



## National unit specification

### General information

**Unit title:** Operate a Wood Chipper (SCQF level 6)

**Unit code:** HH55 46

**Superclass:** SG

**Publication date:** December 2016

**Source:** Scottish Qualifications Authority

**Version:** 02

### Unit purpose

This unit is designed to allow the learner to demonstrate their ability to safely operate a wood chipper.

This unit is designed to meet the requirements of the Highways and Construction Training Association's (HTCA) Chainsaw Operators Regulation Scheme (CORS).

### Outcomes

On successful completion of the unit the learner will be able to:

- 1 Prepare to Operate a Wood Chipper.
- 2 Operate a Wood Chipper.
- 3 Undertake Wood Chipper Maintenance.

### Credit points and level

0.5 National unit credits at SCQF level 6: (3 SCQF credit points at SCQF level 6)

### Recommended entry to the unit

Entry to this unit is at the discretion of the delivering centre.

## National unit specification: General information (cont)

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### Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill	None
Core Skill component	Critical Thinking at SCQF level 5 Planning and Organisation at SCQF level 5

### Context for delivery

If this unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

This unit is intended for use by chainsaw users such as term maintenance contractors, local authority grounds maintenance staff and those carrying out emergency works on highways. It has not been designed for the traditional forestry and arboriculture sectors, which has a much greater focus on the end use of the timber.

### Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

## National unit specification: Statement of standards

### Unit title: Operate a Wood Chipper (SCQF level 6)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

#### Outcome 1

Prepare to Operate a Wood Chipper.

##### Performance Criteria

- (a) Undertake a risk assessment.
- (b) Select Personal Protective Equipment (PPE) suitable for working with a chipper.
- (c) Check and top up fluid levels.
- (d) Convert machine from transport to operating mode.
- (e) Secure and stabilise the machine for use on firm and level ground.
- (f) Ensure all guards are in place, secured and not damaged or worn.
- (g) Identify and demonstrate all controls and safety features (including safety decals).
- (h) Ensure all locking devices for the chipping component are disengaged.
- (i) Ensure the in-feed hopper is clear of any debris.
- (j) Ensure suitable warning signs are in place.
- (k) Comply with all relevant Health and Safety requirements and environmental good practice.

#### Outcome 2

Operate a Wood Chipper.

##### Performance Criteria

- (a) Ensure a suitable guard is fitted for the full length of the Power Take-Off (PTO) shaft.
- (b) Adjust the PTO speed appropriate to the machine.
- (c) Carry out starting procedures and ensure correct throttle settings.
- (d) Check the safety bar and feed roller for correct operation.
- (e) Adjust the disclosure chute to deflect materials into a safe area.
- (f) Demonstrate correct manual handling techniques when handling brash.
- (g) Check material for foreign objects prior to reducing.
- (h) Release material when feed rollers engage brash.
- (i) Ensure a safe position for feeding material.
- (j) Use a push stick to ensure that no part of the body passes beyond the in-feed hopper.
- (k) Deal with chute, feed roller and knife blockages.
- (l) Ensure the area to the front of the in-feed hopper remains clear of trip hazards.
- (m) Dispose of arisings in an appropriate manner.
- (n) Shut down and leave equipment in a safe condition.
- (o) Comply with all relevant Health and Safety requirements and environmental good practice.

## National unit specification: Statement of standards

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### Outcome 3

Undertake Wood Chipper Maintenance.

#### Performance Criteria

- (a) Select appropriate tools and equipment for maintenance.
- (b) Use appropriate Personal Protective Equipment (PPE).
- (c) Check and top up fluid levels as required.
- (d) Ensure machine is immobilised before maintenance starts.
- (e) Maintain the feed rollers.
- (f) Maintain the cutting system.
- (g) Identify areas of the machine that require regular cleaning and the methods used.
- (h) Convert machine from Operating to Travel mode.
- (i) Report defects following agreed processes.
- (j) Comply with all relevant Health and Safety regulations and environmental good practice.

#### Evidence Requirements for this unit

Evidence is required to demonstrate that learners have achieved all Outcomes and Performance Criteria.

Evidence is required of the learner's ability to:

#### **Prepare, Operate and Maintain** a wood chipper **safely**

Sufficient material must be available to allow each learner to operate the wood chipper for a **minimum** duration on **10 minutes**.

Manufacturer's instructions for the chipper must be available to the learner during assessment.

Evidence should be generated under realistic working conditions with the powered wood chipper being used in situ or within a practical training area. An element of simulation may be used where opportunities to develop evidence for certain Performance Criteria do not naturally occur, for example carrying out maintenance or cleaning procedures which may not be required after every use.

Given the obvious risks to the learners and others it is imperative that all relevant Health and Safety policies and procedures are fully complied with throughout this unit.

