

To include in all translations:

This is a translation of the original English version of the EFESC handbook and its appendices.
 This translated version is subordinate to the original English version.

EUROPEAN BRUSH CUTTER STANDARDS: 2024

(Includes Trimmer and brush cutter)

EBS : Maintenance and Operational Techniques

What the operator must be able to do:

Carry out maintenance and cutting vegetation with both a Brush cutter (steel blade) and Trimmer (plastic line)
The Certificate awarded to successful candidates will be endorsed with both machines

EBS-1	PERSONAL PROTECTIVE EQUIPMENT FOR MAINTAINANCE
1:01	Safety boots/shoes
1:02	Face & eye protection as appropriate
1:03	Personal/Squad First Aid Kit - on <u>every</u> work site
1:04	Gloves appropriate to task
EBS-2	ROUTINE BRUSH CUTTER / TRIMMER MAINTENANCE
	Brush cutter/Trimmer operator must be able to check function of parts, including safety features (Machine switched off):
2:01	Check for any damage to the machine
2:02	Fully compatible Blade/trimmer deflector guard fitted correctly
2:03	Throttle lock functioning correctly
2:04	Legal symbols present: Head/eye/ear defender/ Safety distances
2:05	Air filter (machines with combustion engine) or battery compartment (battery machines) clean and intact
2:06	Exhaust and protective guard intact
2:07	Anti-vibration system intact
2:08	Recoil starter mechanism functions correctly (machines with combustion engine)
2:09	Intact and secure operating or control handle, hand guards (if provided)
2:10	Gearbox greased (if applicable)
2:11	Functional clearly marked on/off switch

SPECIFIC ROUTINE / daily. BRUSH CUTTER operator must be able to:	
2A:1	Check for damages to the cutting blade / head, and deflector guard
2A:2	Sharpen Brush Cutter blade using file with handle fitted
2A:3	Maintain or fit correct angles and Equal lengths of cutters (depending on the brand and model)
2A:4	Remove Filing burrs if needed
SPECIFIC ROUTINE / daily TRIMMER operator must be able to:	
2B:1	Check for damage to and function of the trimmer head, bearing and deflector guard
2B:2	Ensure trimmer lines are equal and set to manufacturer's recommended length
EBS-3	SAFE AT WORK – PPE
	Brush cutter / trimmer operator to wear appropriate PPE
3:01	Safety boots (heavy-duty slip-resistant)/shoes as appropriate
3:02	Approved eye protection (EN 166) according to risk assessment
3:03	Ear's defenders or ear's protection
3:04	Safety helmet/hat if necessary
3:05	Non-snap-outer clothes
3:06	Gloves appropriate to task
3:07	Whistle/Mobile/Radio
3:08	Protective strong clothing: long trousers, sleeves, chaps or similar for protecting legs from thorns, debris and projections etc. long sleeves recommended appropriate to risk assessment
3:09	Other PPE as highlighted by the risk assessment (e.g. shin guards, aprons, face protection visor, high visibility clothes)
3:10	Manufacturer's handbook available with the machine, if not candidate knows where to find it (online)
EBS-4	RISK ASSESSMENT - SITE INSPECTION - LEGAL AND ENVIRONMENTAL REQUIREMENTS
	Brush cutter/Trimmer operator must be able to identify hazards relevant to the site and plants or material to be brush cut /trimmed.
4:01	RISK ASSESSMENT: Walk site; METHOD STATEMENT – verbal; EMERGENCY PLANNING – check information
4:02	Inspect the work area for potential hazards such as stones, low branches or other potentially dangerous solid objects
4:03	Protection of fauna, flora, wildlife, waterways, site specifications etc., regard given to pollution/damage, selection of fuel storage
4:04	Check vegetation for other hazards, e.g. toxic plants or sap, thorny vegetation (e.g. brambles, hawthorns), insects and/or other biological hazards
4:05	Use alkylate fuel whenever possible (machines with combustion engine) or battery storage, charging & transport meets current guidelines (battery machines)

