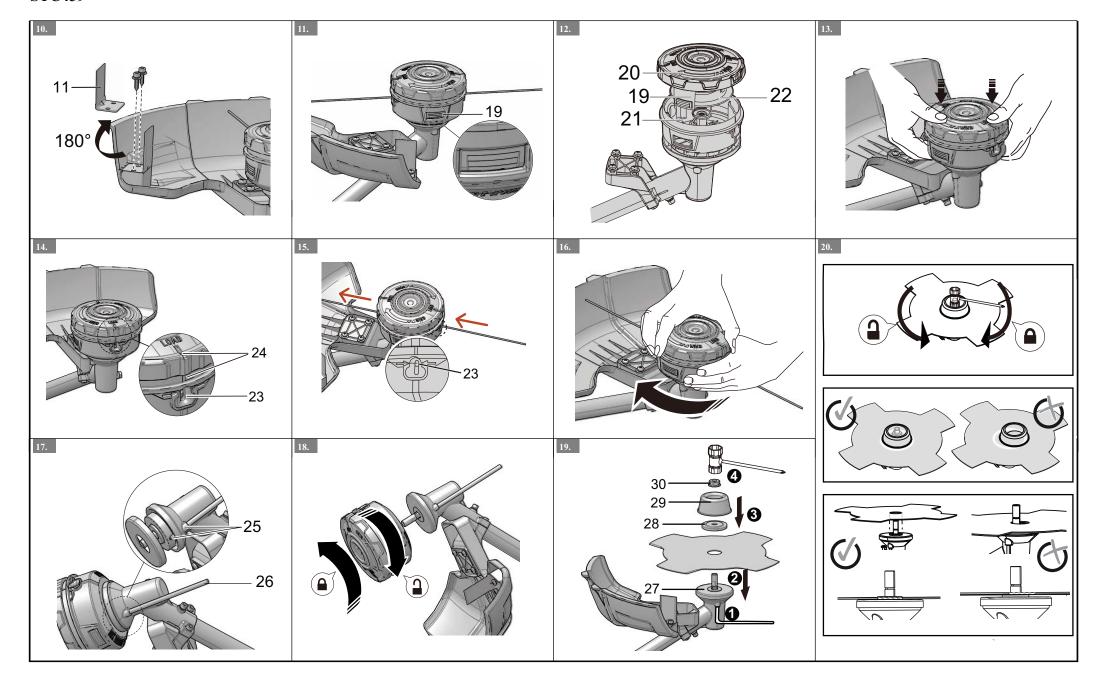


STC459



greenworks pro

2109007AU

EN STRING TRIMMER OPERATOR MANUAL



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STC459

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1 DESCRIPTION

1.1 PURPOSE

This machine is used to cut grass, light weeds, and other similar vegetation at or around ground level. The cutting plane must be approximately parallel to the ground surface. You cannot use the machine to cut or chop hedges, shrubs, bushes, flowers and compost.

1.2 OVERVIEW

Figure 1 - 20.

- Battery release button
- 2 Rear handle
- 3 Trigger
- 4 Lock-out button
- 5 Speed switch
- 6 Auxiliary handle
- 7 Upper shaft
- 8 Coupler
- Lower shaft
- 10 Trimmer head
- 11 Cut-off blade
- 12 Guard
- 13 Knob
- 14 Release button
- 15 Positioning hole
- 16 Bolt
- 17 Lower clamp
- 18 Knob
- 19 Tab
- 20 Spool cover
- 21 Spool housing
- 22 Spool
- 23 Line exist hole
- 24 Slot
- 25 Angle transmission hole
- 26 Metal rod
- 27 Spacer
- 28 Plate
- 29 Outer cup
- 30 Nut
- A Direction of roatation
- B Best cutting area
- C Dangerous cutting area

2 INTRODUCTION

Your product has been engineered and manufactured to high standards for dependability, ease of operation, and operator safety. When properly cared for, it will give you years of rugged, trouble-free performance.

2.1 INTENDED USE

This product is only intended for use outdoors.

This product is designed for cutting grass, light weeds, and other similar vegetation at or about ground level. The cutting plane should be approximately parallel to the ground surface.

The product should not be used to cut or trim hedges, bushes or other vegetation where the cutting plane is not parallel to the ground surface.

