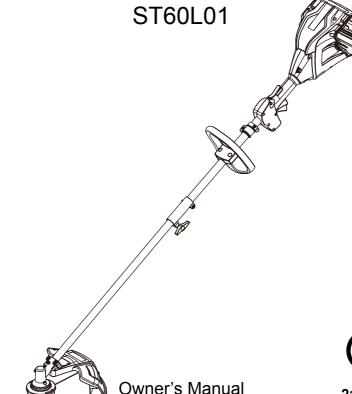
# greenworks pro

60V Cordless String Trimmer





TOLL-FREE HELPLINE: 1-855-345-3934 www.GreenWorksTools.com

# **CONTENTS**

Product Specifications
Important Safety Instructions
Know Your String Trimmer7
Assembly
Operation19
Maintenance
Environmentally Safe Battery Disposal24
Troubleshooting29
Limited Warranty2
Exploded View and Part List20

# PRODUCT SPECIFICATIONS

#### **60V CORDLESS STRING TRIMMER**

Туре	Cordless, battery powered
Motor	60V Brushless
Cutting Width	14 in. /16 in. (35.6 cm / 40.6 cm)
Line Diameter	Nylon / 0.080" (2 mm)
Speed	6000 (±10%)RPM
Feed Type	Bump Feed
Weight (without battery)	9.79 lbs (4.44 kg)





## IMPORTANT SAFETY INSTRUCTIONS

## **AWARNING**

**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.
- Do not use in rain.
- Keep all bystanders, children, and pets at least 50 ft. away.
- Do not use the power tools for any job except that for which it is intended.
- Avoid Unintentional Starting Do not carry string trimmer with fingers on the switch. Be sure the battery is removed while transporting.
- Do not operate the equipment while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces.
- 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 place, out of reach of children.
- Power tool maintenance 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 further use of 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.
- Do not charge or operate cordless tools in damp or wet locations or in the rain. Following this
  rule will reduce the risk of electric shock.
- Remove or disconnect battery before servicing, cleaning or removing material from the gardening appliance.

#### IMPORTANT SAFETY INSTRUCTIONS

- 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.
- 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.
- Do not add unnecessary force to your power tool It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.
- 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.
- For use only with (LB60A00, LB60A03, LB60A01,LB60A02) battery. For use only with (CH60A00) charger.
- 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 power tools to fire or excessive temperature. Exposure to fire or temperature above 265°F (130°C) may cause explosion.

## ▲ W A R N I N G (PROPOSITION 65)

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, and
- · 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.

#### SAVE THESE INSTRUCTIONS

## **SYMBOLS**

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

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
Α	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
min	Minutes	Time
$\sim$	Alternating Current	Type of current
===	Direct Current	Type or a characteristic of current
8	No Blade	Do not install or use any type of blade on a product or displaying this symbol.
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
•	Read The Operator's Manual	To reduce the risk of injury user must read and understand operator's manual before using this product.
•	Eye Protection	Always wear eye protection with side shields marked to comply with ANSI Z87.1 when operating this equipment.
A	Safety Alert	Precautions that involve your safety.
<u>\$</u>	Ricochet	Thrown objects can ricochet and result in personal injury or property damage.
Ø7 15m	Keep Bystanders Away	Keep all bystanders at least 50 ft. away.

#### SYMBOLS

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

SYMBOL	SIGNAL	MEANING
A	DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
A	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
A	CAUTION	Indicates a potentially hazardous 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.

#### **SERVICE**

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

## **AWARNING**

To avoid serious personal injury, do not attempt to use this product until you have read this Owner's Manual thoroughly and understand it completely. If you do not understand the warnings and instructions in this Owner's Manual, do not use this product. Call the Toll-free Helpline (1-855-345-3934) for assistance. The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before operating a power tool, always wear safety goggles, safety glasses with side shields, or a full face shield when needed. We recommend a Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection that is marked to comply with ANSI Z87.1.

