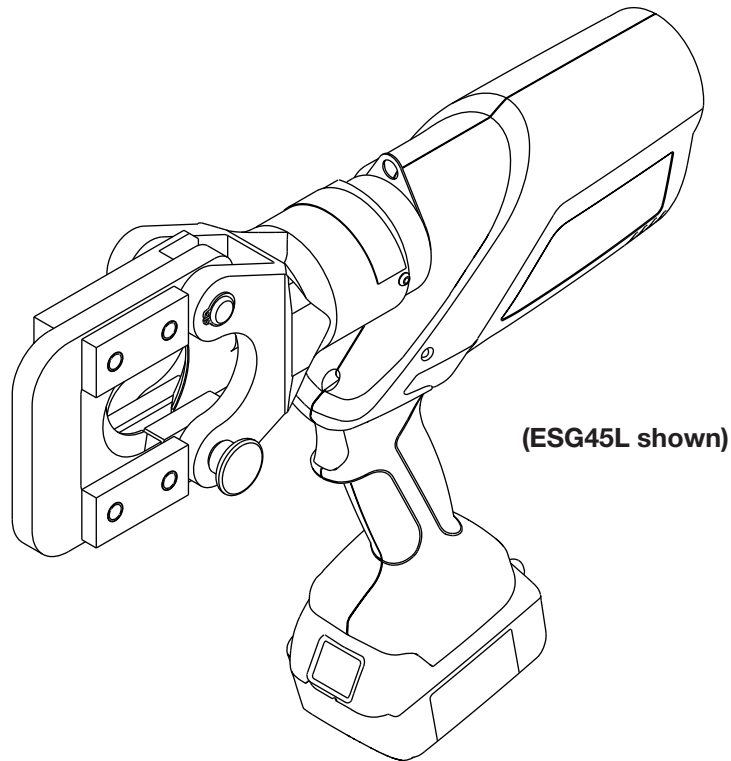


# OPERATION MANUAL



Serial Number



## **GATOR®**

# **Battery-powered Pistol Grip Cable Cutters**



**Read and understand** all of the instructions and safety information in this manual before operating or servicing this tool.

Register this product at [www.greenlee.com](http://www.greenlee.com)

## Table of Contents

Description .....	2
Safety .....	2
Purpose of this Manual .....	2
Important Safety Information .....	3–4
Identification .....	5
Specifications .....	6
Operation .....	7–8
Maintenance .....	9
Troubleshooting .....	10

## Description

Greenlee’s Battery-powered Pistol Grip Cable Cutters are hand-held tools intended to cut the following:

- **ESG45L:** ACSR and guy strand.
- **ESG50L:** Copper and aluminum cable up to 2" (50 mm) in diameter. This tool is intended to cut most low- and medium-voltage copper and aluminum cable found on most job sites.
- **ESG55L:** ACSR and guy strand.
- **ESC85L:** Copper and aluminum cable up to 3.3" (85 mm) in diameter. This tool is intended to cut most low- and medium-voltage stranded copper and aluminum cable.
- **ESC105L and ESG105LU:** Copper and aluminum cable up to 4.13" (105 mm) in diameter. This tool is intended to cut most low- and medium-voltage stranded copper and aluminum cable as well as lead or soft steel armored cable found on job sites.

These tools have a retraction stop feature, which allows the operator to stop the retraction motion of the ram to shorten cycle time.

These tools are protected by U.S. Patent No. 6,206,663, 6,276,186, 6,401,515, and 6,718,870.

## Safety

Safety is essential in the use and maintenance of Greenlee tools and equipment. This manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided.

## Purpose of this Manual

This manual is intended to familiarize all personnel with the safe operation and maintenance procedures for the following Greenlee tools:

- ESG45L Battery-powered Cable Cutter
- ESG50L Battery-powered Cable Cutter
- ESG55L Battery-powered Cable Cutter
- ESC85L Battery-powered Cable Cutter
- ESC105L Battery-powered Cable Cutter
- ESG105LU Battery-powered Cable Cutter

Keep this manual available to all personnel.

