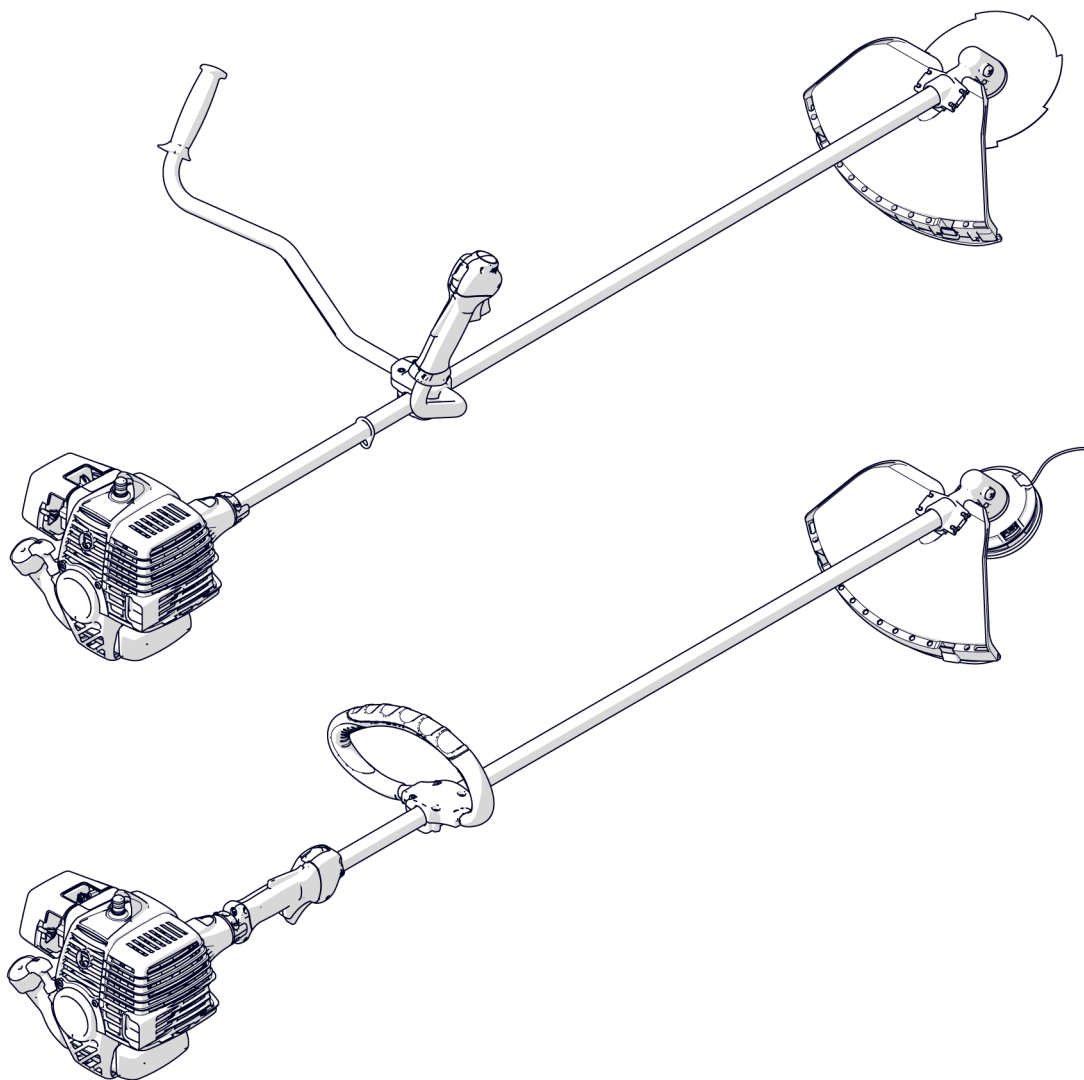




BLUEBIRD
INDUSTRIES

BRUSHCUTTER



USE AND MAINTENANCE MANUAL



Translation of Original
instructions
ENGLISH

Rev. 1.0

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1 PURPOSE AND CONTENT OF THE MANUAL

1.1 SYMBOLS

To ensure the safety of persons and property, this manual uses symbols to draw attention to particularly dangerous situations, warnings and important information for using the brushcutter (hereinafter the "machine") correctly:



DANGER

Hazard that may lead to injury, even fatal.

Accident prevention regulations for the operator.

PAY THE UTMOST ATTENTION TO ANY TEXT INDICATED BY THIS SYMBOL.



CAUTION

Possibility of causing damage to the machine and/or its components or for communicating important information to the operator.

Be careful.



WARNING

Warning or note about key functions or useful information regarding the operation being carried out.

1.2 PURPOSE OF THE MANUAL

This operating manual is an integral part of the machine and was written with the aim of providing all the information necessary to/for:

- Make operators aware of safety issues.
- The correct and safe use of the machine.
- Enable operators to become familiar with the operation and limits of the machine.
- Carry out routine maintenance safely.



WARNING

Carefully read this manual and follow the instructions in it before using, checking or performing any work on or with the machine.

Please contact the Manufacturer if you have difficulties in understanding this manual.

The Manufacturer reserves the right to make changes to this manual without prior notice, as long as this does not constitute a safety risk.

Photos and drawings are indicative only.

1.3 STORING THE MANUAL

The manual should be kept carefully and close to the machine, away from liquids and anything else that could affect its readability, and should be readily accessible at any time.

The manual and Declaration of conformity are integral parts of the machine and must therefore accompany it for its entire service life.

Do not remove, tear out or modify the contents of this document.

In case the manual is lost or illegible request a copy to the Manufacturer.

1.4 RECIPIENTS

The purpose of this manual is to provide the information required for the correct use of the machine.

This manual is intended for personnel in charge of carrying out the following operations:

- use;
- adjustments;
- cleaning;
- routine maintenance.

2 GENERAL INFORMATION

2.1 MANUFACTURER'S IDENTIFICATION DATA

BLUE BIRD INDUSTRIES



Via Due Camini, 19
36010-Zanè (Vi) - Italy



Phone: +39 0445314138
Fax: +39 0445314225



Website: www.bluebirdind.com/



e-mail: info@bluebirdind.com

2.2 LIMITS OF LIABILITY

The manufacturer shall not be liable for injuries or damage to property caused by:

- the improper use of the machine;
- failure to comply with some or all of the instructions provided;
- use that does not comply with current regulations;
- use that does not comply with national safety and accident prevention regulations;
- tampering with even a single part of the machine;
- carrying out unauthorised modifications or work on the machine;
- the lack of or inadequate preventive maintenance;
- the use of non-original spare parts.

3 GUARD

**WARNING**

All the machines and accessories undergo continuous development. The manufacturer reserves the right to modify technical data, weights, construction characteristics and standard equipment at any time and without notice.

**DANGER**

If the cutting tools are not in position and appropriately secured, they may cause SERIOUS DAMAGE TO PEOPLE AND PROPERTY.

The manufacturer accepts no responsibility if the instructions provided in this manual are not followed.

3.1 Intended use

The brushcutter must be used exclusively to cut grass, shrubs and bushes.

3.2 Improper use

Improper use means the incorrect use of the machine that does not result in potential accidents, but may cause serious damage to the machine itself.

Modifying or adjusting the machine in order to obtain a level of performance that is higher or different to that provided by the manufacturer is considered **IMPROPER USE** and therefore the manufacturer declines all liability for injury to persons or damage to property; the machine warranty will be considered void.

3.3 Inappropriate use and contraindications

**CAUTION**

The machine must be used for the purposes intended by the manufacturer.

It is **PROHIBITED** to use the machine in the following cases:

- without the guards indicated and/or with the safety devices disabled, faulty or missing (see section 3.6 and section 3.7);
- setting it up in a way that is not compliant with the instructions in this manual;
- in explosive atmospheres or in places where there is a fire hazard;
- processing materials other than those intended by the manufacturer;
- dangerous situations or device malfunctions;
- improper use of the machine or use by untrained personnel;
- use contrary to the relevant regulations;
- if there are defects in the fuel supply system of the engine;
- if maintenance has not been carried out;
- after modifications or non-authorized interventions;
- failure to comply with some or all of the instructions provided;
- use with materials and tools different from those intended by the manufacturer.

3.4 General instructions

- Read the manual carefully and make sure you have understood all the instructions and recommendations given in this manual before starting to use the machine. Keep this manual carefully and refer to it whenever necessary.
- The machine must only be used by adults who have been trained how to use it by a qualified technician or your local dealer.
- Contact the manufacturer's service centre or your local dealer for non-routine machine maintenance. A list of Blue Bird service centres can be found at: www.bluebirdind.com/assistenza/
- Make sure that there are no people, animals or objects that can be damaged within the range of action (**15 metres**).
- The user of the machine is responsible for any damage to third parties and property within the range of action of the device.
- Always wear suitable work clothes and adequate protective equipment: close-fitting overalls, heavy duty shoes, gloves, protective helmet, etc.
- Always wear goggles or a face-mask, earmuffs or earplugs.
- The user of the machine must be in good health and not under the influence of alcohol, drugs and/or medicines.
- Only carry out work when there is good visibility and in natural daylight.
- DO NOT use cutting tools other than those supplied by the manufacturer. Only original spare-parts.
- DO NOT use broken, worn-out, deformed, dented, or cracked cutting tools.
- Do not start the brushcutter or keep it running indoors.
- Mix and handle the fuel in the open air, away from sources of heat, sparks or flames and with the engine switched off. After putting the cap on the tank, check that there are no fuel leaks by rotating the machine in every possible direction.
- Do not smoke when mixing and handling fuel.
- All maintenance, repair and the replacement of components should always be carried out with the engine switched off and all rotating parts stopped.
- All the machine's safety systems and the protective equipment must be kept in operation during the entire period of use.
- Beware of the effects of vibrations and alternate work with short rest breaks.
- Pay attention to the possible emission of "aerosols", due to the chopping of grass and shrubs, which can cause allergies.
- Carefully read the instructions regarding clothing and protective equipment below.

3.5 Meaning of the symbols used



Warning, danger, caution.



Read the product documentation and safety instructions in this manual.



Wear eye and hearing protection devices as well as a protective helmet when using the product.



Wear protective footwear.



Wear protective gloves.

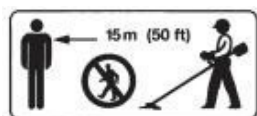


SHARP ELEMENTS!

Keep your hands or feet away from moving parts and always keep away from the cutting element, which will continue to rotate even after the engine has been switched off.



Pay attention to flying objects.



No people, animals and/or objects that can be damaged should be within the working range shown in the pictogram.



Sound power level guaranteed L_{WA} according to Directive 2000/14/EC + 2005/88/EC



Toxicity hazard



Risk of fire or explosion

3.6 Appropriate clothing and protective equipment



CAUTION

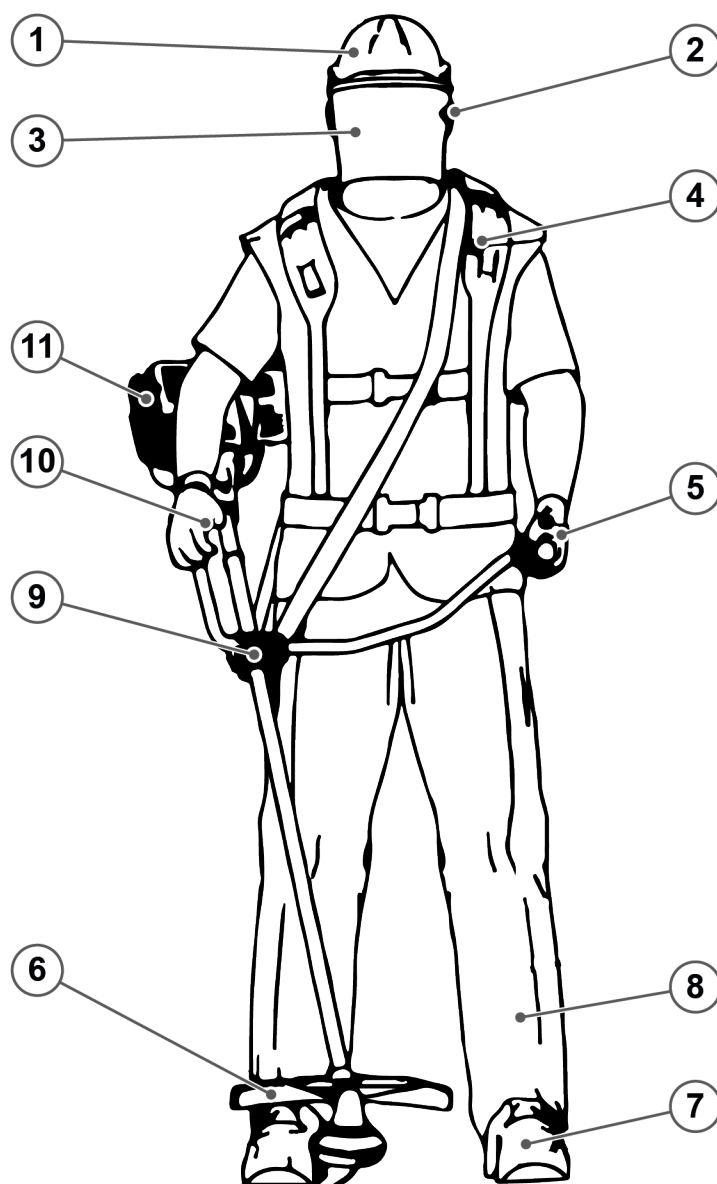
Carefully read the following instructions regarding the type of clothing and protective equipment to wear before using the machine.

- Use close-fitting overalls (avoid loose fitting shirts or loose clothing).
- Do not wear jewellery, rings, ties, scarves or anything else that might get caught in branches or the moving parts of the machine.
- Tie up your hair so that it is above shoulder length.
- Wear closed work shoes or boots with non-slip soles that ensure stability (never use the machine barefoot or wearing flip-flops or low open shoes).
- Wear a protective helmet whenever there is a risk of contact with falling objects during pruning operations or when cutting eye-level undergrowth.
- ALWAYS wear a visor and/or anti-fog goggles for effective face and eye protection.
- Protect your hearing by wearing earmuffs or earplugs.
- Always wear work gloves that protect against light impact and cuts when handling blades, knives, and/or sharp parts.

