has been removed from the ignition, and the cutter mechanism is secured.

Check the cutters each day for damage and wear. Replace as necessary during the working period if damaged, or if worn beyond the manufacturer's recommended tolerances.

Replacement cutters should be machined to match the existing cutters to ensure appropriate cutter mechanism balance. If necessary, the whole cutter set should be replaced.

## Emergency procedures

Ensure a designated and responsible person knows the daily work programme and agree with them a suitable emergency contact procedure. Where reasonably practicable, use a mobile phone or radio and a pre-arranged call-in system.

Ensure the operators can provide the emergency services with enough detail for them to be found in the event of an accident, eg the grid reference, the distance from the main road, the type of access (suitable for car/four-wheel drive/emergency service vehicles). In urban areas street names are essential. Know the location details before they are needed in an emergency.

## Further reading

*Noise: Don't lose your hearing!* Leaflet INDG363(rev2) HSE Books 2012 [www.hse.gov.uk/pubns/indg363.htm](http://www.hse.gov.uk/pubns/indg363.htm)

*First aid at work: Your questions answered* Leaflet INDG214(rev1) HSE Books 2009 [www.hse.gov.uk/pubns/indg214.htm](http://www.hse.gov.uk/pubns/indg214.htm)

*Power take-offs and power take-off drive shafts* Leaflet AIS40 HSE Books 2012 [www.hse.gov.uk/pubns/ais40.htm](http://www.hse.gov.uk/pubns/ais40.htm)

*Safety signs and signals. The Health and Safety (Safety Signs and Signals) Regulations 1996. Guidance on Regulations L64 (Second edition)* HSE Books 2009 [www.hse.gov.uk/pubns/books/L64.htm](http://www.hse.gov.uk/pubns/books/L64.htm)

*Safety at street works and road works: A Code of Practice* The Stationery Office 2001 ISBN 978 0 1155 1958 1 [www.tsoshop.co.uk/](http://www.tsoshop.co.uk/)

## Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit [www.hse.gov.uk](http://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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