Replacement manuals are available upon request at no charge at [www.greenlee.com](http://www.greenlee.com).



**Do not discard this product or throw away!**

For recycling information, go to [www.greenlee.com](http://www.greenlee.com).

All specifications are nominal and may change as design improvements occur. Greenlee Textron Inc. shall not be liable for damages resulting from misapplication or misuse of its products. GATOR is a registered trademark of Textron Innovations Inc.

# KEEP THIS MANUAL

**IMPORTANT SAFETY INFORMATION**



**SAFETY ALERT SYMBOL**

This symbol is used to call your attention to hazards or unsafe practices which could result in an injury or property damage. The signal word, defined below, indicates the severity of the hazard. The message after the signal word provides information for preventing or avoiding the hazard.

**⚠ DANGER**

Immediate hazards which, if not avoided, **WILL** result in severe injury or death.

**⚠ WARNING**

Hazards which, if not avoided, **COULD** result in severe injury or death.

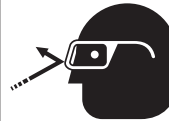
**⚠ CAUTION**

Hazards or unsafe practices which, if not avoided, **MAY** result in injury or property damage.

**⚠ WARNING**

- Electric shock hazard: The owner of this cutter must be certain that all users of this tool are trained in the applicable safety codes and standards as well as in the safe use of this tool and its accessories.
- Do not cut cable under tension.
- Use the tool for its intended purpose, which is cutting cable.

Failure to observe these warnings could result in severe injury or death.



**⚠ WARNING**

Wear eye protection when operating or servicing this tool.

Failure to wear eye protection could result in serious eye injury from flying debris or hydraulic oil.



**⚠ WARNING**

Skin injection hazard:

Do not use hands to check for oil leaks. Oil under pressure easily punctures skin. If injured, seek medical attention immediately to remove oil.

Failure to observe this warning could result in serious injury, gangrene, or death.



**⚠ WARNING**

Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

Failure to observe this warning could result in severe injury or death.



**⚠ WARNING**

Electric shock hazard:  
This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment.


Failure to observe this warning could result in severe injury or death.



**⚠ WARNING**

Do not use solvents or flammable liquids to clean the tool body. Solvents or flammable liquids could ignite and cause serious injury or property damage.

## IMPORTANT SAFETY INFORMATION

	<b>⚠ WARNING</b>
	<p>Cutting hazard:</p> <ul style="list-style-type: none"><li>• Remove battery before changing dies, adapters, or jaws.</li><li>• Keep hands away from the cutting head when cutting.</li></ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

<b>⚠ WARNING</b>
<p>Do not dispose of batteries in a fire. They will vent fumes and may explode.</p> <p>Failure to observe this warning could result in severe injury from harmful fumes or burns from flying debris.</p>

<b>⚠ WARNING</b>
<ul style="list-style-type: none"><li>• Inspect tool and blades before use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel.</li><li>• Carrying strap is for carrying only, not to be used to hang or suspend tool.</li></ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

<b>⚠ CAUTION</b>
<ul style="list-style-type: none"><li>• Do not use this tool for continuous use. After 30 to 40 cycles, allow the tool to cool for 15 minutes.</li><li>• Do not secure this tool in a vise. This tool is designed for hand-held operation.</li><li>• This tool may be used in damp or wet environments; however, air-drying is recommended before use if the tool becomes soaked. Damage may result when the tool is operated prior to thorough drying when electrical components are soaked.</li><li>• Use this tool for the manufacturer's intended purpose only.</li></ul> <p>Failure to observe these precautions may result in injury or property damage.</p>

