



National unit specification

General information

Unit title: Operate a Hand Winch (SCQF level 6)

Unit code: HH52 46

Superclass: SG

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Version: 02

Unit purpose

This unit is designed to develop the knowledge and skills required to safely set up and operate a hand winch in support of tree clearing operations. It has been specifically designed to meet the requirements of the Highways and Construction Training Association's (HCTA) Chainsaw Operators Registration Scheme. This unit is designed to cover the safe use of a hand winch to assist in felling trees; it **DOES NOT** cover the use of mechanical winches.

Outcomes

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

- 1 Prepare to operate a hand winch.
- 2 Operate a hand winch.
- 3 Complete hand winch operations.

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.

The centre must ensure that the learner is appropriately qualified to carry out the activities related to this unit, including appropriate chainsaw use and maintenance qualifications if they are also felling the tree in addition to preparing and operating a hand winch.

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 Organising at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

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.

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.

National unit specification: Statement of standards

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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 hand winch.

Performance Criteria

- (a) Conduct a risk assessment of the site and planned winching operation.
- (b) Identify the capacity of the winch.
- (c) Identify and check the shear pin for condition and security.
- (d) Select appropriate working methods in accordance with the assessed risks.
- (e) Determine the cable is the correct size and strength.
- (f) Inspect the cable for damage.
- (g) Ensure all ropes, strops and pulleys are fit for purpose.
- (h) Identify and use correct signals for the winch operation.
- (i) Ensure the assistant knows the method of working for the planned operation.
- (j) Select suitable winch anchor points.

Outcome 2

Operate a hand winch.

Performance Criteria

- (a) Rig the winching system.
- (b) Ensure the area is secure and safety zones clearly established.
- (c) Use and follow hand signals with a banksman.
- (d) Take in slack then engage the winch.
- (e) Take up further slack under instruction.
- (f) Ensure components parts of the winch are not overstressed.
- (g) Pay out cable to de-stress the system.
- (h) Comply with all relevant Health and Safety requirements and environmental good practice.
- (i) Minimise environmental impact of winching operation.

National unit specification: Statement of standards (cont)

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Outcome 3

Complete hand winch operations.

Performance Criteria

- (a) De-rig the system.
- (b) Carry out post-use maintenance checks and procedures.
- (c) Store equipment and machinery securely ready for transport.
- (d) Report any defects.
- (e) Comply with all relevant Health and Safety requirements 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, rig and use a hand winch to assist in felling a tree to prevent movement of the tree and to restrain the root-plate.

Evidence should be generated under realistic working conditions with the hand-winch being used in situ or within a practical training area using imported materials. An element of simulation may be used where opportunities to develop evidence for certain Performance Criteria do not naturally occur, for example carrying out winch maintenance 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:

- ◆ 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 Hand Winch (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 developed to meet the requirements of the Highways and Construction Training Association's (HCTA) Chainsaw Operators Registration Scheme for CS7 Winching. Completion of this unit will allow the learner to demonstrate that they are suitably trained and qualified to operate a winch during tree felling and/or clearing operations. This unit, however only covers the safe use of the winch, separate units are available which cover the use and maintenance of a chainsaw, this work can only be undertaken by those who are suitably trained and qualified.

The key vocational knowledge and skills covered in this unit:

- ◆ Winch, cable and ancillary equipment and acceptable conditions for use
- ◆ Key winch components
- ◆ Site risk assessments and risk reduction strategies
- ◆ Appropriate personal protective equipment (PPE)
- ◆ Correct winching techniques
- ◆ Use of hand signals
- ◆ Suitable anchor points
- ◆ Rigging and De-rigging winching systems
- ◆ Operational safety zones

Guidance on approaches to delivery of this unit

The unit is designed to be sequential, progressing from preparation and planning through to operation and finally completion of the task and maintenance. It is recommended that the unit is delivered in this sequence; however there may be opportunities to develop evidence during naturally occurring circumstances where this is safe to do so.

Delivering centres will require access to a suitable hand winch and Personal Protective Equipment (PPE) and to a suitable site on which to set up and operate the winch 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 (cont)

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Given the obvious risks to the learner and others from operating a winch in this context 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.

A learner to assessor ratio of 4:1 should not be exceeded for any practical aspects of delivery or assessment.

There may be opportunities to deliver and assess aspects of this unit in conjunction with other units such as “Fell Large Trees”, “Clear Individual Fallen or Windblown Trees” and “Clear Multiple Fallen or Windblown Trees”.

Guidance on approaches to assessment of this unit

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 hazards and 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, set up and operate a hand winch to assist in the felling of trees. 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.

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.

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.

National unit Support Notes (cont)

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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.

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.	21/02/17

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General information for learners

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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 in you are required to use a hand winch in support of tree felling and clearing as part of your work (the actual maintenance and use of chainsaws is covered by other units).

The unit contains three Outcomes, the first covers the preparation and planning required before starting to use the winch, including carrying out a risk assessment. The second Outcome covers the practical work required to set up and use a winch safely. 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.