



City & Guilds Level 2 Certificate of Competence in Powered Pole Pruner Maintenance and Operation (0039-26)

September 2022 Version 1.1

Qualification Handbook

Qualification at a glance

Industry area	Forestry and Arboriculture
City & Guilds number	0039-26
Age group	16-19, 19+
Entry requirements	n/a
Assessment	To gain this qualification, candidates must successfully achieve the following assessments: <ul style="list-style-type: none"> One to one practical assessment with oral questioning by an NPTC City & Guilds approved assessor
Grading	Pass only
Approvals	Full centre approval Qualification approval
Support materials	n/a
Registration and certification	Registration and certification of this qualification is through the Walled Garden and is subject to end dates.

Title and level	Size (GLH)	TQT	City & Guilds qualification number	Ofqual number
City & Guilds Level 2 Certificate of Competence in Powered Pole Pruner Maintenance and Operation	16	19	0039-26	603/7645/4

Version and date	Change detail	Section
1.0	First version	
1.1 September 2022	Formatting changes Updated logo Updated 'Sources of general information'	Throughout Front cover Appendix 1

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1 Introduction

Purpose of this qualification

The following purpose is for the **City & Guilds Level 2 Certificate of Competence in Powered Pole Pruner Maintenance and Operation (603/7645/4)**.

Area	Description
OVERVIEW	
Who is this qualification for?	Individuals who operate and carry out powered pole pruner tasks as part of their work in arboriculture, forestry, or other industries. It will provide the individual with the knowledge, understanding and skills required to carry out this work.
What does this qualification cover?	It covers hazards, risks, controls, emergency planning, legislation, industry good practice, roles, and maintenance of powered pole pruners.
WHAT COULD THIS QUALIFICATION LEAD TO?	
Will the qualification lead to employment, and if so, in which job role and at what level?	This qualification will support progression into employment where powered pole pruner tasks is part of the role. Safe operational skills are key to efficient use, good working practice and preventing accidents, leading to business benefits in terms of less machinery damage and down time.
Why choose this qualification over similar qualifications?	This is a specialist qualification demonstrating the individual is able to safely carry out duties associated with operating powered pole pruners tasks to a recognised level of competency.
Will the qualification lead to further learning?	Individuals who successfully complete this qualification could go on to increase their level of proficiency through consolidation practice within a working environment, or develop other skills in safely operating chainsaws, e.g., Level 2 Certificate of Competence in Felling Medium Trees.
WHO SUPPORTS THIS QUALIFICATION?	
Employer/Higher Education Institutions	The Arboricultural Association Confor
Further information	Please refer to the City & Guilds NPTC website for more information on the assessment.

Qualification structure

For the **City & Guilds Level 2 Certificate of Competence in Powered Pole Pruner Maintenance and Operation** learners must be trained and assessed in a minimum of one of the units listed below. The qualification will be endorsed to the context of the unit assessed:

Unit number	Unit title	GLH
Learners must achieve		
207	Powered Pole Pruner Maintenance and Operation	16

Total Qualification Time

Total Qualification Time (TQT) is the number of notional hours which represents an estimate of the total amount of time that could reasonably be expected for a learner to achieve and demonstrate the achievement of the level of attainment necessary for the award of a qualification.

TQT is comprised of the following two elements:

- 1) The number of hours which an awarding organisation has assigned to a qualification for Guided Learning, and
- 2) An estimate of the number of hours a Learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by - but, unlike Guided Learning, not under the Immediate Guidance or Supervision of - a lecturer, supervisor, tutor or other, appropriate provider of education or training

Title and level	GLH	TQT
City & Guilds Level 2 Certificate of Competence in Powered Pole Pruner Maintenance and Operation	16	19

2 Centre requirements

Approval

New centres will need to gain centre approval. Existing City & Guilds centres who do not currently offer this qualification must go through the Qualification Approval (QAP) process. For centres currently offering City & Guilds NPTC Level 2 Award in Safe Use of a Powered Pole Pruner (0020-06) there is a Fast Track method of approval. Please email qasupport@cityandguilds.com for further information on the approval process

Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following requirements:

- be technically competent in the areas in which they are delivering
- be able to deliver across the breadth and depth of the content of the qualification being taught
- have recent relevant teaching and assessment experience in the specific area they will be teaching, or be working towards this
- demonstrate continuing CPD.