3 GENERAL POWER TOOL SAFETY WARNINGS

WARNING

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your batteryoperated (cordless) power tool.

3.1 TRAINING

- Read the instructions carefully.
 Be familiar with the controls and the correct use of the machine.
- Never allow children, persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with these instructions to use the machine. Local regulations can restrict the age of the operator.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring

to other people or their property.

3.2 PREPARATION

- Before use, check the battery pack for signs of damage or aging. If the battery becomes damaged during use, switch off the power tool and remove the battery immediately. Do not use the power tool if the battery is damaged or worn.
- Before use, always visually inspect the power tool for damaged, missing or misplaced guards or shields.

3.3 OPERATION

- Keep power cords away from cutting means.
- Wear eye protection and stout shoes at all times while operating the power tool.
- Avoid using the power tool in bad weather conditions especially when there is a risk of lightning.
- Use the power tool only in daylight or good artificial light.
- Never operate the power tool with damaged guards or

- shields or without guards or shields in place.
- Switch on the motor only when the hands and feet are away from the cutting means.
- Always disconnect the power tool from the power supply (i.e. remove the plug from the mains, remove the disabling device or removable battery)
 - whenever the power tool is left unattended;
 - before clearing a blockage;
 - before checking, cleaning or working on the power tool;
 - after striking a foreign object;
 - whenever the power tool starts vibrating abnormally.
- Take care against injury to feet and hands from the cutting means.
- Always ensure that the ventilation openings are kept clear of debris.

3.4 MAINTENANCE

• Disconnect the power tool from the power supply (i.e. remove the plug from the mains, remove the disabling

- device or removable battery) before carrying out maintenance or cleaning work.
- Use only the manufacturer's recommended replacement parts and accessories.
- Inspect and maintain the power tool regularly. Have the power tool repaired only by an authorized repairer.
- When not in use, store the power tool out of the reach of children.

3.5 SERVICE

• Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

4 STRING TRIMMER SAFETY WARNINGS

- Children shall not play with the power tool.
- Cleaning and user maintenance shall not be made by children without supervision.
- The battery must be removed from the power tool before it is scrapped.

- The power tool must be disconnected from the supply mains when removing the battery.
- The battery is to be disposed of safely.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts. While operating the machine always wear substantial footwear and long trousers.
- This power tool is not intended for use by persons (including children) with reduced physical, sensory or mental cpabilities, or lack of experience and knowledge, unless they have been given supervision or instruction cnocerning use of the power tool by a person responsible for their safety.

- Children should be supervised to ensure that they do not play with the power tool.
- Do not touch moving hazardous parts before the machine is disconnected from the mains and the moving hazardous parts have come to a complete stop. Never to replace the non-metallic cutting means with metallic cutting means.
- Never operate the machine while people, especially children, or pets are nearby.
- Always be sure of your footing on slopes.
- Walk, never run.

5 SYMBOLS ON THE PRODUCT

Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

Symbol	Explanation
	Read and understand all instructions before operating the product, follow all warnings and safety instructions.
	Wear head protection.
	Wear eye and ear protection.
	Wear safety footwear.

Symbol	Explanation
	Wear protective gloves.
	Do not expose the product to rain or moist conditions.
	Thrown objects can ricochet and result in personal injury or property damage. Wear protective clothing and boots.
	Beware of thrown or flying objects. Keep all bystanders, especially children and pets, at a safe distance at least 15 m away from the operating area.
	Keep bystanders a safe distance away from the product.

6 RISK LEVELS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYM- BOL	SIGNAL	MEANING
\triangle	DANGER	Indicates an imminently haz- ardous situation, which, if not avoided, will result in death or serious injury.
\triangle	WARNING	Indicates a potentially hazard- ous situation, which, if not avoided, could result in death or serious injury.
\triangle	CAUTION	Indicates a potentially hazard- ous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

7 RECYCLE



Separate collection. You must not discard with usual household waste. If it is necessary to replace the machine, or if it is no more use to you, do not discard it with household waste. Make this machine available for separate collection.



Separate collection of used machine and packaging let you recycle materials and use them again. Use of the recycled materials helps prevent environmental pollution and decreases the requirements for raw materials.