3.7 Machine safety devices and safety systems

The machine is fitted with a series of “safety devices” to protect the user:

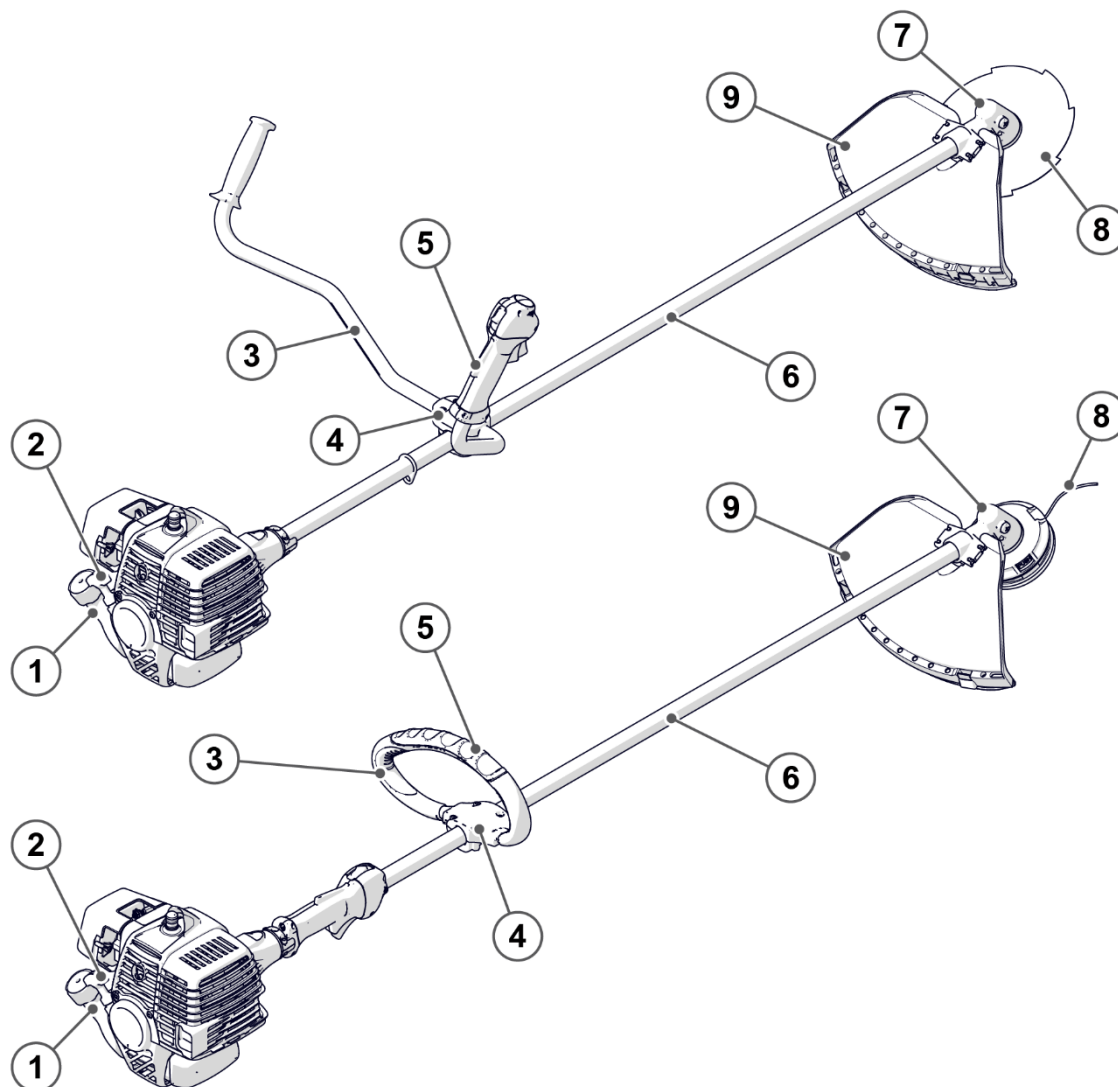
- Safety guards to protect against accidental contact with the hot parts of the device.
- Nylon or rubber spark plug cap that provides protection against accidental contact with the machine’s high-voltage electrical parts.
- Shaft-engine connection housing fitted with a vibration damping rubber.
- Handlebar cross brace or grip with vibration-damping.
- Large safety guards and protective barriers.
- Fireproof safety harnesses with quick release buckles to release the machine immediately.
- Throttle lever with double safety.



1	Safety helmet	7	Safety shoes
2	Earmuffs	8	Heavy-duty overalls
3	Chip-guard face-mask	9	Vibration damping support
4	Quick-release safety strap	10	Throttle control handle with "STOP" switch
5	Gloves	11	Engine with overheat protection
6	Safety guard		

4 TECHNICAL FEATURES

4.1 Main parts

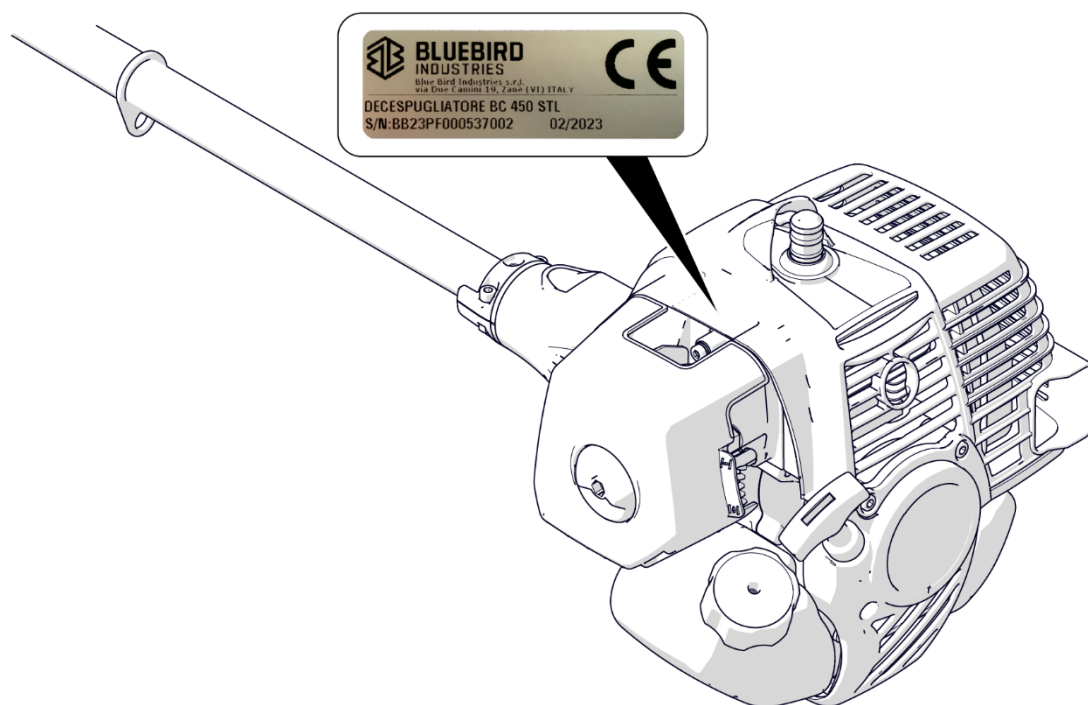


1	Fuel tank	6	Drive shaft
2	Starting grip	7	Bevel gear box
3	Vibration-damping handlebar/grip	8	Cutting tool
4	Vibration damping support	9	Safety guard
5	Throttle control lever with safety trigger		

4.2 Data plate

A nameplate (1) containing the identification information required when requesting assistance and/or spare parts is attached to the motor. It includes:

- name;
- model;
- serial number;
- year;



WARNING

DO NOT remove, move or replace the nameplate with that of another machine;
DO NOT modify the data indicated on the nameplate.

4.3 Technical data tables

MODEL	BCB 450 ST	BCB 560 ST	BCB 610 ST	BC 261	BC 341	BC 431	BC 521
Shaft diameter [mm]	28	28	28	24	28	28	28
Weight without fuel, cutting tools and guard [kg]	12.2	12.2	12.2	5.4 (G)	6.5 (G)	6.6 (G)7.2 (H)	7.2 (G)7.9 (H)
Tank capacity [cm ³]	800	800	800	450	700	800	800
Engine type*	B.B.I. N44E ST 44.3c.c	B.B.I. N56E ST 53.2c.c	B.B.I. N61E ST 57.9c.c.	1E34FGN 25.4c.c.	1E36F-2GN 33c.c.	1E40F-5GN 42.7c.c.	1E44F-5GN 51.6c.c.
Maximum power [kW]	1.80	2.00	2.60	0.75	0.90	1.25	1.46
Blade diameter [mm]	255 – 305						
Attachment hole diameter [mm]	25.5						
Blade rotation speed [rpm/1']	8,000						
Min. engine speed range [rpm/1']	2800/3000						
Rotation direction (as seen from the PTO)	Left						
Length [mm]	2760	2760	2760	1785	1785	1785	1785
Width [mm]	385	385	385	385 (G) 560 (H)	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)
Height [mm]	475	475	475	330 (G) 420 (H)	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)
Sound pressure level (LpA av) according to Directive 2000/14/EC+2005/88/EC [dB]	91	92	92	90	91	92	93
Sound power level (LWA av) according to Directive 2000/14/EC+2005/88/EC [dB]	111	112	112	112	114	114	114
Vibration: $\bar{a}(h,w)$ at minimum according to Directive 2002/44/EC [m/s ²]	0.2(L) 0.4(R)	0.2(L) 0.4(R)	0.2(L) 0.4(R)	1.8(L) 3.1(R)	2.0(L) 2.1(R)	2.2(L) 2.1(R)	2.3(L) 2.1(R)
Vibration: $\bar{a}(h,w)$ at maximum without load according to Directive 2002/44/EC [m/s ²]	4.2(L) 5.3(R)	4.2(L) 5.3(R)	4.2(L) 5.3(R)	5.6(L) 5.9(R)	7.5(L) 6.5(R)	7.5(L) 6.5(R)	7.5(L) 6.5(R)

(G)= Grip – (H)=Handlebar (R)-(L): grip right – left

For the technical characteristics of the engine, please refer to the ENGINE INSTRUCTIONS MANUAL

Uncertainty of measurement: sound pressure/power level: ± 1 dB Uncertainty of level of vibration: 10 % - All machines and equipment undergo continuous development and we reserve the right to modify the technical data, weights, construction characteristics and standard equipment at any time and without notice. The information and illustrations contained in this manual are purely indicative and not legally binding.

TECHNICAL FEATURES

MODEL	BC 450 ST	BC 560 ST	BC 610 ST	BC 280	BC 370	BC 450 ST PRO	BC 560 ST PRO	BC 610 ST PRO
Shaft diameter [mm]	28	28	28	24	28	28	28	28
Weight without fuel, cutting tools and guard [kg]	7.7 (G) 8.3 (H)	7.7 (G) 8.3 (H)	7.7 (G) 8.3 (H)	6.6 (G) 7.2 (H)	6.6 (G) 7.2 (H)	7.8 (G) 8.4 (H)	7.8 (G) 8.4 (H)	7.8 (G) 8.4 (H)
Tank capacity [cm ³]	800	800	800	800	800	800	800	800
Engine type*	B.B.I. N44E ST 44.3c.c.	B.B.I. N56E ST 53.2c.c.	B.B.I. N61E ST 57.9c.c.	B.B.I. P28E 27.4c.c.	B.B.I. P35E 34c.c.	B.B.I. N44E ST 44.3c.c.	B.B.I. N56E ST 53.2c.c.	B.B.I. N61E ST 57.9c.c.
Maximum power [kW]	1.80	2.00	2.60	0.90	1.10	1.80	2.00	2.60
Blade diameter [mm]	255 – 305							
Attachment hole diameter [mm]	25.5							
Blade rotation speed [rpm/1']	8,000							
Min. engine speed range [rpm/1']	2800/3000							
Rotation direction (as seen from the PTO)	Left							
Length [mm]	1785	1785	1785	1785	1785	1785	1785	1785
Width [mm]	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)
Height [mm]	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)
Sound pressure level (LpA av) according to Directive 2000/14/EC+2005/88/EC [dB]	94	94	95	92	93	94	94	94
Sound power level (LWA av) according to Directive 2000/14/EC+2005/88/EC [dB]	114	114	115	114	114	114	114	114
Vibration: $\bar{a}(h,w)$ at minimum according to Directive 2002/44/EC [m/s ²]	3.0 (L) 3.0 (R)	3.0 (L) 3.0 (R)	3.2 (L) 3.1 (R)	2.7 (L) 3.3 (R)	5.7 (L) 3.7 (R)	3.0 (L) 3.0 (R)	3.0 (L) 3.0 (R)	3.0 (L) 3.0 (R)
Vibration: $\bar{a}(h,w)$ at maximum without load according to Directive 2002/44/EC [m/s ²]	3.6 (L) 3.6 (R)	3.6 (L) 3.6 (R)	3.4(L) 3.5(R)	5.5 (L) 8.9 (R)	7.5 (L) 12.2 (R)	3.6 (L) 3.6 (R)	3.6 (L) 3.6 (R)	3.6 (L) 3.6 (R)

(G)= Grip – (H)=Handlebar (R)-(L): grip right – left

For the technical characteristics of the engine, please refer to the ENGINE INSTRUCTIONS MANUAL

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TECHNICAL FEATURES

MODEL	TJ27E	TJ35E	TJ45E	TJ53E	TJ45EZ	TJ53EZ
Shaft diameter [mm]	24	28	28	28	27	27
Weight without fuel, cutting tools and guard [kg]	5.1 (G) 5.8 (H)	6.2 (G) 6.9 (H)	6.9 (G) 7.6 (H)	7.6 (G) 8.3 (H)	11.8	12.1
Tank capacity [cm ³]	500	700	900	1100	900	1100
Engine type*	KAWASAKI TJ27E 26.3c.c. 0.77	KAWASAKI TJ35E 34.4c.c. 1.03	KAWASAKI TJ45E 45.4c.c. 1.42	KAWASAKI TJ53E 53.2c.c. 2.00	KAWASAKI TJ45E 45.4c.c. 1.42	KAWASAKI TJ53E 53.2c.c. 2.00
Maximum power [kW]						
Blade diameter [mm]			255 – 305			
Attachment hole diameter [mm]			25.5			
Blade rotation speed [rpm/1']			8,000			
Min. engine speed range [rpm/1']			2800/3000			
Rotation direction (as seen from the PTO)			Left			
Length [mm]	1785	1785	1785	1785	2760	2760
Width [mm]	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)	385 (G) 560(H)	385	385
Height [mm]	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)	330 (G) 420(H)	475	475
Sound pressure level (LpA av) according to Directive 2000/14/EC+2005/88/E C [dB]	87	94	94	92	94	92
Sound power level (LWA av) according to Directive 2000/14/EC+2005/88/E C [dB]	107	114	114	112	114	112
Vibration: $\ddot{a}(h,w)$ at minimum according to Directive 2002/44/EC [m/s ²]	2.4 (L) 5.7 (R)	3.4 (L) 2.6 (R)	3.4 (L) 2.6 (R)	3.2 (L) 6.0 (R)	0.2 (L) 0.4 (R)	0.2 (L) 0.4 (R)
Vibration: $\ddot{a}(h,w)$ at maximum without load according to Directive 2002/44/EC [m/s ²]	6.7 (L) 8.8 (R)	8.6(L) 8.7(R)	8.6(L) 8.7(R)	5.2 (L) 9.6 (R)	4.2 (L) 5.3 (R)	4.2 (L) 5.3 (R)

(G)= Grip – (H)=Handlebar (R)-(L):grip right – left

For the technical characteristics of the engine, please refer to the ENGINE INSTRUCTIONS MANUAL

Uncertainty of measurement: sound pressure/power level: ± 1 dB Uncertainty of level of vibration: 10 % - All machines and equipment undergo continuous development and we reserve the right to modify the technical data, weights, construction characteristics and standard equipment at any time and without notice. The information and illustrations contained in this manual are purely indicative and not legally binding.