Physical resources

Centres must be able to demonstrate that they have access to the equipment and technical resources required to deliver this qualification and its assessments.

Assessment Guidance for the Assessor

Staff assessing these qualifications must be approved Certificate of Competence City & Guilds NPTC Assessors and must be independent **and cannot have been involved with the training of the Candidate**. This qualification can only be assessed by an Assessor who is suitably qualified and meets the requirements of the awarding body.

Certificate of Competence City & Guilds NPTC Assessors must meet the following requirements:

- show competence and provide evidence of industry expertise in the qualification/s they wish to assess
- hold the qualification as a candidate and have been technically evaluated as an Assessor
- be up to date with their verification and relevant first aid
- demonstrate continuing technically relevant CPD

Compliance with these requirements is a pre-requisite for Assessors remaining on the list of approved Assessors.

Verification is a process of monitoring assessment; it is an essential check to confirm that the assessment procedures are being carried out in the way City & Guilds has laid down. The overall aim of verification is to establish a system of quality assurance that is acceptable in terms of both credibility and cost effectiveness and approved Assessors will be subject to a regular visit by the Verifier at a time when assessments are being undertaken.

A selection of assessment reports completed by the Assessor will be evaluated by a City & Guilds approved Quality Consultant.

Safe Practice

Appropriate PPE must be worn at all times

All equipment must be operated in such a way that the Candidate, Assessor, other persons, animals or other equipment are not endangered.

If these conditions are not observed this will result in the Candidate not meeting the required standard.

Validation of Equipment

Any item(s) equipment used for the assessment must comply with current legal requirements.

Additional information may be sought from the relevant manufacturer's instruction book, operators' manual, product label/database or any other Government/Government Agency publication.

Age restrictions

This qualification is approved for learners aged 16 – 19, 19+.

3 Administration

Approved centres must have effective quality assurance systems to ensure valid and reliable delivery and assessment of qualifications. Quality assurance includes initial centre registration by City & Guilds and the centre's own internal procedures for monitoring quality assurance procedures.

Consistent quality assurance requires City & Guilds and its associated centres to work together closely; our Quality Assurance Model encompasses both internal quality assurance (activities and processes undertaken within centres) and external quality assurance (activities and processes undertaken by City & Guilds).

External quality assurance

City & Guilds will undertake external moderation activities to ensure that the quality assurance criteria for this qualification are being met. Centres must ensure that they co-operate with City & Guilds staff and representatives when undertaking these activities.

City & Guilds requires the Head of Centre to

- facilitate any inspection of the centre which is undertaken on behalf of City & Guilds
- make secure arrangements to receive, check and keep assessment material secure at all times, maintain the security of City & Guilds confidential material from receipt to the time when it is no longer confidential and keep completed assignment work and examination scripts secure from the time they are collected from the candidates to their dispatch to City & Guilds.

Malpractice

Please refer to the City & Guilds guidance notes *Managing cases of suspected malpractice in examinations and assessments*. This document sets out the procedures to be followed in identifying and reporting malpractice by candidates and/or centre staff and the actions which City & Guilds may subsequently take. The document includes examples of candidate and centre malpractice and explains the responsibilities of centre staff to report actual or suspected malpractice. Centres can access this document on the City & Guilds website.

Examples of candidate malpractice are detailed below (please note that this is not an exhaustive list):

- falsification of assessment evidence or results documentation
- plagiarism of any nature
- collusion with others
- copying from another candidate (including the use of ICT to aid copying), or allowing work to be copied
- deliberate destruction of another's work
- false declaration of authenticity in relation to assessments
- impersonation.

These actions constitute malpractice, for which a penalty (eg disqualification from the assessment) will be applied.

Where suspected malpractice is identified by a centre after the candidate has signed the declaration of authentication, the Head of Centre must submit full details of the case to City &

Guilds at the earliest opportunity. Please refer to the form in the document *Managing cases of suspected malpractice in examinations and assessments*. Alternatively, please complete the form, JCQ/M1. Copies of this form can be found on the JCQ website: <http://www.jcq.org.uk>

Access arrangements and special consideration

We have taken note of the provisions of equalities legislation in developing and administering this specification.

