




greenworks 21212 String Trimmer Instruction Manual

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greenworks

String Trimmer
Instruction Manual



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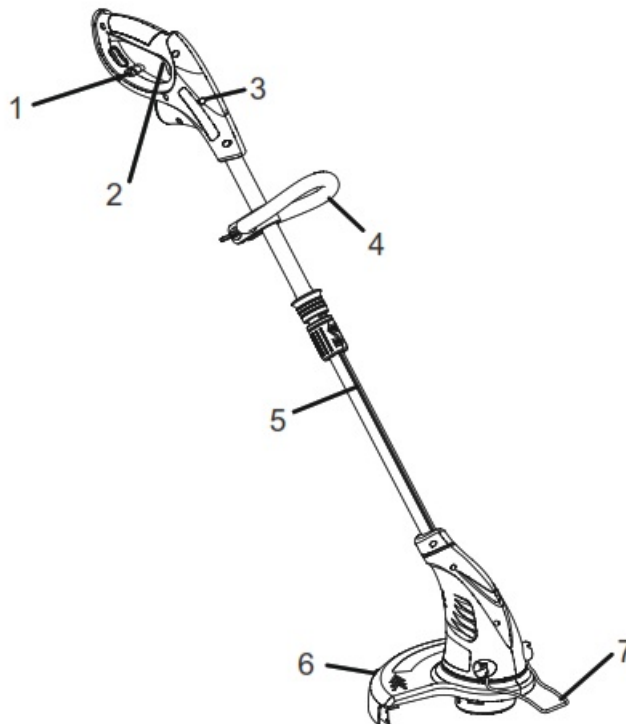
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DESCRIPTION

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.

OVERVIEW



- 1. Cord retainer
- 2. Trigger
- 3. Rear handle

4. Auxiliary handle
5. Lower shaft
6. Guard
7. Speed switch
8. Upper shaft
9. Edge guide

PACKING LIST

1. String trimmer
2. Auxiliary handle
3. Guard
4. Edge guide
5. Operator manual

IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING (THIS POWER TOOL)



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. 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.
- 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.
- 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 plugging 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.
- Do not operate cordless tools in damp or wet locations or in the rain. Following this rule will reduce the risk of electric shock.
- When servicing use only identical replacement part.
- To reduce the risk of electric shock, this tool has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way.
- Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the gardening appliance. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
- Warning – To reduce the risk of electric shock, use only with an extension cord intended for outdoor use, such as an extension cord of cord type SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A, or SJTOW-A.
- Disconnect Appliance – Remove appliance from the power source before storing, servicing, and changing accessories such as cutting line. Such preventive safety measures reduce the risk of starting the tool accidentally.
- Do not abuse the cord – Never carry the unit by the extension cord or yank the extension cord to disconnect the unit. Keep the cord clear of operator and obstacles at all times.
Do not expose cords to heat, oil, water, or sharp edges. Do not handle the plug with wet hands.

SAVE THESE INSTRUCTIONS

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 machine better and safer.

Symbol	Explanation
V	Voltage
A	Current
Hz	Frequency (cycles per second)

Symbol	Explanation
W	Power
min	Time
/min	Revolutions, strokes, surface speed, orbits etc., per minute
~	Alternating Current
	Double-insulated construction
	Always wear safety glasses with side shields marked to comply with ANSI Z87.1 when you operate this machine.
	Read and understand all instructions before you operate the machine, and follow all warnings and safety instructions.
	Precautions that involve your safety.
	Do not expose the machine to rain or moist conditions.
	Keep all bystanders at least 15m away.
	Do not install or use any type of blade on the machine or display this symbol.
	Thrown objects can ricochet and result in personal injury or property damage.
	Do not expose to rain or use in damp locations.

RISK LEVELS

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

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

DOUBLE INSULATED

Double insulation is a concept in safety in electric power tools, which eliminates the need for the usual three-wire grounded power cord. All exposed metal parts are isolated from the internal metal motor components with protecting insulation. Double-insulated tools do not need to be grounded.



WARNING

The double insulated system is intended to protect the user from shock resulting from a break in the tool's internal insulation. Observe all normal safety precautions to avoid electrical shock.



NOTE

Servicing of a product with double insulation requires extreme care and knowledge of the system and should be performed only by a qualified service technician. For service, we suggest you return the tool to your nearest authorized service center for repair. Always use original factory replacement parts when servicing.