<b>⚠ CAUTION</b>
<p>Do not allow anything to contact the battery terminals.</p> <ul style="list-style-type: none"><li>• Do not immerse the batteries in liquid. Liquid may create a short circuit and damage the battery. If batteries are immersed, contact your service center for proper handling.</li><li>• Do not place the battery into a pocket, tool pouch, or tool box with conductive objects. Conductive objects may create a short circuit and damage the battery.</li><li>• Do not place a battery on moist ground or grass. Moisture may create a short circuit and damage the battery.</li></ul> <p>Failure to observe these precautions may result in injury or property damage.</p>

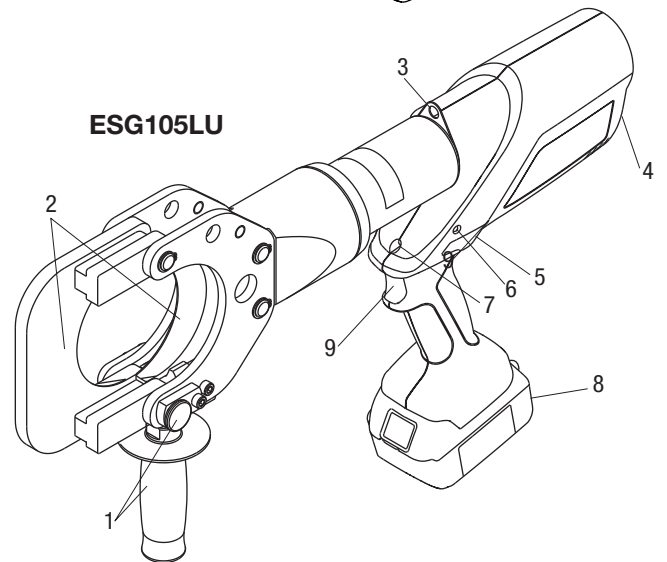