EBS-5	OPERATIONAL SAFETY CHECKS - Operator must be able to check Brush cutter / trimmer for pre-use safety:
5:01	Check for damages and adjust harness, straps, and hook to appropriate working position (length, position, and balance)
5:02	Safe Start method (ground)
5:03	Safe start distance from fuel and other persons (min. 5 m or greater according to national guidance, no spillage, gases released)
5:04	Check maximum speed of the cutting attachment and compatibility with the machine (label on the machine and cutting attachment)
5:05	Check the cutting attachment does not rotate at idle speed
5:06	On/off switch is working (pull choke to stop if not, then label not to be used) or remove battery for battery driven machines
EBS-6	OPERATE IN A SAFE AND ERGONOMIC WAY & USE SAFE WORK METHODS. Brush cutter /trimmer operator must be able to:
6:01	Determine safety distances and exclusion zones from other people
6:02	Place signs where necessary to warn the public and other workers of the risks.
6:03	Change different cutting heads, cutting line, blade, and deflector(s)'s attachments
6:04	Always walk forwards while working
6:05	Operator must avoid contact with stones, rocks, pieces of metal, other solid foreign objects, and biohazards
6:06	Use the throttle to cut safely and efficiently
6:07	Cut/shred/trim wild growth and scrub, with an appropriate technique and attachment. When using the brush knife lower it down onto the growth to achieve a shredding effect safely and efficiently (if operational different to recommended item, must be in risk assessment)
6:08	Working procedure (direction of cutting) is appropriate to deflection of material and proximity to obstacles according to working plan
6:09	Do not damage the bark of trees, and/or respect seedlings or resprouts with the cutting device
6:10	Use of cutting attachments appropriate diameter / density of plant material
6:11	When brush cutting / trimming maintain a safe of at least 15 metres, or further if risk's assessment recommends
6:12	Maintain an ergonomic stance: Straight back, use of legs to control balance, bending at knees
6:13	Leave site tidy & safe
What the Brush cutter / Trimmer operator must know and understand: EBS	
1	Demonstrate knowledge on why the PPE is required and what kind of PPE is appropriated for each task
2	Demonstrate knowledge of risk assessment and emergency planning and procedures
3	Demonstrate knowledge regarding first aid and Brush cutter / trimmer use
4	Demonstrate knowledge of adjusting harness to ergonomic work
5	Demonstrate knowledge of carrying out daily and weekly maintenance, settings and pre-start checks as per manufacturers' recommendations
5:01	Demonstrate knowledge of information required to select a replacement brushing/ trimmer head for a given brush cutter/trimmer
5:02	Demonstrate knowledge of anti-vibration system
5:03	Demonstrate knowledge of clutch components and function

5:04	Demonstrate knowledge of cutting head/unit and transport / storage safety cover and inspect for damage
5:05	Demonstrate knowledge of condition of spark plug (machines with combustion engine) or battery (battery machines)
5:06	Demonstrate knowledge of cutting attachment and corresponding deflector
5:07	Demonstrate knowledge of air filter and compartment (machines with combustion engine) or battery compartment (battery machines) and explain the purpose of cleaning
5:08	Demonstrate knowledge of cord condition and recoil starter mechanism (machines with combustion engine) or function of switches (battery machines)
5:09	Demonstrate knowledge of fuel filter maintenance (machines with combustion engine) or battery checks including storage, charging and transport (battery machines)
5:10	Demonstrate knowledge of condition and pre-use operational safety checks on the Brush knife/trimmer
5:11	Demonstrate knowledge of symptoms associated with poor brush cutting /trimming performance
6	Demonstrate knowledge of maintaining the safety and security of brush cutter / trimmer and other equipment
7	Demonstrate knowledge of efficient throttle use and maximum blade / head speed
8	Demonstrate knowledge of the safety considerations required during brush cutting /trimming including-safe working distances for brush cutter / trimmer
9	Demonstrate knowledge of maintaining effective teamwork when working with others
10	Demonstrate knowledge of kickout risk of the blade when working.
11	Demonstrate knowledge of the implications of terrain, ground conditions, season, weather, and species
12	Demonstrate knowledge of causes of, and how to prevent, potential pollution, environmental damage
13	Demonstrate how to brush cutting / trimming without damaging bark of trees, and/or respect seedlings or resprouts with the cutting device
14	Demonstrate knowledge of how to identify your own capabilities and limitations as operator
15	Demonstrate knowledge of the principles of a safe effective use of the brush cutter / trimmer like a scythe ('sweep' method)
16	Demonstrate knowledge of the principles of a safe effective use of the brush cutter / trimmer as a shredder ('swatting' method)
17	Demonstrate knowledge of how to apply ergonomic working methods and the implications of manual handling regulations
18	Demonstrate knowledge of the methods and safeguards required when cutting and shredding tough, matted grass and scrub (e.g. hardwood or similar)
19	Demonstrate knowledge of reinspecting machine after use and procedure if defects found
20	Demonstrate knowledge of cleaning machine after use to prevent corrosion after the work

EBC assessment: EFESC prescriptions of tasks and criteria

To obtain a European Brush cutter Certificate, you must pass an assessment in which your skills and knowledge, both theoretical and practical, are tested. With this certificate you can prove your competence to work according to the European minimum Brush cutter Standards. If national standards or assessment procedures are more stringent and EBC is covered, an EBC label can be added to the current certificate by a certified assessment center.

During the assessment, the following minimum tasks and criteria must be checked objectively according to the standards by a certified assessor. It's up to each EFESC National Agency to decide if EBS-trainer and EBC-assessor must be different persons.