EXTENTION CORDS

When using a power tool at a considerable distance from a power source, be sure to use an extension cord that has the capacity to handle the current the product will draw. An undersized cord will cause a drop in line voltage, resulting in overheating and loss of power. Use the chart to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

When working outdoors with a product, use an extension cord that is designed for outside use. This type of cord is designated with "W-A" or "W" on the cord's jacket. Before

using any extension cord, inspect it for loose or exposed wires, and cut or worn insulation.

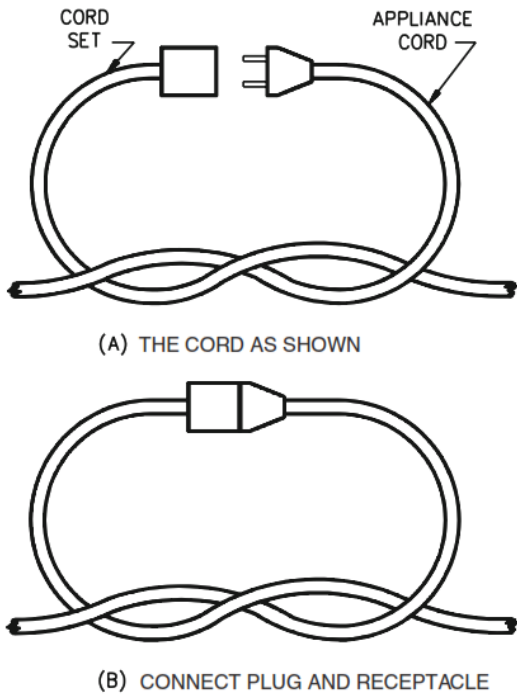
MINIMUM GAUGE FOR EXTENSION CORDS (AWG) (WHEN USING 120 V ONLY)

Ampere Rating		Total Length of Cord in Feet (meters)		
More Than	Not More Than	25' (7.6 m)	50' (15 m)	100' (30.4 m)
0	6	/	/	/
6	10	/	/	/
10	12	16	16	14
12	16	14	12	Not Recommended

Extension Cord – Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized extension cord will cause a drop in voltage resulting in loss of power and overheating. The table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord. To reduce the risk of disconnection of the appliance cord from the extension cord during operation:

- 1. Make a knot as shown in Figure A. or
- 2. Use one of the plug-receptacle retaining straps or connectors.

METHOD OF SECURING EXTENSION CORD



⚠️ WARNING

Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools,

or other obstructions while you are working with a power tool. Failure to do so can result in serious personal injury.

WARNING

Check extension cords before each use. If damaged replace it immediately. Never use the product with a damaged cord since touching the damaged area could cause electrical shock resulting in serious injury.

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 contain 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.

Save these instructions.

INSTALLATION

9.1 UNPACK THE MACHINE

WARNING

Make sure that you correctly assemble the machine before use.

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.

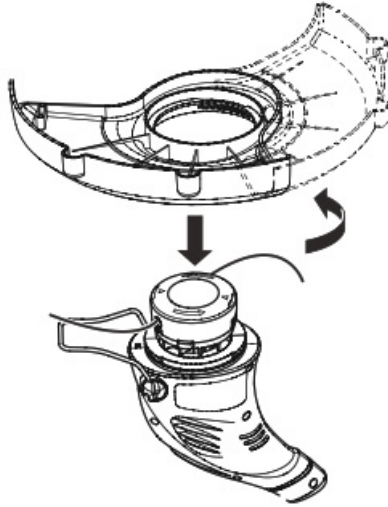
1. Open the package.
2. Read the documentation provided in the box.
3. Remove all the unassembled parts from the box.
4. Remove the machine from the box.
5. Discard the box and packing material in compliance with local regulations.

9.2 ATTACH THE GUARD

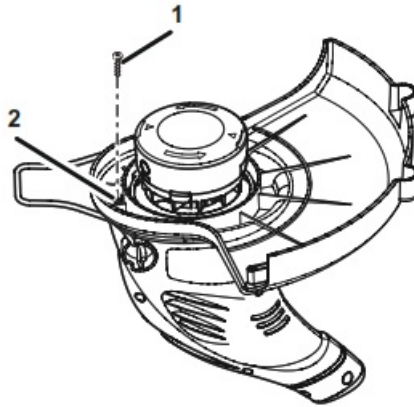
WARNING

Do not touch the cut-off blade.

1. Remove the screws from the trimmer head with a Phillips head screwdriver (not included).
2. Install the guard into the slots on the trimmer head.
3. Turn the guard counterclockwise to lock it into place.