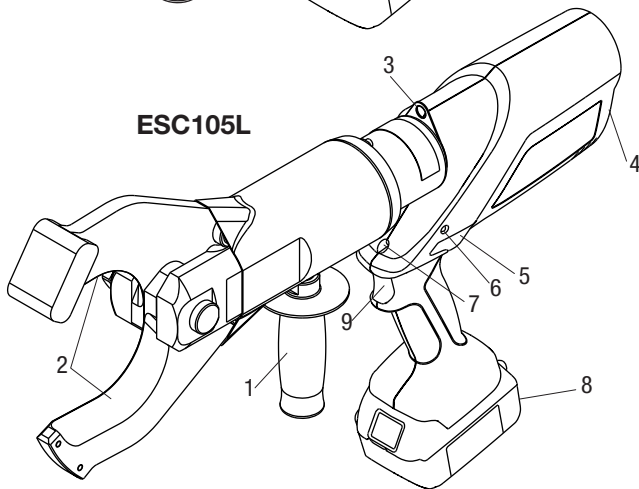
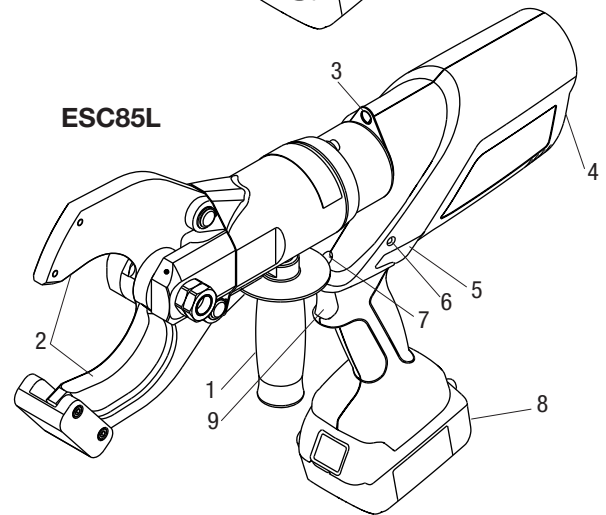
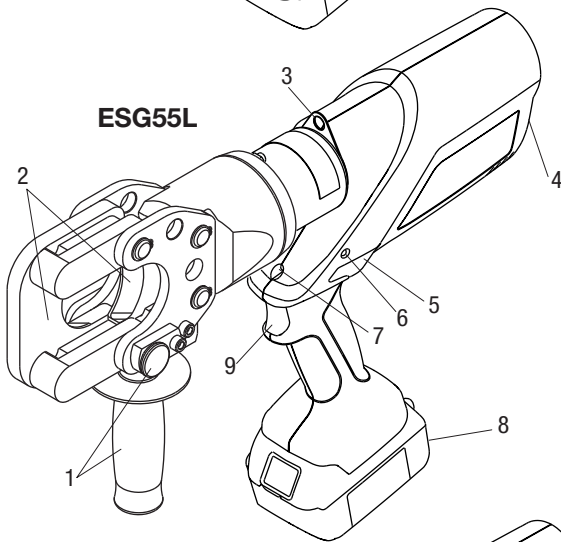
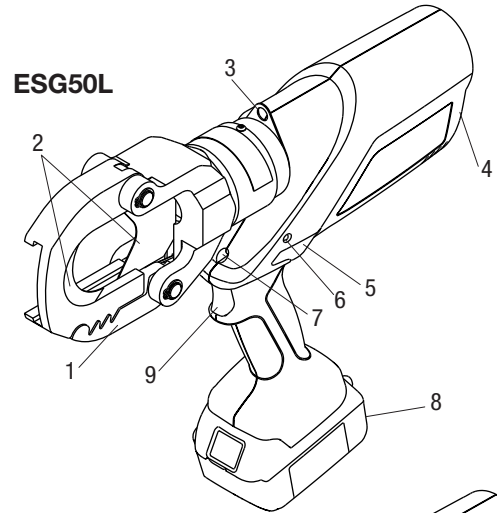
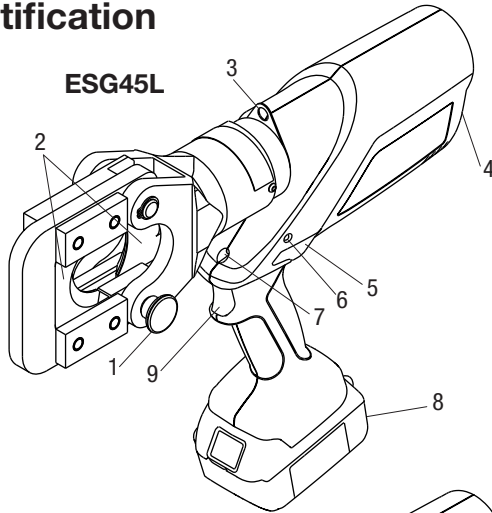
<b>⚠ CAUTION</b>
<ul style="list-style-type: none"><li>• Do not store the battery at more than 122 °F (50 °C) or less than -4 °F (-20 °C). Damage to the battery can result.</li><li>• Do not use another manufacturer's charger. Other manufacturers' chargers may overcharge and damage the battery.</li><li>• Do not attempt to open the battery. It contains no user-serviceable parts.</li></ul> <p>Failure to observe these precautions may result in injury or property damage.</p>