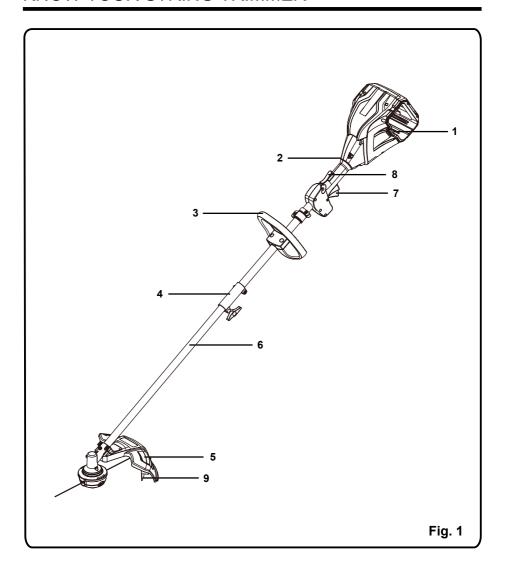
## **A** WARNING



The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

## SAVE THESE INSTRUCTIONS

# KNOW YOUR STRING TRIMMER



## KNOW YOUR STRING TRIMMER

#### KNOW YOUR STRING TRIMMER (See Figure 1.)

The safe use of this product requires an understanding of the information on the product and in this operator's manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

#### 1. BATTERY PACK LATCH

Press to release the battery pack from the tool.

#### 2. REAR HANDLE

Ergonomic handle with overmold improves comfort and grip.

#### 3. AUXILIARY HANDLE

The string trimmer is equipped with an auxiliary handle for ease of operation and to prevent loss of control.

#### 4. COUPLER

The coupler connects and locks the two shafts.

#### 5. GUARD

The trimmer includes a guard that helps protect from flying debris.

#### 6. TRIMMER SHAFT

The trimmer shaft encloses and protects the cables between the motor and rear handle.

#### 7. VARIABLE SPEED TRIGGER

Provides added control and precision.

#### **8. SAFETY LOCK BUTTON**

The safety lock button prevents accidental starting.

#### 9. CUT-OFF BLADE

Adjustable steel blade on the guard keeps the cutting line at the proper cutting length.

## **ASSEMBLY**

#### UNPACKING

This product requires assembly.

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- · Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1-855-345-3934.

## **A**WARNING

Do not use this product if any parts on the packing list are already assembled to your product when you unpack it. Parts on this list are not assembled to the product by the manufacturer and require customer installation. Use of a product that may have been improperly assembled could result in serious personal injury.

#### **PACKING LIST**

Part Name	Figure	Qty
String trimmer		1
Auxiliary handle		1
Guard		1
Operator's manual		1

## **ASSEMBLY**

## **AWARNING**

If any parts are damaged or missing, do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

## **AWARNING**

Do not attempt to modify this product or create accessories not recommended for use with this string trimmer. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

## A WARNING

Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

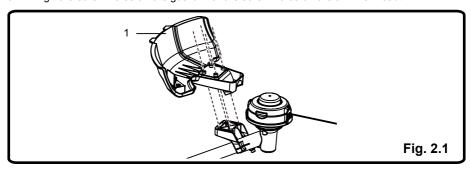
# **AWARNING**

To reduce the risk of injury to persons, do not operate without guard in place.

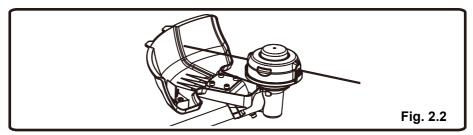
## ATTACHING THE GUARD (See Figure 2.)

NOTE: Install the guard before the attachment is connected to the lower shaft.

- 1. Invert the string trimmer to access the trimmer head.
- 2. Place the guard (1) on to the trimmer head.
- 3. Align the screw holes on the guard with the screw holes on the trimmer head.



4. Install the screws and tighten with a phillips screwdriver (not included).



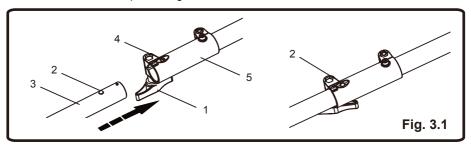
#### INSTALLING THE UPPER SHAFT TO THE LOWER SHAFT (See Figure 3.)

## A WARNING

Never install, remove, or adjust any attachment while string trimmer is running. Failure to stop the motor can cause serious personal injury.

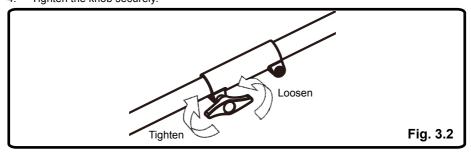
The attachment connects to the power head by means of a coupler device.