TECHNICAL FEATURES

MODEL	HO25	HO35	HO35Z	HO50	ZHO 50
Shaft diameter [mm]	24	28	27	28	27
Weight without fuel, cutting tools and guard [kg]	5.2 (T) 5.3 (G) 6.0 (H)	7.1 (G) 7.7 (H)	12.2	7.9 (G) 8.5(H)	13.0
Tank capacity [cm ³]	580	650	650	630	630
Engine type*	HONDA GX25 25c.c.	HONDA GX35 35.8 c.c.	HONDA GX35 35.8 c.c.	HONDA GX50 47.9 c.c.	HONDA GX50 47.9 c.c.
Maximum power [kW]	0.72	1.0	1.0	1.47	1.47
Blade diameter [mm]	255 – 305				
Attachment hole diameter [mm]	25.5				
Blade rotation speed [rpm/1']	8,000				
Min. engine speed range [rpm/1']	2800/3000				
Rotation direction (as seen from the PTO)	Left				
Length [mm]	1535 (T) 1785	1785	2760	1785	2760
Width [mm]	385 (G) 560(H)	385 (G) 560(H)	385	385 (G) 560(H)	385
Height [mm]	330 (G) 420(H) 450 (T)	330 (G) 420(H)	475	330 (G) 420(H)	475
Sound pressure level (LpA av) according to Directive 2000/14/EC+2005/88/EC [dB]	91	91	91	92	92
Sound power level (LWA av) according to Directive 2000/14/EC+2005/88/EC [dB]	111	111	111	112	112
Vibration: $\bar{a}(h,w)$ at minimum according to Directive 2002/44/EC [m/s ²]	1.1 (L) 2.3 (R)	3.3 (L) 1.1 (R)	0.2 (L) 0.4 (R)	3.5 (L) 1.3 (R)	0.3 (L) 0.5 (R)
Vibration: $\bar{a}(h,w)$ at maximum without load according to Directive 2002/44/EC [m/s ²]	4.9 (L) 11.8 (R)	9.1 (L) 4.2 (R)	3.2 (L) 4.1 (R)	5.6 (L) 4.4 (R)	3.5 (L) 4.3(R)

(G)= Grip – (H)=Handlebar (R)-(L): grip right – left

For the technical characteristics of the engine, please refer to the ENGINE INSTRUCTIONS MANUAL

Uncertainty of measurement: sound pressure/power level: ± 1 dB Uncertainty of level of vibration: 10 % - All machines and equipment undergo continuous development and we reserve the right to modify the technical data, weights, construction characteristics and standard equipment at any time and without notice. The information and illustrations contained in this manual are purely indicative and not legally binding.

5 ASSEMBLY



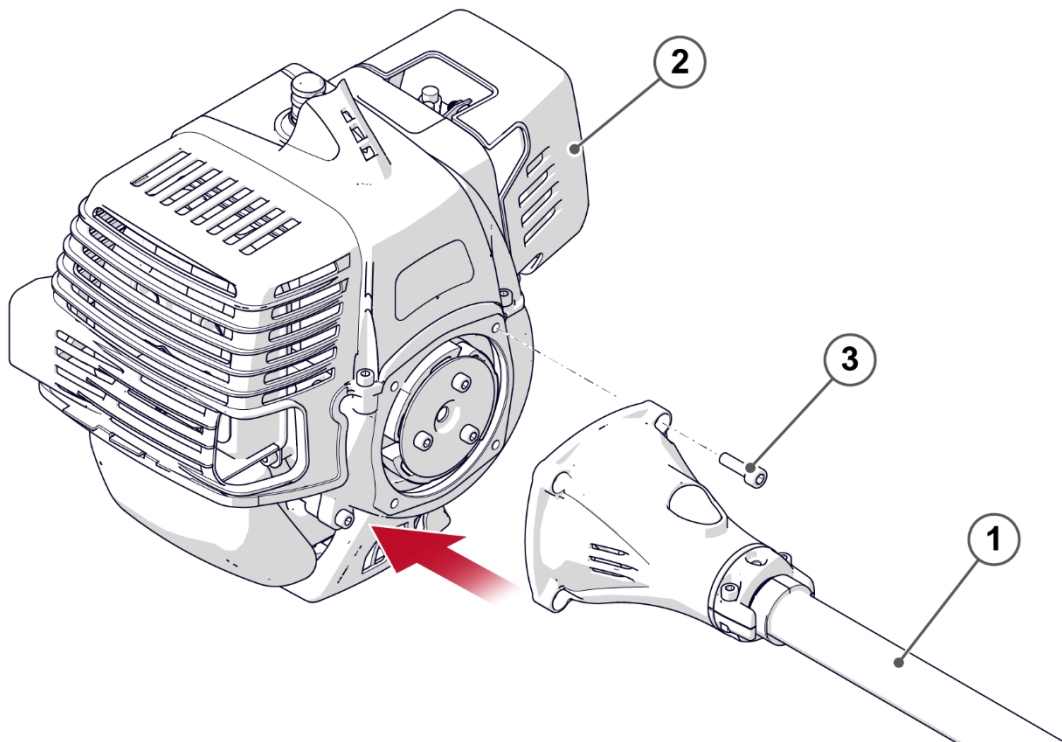
CAUTION

Make sure that all parts have been assembled correctly before starting to use the machine.

5.1 Models with rigid shaft

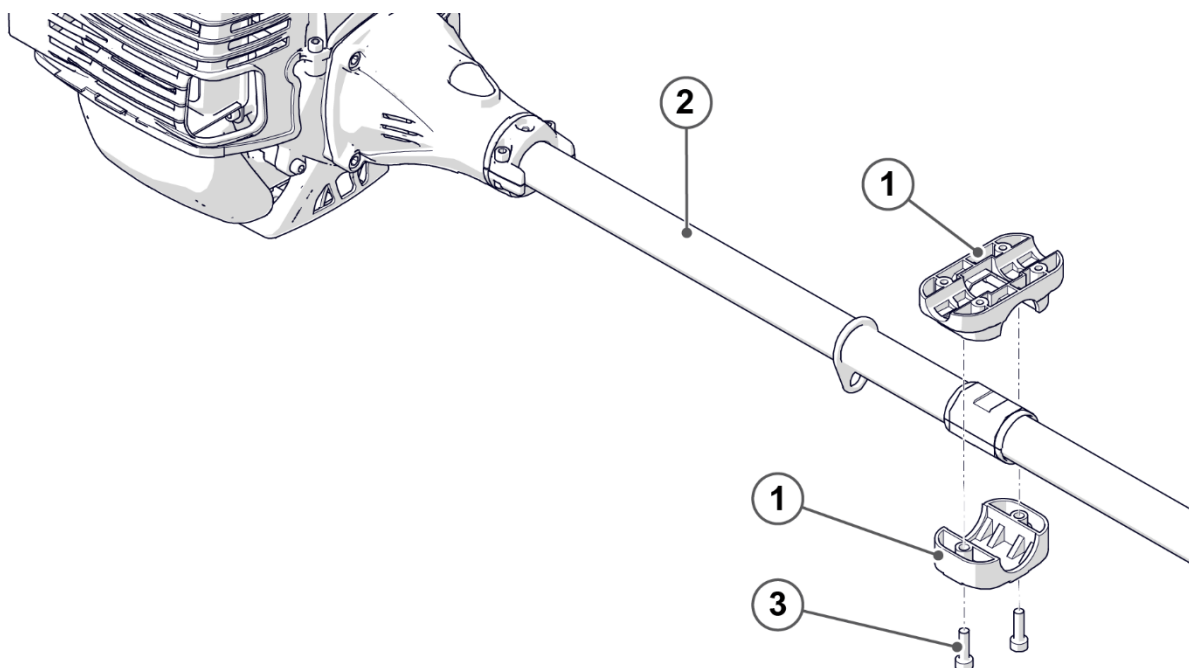
5.1.1 Shaft – engine

1. Orientate the shaft (1), complete with housing support and connect it to the engine (2).
2. Tighten the four screws (3).

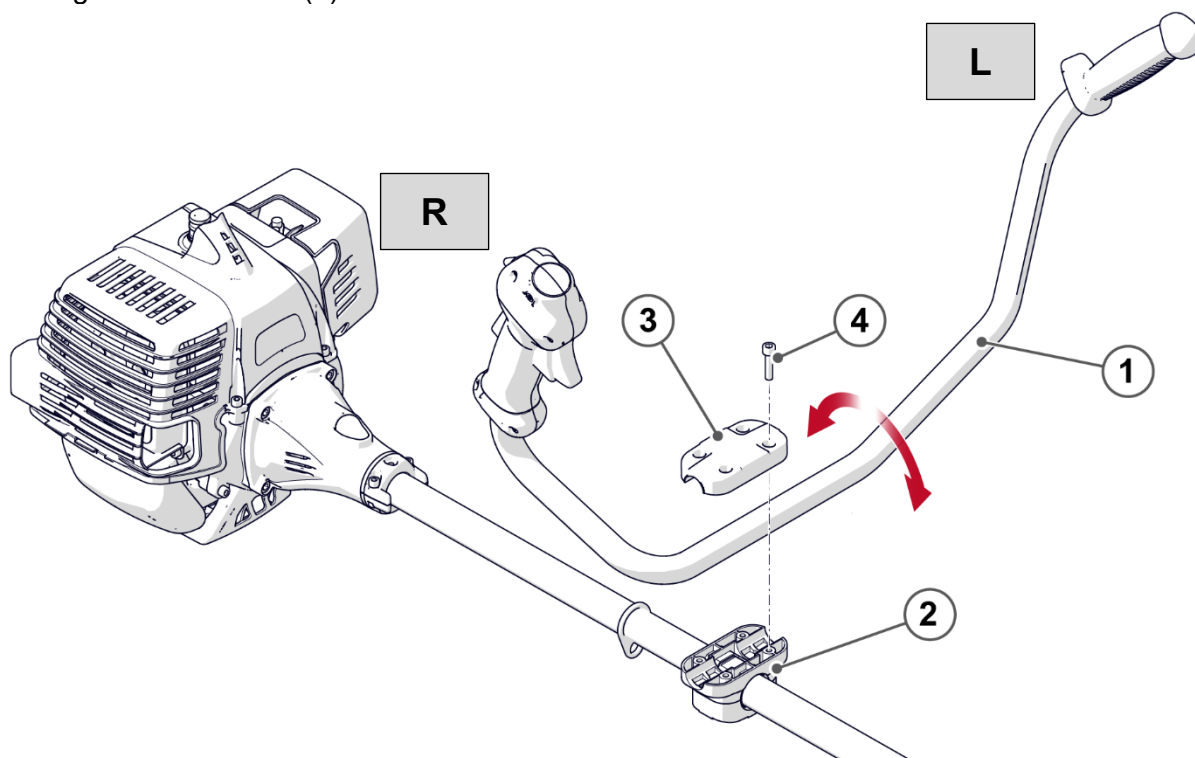


5.1.2 Handlebar

1. Insert the two half-bearings (1) onto the shaft (2) and secure with the appropriate screws (3).

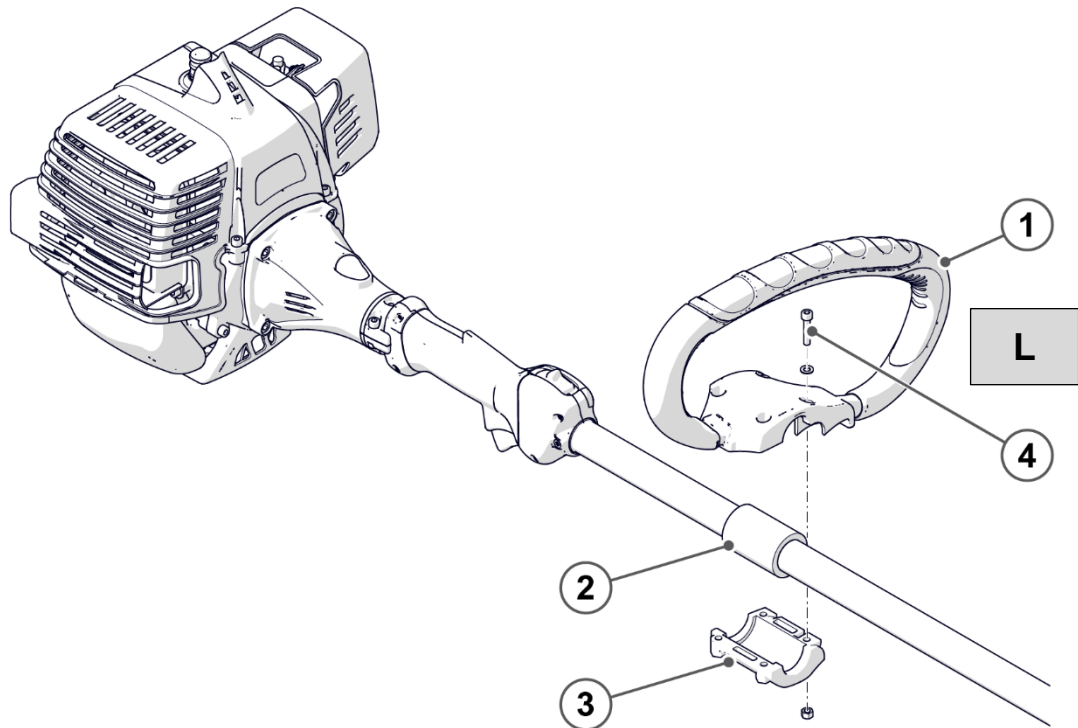


2. Position the handlebar (1) in its seat as shown in the figure.
3. Mount the cover (3) using the screws (4) but without tightening them.
4. Adjust the position of the handlebar so that it can be gripped with slightly bent arms and wrists in an ergonomic position when working.
5. Tighten the screws (4).