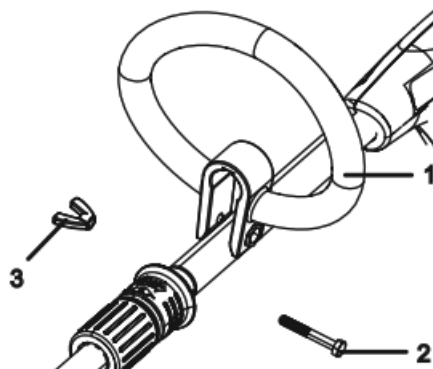
4. Align the screw holes (1) on the guard with the screw holes (2) on the trimmer head.



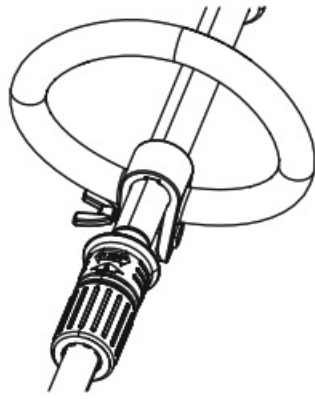
5. Tighten the screws.

9.3 ATTACH THE AUXILIARY HANDLE

1. Remove the knob from the handle.
2. Attach the auxiliary handle (1) on the shaft.
3. Set the auxiliary handle in a comfortable position.
4. Put bolt (2) through the holes.



5. Tighten the auxiliary handle with the knob (3).



OPERATION



IMPORTANT

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



WARNING

Be careful when you operate the machine.

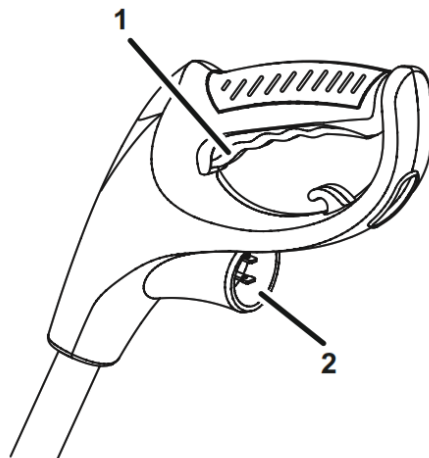
10.1 START THE MACHINE



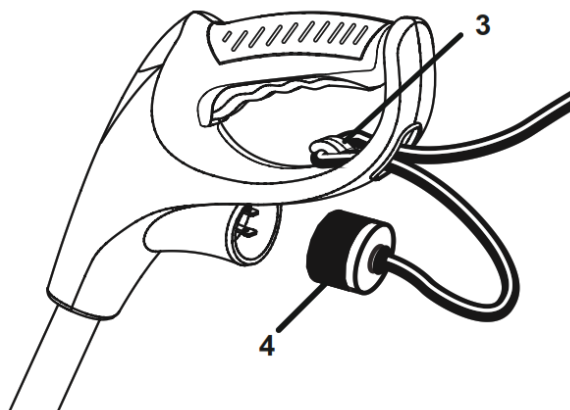
NOTE

Use only approved outdoor extension cords.

1. Put the extension cord through the slot on the rear handle and put it underneath the cord retainer (3).



2. Attach the outlet end (4) of an extension cord to the plug (2) on the rear of the machine.



3. Push the trigger (1) to start the machine.

10.2 STOP THE MACHINE

1. Release the trigger to stop the machine.

10.3 ADJUST THE LENGTH OF THE CUTTING LINE

NOTE

The machine has an auto-feed head. It will damage the machine if you hit the head to try to advance the line.

NOTE

If the cutting line does not automatically advance, it can be tangled or empty.