- 1. Set the unit on a flat, level surface.
- 2. Loosen the knob (1) on the coupler (5).
- 3. Push in the release button (2) located on the lower shaft (3). Align the release button with the positioning hole (4) and slide the two shafts together. Rotate the lower shaft until the button locks into the positioning hole.



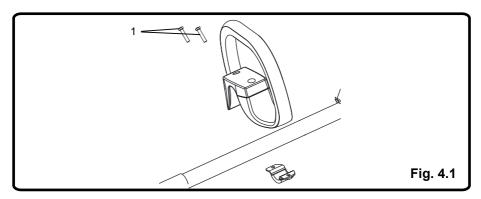
**NOTE**: If the button does not release completely in the positioning hole, the shafts are not locked into place. Slightly rotate from side to side until the button is locked into place.

4. Tighten the knob securely.

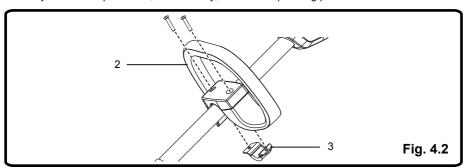


#### ATTACHING THE AUXILIARY HANDLE (See Figure 4.)

 Loosen the two screws (1) in the handle with a philips screwdriver (not included) and remove the screws from the handle.



- 2. Attach the auxiliary handle (2) and lower clamp (3) on the shaft.
- 3. Adjust handle up or down, if necessary, to desired operating position.



4. Insert and tighten the two screws so that the handle cannot be rotated on the shaft.

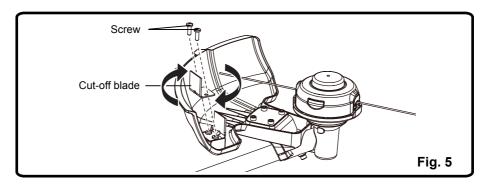
## **ASSEMBLY**

#### ADJUSTING THE CUTTING SWATH (See Figure 5.)

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.

This trimmer is currently set at the 14 in. cutting swath. To adjust to a cutting swath of 16 in.:

- 1. Remove the battery pack.
- 2. Remove the blade screws then rotate the line cut-off blade 180°.
- 3. Tighten the blade screw.



## **OPERATION**

## A WARNING

Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

## **A**WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious personal injury.

## **AWARNING**

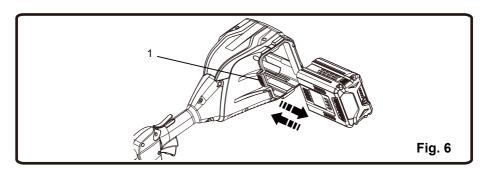
This string trimmer is not meant to be used with brush cutter attachments. Use of a brush cutter attachment could cause serious personal injuries or property damage.

#### **INSTALLING THE BATTERY PACK** (See Figure 6.)

- · Align the battery with the battery opening.
- Insert battery pack into tool until an audible "click" is heard.

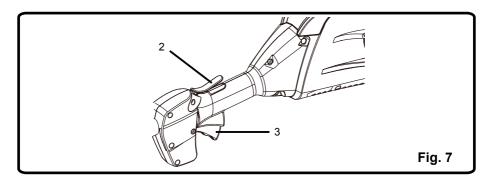
#### REMOVING THE BATTERY PACK (See Figure 6.)

 Depress the battery release button (1) in the back of the battery pack and pull battery pack out of tool.



#### **STARTING AND STOPPING THE TRIMMER** (See Figure 7.)

- Press the lock-off lever (2). Squeeze the switch trigger (3) to start.
- · Release the switch trigger to stop.



#### **OPERATING THE TRIMMER** (See Figure 8.)

## A WARNING

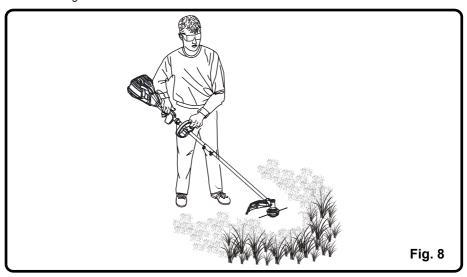
Always hold the string trimmer away from the body keeping clearance between the body and the string trimmer. Any contact with the string trimmer cutting head while operating can result in serious personal injury.

