# greenworks

EN STRING TRIMMER OPERATOR MANUAL

FR COUPE-HERBE MANUEL DE L'UTILISATEUR

ES CORTABORDES MANUAL DEL OPERADOR



24V 13" Brushless String Trimmer

**STG401** 

ST24L00

www.greenworkstools.com

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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



	<b>—</b> 9
1	Trigger
2	Lock-out button
3	Rear handle
4	Auxiliary handle
5	Upper shaft
6	Lower shaft
7	Motor housing
8	Edge guide
9	Cutting line
10	Trimmer head
11	Guard
12	Lock button

# 2 IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING (THIS POWER TOOL)

#### **A** WARNING

Read and understand all instructions before using this product. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

- Use only identical manufacturer's replacement parts and accessories. Use of any other parts may create a hazard or cause product damage.
- Always wear safety glasses with side shields marked to comply with ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are NOT safety glasses. Following this rule will reduce the risk of eye injury. Use face mask if operating in dusty work spaces.
- Avoid Dangerous Environment Don't expose power tools to damp or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Don't use in rain.
- Keep all bystanders, children, and pets at least 50 ft. away.
- Dress Properly Do not wear loose clothing or jewelry.
  They can be caught in moving parts. Use of rubber gloves
  and substantial footwear is recommended when working
  outdoors. Wear protective hair covering to contain long
  hair.
- Use right Appliance. Do not use appliance for any job except that for which it is intended.
- Avoid Unintentional Starting Don't carry appliance with finger on switch. Be sure switch is off when battery is plugged in.
- Don't Force Appliance It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- Don't overreach Keep proper footing and balance at all times.
- Stay alert Watch what you are doing. Use common sense. Do not operate this unit when you are tired, ill or under the influence of alcohol, drugs or medication.
- Always store idle power tools indoors When not in use, power tools should be stored indoors in a dry and high or locked-up place, out of reach of children.
- Maintain Appliance With Care Replace string head if cracked, chipped, or damaged in any way. Be sure the string head is properly installed and securely fastened. Keep cutting edge sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Inspect appliance cord periodically, and if damaged, have it repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease. Failure to do so can cause serious injury.

- Check damaged parts before using the appliance, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, damaged mountings, and any other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless indicated elsewhere in this manual
- Remove or disconnect battery before servicing, cleaning or removing material from the gardening appliance.
- Do not modify or attempt to repair the appliance or the battery pack (as applicable) except as indicated in the instructions for use and care. Use appliances only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire. Use only Greenworks BAG709 battery or other BAG series.
- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack. Use only Greenworks CAG801 charger or other CAG series.
- When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Do not use a battery pack or appliance that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- Do not expose a battery pack or appliance to fire or excessive temperature. Exposure to fire or temperature above 265 °F (130 °C) may cause an explosion.
- Do not dispose of the batteries in a fire. The cells may explode. Check with local codes for possible special disposal instructions.
- Do not open or mutilate the batteries. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets, and keys. The battery or conductor may overheat and cause burns.
- Follow all charging instructions and do not charge the battery pack or appliance outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
- Have servicing performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
- · Keep guards in place and in working order.

- Keep hands and feet away from cutting area.
- Disconnect the battery pack from the appliance before making any adjustments, changing accessories, or storing appliance. Such preventive safety measures reduce the risk of starting the appliance accidentally.
- Use only with the nylon cutting line of .08" (2.0 mm) diameter. Do not use heavier lines than recommended by the manufacturer and line materials of other types for example, metal wire, rope, and the like.

#### SAVE THESE INSTRUCTIONS

#### 3 SYMBOLS ON THE MACHINE

Some of the following symbols can be used on this machine. Please study them and learn their definition. Proper interpretation of these symbols will let you operate the tool better and safer.