<b>⚠ CAUTION</b>
<p>Use all appropriate and applicable personal safety equipment as required such as safety shoes, hard hat, and safety glasses. Follow all safety rules and regulations for the job.</p> <p>Failure to comply may result in personal injury or property damage.</p>

<b>⚠ CAUTION</b>
<p>Do not perform any service or maintenance other than as described in this manual. Injury or damage to the tool may result.</p> <p>Failure to observe this precaution may result in injury and property damage.</p>

*Note: Keep all decals clean and legible, and replace when necessary.*

## Identification



- 1. Pull Pin (ESG45L, ESG55L, and ESG105LU)  
Locking Flange (ESG50L)  
Handle (removable)  
(ESG55L, ESC85L, ESC105L, and ESG105LU)

- 2. Blades
- 3. Lanyard Ring
- 4. Housing
- 5. Retract Button
- 6. LED Indicator (red)
- 7. LED Work Light (white)
- 8. Battery
- 9. Trigger

## Specifications

### All Models

#### Cutting Tool

Hydraulic Oil..... 52057878 biodegradable hydraulic fluid

Recommended Operating Temperature Range..... 5 °F to 122 °F (-15 °C to 50 °C)

Battery Charger ..... Read the instructions supplied with the battery charger

### ESG45L

#### Cutting Tool

Length ..... 15.75" (400 mm)  
 Width ..... 2.87" (72.9 mm)  
 Height ..... 12.75" (323.8 mm)  
 Weight ..... 12.6 lb (5.7 kg)

#### Cutting Capacities

Maximum Cable Cutting Diameter (copper and aluminum) ..... 1.75" (45 mm)  
 ACSR ..... Falcon 54/19 (1590 kcmil)  
 Guy Strand ..... 5/8" (16 mm) dia.  
 EHS Guy Strand ..... 1/2" (13 mm) dia.  
 Ground Rod ..... 5/8" (16 mm) dia.  
 Rebar (Schedule 60) ..... 1/2" (13 mm) dia.  
 Wire Rope ..... 5/8" (16 mm) dia.

### ESG50L

#### Cutting Tool

Length ..... 16.0" (406.4 mm)  
 Width ..... 2.87" (72.9 mm)  
 Height ..... 14.5" (368.3 mm)  
 Weight ..... 10.4 lb (4.7 kg)

#### Cutting Capacity

Maximum Cable Cutting Diameter (copper and aluminum) ..... 2" (50 mm)

### ESG55L

#### Cutting Tool

Length ..... 18.12" (461 mm)  
 Width ..... 3.12" (80 mm)  
 Height ..... 13.25" (337 mm)  
 Weight ..... 17.5 lb (8 kg)

#### Cutting Capacities

Maximum Cable Cutting Diameter (copper and aluminum) ..... 2.12" (55 mm)  
 ACSR ..... Joree 76/19 (2515 kcmil)  
 Guy Strand ..... 5/8" (16 mm) dia.  
 EHS Guy Strand ..... 9/16" (14 mm) dia.  
 3/4" Ground Rod ..... 3/4" (19 mm) dia.  
 Rebar (Schedule 60) ..... 5/8" (16 mm) dia.  
 Soft Steel Bolts ..... 3/4" (19 mm) dia.

### ESC85L

#### Cutting Tool

Length ..... 19.25" (488.9 mm)  
 Width ..... 2.87" (72.9 mm)  
 Height ..... 14.25" (362 mm)  
 Weight ..... 13.8 lb (6.3 kg)

#### Cutting Capacities

Maximum Cable Cutting Diameter (copper and aluminum) ..... 3.3" (85 mm)

### ESC105L

#### Cutting Tool

Length ..... 24.0" (609.6 mm)  
 Width ..... 2.87" (72.9 mm)  
 Height ..... 14.8" (376 mm)  
 Weight ..... 19.4 lb (8.8 kg)

#### Cutting Capacities

Maximum Cable Cutting Diameter (copper, aluminum, lead armored, and soft steel armored cable) ..... 4.13" (105 mm)

### ESG105LU

#### Cutting Tool

Length ..... 24.0" (609.6 mm)  
 Width ..... 2.87" (72.9 mm)  
 Height ..... 14.8" (376 mm)  
 Weight ..... 23.1 lb (10.5 kg)

#### Cutting Capacities

Maximum Cable Cutting Diameter (copper, aluminum, lead armored, and soft steel armored cable) ..... 4.13" (105 mm)

### All Models

52047087	120 VAC corded adapter
52047088	230 VAC corded adapter
52049189	18 V, 3 Ah lithium-ion battery
52049201	120 VAC, 18 V charger
52049202	230 VAC, 18 V charger
52049204	12 VDC, 18 V charger
52054992	Li (18 V) to NiCd, NiMH (12 V) charger adapter
50122746	Carrying strap

## Operation

### ⚠️ WARNING

- Inspect tool and blades before use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel.
- Carrying strap is for carrying only, not to be used to hang or suspend tool.