We can make arrangements so that candidates with disabilities, special educational needs and temporary injuries can access the assessment. These arrangements must be made before assessment takes place.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the *JCQ access arrangements and reasonable adjustments* and *Access arrangements - when and how applications need to be made to City & Guilds* for more information. Both are available on the City & Guilds website:

<http://www.cityandguilds.com/delivering-our-qualifications/centre-development/centre-document-library/policies-and-procedures/access-arrangements-reasonable-adjustments>

Special consideration

We can give special consideration to candidates who have had a temporary illness, injury or indisposition at the time of the examination. Where we do this, it is given after the examination.

Applications for either access arrangements or special consideration should be submitted to City & Guilds by the Examinations Officer at the centre. For more information, please consult the current version of the JCQ document, *A guide to the special consideration process*.

Language of examinations

City & Guilds has a responsibility to ensure that candidates can be assessed in the following languages only:

- English
- English in Northern Ireland
- English in Wales.

Unit 207

Powered Pole Pruner Maintenance and Operation

Level:	2
GLH	16

What is this unit about?

The aim of this unit is to provide the learner with the knowledge, understanding and skills required to use and maintain a powered pole pruner in the workplace.

Learning outcomes

In this unit, learners will be able to

1. Carry out powered pole pruner maintenance and operation

Scope of content

This section gives details of the scope of content to be covered in the teaching of the unit to ensure that all the learning outcomes can be achieved.

Learning outcome:

1. Carry out powered pole pruner maintenance and operation

Topics:

- 1.1 Hazards, risks, controls and emergency planning
- 1.2 Legislation and industry best practice
- 1.3 Maintenance of powered pole pruners
- 1.4 Using a powered pole pruner

Topic 1.1

The risk assessment process:

- Identify the hazards
- Decide who might be harmed and how
- Evaluate the risks and decide on precautions
- Record the findings and implement them
- Review and update the assessment as necessary

Hazards, risks and controls relevant to the site task and machine.

Emergency procedures relevant to a work site may include:

- Site location
- Grid reference
- What three words
- Designated meeting place
- Nearest access point
- Street name/district
- Type of access (public road/light vehicles, four-wheel drive)
- Suitable helicopter landing area
- Phone number of nearest doctor
- Location of nearest accident and emergency hospital and phone number
- Works manager contact details
- Your own contact number/mobile number
- Other

Topic 1.2

Key points from the legislation listed below:

Health and Safety at Work Act (HASWA):

- Follow training received
- Take reasonable care of their own and other people's safety
- Other

Provision and Use of Work Equipment Regulations (PUWER):

- Equipment is maintained
- Equipment is fit for purpose

Providers of industry good practice may be:

- Forest Industry Safety Accord (FISA)
- Regional forestry bodies
- Arboricultural Forestry Advisory Group (AFAG)
- Arboricultural Association (AA)
- Other

Topic 1.3

The importance of maintaining powered pole pruners to manufacturer's recommendations may include:

- Machine is safe to use
- Reduces machinery repair downtime
- Other

Explain the function of all powered pole pruner safety features:

Guide bar cover:

- Protects and covers the bar and chain

Chain with low kick back characteristics:

- Reduces kickback

Exhaust:

- Noise reduction and reduces emissions

Anti-vibration mounts:

- Reduces vibration

On/off switch:

- Stops engine

Safety decals-hand/eye/ear defender symbols:

- Provides mandatory information

Throttle trigger lockout:

- Stops accidental throttle operation

Appropriate tools for the maintenance of both the power unit and guidebar/chain are selected.

Hazards and risks associated with battery powered equipment may be:

- Incorrect compatibility of battery/machine
- Machine being live when the battery is in place
- Machine may not have an on/off switch
- Battery misalignment
- Battery storage
- Battery disposal
- Battery dislodging and falling from the machine
- Electric shock
- Short circuiting and combustion when charging
- Malfunction due to water contamination
- Lack of power
- Charge time and charging requirements
- Other

Battery power unit maintenance and checks should include:

- Battery guide tracks are inspected and cleaned
- Battery is not damaged, cracked or deformed
- Battery has sufficient charge
- Machine air intake and cooling system cleaned and inspected for damage
- Keypad is inspected for damage and cleaned (if applicable)
- Battery compartment is inspected and inspected for damage
- Other

Benefits associated with the use of battery powered machines maybe:

- Reduced weight
- Reduced vibration
- Reduced noise
- No emissions
- Clearer communication with others on site
- Less maintenance requirements
- More accurate operation due to no engine torque
- No need for the transportation of fuel
- No risk of fuel spillages
- Other

Spark plug:

- Provides ignition, maintenance may include inspection, cleaning and checking of electrode gap.