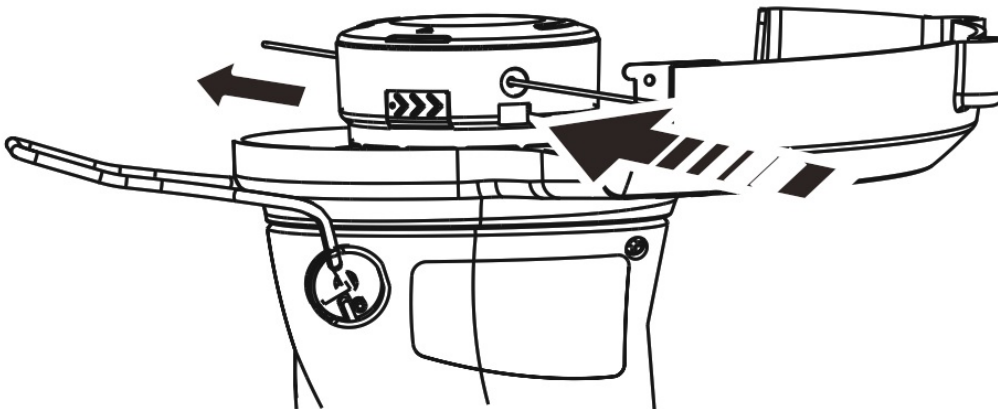
1. When the machine is on, release the trigger.
2. Wait two seconds, and push the trigger again.
3. Resume trimming.

NOTE

The line will extend approximately 0.4 in. with each stop and start of the switch trigger until the line reaches the cutoff blade and the cut-off blade cuts the excess length.

10.4 ADJUST THE LENGTH OF THE CUTTING LINE MANUALLY

1. Stop the machine. Remove the battery from the unit.
2. Push the spool retainer button and pull on the cutting line to manually advance the cutting line.
3. After you extend the new cutter line, always return the machine to its normal position before you start it again.



10.5 OPERATION TIPS



WARNING

Keep clearance between the body and the machine.



WARNING

Do not operate the machine without a guard in place.

Do these tips when you use the machine

- Keep a firm hold with the two hands on the machine while you operate the machine.

- Cut tall grass from the top down.

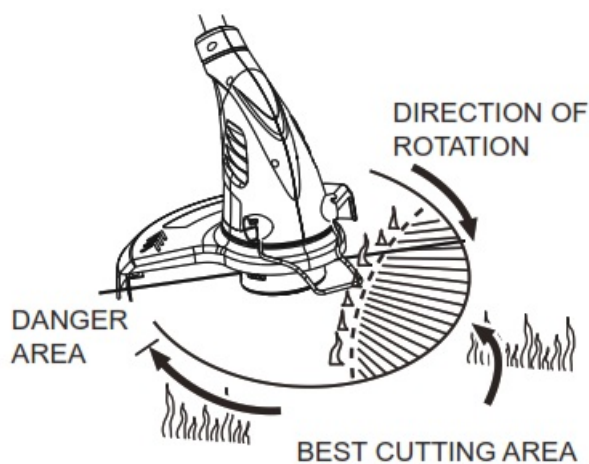
If grass winds around the trimmer head:

- Stop the machine.
- Unplug the machine.
- Remove the grass.



10.6 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 from hitting the operator.
- Do not cut in the danger 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.



10.7 CHANGE TO THE EDGING MODE

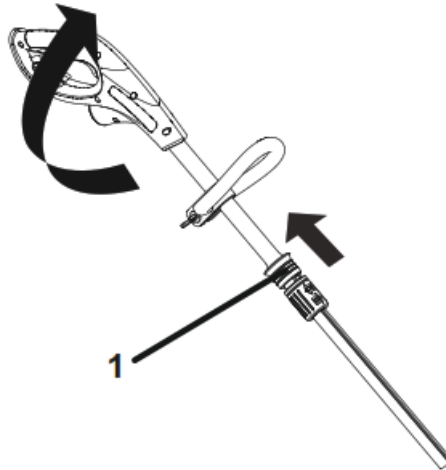
i NOTE

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

1. Stop the machine and flip down the edge guide (2) from the stored position.



2. Pull the edging coupler (1) and turn the trimmer head 180 degrees until the trimmer head locks into position.



3. Release the edging coupler.

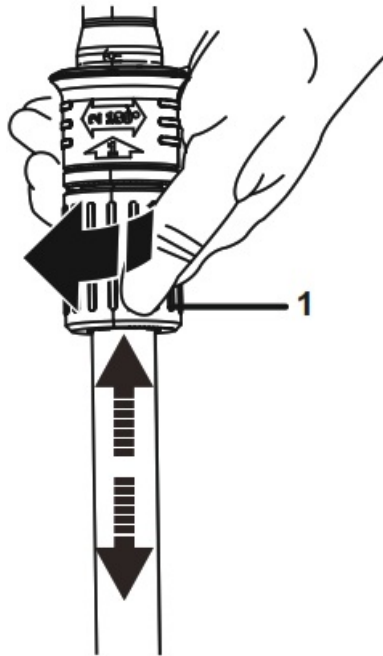


10.8 ADJUST THE LENGTH OF THE SHAFT

i NOTE

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

1. Stop the machine.
2. Loosen the telescoping boom coupler (1) and move the shaft to the desired position.
3. Tighten the coupler.