Symbol	Explanation
V	Voltage
A	Current
Hz	Frequency (cycles per second)
W	Power
min	Time
/min	Revolutions, strokes, surface speed, orbits etc., per minute
===	Direct current
<b>A</b>	Precautions that involve your safety.
<b>③</b>	Read and understand all instructions be- fore you operate the machine, and follow all warnings and safety instructions.
	Always wear safety glasses with side shields marked to comply with ANSI Z87.1 when you operate this machine.
	Do not expose the machine to rain or moist conditions.
	Keep all bystanders at least 15m away.
<b>®</b>	Do not install or use any type of blade on the machine or displaying this symbol.
	Thrown objects can ricochet and result in personal injury or property damage.

#### 4 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.

#### 5 SERVICE

Servicing requires extreme care and knowledge and must be performed only by a qualified service technician. For service we suggest you return the machine to your nearest AUTHORIZED SERVICE CENTER for repair. Use only identical manufacturer's replacement parts and accessories.

#### 6 ENVIRONMENTALLY SAFE BATTERY DISPOSAL





The toxic and corrosive materials below are in the batteries used in this machine: **Lithium-Ion**, a toxic material.

#### **▲** WARNING

Discard all toxic materials in a specified manner to prevent contamination of the environment. Before discarding damaged or worn out Li-ion battery, contact your local waste disposal agency, or the local Environmental Protection Agency for information and specific instructions. Take the batteries to a local recycling and/or disposal center, certified for lithium-ion disposal.

#### **▲** WARNING

If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use. Discard it and replace with a new battery pack. DO NOT TRY TO REPAIR IT! To prevent injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the terminals of the battery with heavy-duty adhesive tape.
- DO NOT try to remove or destroy any of the battery pack components.
- DO NOT try to open the battery pack.
- If a leak develops, the released electrolytes are corrosive and toxic. DO NOT get the solution in the eyes or on skin, and do not swallow it.
- DO NOT put these batteries in your regular household trash.
- DO NOT incinerate.
- DO NOT put them where they will become part of any waste landfill or municipal solid waste stream.
- Take them to a certified recycling or disposal center.

#### 7 PROPOSITION 65

#### **▲** WARNING

This product contains a chemical known to the state of California to cause cancer, birth defects or other reproductive harm. Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints;
- Crystalline silica from bricks and cement and other masonry products;
- · Arsenic and chromium from chemically treated lumber.

Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

#### 8 INSTALLATION

#### 8.1 UNPACK THE MACHINE

#### A WARNING

Make sure that you correctly assemble the machine before use.

#### **▲** WARNING

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

#### 8.2 ATTACH THE EDGE GUIDE

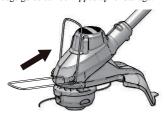
#### i NOTE

The edge guide can limit the cutting range of the machine and decrease the risk of the damage caused by the rotating cutting line.

 Push the edge guide onto the trimmer head until it engages in the slots.



2. The edge guide can be flipped up for storage.

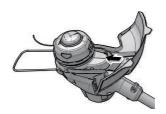


#### 8.3 ATTACH THE GUARD

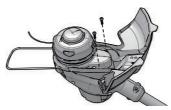
#### **▲** WARNING

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.



# 8.4 ATTACH THE AUXILIARY HANDLE

- 1. Remove the knob (13) from the handle.
- 2. Attach the auxiliary handle on the shaft.
- 3. Set the auxiliary handle in the comfortable position.
- 4. Put the bolt (14) through the holes.
- 5. Tighten the auxiliary handle with the knob.



#### 8.5 INSTALL THE BATTERY PACK

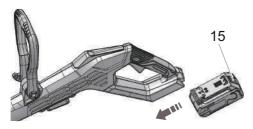
#### **▲** WARNING

- 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 do the instructions in the battery and charger manual.

- Align the lift ribs on the battery pack with the grooves in the battery compartment.
- 2. 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

- 1. Push and hold the battery release button (15).
- 2. Remove the battery pack from the machine.



#### 9 OPERATION

#### i IMPORTANT

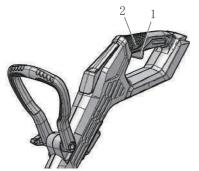
Before you operate the machine, read and understand the safety regulations and the operation instructions.