#### Follow these tips when using the string trimmer:

- Hold the trimmer with your right hand on the rear handle and your left hand on the auxiliary handle.
- Keep a firm grip with both hands while in operation.
- Trimmer should be held at a comfortable position with the rear handle about hip height.
- Cut tall grass from the top down. This will prevent grass from wrapping around the shaft housing and string head which may cause damage from overhearing.

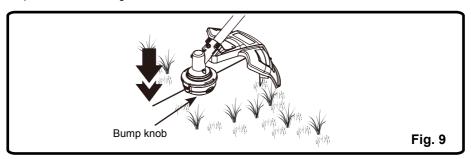
#### If grass becomes wrapped around the string head:

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



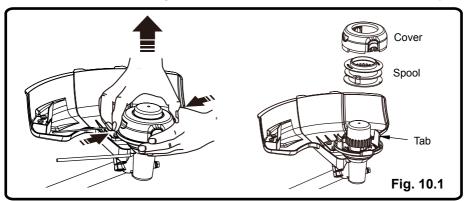
#### ADVANCING LINE (See Figure 9.)

While the string trimmer is operating, the cutting line gets worn down and becomes shorter. This trimmer is equipped with bump feed line advancement, which advances additional line once the head is bumped on the ground while rotating. The cutting blade will cut the line to keep an accurate cutting swath.



#### SPOOL REPLACEMENT (See Figure 10.)

1. Press the tabs simultaneously on the side of the trimmer head and remove cover and spool.

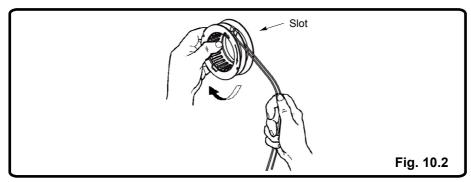


- 2. Remove any remaining line.
- 3. Clean dirt and debris from all parts. Replace spool if it is worn or damaged.
- Replace with a pre-wound spool, or replace line using 15 feet (4.6 meters) of 0.080 inch (2.0 mm) diameter line.

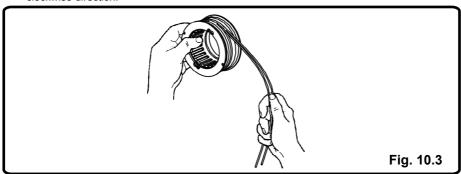
## **AWARNING**

Never use wire, rope, string, etc., which can break off and become a dangerous projectile.

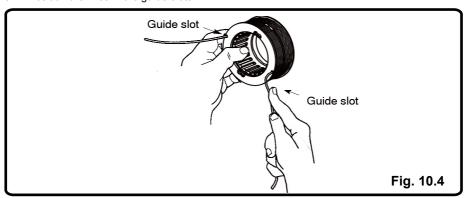
- 5. When installing new line on an existing spool, hold the spool as shown.
- Bend the line at the midpoint and insert the bend into the slot in the center rim of the spool. Ensure line snaps into position in the slot.



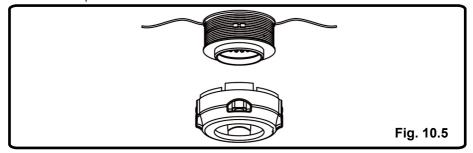
 With your finger between the lines, wrap the lines evenly and firmly around the spool in a clockwise direction.



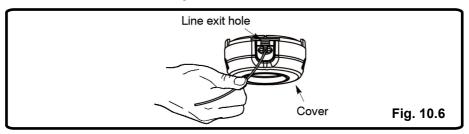
8. Position the lines in the guide slots.



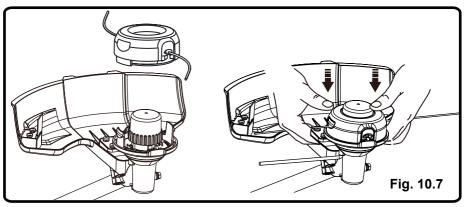
9. Place the spool in the cover as shown below.