Evidence could consist of:

- ◆ A completed risk assessment
- ◆ Observation checklist of practical activities
- ◆ Completed Risk Assessment
- ◆ Written and/or recorded oral responses to questions
- ◆ Photographic/video evidence of practical activities



## National unit Support Notes

**Unit title:** Operate a Wood Chipper (SCQF level 6)

Unit Support Notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 20 hours.

### Guidance on the content and context for this unit

This unit has been specifically written to meet the requirements of the Highways and Construction Training Association's (HCTA) Chainsaw Operators Registration Scheme (CORS) CS9 "Wood Chipper". Achievement of this unit will demonstrate that the learner is suitably trained and qualified to undertake this work.

The key vocational knowledge and skills covered in this unit are as follows:

- ◆ Key components of the chipper
- ◆ Operational and transport modes
- ◆ Site risk assessment and risk reduction strategies
- ◆ Personal Protective Equipment
- ◆ Manual handling techniques
- ◆ Techniques for feeding materials
- ◆ Procedure for dealing with blockages
- ◆ Operational maintenance including checking and topping up fluid levels
- ◆ Post use checks and maintenance

This unit is designed in the context of chainsaw users, term maintenance contractors, local authorities, ground maintenance activities and emergency works on highways. This unit is not intended for use in a traditional Forestry or Arboriculture context and does not cover the end use of timber and arisings beyond leaving the site in good condition.

### Guidance on approaches to delivery of this unit

Delivering centres will require access to a wood chipper and Personal Protective Equipment (PPE) and to a site containing suitable material to work with in order to allow learners to generate the required evidence. The centre should ensure that all relevant equipment has a recent valid certificate of inspection/examination.

The learner should be given ample opportunities to develop their knowledge and skills in a safe environment prior to assessment.

## National unit Support Notes

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Given the obvious risks to the learner and others from operating a wood chipper due emphasis should be placed on the importance of conducting a thorough Risk Assessment and on complying with all relevant Health and Safety requirements and Standard Operating procedures.

Where the deliverer and/or assessor have any concerns over the safety of any activities being undertaken then all delivery and assessment should be ceased immediately until the safety concerns are satisfactorily resolved. The centre must also ensure that the work site environment and weather conditions do not create unnecessary risk.

The centre should not proceed with any delivery or assessment of this unit until they are satisfied that the learner is suitably trained in the safe use and maintenance of a chainsaw.

An assessor to learner ratio of 1:6 should not be exceeded for any practical aspects of delivery or assessment.

### Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Assessments should be carried out in situ and the environment should mirror a realistic working environment as closely as is practicable.

Learners must complete a suitable and sufficient assessment of the risks associated with the work activity (a Risk Assessment). This should be documented in an agreed format (in line with Standard Operating Procedures) and could form part of the learner's evidence.

Evidence for the unit as a whole could be generated using a single project where the learner is required to prepare for, carry out and complete (including maintenance) the operation of a wood chipper. If it is not possible to produce evidence for the whole unit during a single assessment, evidence could be generated on an Outcome by Outcome basis, however the learner should still be required to demonstrate their ability to safely carry out all the tasks required in the required sequence.

A portfolio or e-portfolio could be used to store and organise a learner's evidence. If this unit is being delivered in conjunction with other related units a single portfolio could be used, cross referenced to show where evidence can be integrated across units.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

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### Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at [www.sqa.org.uk/e-assessment](http://www.sqa.org.uk/e-assessment).

### Opportunities for developing Core and other essential skills

There may be opportunities to develop the Core Skills of *Problem Solving* and *Working with Others* at SCQF level 5.

This Unit has the Critical Thinking and Planning and Organising components of Problem Solving embedded in it. This means that when learners achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 5 and Planning and Organising at SCQF level 5.

## History of changes to unit

Version	Description of change	Date
02	Core Skills Components Critical Thinking and Planning and Organising at SCQF level 5 embedded.	21/02/2017

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## **General information for learners**

### **Unit title:** Operate a Wood Chipper (SCQF level 6)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit is suitable for you if you are required to operate a wood chipper as part of your work.

This unit has been specifically designed to meet the requirements of the Highways and Construction Training Association's (HCTA) Chainsaw Operators Registration Scheme.

The unit contains three Outcomes, the first covers the preparation and planning required before starting to use the chipper, including carrying out a risk assessment. The second Outcome covers the practical work required to set up and operate the chipper. Finally, Outcome 3 covers completing the work and returning the site to a clean and tidy condition.

This unit has a practical focus and the assessments will reflect that, you will be observed carrying out the range of tasks required but you will also have to produce a risk assessment.

This Unit has the Critical Thinking and Planning and Organising components of Problem Solving embedded in it. This means that when you achieve the Unit, your Core Skills profile will also be updated to show you have achieved Critical Thinking at SCQF level 5 and Planning and Organising at SCQF level 5.