5.1.3 Vibration-damping grip

1. Place the vibration-damping grip (1) on the rubber bushing (2), keeping the longer part facing towards the left (L).
2. Adjust the handle (1) to a position which allows the ergonomic use of the machine.
3. Secure the grip (1) to the lower half bearing (3) using the screws (4).



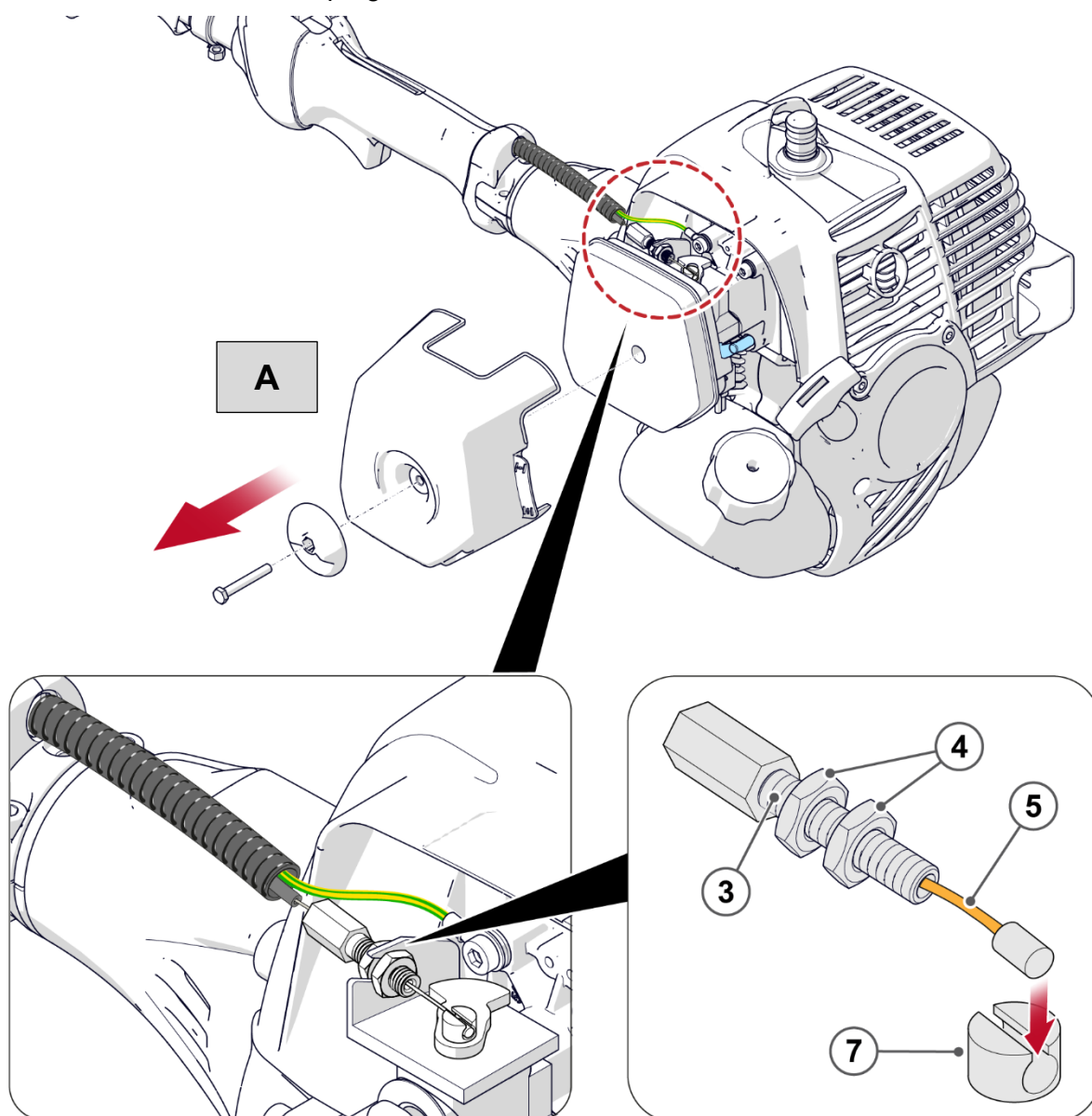
5.1.4 Throttle control acceleration cable (models with rigid shaft)

The end of the throttle control cable (1) which exits from the throttle control handle (2) is fitted with:

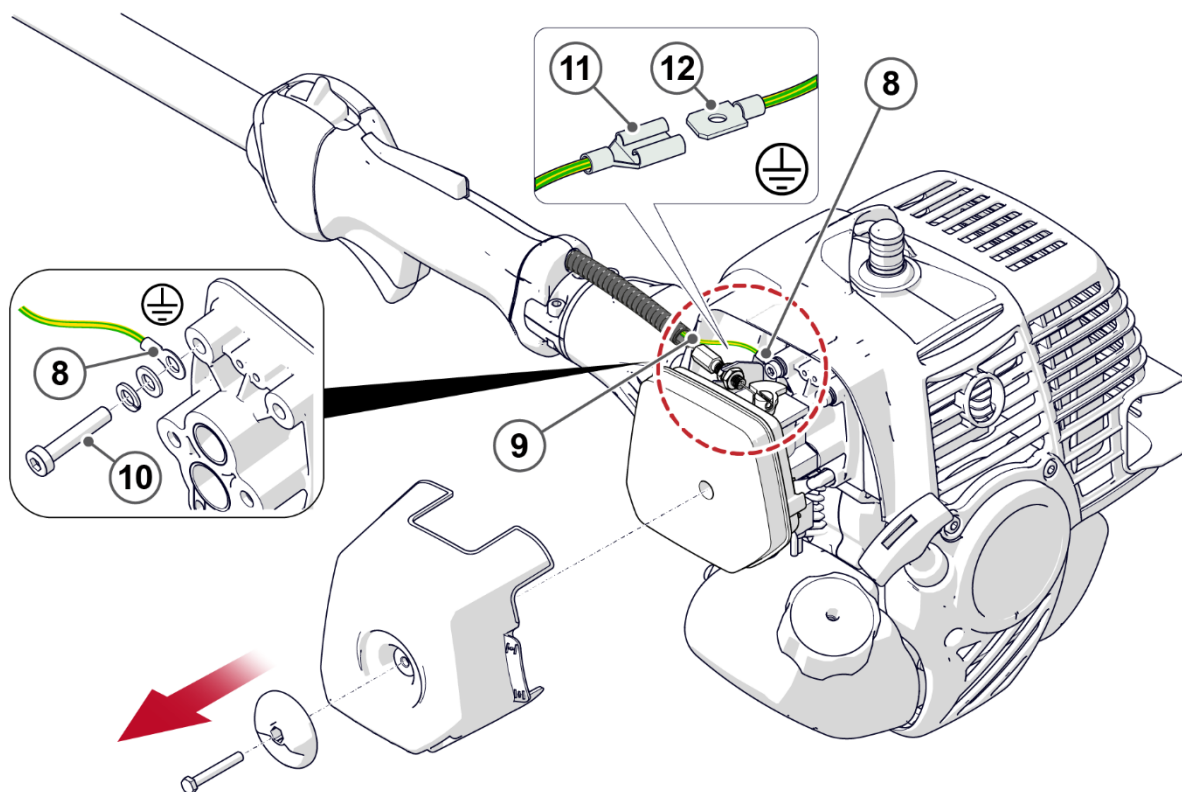
- a threaded regulator (3);
- two nuts (4);
- the steel throttle cable (5).

To connect the cable to the brushcutter, proceed as follows:

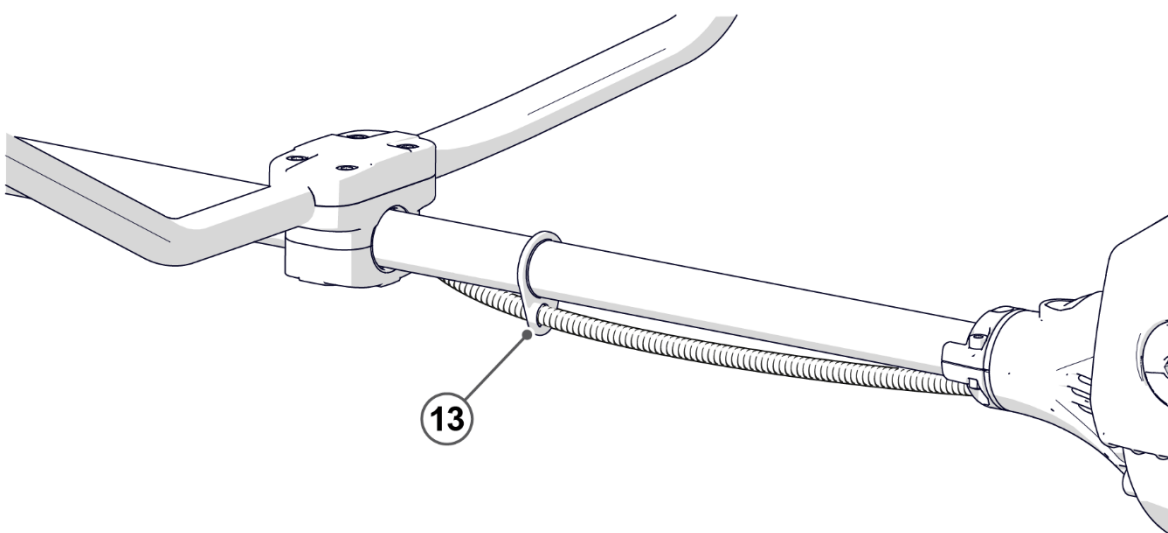
1. Remove (A) the guard (6).
2. Take the throttle cable (1) and insert the end into the swivel (7) for the control of the carburettor butterfly valve.
3. Position the threaded regulator (3) in the respective seat on the carburettor, making sure that you feed the steel cable (5) under the relative track.
4. Fasten the regulator (3) to the carburettor using the nuts (4).
5. Adjust the regulator (3) to eliminate any play between the cable and the sheath in order to ensure correct and progressive acceleration.



6. Then connect the eyelet terminal (8) of the ground cable (9) to one of the four fixing screws (10).
7. Connect the female faston (11) of the ground cable (9) to the male faston (12) coming from the coil in the engine.



In models fitted with handlebars, feed the throttle control cable unit into the cable gland (13) on the shaft so that the throttle control unit is as close as possible to the machine.



5.2 For all models

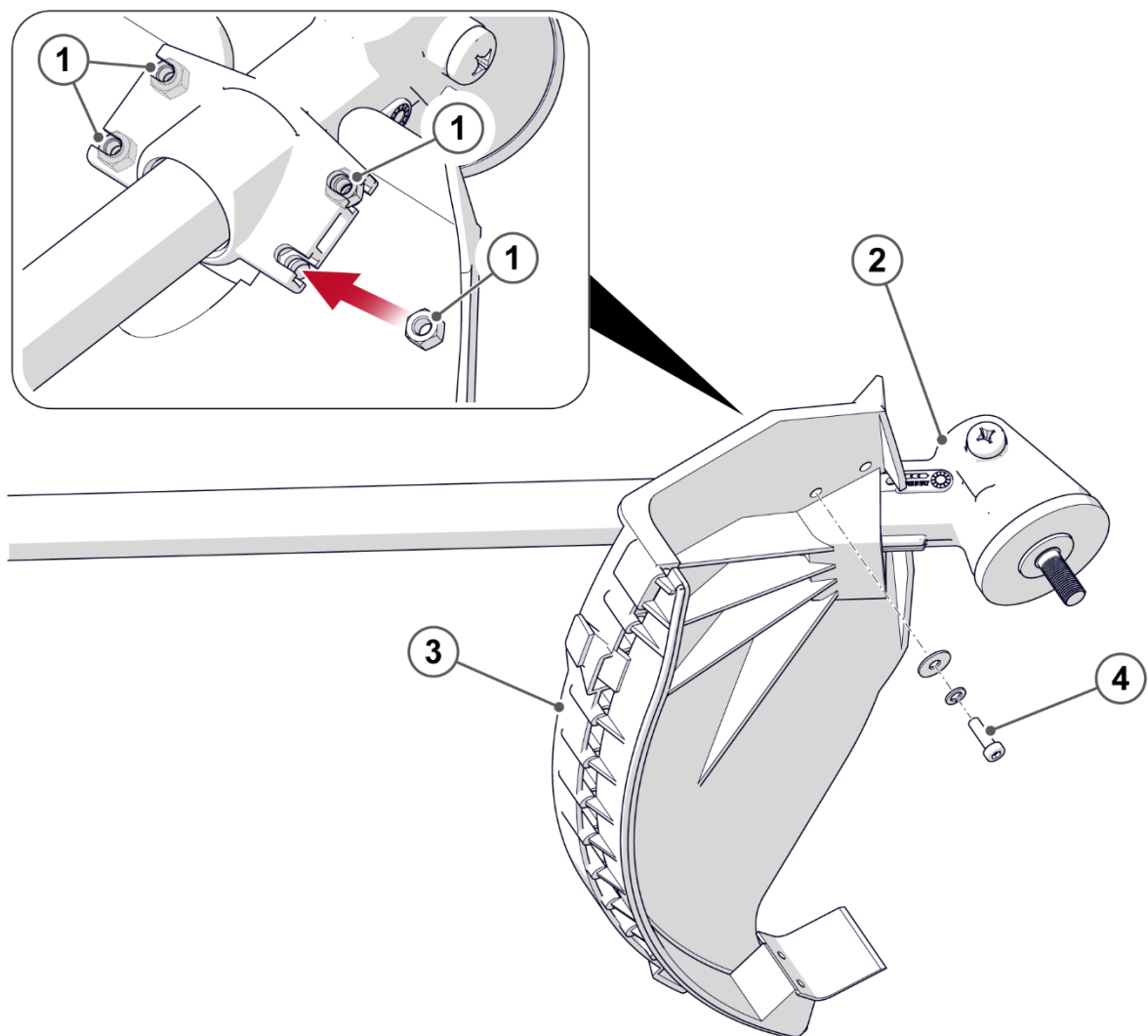
5.2.1 Safety guard

1. Place the nuts (1) into the seats on the bevel gear box (2).
2. Secure the guard (3) to the bevel gear box (2) using the screws (4).