Failure to observe these warnings could result in severe injury or death.

### ⚠️ WARNING



Electric shock hazard:  
This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment.  
Failure to observe this warning could result in severe injury or death.

### ⚠️ WARNING



Wear eye protection when operating or servicing this tool.  
Failure to wear eye protection could result in serious eye injury from flying debris or hydraulic oil.

### ⚠️ WARNING



Cutting hazard:

- Remove battery before changing dies, adapters, or jaws.
- Keep hands away from the cutting head when cutting.

Failure to observe these warnings could result in severe injury or death.

### ⚠️ WARNING

- Electric shock hazard: The owner of this cutter must be certain that all users of this tool are trained in the applicable safety codes and standards as well as in the safe use of this tool and its accessories.
- Do not cut cable under tension.

Failure to observe these warnings could result in severe injury or death.

### ⚠️ CAUTION

- Do not use this tool for continuous use. After 30 to 40 cycles, allow the tool to cool for 15 minutes.
- Do not secure this tool in a vise. This tool is designed for hand-held operation.
- This tool may be used in damp or wet environments; however, air-drying is recommended before use if the tool becomes soaked. Damage may result when the tool is operated prior to thorough drying when electrical components are soaked.
- Use this tool for the manufacturer's intended purpose only.

Failure to observe these precautions may result in injury or property damage.

### Charging the Battery

Read the instructions supplied with the battery charger.

### LED Work Light (white)

This LED automatically turns on when the trigger is pulled. It remains on for 10 seconds after the trigger is released.

### LED Indicator (red)

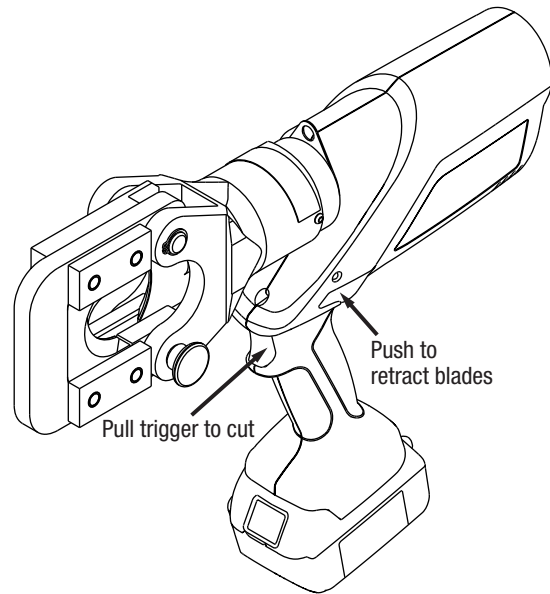
This tool is equipped with a special circuit board incorporating several important features to inform the user about the current status of the unit. The LED signals in the following cases:

What happens	Signal	What it means
Flashing light for 2 seconds	● ●	Battery is inserted in tool
Constant light for 20 seconds at end of cycle	■	Battery charge is below 17 V at beginning of cycle
Tool will <b>not</b> start, and constant light for 20 seconds when trigger is released	■	Battery charge is below 16 V at beginning of cycle
Tool will stop, and constant light for 20 seconds after trigger is released	■	Battery voltage drops below 13 V during cycle
Tool will stop, and flashing light for 20 seconds when trigger is released	● ● ● ●	Motor current exceeds 20 A during cycle Circuit has become too hot