Maintenance:

- Engine cover and spark plug removed
- Plug cleaned or replaced as necessary
- Wear/damage assessed
- Gap size checked and set if necessary

Air filter:

- Prevents debris entering the carburetor and helps maintain the correct air/fuel ratio, maintenance may include inspection and thorough cleaning

Maintenance:

- Excess debris removed from around filter prior to removal
- Filter removed, protecting carburetor
- Filter inspected maintained and cleaned appropriate to condition
- Filter refitted correctly

Cooling system:

- Prevents the engine from overheating, maintenance may include inspection and cleaning

Maintenance:

- Remove covers where appropriate and remove excess debris from fins and cylinder

Exhaust system:

- Reduces noise and emissions, maintenance may include inspection, security of nuts/bolts, spark arrestor and removal of residue

Maintenance:

- Check all nuts and bolts for security
- Remove excess residue from the silencer
- Check condition and security of spark arrestor

Sprocket:

- Drives/pushes the chain along the guidebar, maintenance may include inspection and replacement due to wear exceeding manufacturer's tolerances

Maintenance:

- Sprocket checked for wear and condition

Starter mechanism:

- Engages the flywheel, maintenance may include cleaning, inspection

Maintenance:

- Starter cover removed and air ways cleared
- Cord and coil spring tension released
- Cord inspected for wear
- Cord and coil spring re-tensioned
- Re-coil checked to ensure spring tension is correctly applied
- Pull toggle checked for security

Greasing/lubrication:

- May help prevent excessive wear of components

Maintenance:

- Greasing of component parts as appropriate

Fuel filter:

- Prevent debris entering engine components, maintenance may include cleaning as appropriate or replacement

Maintenance:

- Fuel cap removed
- Filter located and removed where applicable from tank using appropriate tool
- Condition of filter determined
- Replacement as appropriate

Oil filter:

- Prevent debris entering guide bar, maintenance may include cleaning as appropriate or replacement

Maintenance:

- Oil cap removed
- Filter located and removed where applicable from tank using appropriate tool
- Condition of filter determined
- Cleaning procedures using non-flammable detergents followed by rinsing and drying or replacement as appropriate

Guidebar:

- Holds and carries the chain to enable the cutting of timber

Maintenance:

- Identification of uneven and damaged rails and maintain as appropriate
- Checking the straightness of bar
- Checking the bar groove depth
- Identification of any blueing, cracking and burring
- Removal of burrs
- Clearing the bar groove and oil holes
- Inspecting the sprocket nose for security and condition
- Greasing the bar nose sprocket if applicable
- Turning the bar following maintenance to reduce wear

Problems that may be encountered when a chain and guidebar are worn, damaged or poorly maintained may include:

- Pole pruner does not cut efficiently
- Over-heating of the guidebar
- Poor lubrication of the chain
- Increased chain, bar and sprocket wear
- Other
- Pitch
- Gauge
- Length of guidebar
- Number of drive links
- Cutter type

Information required to replace pole pruner chain:

- Pitch
- Gauge
- Length
- Number of drive links
- Cutter type

Cutter types may include:

- Chisel chain
- Semi-chisel chain
- Other
- Application may depend on experience of the operator, timber type and personal preference

File size and sharpening angles through use of chain charts, manufactures information, chain box etc.

Reasons for maintaining correct filing angles and cutter lengths may include:

- Ensures chain is sharpened as per manufacturer's recommendations
- Enhances cutting performance
- Decreased vibration
- Accurate cutting
- Decreased risk of kick back
- Other

The correct depth gauge setting:

- Achieves optimum cutting speed as per manufacturer's recommendations
- Reduces the risk of kick back
- Reduces chain vibration
- Other

Function of the chain:

- carries the cutting components to enable the cutting of timber

Maintenance of the chain:

- Checking cutters for damage and selecting the first cutter to sharpen
- Having the chain secured in a chain vice or on bar in a bench vice or timber vice
- Selecting and using a file of the correct size with a handle fitted to sharpen all of the cutters
- Maintenance of top and side plate angles throughout sharpening of the whole chain
- Ensuring a consistent cutter length is maintained
- Removing burrs when applicable
- Maintaining the height and profile of depth gauges

Upon completion of maintenance activities, the powered pole pruner including the bar and chain is reassembled in line with the operator's handbook.