CAUTION

The type of guard to be fitted will depend on the cutting accessory used (wire or disc).



5.2.2 Safety straps



WARNING

The strap supplied varies according to the type of brushcutter handle.

In models fitted with a handlebar, the safety strap consists of:

- a shoulder strap with a fixed shoulder piece;
- a side protection with support clip.

In models fitted with a vibration damping grip, the safety strap is consists of:

- a fixed shoulder piece
- a support clip connected directly to the clip buckle.

In the event of immediate danger, use the support clip (handlebar) or the snap buckle (anti-vibration grip) to quickly release the machine.

Place the safety strap over your left shoulder so that the hip protector rests against your right hip.

Use the through buckle near the shoulder strap to adjust the length of the strap according to the height of the user.

5.2.3 Balancing

Before starting:

1. Adjust the safety strap in order to balance the weight of the machine.
2. Put on the safety strap.
3. Attach the machine to the attachment.

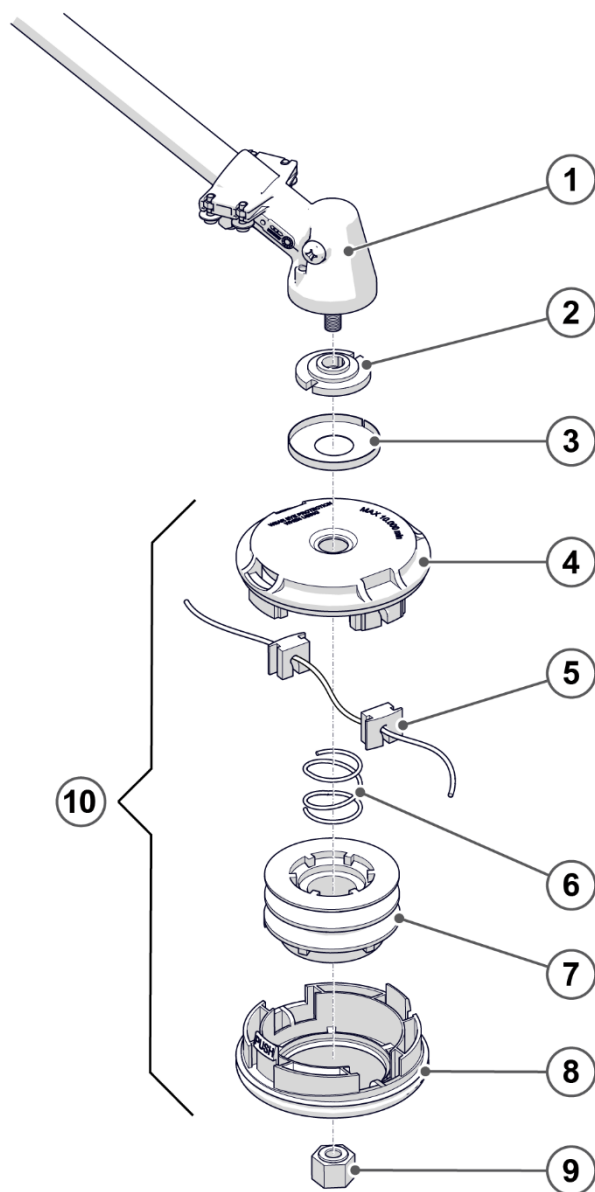


CAUTION

Adjust the safety strap so that the distance between the ground and the closest point of the cutting tool is between 100 and 300 mm.

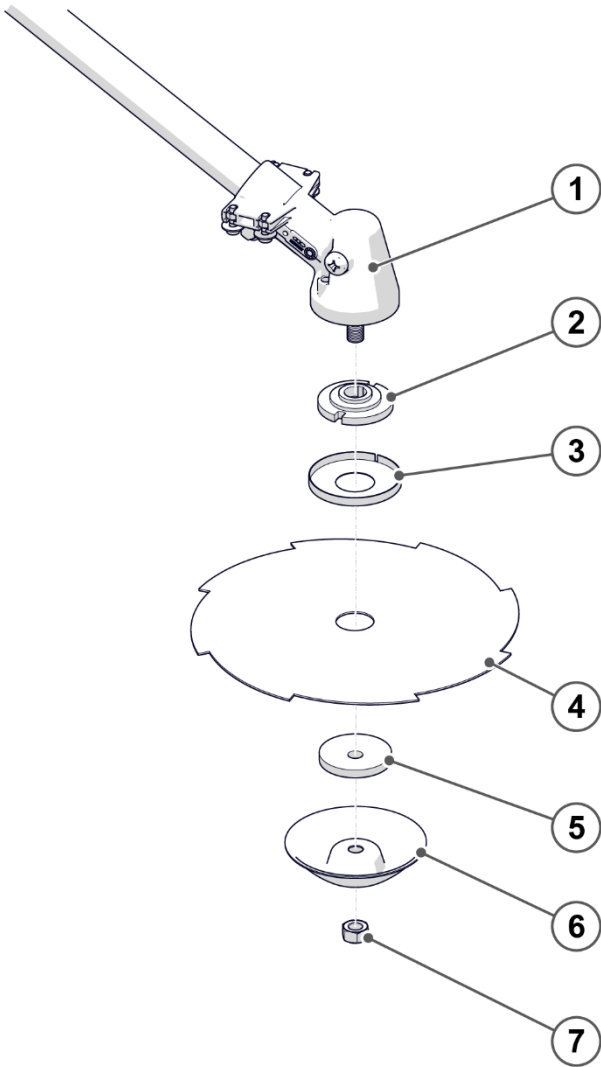
5.2.4 Assembling the cutting tools (for 27 - 28 mm diameter shaft)

LINE



1	Bevel gear box	6	Spring
2	Disc holder ring	7	Spool
3	Wrapping cover	8	Support cup
4	Head cover	9	Nut
5	Line	10	Complete head unit

DISC



1	Bevel gear box	5	Plate fixing flange
2	Disc holder ring	6	Support cup
3	Wrapping cover	7	Nut
4	Disc		

Installing cutting tools

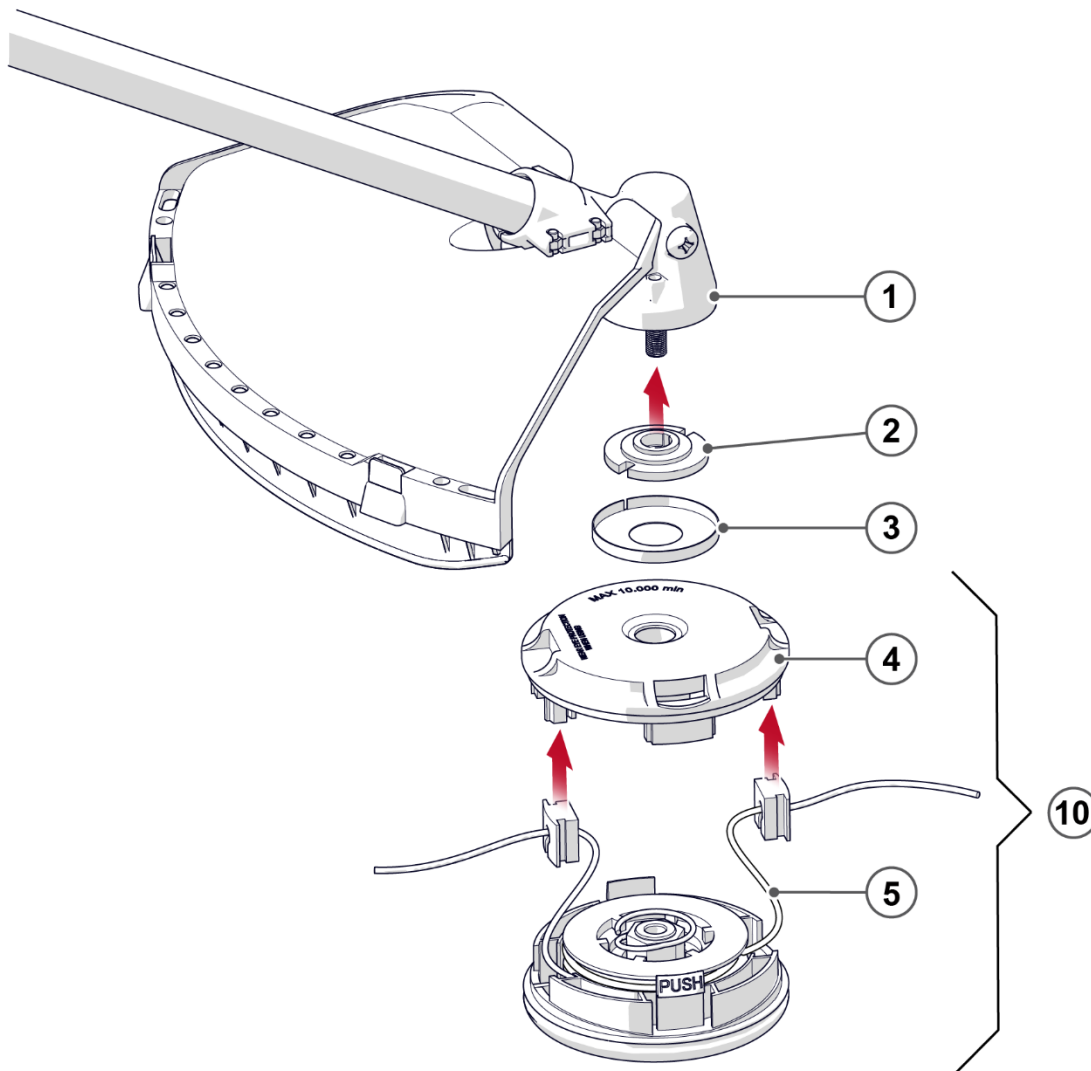
Safe and economical work requires the installed cutting tool to be the most appropriate for the intended use (grass line, shrub cutter disc).



WARNING

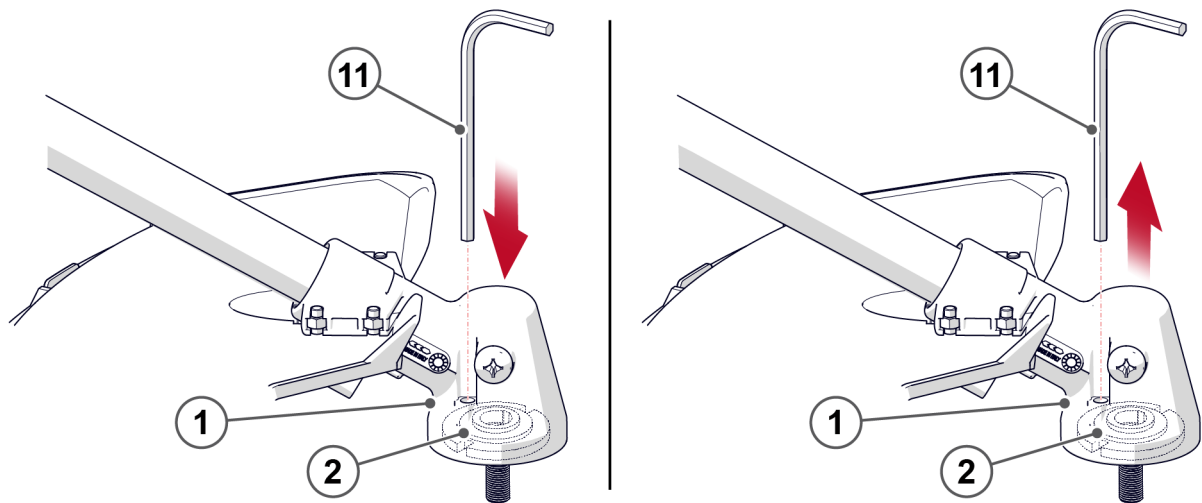
The right type of cutting tool for the model you have chosen can be supplied either as standard or as an optional.

1. Attach the line (5) to the head cover (4)
2. Close the **head unit** (10)
3. Position the wrapping cover (3) and the disc holder ring (2) against the bevel gearbox (1).



ASSEMBLY

4. Insert an Allen key (11) into the hole on the side of the bevel gearbox (1) to lock the rotation of the disc holder ring (2) in the appropriate slot.



Carefully screw the **head unit (10)** on until it is fully tightened.

5. Remove the Allen key (11) so that the shaft and the cutting head are free to rotate.
6. Make sure that all parts are secured correctly and that the head rotates in axis.

**DANGER**

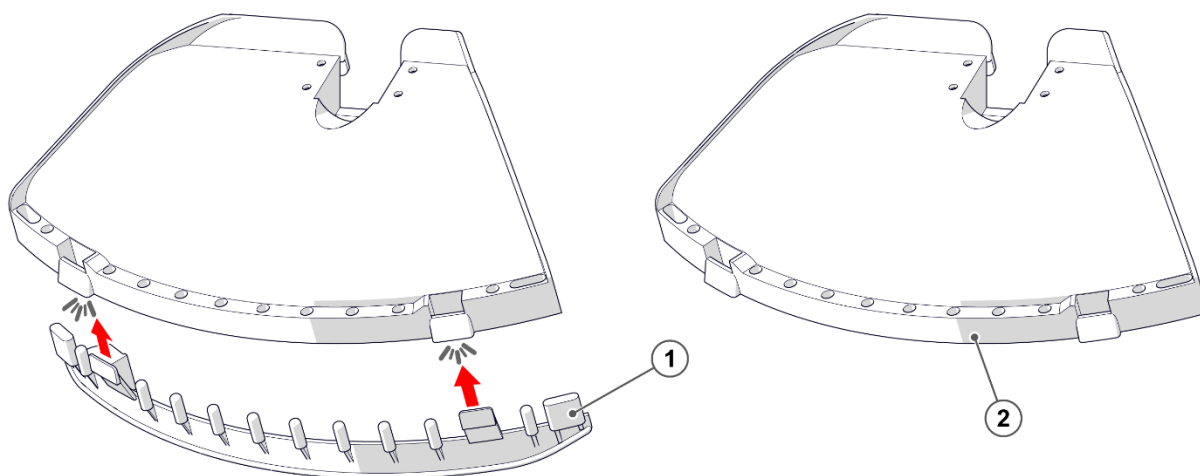
If the cutting tools are not in position and appropriately secured, they may cause **SERIOUS DAMAGE TO PEOPLE AND PROPERTY.**

**CAUTION**

Make sure that all parts have been assembled correctly before starting to use the machine.