10. Insert the ends of the lines through the line exit holes in the sides of the cover.

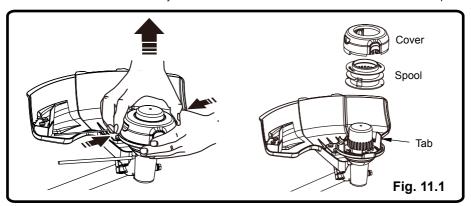


11. Reinstall the spool and cover onto the trimmer head. Push until cover snaps into place.

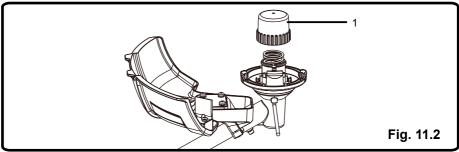


## REPLACING THE BUMP KNOB (See Figure 11.)

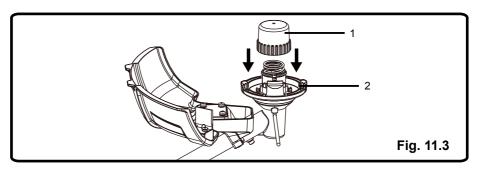
- 1. Remove the battery pack.
- 2. Press the tabs simultaneously on the side of the trimmer head and remove cover and spool.



3. While holding the bump knob (1), firmly pull it out with a wrench.



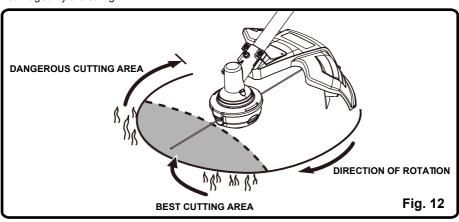
4. Replace with a new bump knob (1). Push the bump knob into the spool housing (2).



## **OPERATION**

#### **CUTTING TIPS** (See Figure 12.)

- Keep the trimmer tilted toward the area being cut; this is the best cutting area.
- The trimmer cuts when passing the unit from right to left. This will avoid throwing debris at the operator. Avoid cutting in the dangerous area shown in figure 12.
- Use the tip of string to do the cutting; do not force string head into uncut grass.
- Wire and picket fences cause extra string wear and breakage. Stone and brick walls, curbs, and wood may wear string rapidly.
- Avoid trees and shrubs. Tree bark, wood moldings, siding, and fence posts can easily be damaged by the string.



## **MAINTENANCE**

#### **GENERAL MAINTENANCE**

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, lubricant, grease, etc.

Always store the machine clean and in a dry enclosure with the battery charged.

Maintenance task	Each time the machine is used	Every two hours	Each week	After use	Every year or when required
Visual check of the tool's safety systems (distancing device, carrying eye, safety casing)	х			х	
Check the trigger safety system functions	x				
Check the sharpness of blades and sharpen if necessary	х	х			х
Visual check of the tool (no cracks or deformation)	X	x			X
Visual check of the tool at the shaft attachment (no deformations or wear)	х	Х			х
Check the battery level	X				
Inspection of the tool by an approved dealer					х

## ENVIRONMENTALLY SAFE BATTERY DISPOSAL

The following toxic and corrosive materials are in the batteries used in this string trimmer battery pack: **Lithium-lon, a toxic material**.





## **A**WARNING

All toxic materials must be disposed of in a specified manner to prevent contamination of the environment. Before disposing of damaged or worn out Lithium-Ion battery packs, 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 centre, certified for lithium-ion disposal.

## **A**WARNING

If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use. Dispose of it and replace with a new battery pack. DO NOT ATTEMPT TO REPAIR IT!

To avoid injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the battery's terminals with heavy-duty adhesive tape.
- DO NOT attempt to remove or destroy any of the battery pack components.
- DO NOT attempt 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 place these batteries in your regular household trash.
- · DO NOT incinerate.
- DO NOT place them where they will become part of any waste landfill or municipal solid waste stream.
- Take them to a certified recycling or disposal centre.

# **TROUBLESHOOTING**

Problem	Cause	Solution	
	The battery pack is not connected to the trimmer.	Attach the battery pack to the trimmer.	
String trimmer fails to start	No electrical contact between the trimmer and battery.	Remove battery check contact and reinstal the battery pack.	
when trigger is depressed.	3. The battery pack is depleted.	3. Charge the battery pack.	
	The lock-off lever and trigger are not depressed simultaneously.	4. Press down the lock-off lever and hold it, then depress the trigger to turn on the string trimmer.	
String trimmer stops while cutting.	The guard is not mounted on the trimmer, resulting in an overly long cutting and motor overload.	Remove the battery pack and mount the guard on the trimmer.	
	2. Heavy cutting line is used.	2. Use only with nylon cutting line 0.08" diameter or less.	
	3. The motor shaft or trimmer head is bound with grass.	3. Stop the trimmer, remove the battery, and remove the grass from the motor shaft and trimmer head.	
	4. The motor is overloaded.	4. Remove the trimmer head from the grass. The motor will recover to work as soon as the load is removed. When cutting, move the trimmer head in and out of the grass to be cu and remove no more than 8 inches of length in a single cut.	
	5. The battery pack or string trimmer is too hot.	5. Allow the battery pack to cool until the temperature drops below 158°F (70°C). Allow the trimmer to cool until the temperature drops below 194°F (90°C).	
	6. The battery pack is disconnected from the tool.	6. Re-install the battery pack.	
	7. The battery pack is depleted.	7. Charge the battery pack.	