**Operation (cont'd)****Cutting Cable—ESG45L, ESG55L, and ESG105LU**

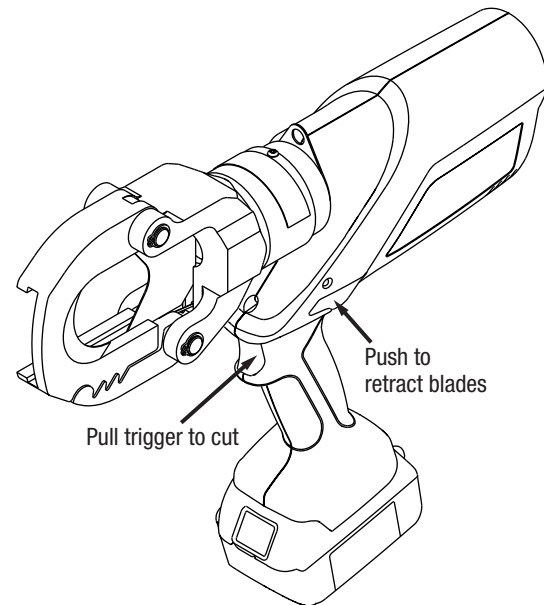
1. Open the head by using the pull pin.
2. Position the cable in the open cutting head.
3. Close the cutting head and insert pull pin.
4. Pull the trigger. The blades will begin to close.
5. When the cut is completed, the ram will retract completely.
6. To stop the ram from returning fully, activate the trigger for a brief moment. This activation will close the retraction valve and stop the retraction motion.

*Note: At any time during cutting, pushing the retract button will result in a complete return of the ram.*

**Cutting Cable—ESG50L**

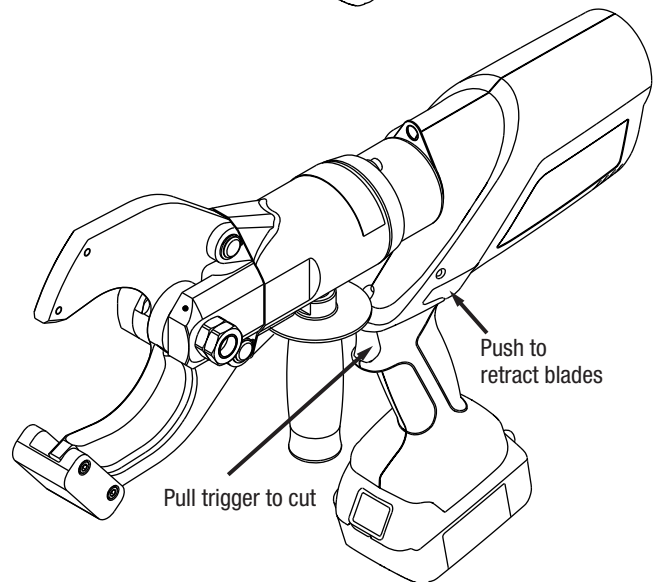
1. Open the head by lifting the locking flange.
2. Position the cable in the open cutting head.
3. Close the cutting head.
4. Pull the trigger. The blades will begin to close.
5. When the cut is completed, the ram will retract completely.
6. To stop the ram from returning fully, activate the trigger for a brief moment. This activation will close the retraction valve and stop the retraction motion.

*Note: At any time during cutting, pushing the retract button will result in a complete return of the ram.*

**Cutting Cable—ESC85L and ESC105L**

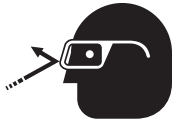
1. Position the cable in the open cutting head.
2. Pull the trigger. The blades will begin to close.
3. When the cut is completed, the ram will retract completely.
4. To stop the ram from returning fully, activate the trigger for a brief moment. This activation will close the retraction valve and stop the retraction motion.