A specific guard has to be installed for each tool used, as required by the EC regulation:

- guard with extension (1) for the nylon wire cutting head.
- guard without extension (2) for the mowing disc.



CAUTION

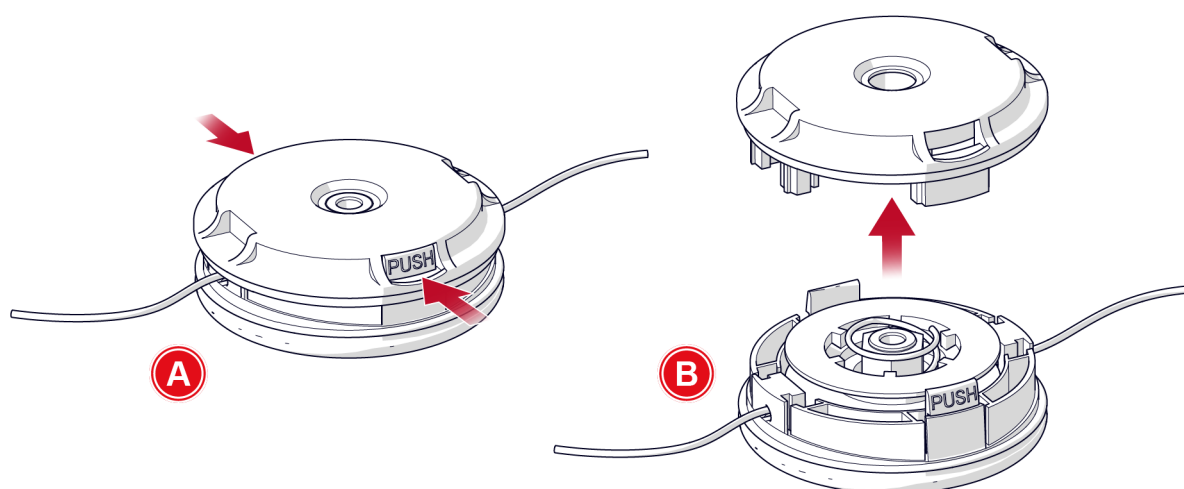
Only use the nylon line recommended by the manufacturer.

Only use original tools, which bear the seal of approval, recommended by the manufacturer.

For machines fitted with nylon wire cutting heads, it is possible to use the version of the machine with the vibration damping grip or the version with the handlebar.

For all other types of cutting element, use the version of the machine with the handlebar.

The fixed cup allows cutting to be carried out at a uniform height (as long as the shaft is kept at a constant inclination) and prevents the cutting tools from coming into contact with the ground and/or small protruding stones.



**CAUTION**

It is strictly forbidden to use the disc saw on the brushcutter described in this manual.

Never use knives, blades or cutting tools other than those provided by the manufacturer.

Only ever use tools that are in perfect condition and free from dents, cracks, deformation or which have broken or worn-out teeth that may cause the device to break.

The high speed of rotation of the cutting devices can cause any objects present in the cutting area (for example stones, broken glass, etc.) to splinter and lead to serious consequences to both people and things.

The manufacturer assumes no liability if the machine is used incorrectly.

**WARNING**

Refer to the catalogue for a list of cutting tools available for the machine.

6 USING THE MACHINE

6.1 Before starting

- Before starting the machine, make sure that it has been carefully positioned on a flat, clean surface free from obstacles.
- Place it in a horizontal position so that the cutting tool is not touching the ground or any other object.
- Make sure that all the screws, especially the fixing screws for the shaft, safety guard and cutting tool are well tightened.
- Make sure that both the cutting tool and the respective safety guard have been installed correctly as described in this manual.
- Whenever possible, clean the cutting area before starting work. Collect all foreign objects such as stones, pieces of broken glass, nails, metal wire or string that might be thrown up or become tangled up in the cutting tool.



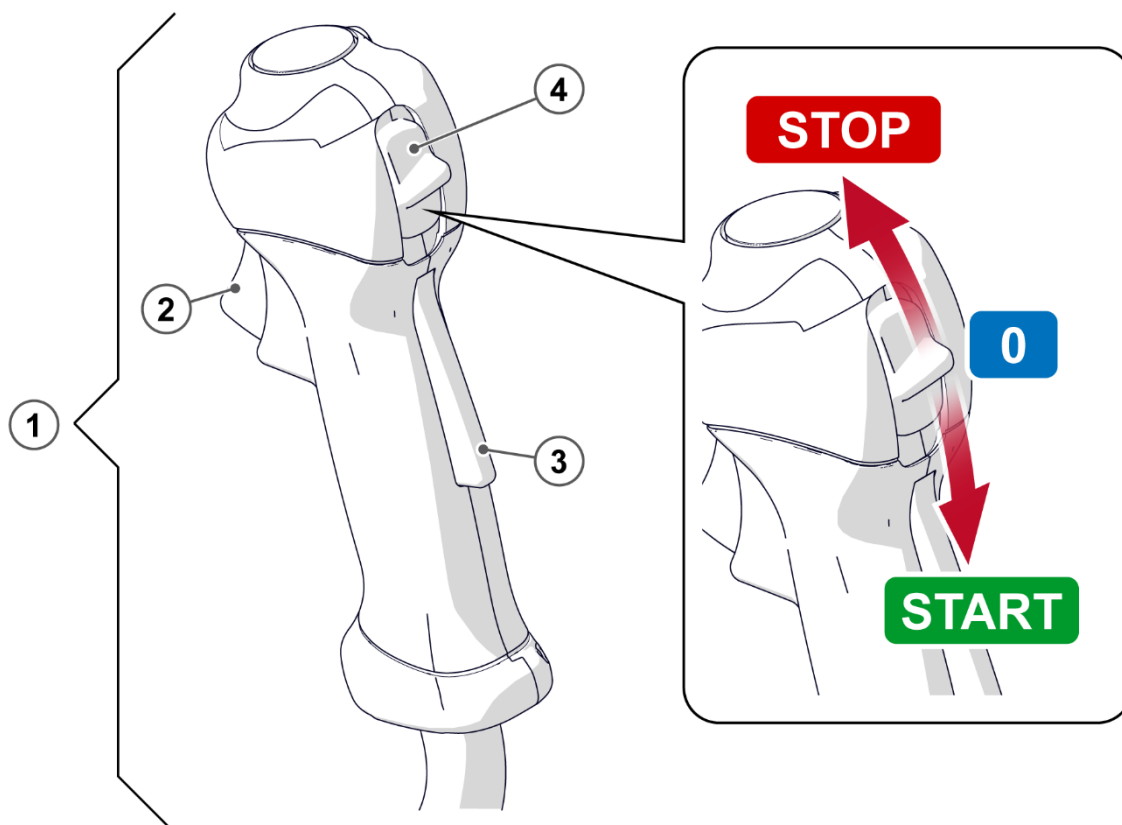
CAUTION

Do not start the brushcutter or keep it running indoors.

Use suitable protective equipment (mask, goggles) against risks deriving from the emission of "aerosols" due to shredding grasses and shrubs.

6.2 Using the control handle to start the brushcutter

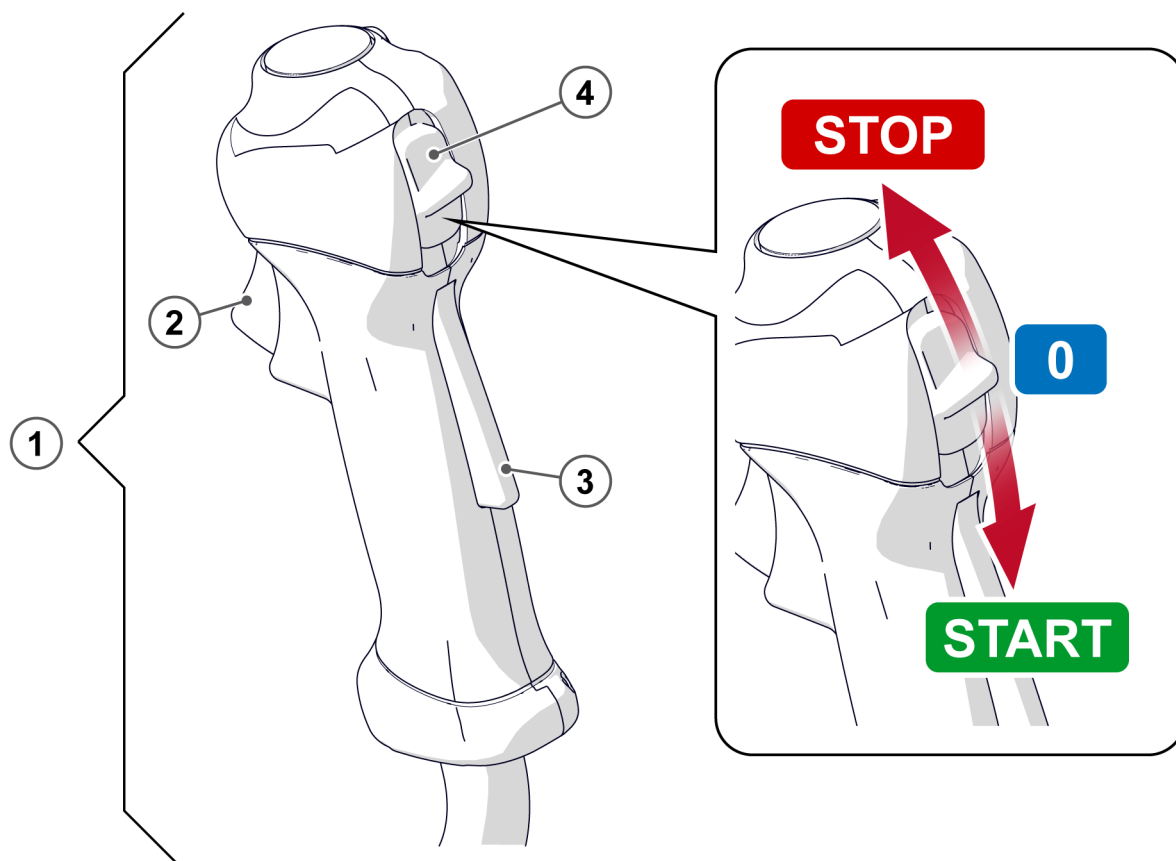
In order to use the throttle control handle (1) properly, operators must be familiar with all its features that allow the machine to be switched on and controlled.



1	Complete control handle	3	Safety trigger
2	Throttle lever	4	Selector in work position

6.2.1 For Blue Bird engines**SEMI-ACCELERATION FOR COLD STARTING.**

1. Grip the control handle (1) and press the safety trigger (3) with the palm of your hand.
2. Press the throttle lever as far as it will go (2).
3. Move the red selector (4) to the **START** position.
4. Release the lever (2).
The throttle lever stays in the semi-acceleration position.

**CAUTION**

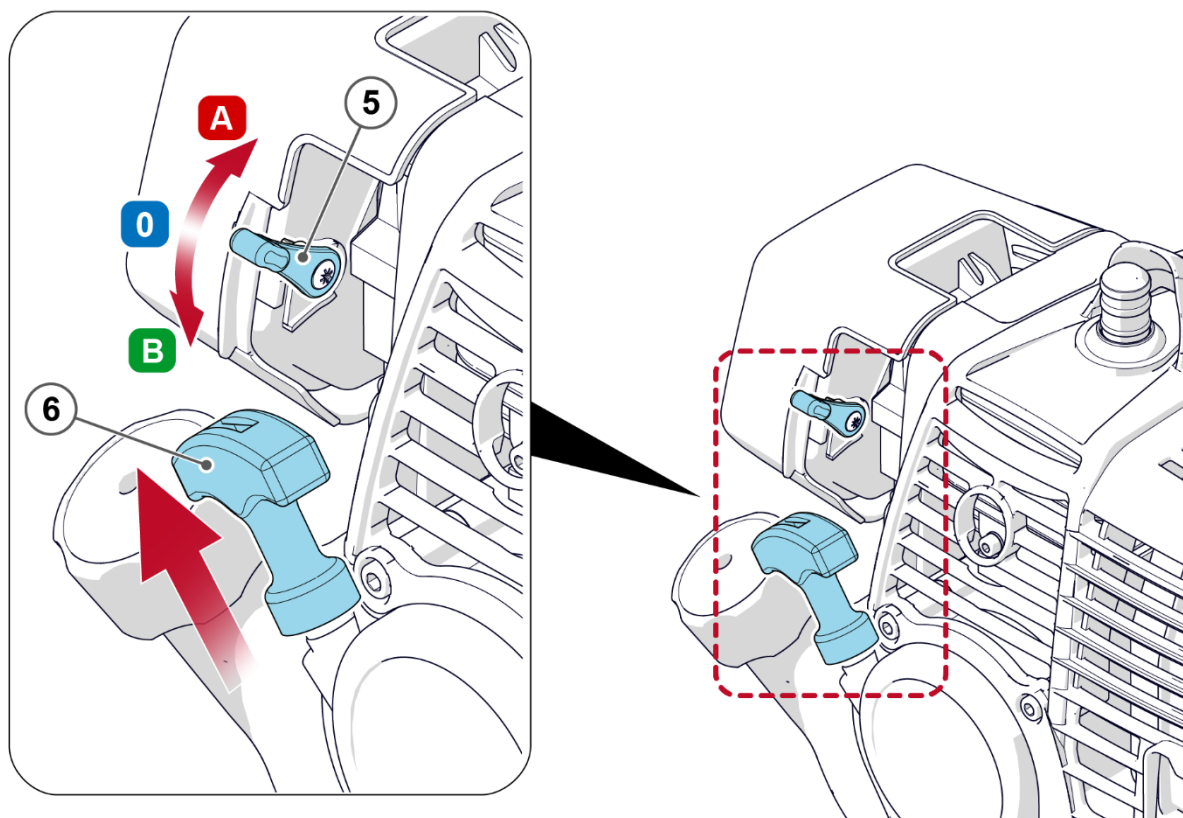
It is not possible to use the throttle lever (2) without keeping the safety trigger (3) pressed. Keep the safety trigger (3) pressed.
It is **ESSENTIAL** in order to avoid dangerous accelerations due to imprudent or accidental manoeuvres.