#### ▲ WARNING

Be careful when you operate the machine.

#### 9.1 START THE MACHINE

1. Push the lock-out button (2) and pull the trigger (1).



#### 9.2 STOP THE MACHINE

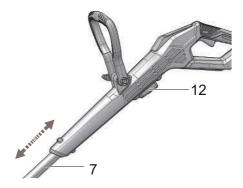
1. Release the trigger to stop the machine.

# 9.3 ADJUST THE LENGTH OF THE SHAFT

#### i NOTE

You can adjust the length of the shaft to operate the machine easily.

- 1. Stop the machine.
- 2. Push the lock button (12) and move the lower shaft (7) to the desired position.
- 3. Release the lock button.

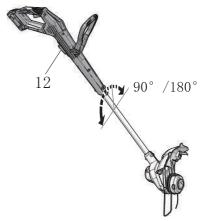


#### 9.4 CHANGE TO THE EDGING MODE

#### i NOTE

The machine can be used in combination with the edge guide for edging sidewalks and walkways.

- Stop the machine and flip down the edge guide from stored position.
- 2. Push the lock button (12) and turn the lower shaft  $90^{\circ}$  or  $180^{\circ}$  until it engages.



3. Release the lock button.



#### 9.5 OPERATION TIPS

#### **▲** 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:

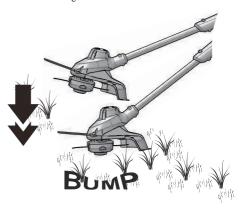
- · Remove the battery pack.
- · Remove the grass.



# 9.6 ADJUST THE LENGTH OF THE CUTTING LINE

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

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.

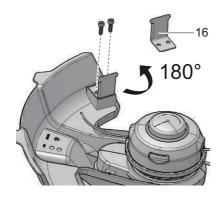
# 9.8 ADJUST THE CUTTING DIAMETER

#### i NOTE

The machine is set at a 11 in. (280 mm) cutting diameter. You can adjust to a 13 in. 330 mm) cutting diameter.

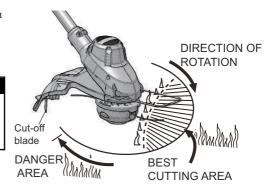
Set the cutting diameter to 11 in. (280 mm) for greater runtime and 13 in. 330 mm) for a larger cutting area.

- 1. Remove the battery pack.
- 2. Remove the blade screws from the cut-off blade (16).
- Turn the cut-off blade 180°.
- 4. Tighten the blade screws.



#### 9.9 CUTTING TIPS

- 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.



#### 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.

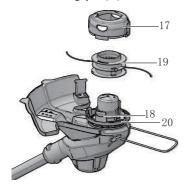
Do not spray water onto the motor and electrical components.

#### 10.3 REPLACE THE SPOOL

- Push the tabs (18) on the sides of the trimmer head at the same time.
- 2. Pull and remove the spool cover (17).



3. Remove the remaining spool (19).



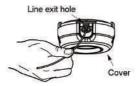
- Clean dirt and debris from all parts. Replace spool if it is worn or damaged.
- Replace with a pre-wound spool, or replace the cutting line.
- 6. Put the new spool in the spool cover.



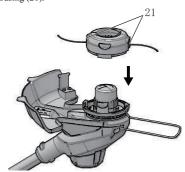
#### i NOTE

Make sure that you put the cutting line in the slot on the new spool and extend the line approximately 15 cm before you install the new spool.

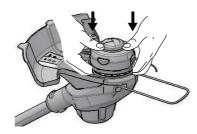
- 7. Put the ends of the cutting lines through the holes (21).
- 8. Extend the cutting line to release it from the guide slot in the spool.



9. Push the tabs and install the spool cover onto the spool housing (20).



10. Push the spool cover until it clicks into position.



#### 10.4 REPLACE THE CUTTING LINE

#### i NOTE

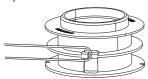
Remove the remaining cutting line on the spool.