Steps to take when a powered pole pruner is not repairable, faulty or non-operational may include:

- Labelling of the powered pole pruner and removing from service
- Operator maintenance
- Arranging for repair of the powered pole pruner
- Other

Maintenance area is left in a clean and tidy state with tools and equipment appropriately cleared away.

Disposal of waste from maintenance activities may include:

- Use of designated waste/recycle bins
- Waste oils placed in approved containers for disposal
- Other

All waste produced from maintenance activities is disposed of in line with legislation, good practice and/or site requirements.

Topic 1.4

Personal protective equipment (PPE) should include:

- Safety boots
- Gloves
- Head, ear and eye protection
- Non snag outer clothing
- Harness
- All PPE must conform to applicable CE/EN standards where appropriate

Identify hazards, risks and controls relevant to the site task and machine

Emergency procedures relevant to the work site .

Safe working distance:

- Minimum of fifteen metres

Bio-security considerations may include:

- Cross contamination
- Disinfection/cleaning of equipment
- Cleaning/disposal of PPE
- Other

Environmental considerations may include:

- Fuelling site
- Type of fuel/oil
- Use of battery powered saws
- Other

Condition of tree and time of year may affect the work owing to:

Condition:

- Dead – loss of control, safety compromised
- Diseased – biosecurity measures
- Other

Time of year:

- Some species bleed heavily if pruned at certain times of year
- Promotion of subsequent disease or infection
- Other

Appropriate pruning methods may include:

Through cut:

- Small diameter timber cut straight through with one cut

Step cut:

- Two over lapping cuts used on free fall sections

Natural target pruning:

- Pruning cut made to the outer edge of the branch bark collar/ridge

Basic principles of target pruning are to:

- Simulate the tree's natural ability to shed branches
- Leaves the branch bark ridge and collar intact
- Allow complete doughnut of callus wood to form
- Allow protection boundary to develop inside collar
- Cuts carried out in accordance with industry standard and job
- Specification
- Other

Tension in branches:

- Found on the outside edge of strained timber and when cut, the kerf opens

Compression in branches:

- Found on the inside edge of strained timber and when cut, the kerf closes

Procedure for removing a trapped powered pole pruner may include:

Method one:

- Switch off engine
- Operator and work partner stand side by side
- Work partner lifts end of branch with suitable aid to open the cut
- Withdraw the machine

Method two:

- Switch off engine
- Prop engine on the ground
- Lift and prop branch with a trimmed branch or pole
- Withdraw the machine

Method three:

- Switch off engine
- Use of second machine or pole saw to release trapped machine minimum of 300mm (12") away
- Withdraw the machine

Branch sections should be removed taking the following points into account:

- Order of cuts planned
- Characteristics and properties of the wood allowed for
- Suitable sized sections removed
- Side or reducing cuts used where appropriate
- Position of cuts
- Complete overlap of cuts achieved
- Cut pieces fall into a safe/ clear area
- The branch collar and/or branch bark ridge is identified when pruning
- The pruning cut is left as smooth as possible
- Operator is not directly below falling branches
- Angle of powered pole pruner does not exceed 60 degrees when cutting

All debris should be left in a safe, stable condition and appropriate position.

All waste produced is disposed of in line with legislation, good practice and site requirements.

All tools, equipment and personal protective equipment is used in line with industry good practice.

It is ensured that any possible environmental damage is minimised at all times.

All activities must be completed in a way which protects the operator and those around them.

Appendix 1 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the *Centre Document Library* on www.cityandguilds.com or click on the links below:

Quality Assurance Standards: Centre Handbook

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on

- Centre quality assurance criteria and monitoring activities
- Administration and assessment systems
- Centre-facing support teams at City & Guilds / ILM
- Centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the Centre Contract.

Quality Assurance Standards: Centre Assessment

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements, or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre-assessments.

Access arrangements - When and how applications need to be made to City & Guilds

provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The *Centre Document Library* also contains useful information on such things as:

- Conducting examinations
- Registering learners
- Appeals and malpractice

Useful contacts

Please visit the Contact Us section of the City & Guilds website, *Contact us*

About City & Guilds

As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group is a leader in global skills development. Our purpose is to help people, organisations and economies develop their skills for growth. We work with education providers, employers and governments in over 100 countries across the world to help people, businesses and economies grow by shaping skills systems and supporting skills development.

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