**WARNING**

After the engine is running, the red selector (4) returns automatically to the central position.

STARTING A COLD ENGINE

1. Move the lever (5) to the CLOSED position (A).
2. Pull the starting rope (6) a maximum of 1-2 times (until the engine starts to fire).
3. Move the lever (5) back to the OPEN position (B).
4. Pull the starting rope (6) again until the engine starts. If the engine doesn't start after the fourth pull, repeat the procedure from point 1.

**CAUTION**

Do not pull the starting rope (6) all the way out in order to avoid damaging its connection mechanism.

If, despite repeated attempts, the engine fails to start, it means that the combustion chamber is flooded.

In this case, proceed as follows:

1. remove and dry the spark plug.
2. pull the starting rope several times without the spark plug installed in order to clean and ventilate the combustion chamber.

STARTING A WARM ENGINE

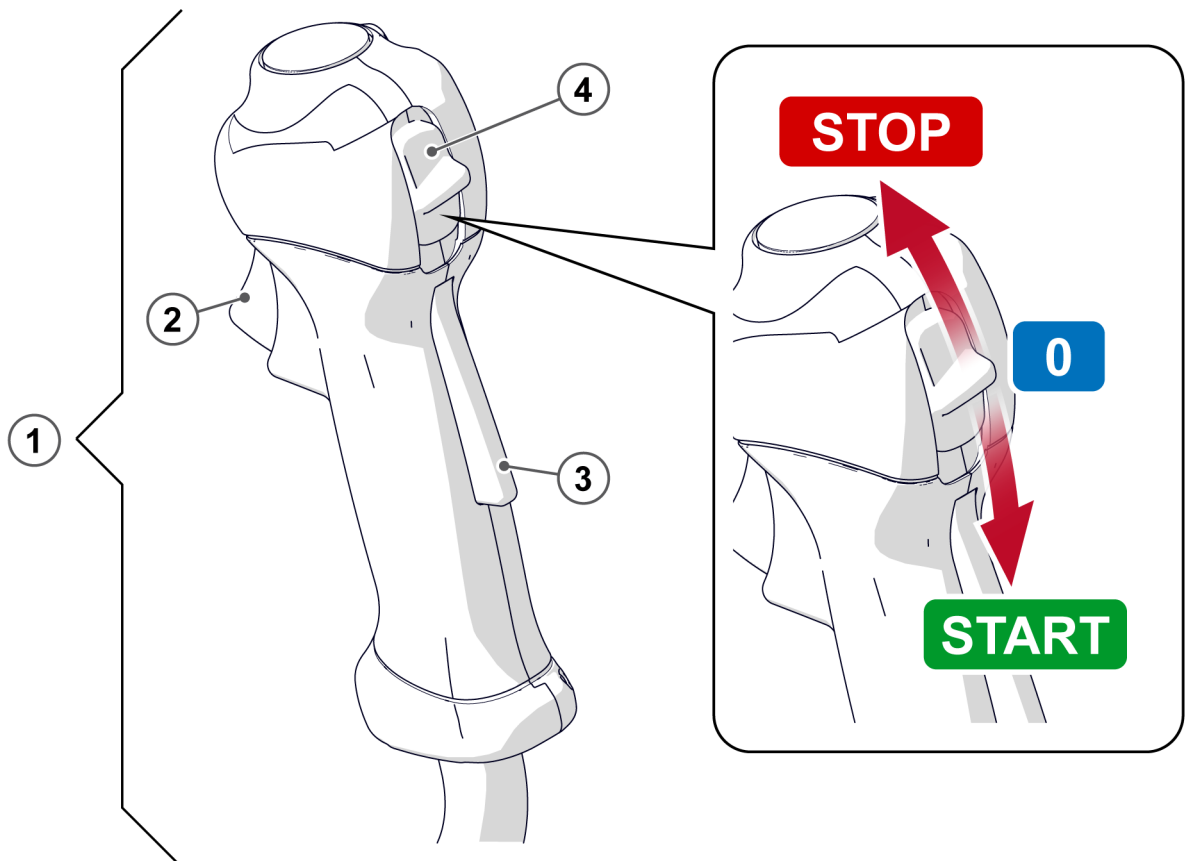
With the red selector on the control handle in the central position, pull the starting rope (6) until the engine starts.

**WARNING**

For any other information regarding Kawasaki and Honda engines, please refer to the manual supplied with the machine.

STOPPING THE ENGINE

1. Release the throttle lever (2) and the safety trigger (3).
2. Move the red selector (4) to the **STOP** position.



In order to restart the machine (as described previously), the red selector (4) must be in the **0** position.

6.3 Correct use

The brushcutter must only be used to cut grass, bushes and shrubbery (trunks up to a max. diameter of 200 mm can be cut using a high power machine fitted with a blade and a trunk-retainer guard).

- Put on the safety strap and adjust it.
- After the engine has been started, let it run for 2-3 minutes at idle speed.
- Connect the brushcutter to the clip on the safety strap.
- Make sure that the weight of the machine is evenly distributed and perfectly balanced so that the cutting tool is parallel to the ground and does not require support from the grip.
- Pull the throttle lever several times (without reaching the maximum rpm) to make sure that everything is working correctly.
- Go to the work area, keeping the machine below waist level, away from your body and with the cutting tool stationary, clearly visible and under control.
- Make sure that there are no other people within a 15-metre radius.

6.4 Using the machine

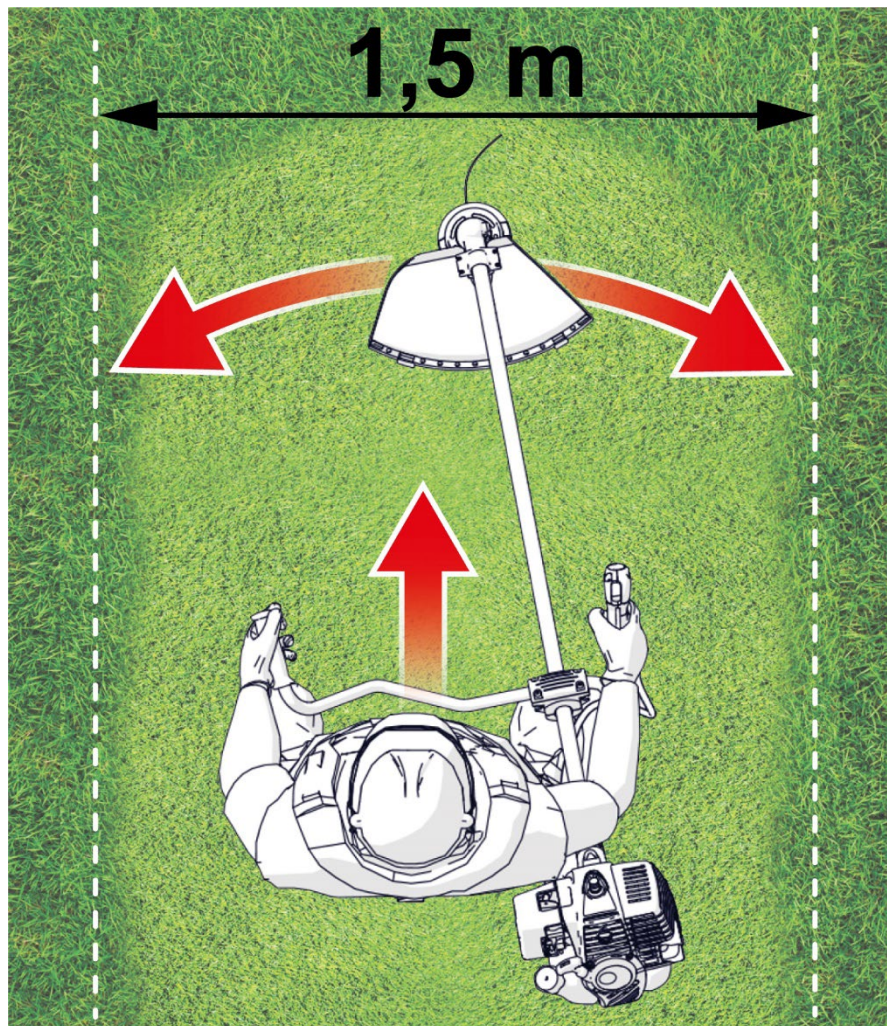


CAUTION

Stand on both feet in a stable and balanced position.

CUTTING GRASS

Move slowly and cut from right to left and vice versa over an area approximately 1.5 metres wide. As you progress, always make sure you are standing in a stable position on both feet.



WARNING

When using grass-cutter disks and you wish to collect the cuttings, always cut from right to left in order to collect the cut grass on one side only.

BUSHCUTTING OR PRUNING

Install the disk saw together with the EC approved safety guard.

Accelerate to maximum rpm to give the saw maximum cutting capacity and prevent it from jamming or stopping, which may cause the blade to rebound (kick-back effect). This effect can make you lose control of the machine and to lose your balance, with a possible risk of injury.

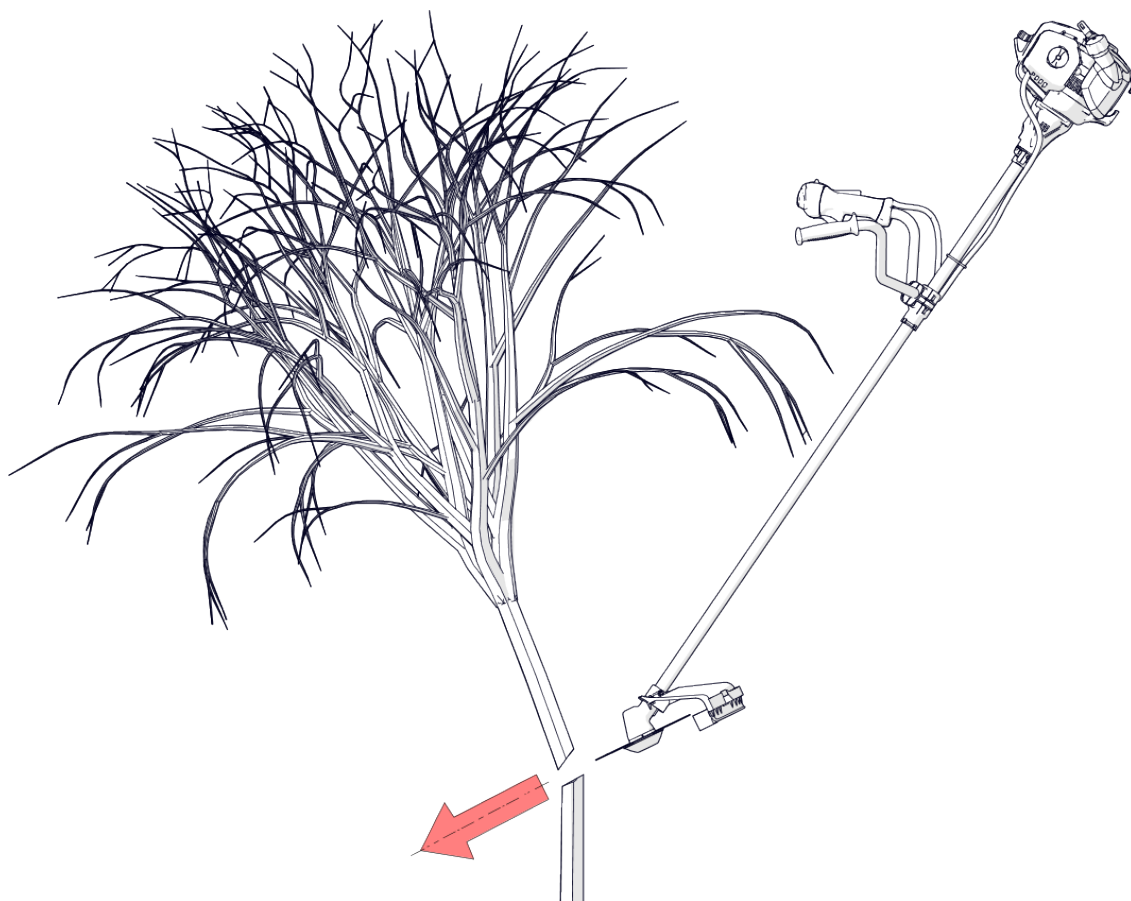
For optimum control, we recommend that you cut using side **A** of the disk saw (side **B** provides less control because of the anti-clockwise rotation of the disc).



WARNING

The direction in which the trunk is felled depends on the sector of use of the disk saw, the inclination of the blade and the diameter of the trunk.

- For trunks of up to 3 cm in diameter, the disk saw can be used with “axe strokes”, in other words, cutting in the direction opposite to expected direction of fall.
- For trunks of from 3 to 7 cm in diameter, the disk saw must never be used horizontally, but always at a slight angle from top to bottom to prevent the blade from jamming. The greater the diameter of the trunk, the greater this inclination should be.



- Trunks of more than 7 cm in diameter can be also cut with the high-power brushcutter, but this should only be carried out occasionally because a power saw is more appropriate for this type of work. Whenever possible, try to avoid even very small stones, lumps of earth, small pieces of wood and anything else that could be hidden or barely visible in the grass. If you happen to strike a large obstacle, or if the cutting tool jams suddenly due to overloading because grass, stringy vegetal matter or bark has been tangled up in it:
 1. Reduce the engine speed to idle speed and then disengage the clutch.
 2. Make sure that the blade, which continues to rotate due to inertia, has come to a complete stop; otherwise stop it against the ground in a safe place.
 3. Switch off the engine.
 4. Unhook the brushcutter from the safety strap and place it on the ground.
 5. Check that the cutting tool has not been damaged, for example cracked or broken teeth, etc. Replace if necessary. If, on the other hand, the tool has become tangled with stringy vegetal matter, put on a pair of gloves and use a tool to free it completely.