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.

11.1 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:

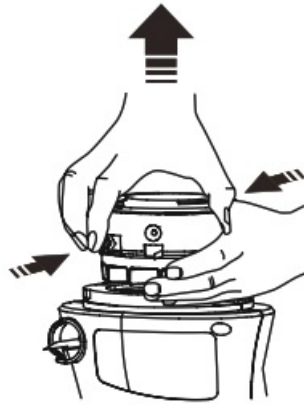
- Stop the machine.
- Remove the battery pack.
- Cool the motor.
- Store the machine in a cool and dry place.
- Use correct clothing, protective gloves, and safety glasses.

11.2 CLEAN THE MACHINE

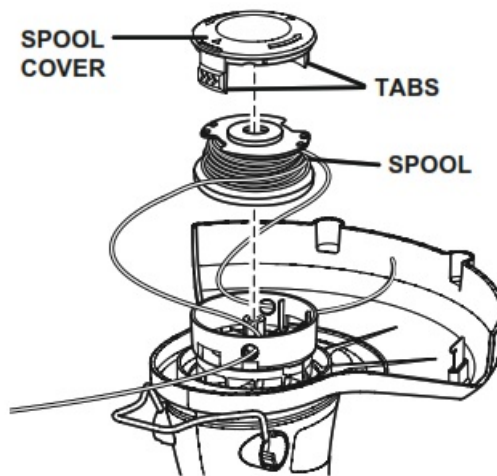
- Clean the machine after use with a moist cloth dipped in neutral detergent.
- Do not use aggressive detergents or solvents to clean the plastic parts or handles.
- Keep the trimmer head free of grass, leaves, or excessive grease.
- Keep the air vents clean and free of debris to avoid overheating and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

11.3 REPLACE THE SPOOL

1. Push the tabs on the sides of the trimmer head at the same time.



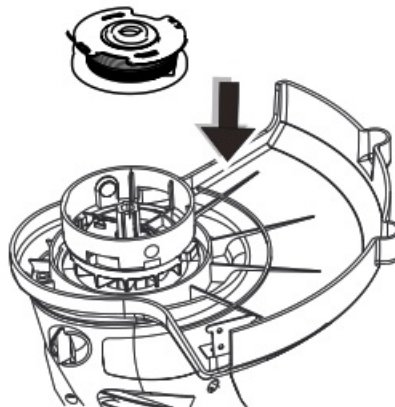
2. Pull and remove the spool cover.



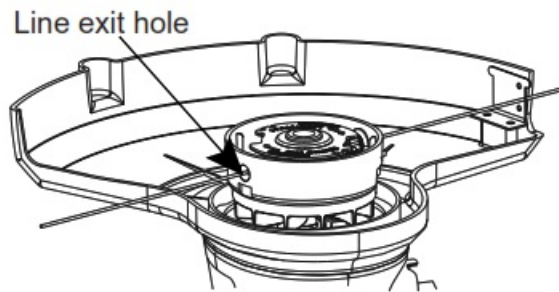
3. Remove the remaining spool.
4. Put the spool in the spool housing.

NOTE

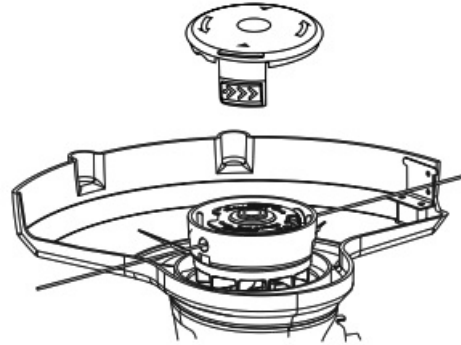
Make sure that you put the cutting line in the slot on the new spool and extend the line approximately 15 cm before you install the new spool.



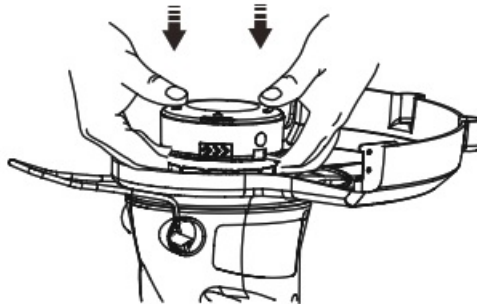
5. Put the ends of the cutting lines through the holes.
6. Extend the cutting line to release it from the guide slot in the spool.