At the end of their useful life, discard batteries with a precaution for our environment. The battery contains material that is dangerous to you and the environment. You must remove and discard these materials separately at a equipment that accepts lithium-ion batteries

8 INSTALLATION

8.1 UNPACK THE MACHINE

▲ WARNING

Make sure that you correctly assemble the machine before

▲ WARNING

- If parts of the machine are damaged, do not use the machine.
- If you do not have all the parts, do not operate the machine.
- If parts are damaged or missing, contact the service center.
- Open the package.
- 2. Read the documentation provided in the box.
- 3. Remove all the unassembled parts from the box.
- 4. Remove the machine from the box.
- Discard the box and packing material in compliance with local regulations.

8.2 ATTACH THE GUARD

Figure 2.

▲ WARNING

Do not touch the cut-off blade.

- Remove the screws from the trimmer head with a Phillips head screwdriver (not included).
- 2. Put the guard onto the trimmer head.
- Align the screw holes on the guard with the screw holes on the trimmer head.
- 4. Tighten the screws.

8.3 ASSEMBLE THE SHAFT

Figure 3.

1. Loosen the knob on the coupler.

- 2. Push in the release button on the lower shaft.
- Align the release button with the positioning hole and move the two shafts
- 4. Turn the lower shaft until the button locks into the positioning hole.
- 5. Tighten the knob.

8.4 ATTACH THE AUXILIARY HANDLE

Figure 4.

- 1. Remove the knob from the handle.
- 2. Attach the auxiliary handle on the shaft.
- 3. Set the auxiliary handle in the comfortable position.
- 4. Tighten the auxiliary handle with the knob.

8.5 INSTALL THE BATTERY PACK

Figure 5.

▲ WARNING

- If the battery pack or charger is damaged, replace the battery pack or the charger.
- Stop the machine and wait until the motor stops before you install or remove the battery pack.
- Read, know, and follow the instructions in the battery and charger manual.
- Align the lift ribs on the battery pack with the grooves in the battery compartment.
- Push the battery pack into the battery compartment until the battery pack locks into place.
- 3. When you hear a click, the battery pack is installed.

8.6 REMOVE THE BATTERY PACK

Figure 5.

- 1. Push and hold the battery release button.
- 2. Remove the battery pack from the machine.

9 OPERATION

i IMPORTANT

Before you operate the machine, read and understand the safety regulations and the operation instructions.

▲ WARNING

Be careful when you operate the machine.

9.1 START THE MACHINE

Figure 6.

1. Push the lock-out button and pull the trigger.

Push the speed switch to the desired operating speed.
 Push the speed switch to position 1 for low speed or position 2 for high speed.

9.2 STOP THE MACHINE

Figure 6.

1. Release the trigger to stop the machine.

9.3 USE THE SHOULDER STRAP

Figure 7.

- 1. Attach the carabiner to the carrying ring on the pole.
- 2. Put on the shoulder strap.
- 3. Adjust the length of the strap so that the carabiner is about the width of a hand below your right hip.

9.4 OPERATION TIPS

Figure 7.

▲ WARNING

Keep clearance between the body and the machine.

▲ WARNING

Do not operate the machine without guard in place.

Do these tips when you use the machine

- Keep the machine connected to the correctly worn harness.
- Keep a firm hold with the two hands on the machine while you operate the machine.
- · Cut tall grass from the top down.

If grass winds around the trimmer head:

- · Remove the battery pack.
- · Remove the grass.

9.5 CUTTING TIPS

Figure 8.

- Tilt the machine toward the area to be cut. Use the tip of the cutting line to cut grass.
- Move the machine from right to left to prevent thrown debris toward the operator.
- Do not cut in the dangerous area.
- Do not force the trimmer head into uncut grass.
- Wire and picket fences cause cutting line wear and breakage. Stone and brick walls, curbs, and wood can wear the cutting line quickly.

9.6 ADJUST THE LENGTH OF THE CUTTING LINE

Figure 9.

While you operate the machine, the cutting line gets worn and shorter. You can adjust the length of the cutting line.

- Hit the trimmer head against the ground while you operate the machine.
- Line is automatically released and the cut-off blade cuts the excess length.

9.7 LINE CUT-OFF BLADE

Figure 10.

This trimmer is equipped with a line cut-off blade on the guard. The line cut off blade continuously trims the line to ensure a consistent and efficient cut diameter. Advance line whenever you hear the engine running faster than normal, or when trimming efficiency diminishes. This will maintain best performance and keep line long enough to advance properly.