# **TROUBLESHOOTING**

Problem	Cause	Solution	
Lines will not	Lines are welded to themselves.	Lubricate with silicone spray.	
	Not enough line on spool.	Install more line. Refer to Line Replacement earlier in this manual.	
advance.	3. Lines are worn too short.	3. Pull both lines while pressing button.	
	Lines are tangled on spool.	Remove lines from spool and rewind.  Refer to Line Replacement earlier in this manual.	
Line keeps breaking.  1. Trimmer used incorrectly.		Only trim with the tip of the line, avoid stones, walls and other hard objects. Feed the line regularly to maintain full cutting width.	
Grass wraps around trimmer head and motor housing.  1. Cutting tall grass at ground level		1. Cut tall grass from the top down, removing no more than 8 inches in each pass to prever wrapping.	
Line is not cutting well  1. The line-cutting blade on the edge of the guard has become dull.		Sharpen the line-cutting blade with a file or replace it with a new blade.	





GREENWORKS™ hereby warranties this product, to the original purchaser with <u>proof of purchase</u>, 4 year warranty 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:

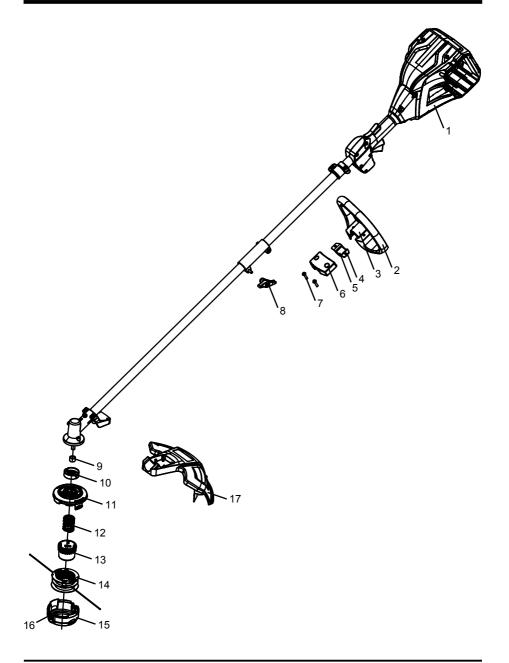
- 1. Any part that has become inoperative due to misuse, abuse, neglect, accident, improper maintenance, or alteration; or
- The unit, if it has not been operated and/or maintained in accordance with the owner's manual: or
- 3. Normal wear, except as noted below:
- 4. Routine maintenance items such as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

#### GREENWORKS HELPLINE (1-855-345-3934):

Warranty service is available by calling our toll-free helpline at (1-855-345-3934).

#### 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 under this warranty unless such return is requested in writing by **GREENWORKS**.



# PARTS LIST

Item No.	Part No.	Description	QTY
1	311021458	Bare tool assembly	1
2	34105836-4	Auxiliary handle	1
3	34203836	Rubber washer	1
4	33301836	Clamp	1
5	34201877	Rubber ring	1
6	341081468	Cover	1
7	32201836	Screw and washer assembly	2
8	341111437AB	Knob	1
9	339031410	Sleeve	1
10	339041410	Fixed seat	1
11	311201429	Base seat	1
12	332041428	Spring	1
13	341041429AC	Bump knob	1
14	311101429A	Spool	1
15	341031429	Spool cover	1
16	332011428	Slot	2
17	311081418D	Guard	1



Greenworks Tools PO Box 1238 Mooresville, NC 28115

**TOLL-FREE HELPLINE: 1-855-345-3934** 

Rev: 00 (01-11-17)