#### i NOTE

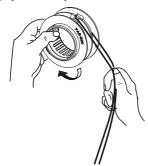
Use only with the nylon cutting line of .08" (2.0 mm) diameter.

1. Cut a piece of cutting line approximately 3m long.

Bend the line at the midpoint and hook the loop into the slot in the center rim of the spool. Make sure that the line snaps into position in the slot.



With your finger between the lines, wind the lines equally and tightly around the spool in the indicated direction.



4. Put the lines in the guide slots.



5. Do not wind the lines beyond the edge of the spool.

# 11 TRANSPORTATION AND STORAGE

#### **▲** WARNING

Remove the battery pack from the machine before tranportation and storage.

#### 11.1 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 machine does not start when you push the	No electrical contact between the machine and the battery pack.	Remove battery pack.     Check contact and install the battery pack again.
trigger.	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 .08" (2.0 mm) diameter.
	The grass winds around the motor shaft or the trim- mer head.	Stop the machine.     Remove the battery pack.
		3. Remove the grass from the motor shaft and trimmer head.
	The motor is over-loaded.	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 TECHNICAL DATA

Туре	Cordless, battery powered
Motor	24V DC Brushless
No load speed	6300 ±10% / 6000 ±10% RPM
Cutting line diameter	.08" (2.0 mm)
Cutting path diameter	11 / 13 in. (280 / 330 mm)
Feed Type	Bump Feed
Weight (without battery pack)	5.5 lbs (2.5 kg)

#### The recommended ambient temperature range:

Item	Temperature
String trimmer storage temperature range	-4°F (-20°C) - 158°F (70°C)
String trimmer operation temperature range	6.8°F (-14°C) - 104°F (40°C)
Battery charging temperature range	39°F (4°C) - 104°F (40°C)
Charger operation temperature range	39°F (4°C) - 113°F (45°C)

Item	Temperature
Battery storage temperature range	1 year: 32°F (0°C) - 73°F (23°C)
	3 month: 32°F (0°C) - 113°F (45°C)
	1 month: 32°F (0°C) - 140°F (60°C)
Battery discharging temperature range	6.8°F (-14°C) - 113°F (45°C)

under this warranty unless such return is requested in writing by Greenworks.

USA address:	Canadian address:
Greenworks Tools	Greenworks Tools Canada Inc.
P.O. Box 1238	1110 Stellar Drive Unit 102
Mooresville, NC 28115	Newmarket, ON, L3Y 7B7

#### 14 LIMITED WARRANTY



Greenworks hereby warranties this product, to the original purchaser with proof of purchase, for a period of three (3) years against defects in materials, parts or workmanship. Greenworks, at its own discretion will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial/commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.

#### ITEMS NOT COVERED BY WARRANTY:

- Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration; or
- The unit, if it has not been operated and/or maintained in accordance with the owner's manual: or
- 3. Normal wear, except as noted below:
- Routine maintenance items such as lubricants, blade sharpening;
- Normal deterioration of the exterior finish due to use or exposure.

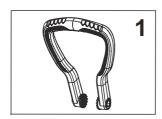
#### HELPLINE:

Warranty service is available by calling our toll-free helpline, at 1-888-909-6757.

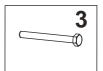
#### TRANSPORTATION CHARGES:

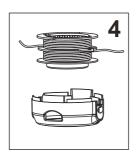
Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser's responsibility to pay transportation charges for any part submitted for replacement

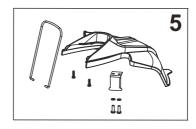
## 15 EXPLODED VIEW











No.	Part No.	Qt	Description	No.	Part No.	Qty	Description
		У					
1	R0201011-00	1	AUXILIARY HANDLE	4	R0200198-00	1	SPOOL & SPOOL COVER
2	R0201051-00	1	KNOB	5	R0201101-00	1	GUARD ASSEMBLY
3	R0201010-00	1	BOLT				