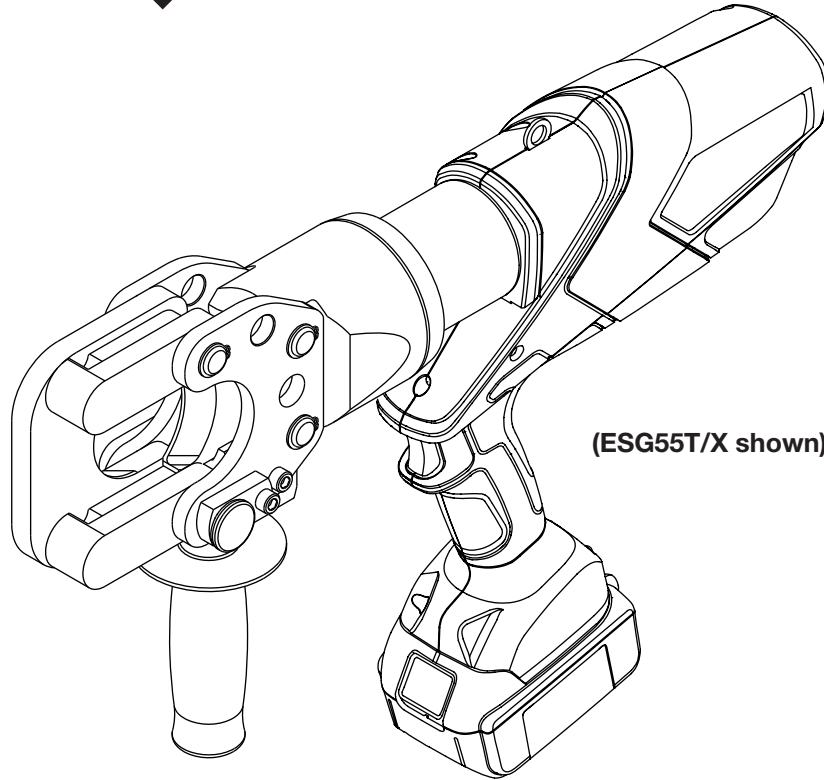


# OPERATION MANUAL



**GREENLEE**<sup>®</sup>  
A Textron Company

Serial Number



(ESG55T/X shown)

## **GATOR**<sup>®</sup> **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)

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## Description

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

- **ESG50T/X:** 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.
- **ESG55T/X:** ACSR and guy strand.
- **ESC85T/X:** 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.
- **ESC105T/X and ESG105T/X:** 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.

Both the T and X versions of this tool have Bluetooth® connectivity and an LCD screen. Only the T version has GPS tracking.

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

**T Version—FCC ID: 2AGL2COM; IC ID: 20646COM**  
**X Version—FCC ID: 2AGL2CFM; IC ID: 20646CFM**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## 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:

- ESG50T and ESG50X Battery-powered Cable Cutters
- ESG55T and ESG55X Battery-powered Cable Cutters
- ESC85T and ESC85X Battery-powered Cable Cutters
- ESC105T and ESC105X Battery-powered Cable Cutters
- ESG105T and ESG105X Battery-powered Cable Cutters

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.

Bluetooth is a registered trademark of Bluetooth SIG, 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**

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:

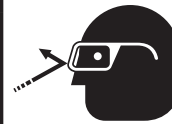
This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment.

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

#### **⚠ WARNING**

- 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**

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.



#### **⚠ 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.

## **IMPORTANT SAFETY INFORMATION**

### **⚠ WARNING**

Do not dispose of batteries in a fire. They will vent fumes and may explode.

Failure to observe this warning could result in severe injury from harmful fumes or burns from flying debris.

### **⚠ WARNING**

Remove the battery before transporting the T version of this tool by air.

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

### **⚠ 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.

### **⚠ 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.

### **⚠ CAUTION**

Do not allow anything to contact the battery terminals.

- 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.
- 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.
- Do not place a battery on moist ground or grass. Moisture may create a short circuit and damage the battery.

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

### **⚠ CAUTION**

- 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.
- Do not use another manufacturer's charger. Other manufacturers' chargers may overcharge and damage the battery.
- Do not attempt to open the battery. It contains no user-serviceable parts.