9.8 ADJUST THE CUTTING DIAMETER

Figure 10.

i NOTE

The machine is set at a 35.6 cm cutting diameter. You can adjust to a 40.6 cm cutting diameter.

Set the cutting diameter to 35.6 cm for greater runtime and 40.6 cmfor a larger cutting area.

- 1. Remove the battery pack.
- Remove the blade screws from the cut-off blade.
- 3. Turn the cut-off blade 180°.
- 4. Tighten the blade screws.

10 MAINTENANCE

i IMPORTANT

Read and understand the safety regulations and the maintenance instructions before you clean, repair or do the maintenance work on the machine.

i IMPORTANT

Make sure that all nuts, bolts and screws are tight. Examine regularly that you install the handles tightly.

i IMPORTANT

Use only the replacement parts and accessories of the initial manufacturer.

10.1 GENERAL INFORMATION

i IMPORTANT

Only your dealer or approved service center can do the maintenance that is not given in this manual.

Before the maintenance operations:

- · Stop the machine.
- Remove the battery pack.
- · Cool the motor.
- · Store the machine in cool and dry place.
- Use correct clothing, protective gloves and safety glasses.

10.2 CLEAN THE MACHINE

- Clean the machine after use with a moist cloth dipped in neutral detergent.
- Do not use aggressive detergents or solvents to clean the plastic parts or handles.
- Keep the trimmer head free of grass, leaves, or excessive grease.
- Keep the air vents clean and free of debris to avoid overheating and damage to the motor or the battery.
- Do not spray water onto the motor and electrical components.

10.3 REMOVE ANY REMAINING LINE

Figure 11 - 13.

- Push the tabs on the sides of the trimmer head at the same time.
- 2. Remove the spool cover and the spool.
- 3. Remove any remaining line.
- 4. Put the spool in the spool housing.
- 5. Install the spool cover onto the trimmer head.
- 6. Push the spool cover until it clicks into position.

10.4 INSTALL THE CUTTING LINE

Figure 14 - 16.

i NOTE

Do not put more than 15 feet of cutting line in at a time.

- Line up the slots on the spool cap with the slots on the trimmer head.
- 2. Put the cutting line through the hole. Push the cutting line until it exits the opposite hole.
- Pull the cutting line through until there is an equal quantity of cutting line on each side.
- Turn the spool cap clock-wise to wind the cutting line into the trimmer head. Keep approximately 5 in of cutting line above out of each side of the trimmer head

10.5 REMOVE THE TRIMMER HEAD

Figure 17 - 18.

- Put the metal rod in the specified angle transmission hole to fix the trimmer head.
- 2. Turn the trimmer head clockwise to loosen it. Do not remove the spacer from the shaft.

10.6 ASSEMBLE THE TRIMMER HEAD

Figure 17 - 18.

- Put the metal rod in the specified angle transmission hole to fix the trimmer head.
- 2. Assemble the trimmer head.
- 3. Turn the trimmer head counterclockwise to tighten it.
- 4. Remove the metal rod.

i IMPORTANT

You must install the cut-off blade when you use the trimmer head.

10.7 REMOVE THE BRUSH-CUTTER BLADE

Figure 19-20.

WARNING

Apply the guard to the blade.

- Put the metal rod in the specified angle transmission hole to fix the trimmer head.
- 2. Loosen the nut clockwise and remove the outer cup.
- 3. Remove the brush-cutter blade.

10.8 ASSEMBLE THE BRUSH CUTTER BLADE

Figure 19-20.

WARNING

Wear gloves and be careful with sharp edges.

▲ WARNING

Apply the guard to the blade.

▲ WARNING

Use the specified Nylon locknut which is packed with the blade, to assemble the blade.

▲ WARNING

You must change the locknut after you use it for 20 times.

- Put the metal rod in the specified angle transmission hole to fix the trimmer head.
- Put the brush-cutter blade on top of the inner cup. Make sure the blade is in the center.
- 3. Put the outer cup above the plate.
- 4. Put the locknut above the outer cup.
- Tighten the lock-nut counter-clockwise to 44-58" N.M of torque with a 19mm wrench.

11 TRANSPORTATION AND STORAGE

11.1 MOVE THE MACHINE

When you move the machine, you must:

- · Wear gloves.
- Stop the machine.
- · Remove the battery pack and charge it.
- · Assemble the blade guard.