**CAUTION**

ALL THE MACHINE'S SAFETY SYSTEMS AND THE PROTECTIVE EQUIPMENT MUST BE KEPT IN OPERATION DURING THE ENTIRE PERIOD OF USE.

Despite being equipped with rubber anti-vibration devices, when in use, the machine transmits vibrations to the operator, which can cause fatigue. It is therefore recommend to take breaks during work.

Make sure that the vibration damping systems are always in good condition. If they are not, have them replaced by a specialised service centre.

**CAUTION**

ONLY CARRY OUT REPAIRS AND ASSEMBLY WHEN THE ENGINE IS SWITCHED OFF (EXCEPT WHEN ADJUSTING THE CARBURETTOR).

6.5 After using the machine

After finishing work, remove any dirt or weeds from the machine and the cutting tool. Protect the blades or the disk saws with the guard provided in order to prevent injury during transport.

Take care not to damage the tank by knocking or cutting it. Store the machine in such a way that it is protected against impact and cannot fall over, which might cause damage.

6.6 Storing the manual

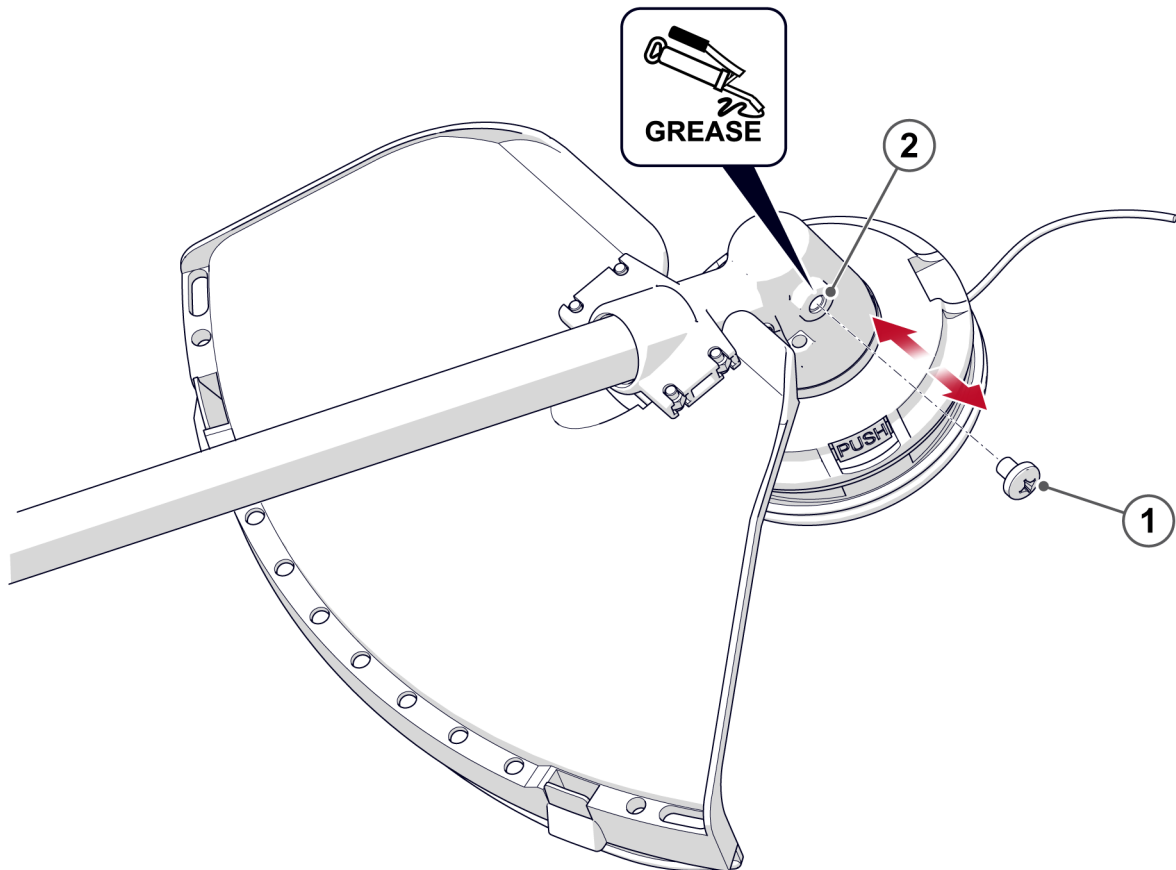
Whenever the brushcutter is not used for a long period of time, please adopt all the precautions regarding the engine mentioned in the specific section of the manual.

7 MAINTENANCE

7.1 Bevel gear box

Grease the bevel gear pair every 25 working hours:

1. Unscrew the screw (1)
2. Inject grease using the special pressurised syringe (2)
3. When it is full, tighten the screw (1)



WARNING

We recommend using grease suitable for use at high temperatures, 120°C - 170°C.

7.2 Sharpening the grass-cutting blade

Blade wear can be seen especially by the rounding of the teeth; when it is greater than 1 mm, re-sharpen the blade with a few strokes of a file, keeping the cutting edge at an angle of 30°.

7.3 Engine

Please refer to the specific section for information about the engine.

8 WARRANTY CONDITIONS

BLUE-BIRD INDUSTRIES – ZANÈ LIMITED WARRANTY FOR BRUSHCUTTERS

- a) Our company guarantees the correct working of all agricultural and industrial machines made by us for a period of 24 months (12 months for professional use) from the time of purchase. The applicable warranty period for the product is calculated from the date of the sales receipt and / or invoice.
- b) This guarantee consists of the free replacement of mechanical and electrical components, which become unusable due to manufacturing or material defects, as determined by our Company.
- c) The technical staff will intervene as soon as possible, within a time limits permitted by organizational requirements, to properly restore the product.
- d) The warranty is limited to the pure and simple replacement of defective parts and/or repair of faults after they have been received by us within a period of two months from the date on which the defect was discovered.
- e) With the exception of original and/or manufacturing defects, all tools and parts whose wear is due to normal use are excluded from warranty. These, for example, include: cutting discs, cutter sections, circular saws, knives, cutters, chainsaw chains, chainsaw bars, spark plugs etc.
- f) All the components we recognised as faulty and replaced free of charge under warranty will be retained by us.
- g) Any free replacements of components, even if recognised by us as being faulty, will not, under any circumstances, be a reason or pretext to prolong or suspend previously agreed terms of payment.
- h) During the warranty period, the machines subject to the foregoing warranty, shall not be sold permanently in use, sold and exported, under penalty of forfeiture of the guarantee.
- i) Our Company declines any liability for injury or damage caused to people or things as a result of the improper use of the machines made by us, even if any such damage should be caused by machines still covered by warranty.
- j) The warranty does not cover set-up and maintenance that may be required during the warranty period.
- k) The warranty does not cover work to update and improve the product.
- l) The warranty will not be valid in the following cases:
 - obvious lack of maintenance;
 - incorrect use of the product or tampering;
 - use of unsuitable lubricants or fuels;
 - use of non-original spare parts or accessories;
 - interventions carried out by unauthorized personnel.
- m) Other brands of engines (Kawasaki, Honda, Briggs & Stratton, etc.) fitted to our machines are covered by the warranties of the engine manufacturer.

BLUE BIRD INDUSTRIES



WARNING

Carefully follow the use and maintenance instructions for each machine, especially those regarding the running-in period.

WARRANTY CONDITIONS

EC DECLARATION OF CONFORMITY - HERSTELLERERKLÄRUNG - DECLARATION 'CE' DE CONFORMITE - DECLARACION DE CONFORMIDAD - DICHIARAZIONE DI CONFORMITA' EUROPEA - GELIJKVORMIGHEIDSVERKLARING - EC DEKLARATION I OVERENSSTEMMELSE - DECLARAÇÃO CE DE CONFORMIDADE - EY ILMOITUS - FORSAKRAN OM OVERENSSTAMMELSE - BEKREFTENDE EU ERKLÆRING - ΔΗΛΩΣΗ ΕΚ ΣΥΜΜΟΡΦΩΣΗΣ - EUROPEJSKA DEKLARACJA ZGODNOSCI

1) MANUFACTURER – HERSTELLER – FABRICANT – FABRICANTE – COSTRUTTORE – CONSTRUCTEUR – PRODUCTENT – FABRICANTE – VALMISTAJA – TILLVERKARE – FABRIKANT – Κατασκευαστής – PRODUCENT:

BLUE BIRD INDUSTRIES Fabbrica Motori srl

Via Due Camini 19, 36010 Zanè(VI), Italia

2) DESCRIPTION OF THE MACHINERY – BESCHREIBUNG DER MASCHINE – DESCRIPTION DE LA MACHINE – DESCRIPCION DE LA MAQUINARIA – DESCRIZIONE DELLA MACCHINA – BESCHRIJVING VAN DE MACHINE – BESKRIVELSE AF MASKINEN – DESCRIÇÃO DA MAQUINA – KONEEN NIMITYS – MATERIELSLAG – BESKRIVELSE AV MASKINERIE – ΠΕΡΙΓΡΑΦΗ ΤΩΝ ΜΗΧΑΝΩΝ – OPIS MASZYN:

DECESPUGLIATORE - BRUSHCUTTER

a) MAKE – FABRIKAT – MARQUE – MARCA – MERK – MÆRKE – MARCA – MERKKI – FABRIKAT – FABRIKANT – MAPKA – MARKA:

BLUE BIRD INDUSTRIES Fabbrica Motori srl

Via Due Camini 19, Zanè, Italia

b) TYPE / TYP / TYPE / TIPO / TIPO / TYPE / TYPE / TIPO / MALLI / TYPBE / TYPE / Πληκτρολογήστε / TYP:

BC 261 L – BC 341 L – BC 431 L – BC 431 B – BC 280 L – BC 280 B – BC 370 L – BC 370 B – BC 450 STL – BC 560 STL – BC 610 STL – BC 450 STB – BC 560 STB – BC 610 STB – BC 450 ST PRO – BC 560 ST PRO – BC 610 ST PRO – BCB 450 STL – BCB 560 STL – BCB 610 STL

2000/14/EC (2005/88/EC) – Livelli di potenza sonora come da allegato V – Sound Power Levels performed per annex V		
TIPO TYPE	Livello di potenza sonora misurato/Livello di potenza sonora garantito Measured Sound Power Level/Guaranteed Sound Power Level LWA (dB)	Potenza netta installata Net Power Installed (kW)
BC 280 L – BC 280 B	92/114	0.90
BC 370 L – BC 370 B	93/114	1.10
BC 450 STL – BC 450 STB BC 450 ST PRO – BCB 450 STL	94/114	1.80
BC 560 STL – BC 560 STB BC 560 ST PRO – BCB 560 STL	94/114	2.00
BC 610 STL – BC 610 STB BC 610 ST PRO – BCB 610 STL	95/115	2.60
BC 261 L	91/111	0.75
BC 341 L	92/112	0.90
BC 431 B – BC 431 L	92/112	1.25
BC 521 L – BC 521 B	93/113	1.46
TJ 27 E	87/107	0.77
TJ 35 E	94/114	1.03
TJ 45 E – TJ 45 EZ	94/114	1.42
TJ 53 E	92/112	2.00
HO 25	91/111	0.72
HO 35 – ZHO 35	91/111	1.00
HO 50 – ZHO 50	92/112	1.47

c) Il prodotto è conforme alle direttive - The product complies with the directives - Das Produkt entspricht den Richtlinien - Le produit est conforme aux directives - El producto cumple con las directivas :

- 2006/42/EC – 2014/30/EU – 2000/14/EC (2005/88/EC) – 2011/65/EU

d) SERIAL NUMBER / SERIENNUMMER / NUMERO DE SERIE / NUMERO DE SERIE / NUMERO DI SERIE / SERIENUMMER / SERIENUMMER / NUMERO DE SERIE / SARJANUMERO / SERIENUMMER / SERIE NUMMER / ΑΡΙΘΜΟΣ ΠΑΑΙΣΙΟΥ / NUMER SERIJNY:

AA19AA000000001 - ZZ23ZZ999999999

e) REFERENCE TO STANDARDS/HARMONIZED STANDARDS - VERWEIS AUF NORMEN/HARMONISIERTE NORMEN - REFERENCE AUX NORMES/NORMES HARMONISEES - REFERENCIA A ESTANDARES/ESTANDARES ARMONIZADOS - RIFERIMENTO ALLE NORME/NORME ARMONIZZATE - REFERENTIE NAAR STANDAARDEN/GEHARMONISEERDE STANDAARDEN - REFERENCE TIL STANDARDER/HARMONISERDE STANDARDER - REFERENCIA AS NORMAS/NORMAS HARMONIZADAS - VITTAUS STANDARDDEIHIN/YHTEISIIN STANDARDDEIHIN - REFERERANDE TILL STANDARDER/HARMONISERADE STANDARDER - HENVISNING TIL STANDARD/FELLES STANDARD - ΑΝΑΦΟΡΑ ΣΕ ΠΡΟΤΥΠΑ/ΕΝΑΡΜΟΝΙΣΜΕΝΑ ΠΡΟΤΥΠΑ - ODNIESIENIE DO NORM/NORM ZHARMONIZOWANYCH:

EN ISO 12100:2010 EN ISO 11806-1:2011 EN ISO 11806-2:2011



BLUE BIRD INDUSTRIES – FABBRICA MOTORI s.r.l.

ZANÈ (VI) – ITALIA

26-02-2019

The chairman – Der vorsitzender – Le président – El presidente – Il presidente – De voorzitter – Daglig leder – O presidente – Toimitusjohtaja – Verkställande direktör – Administrerende direktør – Ο Πρόεδρος - Prezes

VANDA VITELLA



(GB) Technical documentation maintained by
(F) Documentation technique maintenue par
(I) Documentazione tecnica conservata da
(DK) Teknisk dokumentation tilhørende
(FI) Teknisten asiakirjojen ylläpitäjä
(NO) Teknisk dokumentasjon vedlikeholdt av

(D) Technische Dokumentation aktualisiert durch
(E) Documentacion tecnica mantenida por
(NL) Technische documentatie onderhouden door
(P) Documentação tecnica mantida por
(SE) Teknisk dokumentation tillhandhållen av
(GR) τεχνικό φάκελο που τηρείται από

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VANDA VITELLA





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