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

### **⚠ CAUTION**

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.

Failure to comply may result in personal injury or property damage.

### **⚠ CAUTION**

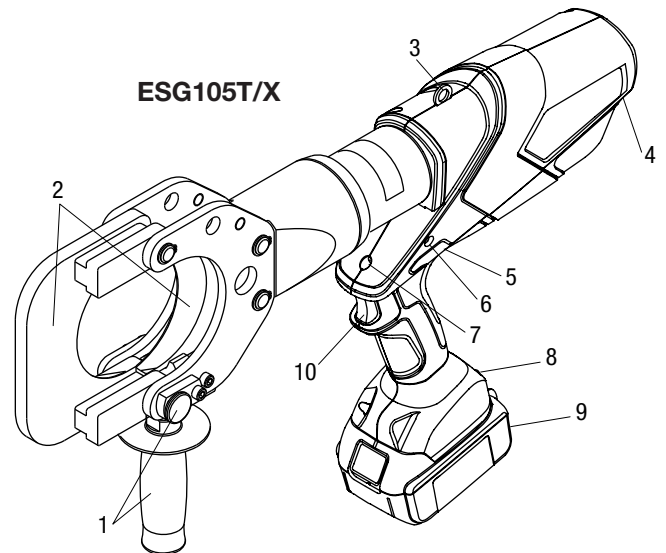
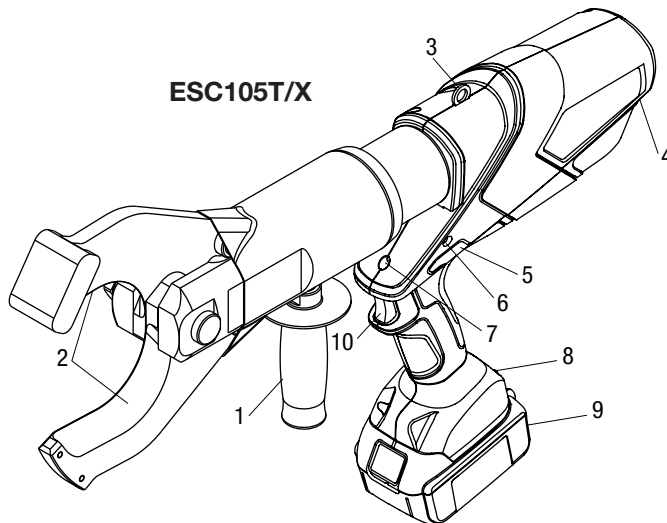
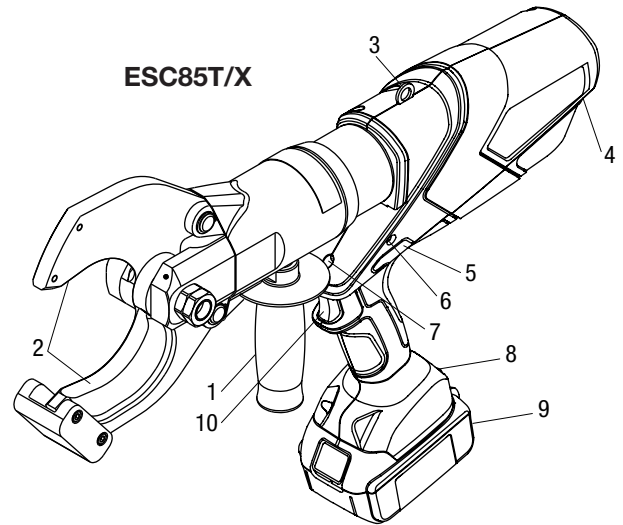
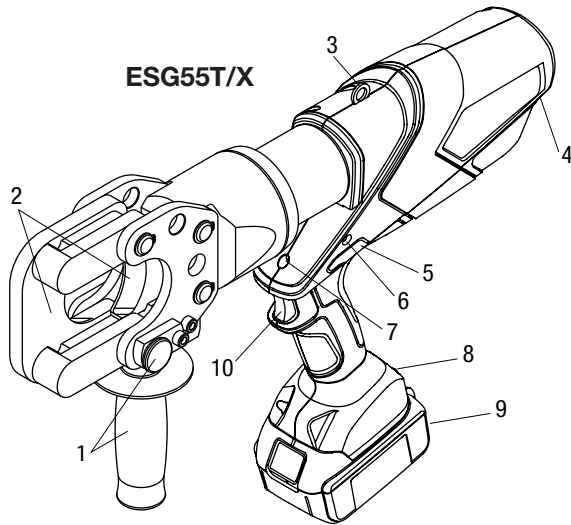
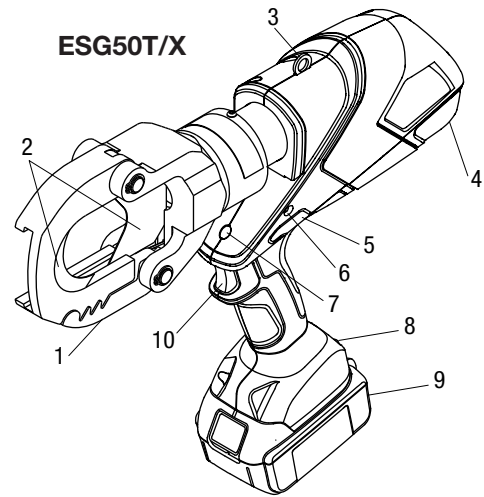
Do not perform any service or maintenance other than as described in this manual. Injury or damage to the tool may result.