11.2 STORE THE MACHINE

- Remove the battery pack from the machine.
- · Make sure that children cannot come near the machine.
- Keep the machine away from corrosive agents such as garden chemicals and de-icing salts.
- Secure the machine during transportion to prevent damage or injury. Clean and examine the machine for any damage.

12 TROUBLESHOOTING

Problem	Possible Cause	Solution
The ma- chine does not start when you push the trigger.	No electrical contact between the machine and the battery pack.	Remove battery pack. Check contact and install the battery pack again.
	The battery pack is depleted.	Charge the battery pack.
	The lock-out but- ton and trigger are not pushed at the same time.	Pull the lock-out button and hold it. Pull the trigger to start the machine.

Problem	Possible Cause	Solution
The ma- chine stops when you	The guard is not attached to the machine.	Remove the battery pack and attach the guard to the machine.
cut.	Heavy cutting line is used.	Use only with the nylon cutting line of 2.0 mm/2.4 mm diameter.
	The grass winds around the motor	1. Stop the machine.
	shaft or the trim- mer head.	2. Remove the battery pack.
		3. Remove the grass from the motor shaft and trimmer head.
	The motor is over-loaded.	1. Remove the trimmer head from the grass.
		2. The motor will recover to work as soon as the load is removed.
		3. When you cut, move the trimmer head in and out of the grass to be cut and remove no more than 8" in pass.
	The battery pack or machine is too hot.	Cool the battery pack until its function returns to normal.
		2. Cool the machine for approximately 10 minutes.
	The battery pack is disconnected from the tool.	Install the battery pack again.
	The battery pack is depleted.	Charge the battery pack.
The line does not ad-	Lines are welded to themselves.	Lubricate with silicone spray.
vance.	Not enough line on spool.	Install more line.
	Lines are worn too short.	Advance the cutting line.
	Lines are tangled on spool.	1. Remove the lines from the spool.
		2. Wind the lines.

Problem	Possible Cause	Solution
The line keeps breaking.	The machine is used incorrectly.	Cut with the tip of the line, avoid stones, walls and other hard objects. Advance the cutting line regularly to keep full cutting width.
The grass winds around the trimmer head and motor hous- ing.	Cut tall grass at ground level.	Cut tall grass from the top down. Remove no more than 8" in each pass to prevent wrapping.
The line does not cut well.	The cut-off blade becomes dull.	Sharpen the cut-off blade with a file or replace it.
Vibration increases obviously.	The line is worn down at one side and not advanced in time.	Make sure that the line on both sides is normal. Advance the line.

13	ΓECHNICAL DATA

Voltage	60 V	
No load speed	6000 ±10%min ⁻¹ (Grass trimmer),6500 ±10%min ⁻¹ (Brush cutter)	
Cutting head	Bump feed / Brush	cutter blade
Cutting line diameter	2.0 mm/2.4 mm	
Cutting path diameter	35.6 cm / 40.6 cmmm (Grass trimmer), mm (Brush cutter)	
Weight (without battery pack)	3.85 kg	
Battery model	G60B2/G60B3/G60B4/G60B4 and other BAC series	
Charger model	G60UC and other CAC series	
Grass trimmer	Measured sound pressure level	L _{PA} =87 dB(A), K _{pA} = 3 dB(A)
	Guaranteed sound power level	L _{WA.d} = 96 dB(A)
	Vibration	7.5 m/s ² , k=1.5 m/s ²

Brush cutter	Measured sound pressure level	L _{PA} = 93dB(A), K= 3 dB(A)
	Guaranteed sound power level	L _{WA.d} =105 dB(A)
	Vibration	3.5 m/s ² , k=1.5 m/s ²



The maximum rotational frequency of the spindle.



Noise value.

14 WARRANTY

(The full warranty terms and conditions can be found on Greenworks website)

The Greenworks warranty is 4 years on the product, and 2 years on batteries (consumer/private usage) from the date of purchase. This warranty covers manufacturing faults. A faulty product under warranty might be either repaired or replaced. A unit that has been misused or used in other ways then described in the owner's manual might be rejected for warranty. Normal wear, and wear parts are not considered as warranty. The original manufacturer warranty is not affected by any additional warranty offered by a dealer or retailer.

A faulty product must be returned to the point of purchase in order to claim for warranty, together with the proof of purchase (receipt).