*Note: At any time during cutting, pushing the retract button will result in a complete return of the ram.*







## Maintenance

	<b>⚠ WARNING</b>
	<p>Wear eye protection when operating or servicing this tool.</p> <p>Failure to wear eye protection could result in serious eye injury from flying debris or hydraulic oil.</p>

	<b>⚠ WARNING</b>
	<p>Skin injection hazard:</p> <p>Do not use hands to check for oil leaks. Oil under pressure easily punctures skin. If injured, seek medical attention immediately to remove oil.</p> <p>Failure to observe this warning could result in serious injury, gangrene, or death.</p>

	<b>⚠ WARNING</b>
	<p>Do not use solvents or flammable liquids to clean the tool body. Solvents or flammable liquids could ignite and cause serious injury or property damage.</p>

	<b>⚠ WARNING</b>
	<p>Cutting hazard:</p> <ul style="list-style-type: none"> <li>• Remove battery before changing dies, adapters, or jaws.</li> <li>• Keep hands away from the cutting head when cutting.</li> </ul> <p>Failure to observe these warnings could result in severe injury or death.</p>

<b>IMPORTANT</b>
Relief valve adjustments must be done by an authorized service center.

### Daily

#### Before use:

1. Inspect the tool for wear or damage, such as cracks, gouges, or chips.
2. Inspect the tool for damage or leaks.
3. Inspect the rotation of the head assembly. Fully retract the ram. The head should rotate no more than 360°. If damage is detected, send the tool to a Greenlee Authorized Service Center for inspection.

#### After use:

1. Use a damp cloth and mild detergent to clean the housing. Allow the housing to dry.
2. Place the tool in the carrying case and store in a cool, dry place.
3. If necessary, recharge the batteries. Refer to the instructions supplied with the battery charger.

### Monthly

1. Thoroughly clean all surfaces.
2. Check the oil level.

### Annually or After 10,000 Cuts

1. Replace the hydraulic oil.
2. Send the tool to a Greenlee Authorized Service Center for inspection.

### Checking the Oil Level

1. Remove the screws holding the housing cover together.
2. Point the cutting head downward and remove the oil reservoir plug. Fill reservoir if necessary.
3. Replace the oil plug and housing cover.

*Note: For Warranty Service or Repair, contact Greenlee customer service at 800-435-0786.*

## Troubleshooting

### Before You Begin

1. Make sure that the battery is charged. Recheck the battery after several minutes to make sure the battery is holding its charge.
2. Use a **nonflammable** contact cleaner or pencil eraser to clean the electrical contacts on the battery and tool.
3. Reinstall the battery and check the tool again.

Problem	Possible Cause	Probable Remedy
Tool is inoperative.	Dirt, contaminants, etc., in ram area of tool.	Clean tool.
	Tool components worn or damaged.	Return tool to a Greenlee Authorized Service Center.
Motor is inoperative.	Low or uncharged battery.	Try known charged battery. Inoperative battery may be discharged or may have reached life expectancy.
	Broken switch components.	Return tool to a Greenlee Authorized Service Center.
Motor runs but tool will not complete a cycle.	Oil level low.	Return tool to a Greenlee Authorized Service Center.
	Air in hydraulic system.	Pull trigger and hold retract button simultaneously. Run for approximately 10 seconds, and then attempt to cut. If unsuccessful, return tool to a Greenlee Authorized Service Center.
	Cold oil.	Pull trigger and hold retract button simultaneously to warm oil. Store tool in warm area.
Dies stop during operation.	Oil level low.	Return tool to a Greenlee Authorized Service Center.
	Air in hydraulic system.	Pull trigger and hold retract button simultaneously. Hold for approximately 10 seconds.
LED glows for 20 seconds.	Battery charge low.	Charge or replace battery.
Tool loses oil.	Damaged internal seal.	Return tool to a Greenlee Authorized Service Center.

*Note: For Warranty Service or Repair, contact Greenlee customer service at 800-435-0786.*





4455 Boeing Drive • Rockford, IL 61109-2988 • USA • 815-397-7070  
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[www.greenlee.com](http://www.greenlee.com)

**USA** Tel: 800-435-0786  
Fax: 800-451-2632

**Canada** Tel: 800-435-0786  
Fax: 800-524-2853

**International** Tel: +1-815-397-7070  
Fax: +1-815-397-9247