Pre-requisite to EBC assessment: none

EBC assessment tasks:

Theoretical test:

- Written or oral

Practical Test:

- Recommended brush cutter/trimmer maximum time allowed 60min
- Candidate must sign RA, shows ID and wears appropriate PPE for maintenance and brush cutting
- Candidate must check function of safety features (Brush cutter off)
- Candidate must state guarding requirements for the machine use
- Candidate must undertake required maintenance tasks
- Candidate must inspect & clean air filter or check condition & security of battery
- Candidate must clean, inspect tension starter recoil mechanism (machines with combustion engine) or function of switches (battery machines)
- Candidate must sharpen a brush knife
- Candidate must identify hazards relevant to the vegetation, site terrain, ground conditions, season, weather and species to be cut / shred
- Candidate must check the legal & site environmental requirements in accordance with national standards.
- Candidate must perform site Inspection, Risk Assessment (RA), work planning and emergency planning
- Candidate must check Brush cutter trimmer for condition/sharpness etc. and pre-use safety
- Candidate must change cutting attachment and deflector to perform brush cutter / trimmer practice
- Candidate must brush cut / trim / clear shrub/grass and/or cut shrubs
A minimum surface to (50 square meters advised) brush cut and trimming needs to be demonstrated to a given standard using brush cutting blade and trimmer head with line
 Both scything ('sweep') method and a shredding-effect ('swatting') method are to be used,-always keeping the cutting attachment below hip level during this process).
- Candidate has to change the cutting attachment and deflector if needed to perform brush cutter, trimmer practice
- Candidate has to leave brush cutter/trimmer or cutting saw in good condition without debris on the deflector or damage to the machine
- Candidate has to check for damages to the brush cutting blade, trimmer head protective cover
- Candidate must have the manufacturer's manual available with the machine or online

**Critical faults or a combination of relevant faults against the good practice of these standards will lead to not passing the assessment.
 The assessor has the right and duty to stop the assessment if direct safety is compromised.**

EBC critical assessment criteria:

Theoretical test:

- If multiple choice: recommended minimum score to succeed: 70% (depending on the national scoring system)

Practical Test:

CRITICAL (C): IF ONE OF THE FOLLOWING critical POINTS IS NOT FULFILLED, THE CANDIDATE CAN NOT PASS EBC:

none	- the candidate wears appropriate PPE for maintenance and brush cutting/trimming
	<ul style="list-style-type: none"> • Safety boots/shoes • Face & eye protection as appropriate
	- The candidate wears appropriate PPE for brush cutting and trimming
	<ul style="list-style-type: none"> • Safety boots (heavy-duty slip-resistant)/shoes as appropriate • Approved eye protection (EN 166) according to risk assessment • Ear's defenders or ear's protection • Protective strong clothing: long trousers, sleeves, chaps or similar for protecting legs from thorns, debris etc. appropriate to risk assessment
	- the candidate checks function of parts, including safety features
	<ul style="list-style-type: none"> • Fully compatible Blade/trimmer deflector guard fitted correctly • Throttle lock functioning correctly
	- the candidate inspects the work area: stones, pieces of metal or other solid objects. Check vegetation for other hazards e.g., toxic plant or sap, thorny vegetation and other bio-hazards
	- the candidate works forwards while brush cutting/trimming
- the candidate positions warnings of Brush cutter/Trimmer work	
- the candidate cuts/shreds wild growth and scrub, lower the brush knife down onto the growth to achieve a shredding effect safely and efficiently (if operational different to recommended item, must be in risk assessment).	

RELEVANT (R): IF, AFTER ONE WARNING, MORE THAN THE MAXIMUM NUMBER OF RELEVANT ERRORS ON THE TOPICS BELOW ARE MADE, THEN THE CANDIDATE CAN NOT PASS EBC:

4 Max. number of errors allowed	- Personal/Squad First Aid Kit - on every work site
	- the candidate performs a risk assessment (RA) work planning and emergency planning
	- the candidate wears other PPE as highlighted by the risk assessment (e.g. shin guards, safety helmet, aprons, face protection visor, high visibility clothes)
	- Manufacturer’s handbook available with the machine, if not candidate knows where to find it.
	- the candidate checks function of safety features (Brush cutter off)
	<ul style="list-style-type: none"> • Check for any damage to the machine • Air filter (machines with combustion engine) or battery compartment (battery machines) clean and intact • Anti-vibration system intact • Control handle intact and secure • Exhaust and protective guard intact • Legal symbols present: Head/eye/ear defender/ Safety distances • Harness: double shoulder, belt, and hook intact • Check for damages to the cutting blade / head, and deflector guard • Sharpen Brush Cutter blade using file with handle fitted or soft grinding disc
	-the candidate checks specifications: Protection of fauna, flora, wildlife, waterways, site specifications etc., regard given to pollution/damage, selection of fuel storage
	-the candidate checks pre-use safety features:
	<ul style="list-style-type: none"> • Adjust harness, straps, and hook to appropriate working position (length, position, and balance) • Safe Start method (ground) • Safe start distance from fuel and other persons (min. 5 m or greater according to national guidance, no spillage, gases released)
	- the candidate checks for damages to the cutting blade / head, and deflector guard
	- the candidate changes different cutting heads, plastic mowing line, deflectors and attachments
	- the candidate avoids contact with stones, rocks, pieces of metal, other solid foreign objects and biohazards
	- the candidate does not damage bark of trees with the cutting attachment.
- the candidate maintains a safe distance between workers when brush cutting or trimming	