7. Push the tabs and install the spool cover onto the spool housing.



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



11.4 REPLACE THE CUTTING LINE

i NOTE

Remove the remaining cutting line on the spool.

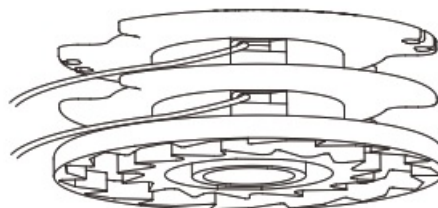
i NOTE

Use only with the nylon cutting line of 0.065" (1.65 mm) diameter.

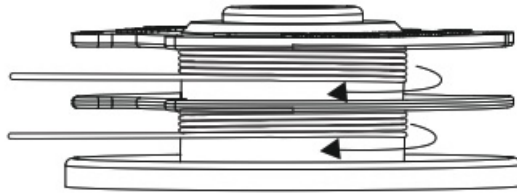
1. Cut two pieces of cutting line approximately 3m long of each.
2. Bend one end of the line 1/4 of an inch (6.35mm) .



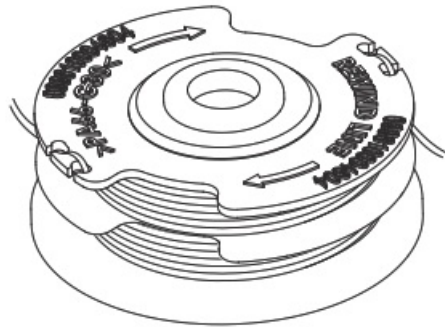
3. Put the lines into the anchor holes of the spool.



4. Wind the cutting lines around the spool tightly in the indicated direction.



5. Put the cutting lines in the guide slots.



6. Do not wind the cutting line beyond the edge of the spool.

TRANSPORTATION AND STORAGE



WARNING

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

12.1 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 transportation to prevent damage or injury. Clean and examine the machine for any damage.

TROUBLESHOOTING

Problem	Possible Cause	Solution
The machine does not start when you push the trigger.	No electrical contact between the machine and the battery pack.	1. Remove the battery pack. 2. Check contact and install the battery pack again.
	The battery pack is depleted.	Charge the battery pack.
	The lock-out button and trigger are not pushed at the same time.	1. Pull the lock-out button and hold it. 2. Pull the trigger to start the machine.
The machine stops when you cut	The guard is not attached to the machine.	Remove the battery pack and attach the guard to the machine.
	A heavy cutting line is used.	Use only with the nylon cutting line of 0.065" (1.65 mm) diameter.
	The grass winds around the motor shaft or the trimmer head.	1. Stop the machine. 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.	1. 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.

Problem	Possible Cause	Solution
The line does not advance.	Lines are welded to themselves.	Lubricate with silicone spray.
	Not enough line on the spool.	Install more lines.
	Lines are worn too short.	Advance the cutting line.
	Lines are tangled on the spool.	1. Remove the lines from the spool. 2. Wind the lines.
The line keeps breaking.	The machine is used incorrectly.	1. Cut with the tip of the line, avoid stones, walls and other hard objects. 2. Advance the cutting line regularly to keep full cutting width.
The grass winds around the trimmer head and motor housing.	Cut tall grass at ground level.	1. Cut tall grass from the top down. 2. 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.

TECHNICAL DATA

Input	120V/60Hz, AC only, 4 Amps
No load speed	9000 (\pm 10%) RPM
Cutting line diameter	0.065" (1.65 mm)
Cutting path diameter	13 in. (330 cm)
Feed Type	Auto Feed
Weight	5.2 lb (2.3 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	32°F (0°C) – 104°F (40°C)

LIMITED WARRANTY

3 YEAR

LIMITED WARRANTY

Greenworks hereby warrants 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 that have been used for personal use that have not been hired or rented for industrial/commercial use, and that has been maintained in accordance with the

instructions in the owner's manual supplied with the product from new.

ITEMS NOT COVERED BY WARRANTY:

1. Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration; or
2. 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.

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

USA address:

Greenworks Tools
P.O. Box 1238

Canadian address:

Greenworks Tools Canada, Inc.
P.O. Box 93095, Newmarket, Ontario
Mooresville, NC 28115 L3Y 8K3

EXPLODED VIEW