Failure to observe this precaution may result in injury and property damage.

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

## Identification

1. Pull Pin (ESG55T/X and ESG105T/X)  
Locking Flange (ESG50T/X)  
Handle (removable)  
(ESG55T/X, ESC85T/X, ESC105T/X, and ESG105T/X)
2. Blades
3. Lanyard Ring
4. Housing
5. Retract Button
6. LED Indicator (red)
7. LED Work Light (white)
8. LCD Screen
9. Battery
10. 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

### ESG50T and ESG50X

#### Cutting Tool

Length ..... 15.5" (394 mm)  
 Width..... 3.00" (76 mm)  
 Height..... 13.2" (336 mm)  
 Weight ..... 9.9 lb (4.5 kg)

#### Cutting Capacity

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

### ESG55T and ESG55X

#### Cutting Tool

Length ..... 18.8" (478 mm)  
 Width..... 3.3" (83 mm)  
 Height..... 13.3" (338 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.

### ESC85T and ESC85X

#### Cutting Tool

Length ..... 21.1" (536 mm)  
 Width..... 3.3" (85 mm)  
 Height..... 14.6" (372 mm)  
 Weight ..... 14.25 lb (6.5 kg)

#### Cutting Capacities

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

### ESC105T and ESC105X

#### Cutting Tool

Length ..... 24.1" (612 mm)  
 Width..... 3.00" (76 mm)  
 Height..... 15.5" (394 mm)  
 Weight ..... 21.1 lb (9.5 kg)

#### Cutting Capacities

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

### ESG105T and ESG105X

#### Cutting Tool

Length ..... 24.4" (620 mm)  
 Width..... 3.00" (76 mm)  
 Height..... 14.6" (371 mm)  
 Weight ..... 22.3 lb (10.1 kg)

#### Cutting Capacities

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

## 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

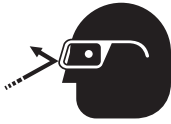


Electric shock hazard:

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
Flashing light for 20 seconds at end of cycle	● ● ● ●	Send tool in for service

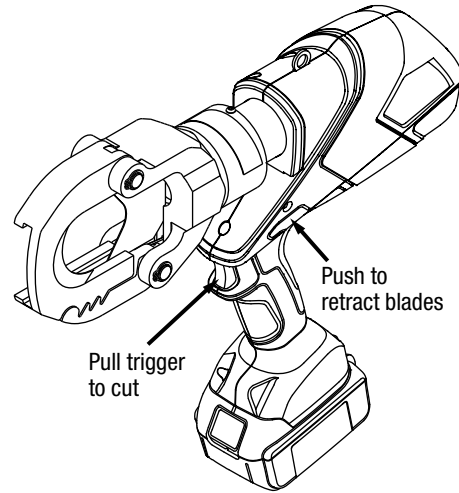
\* Running the battery below 16 V can damage the battery.

## Operation (cont'd)

### Cutting Cable—ESG50T/X

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.

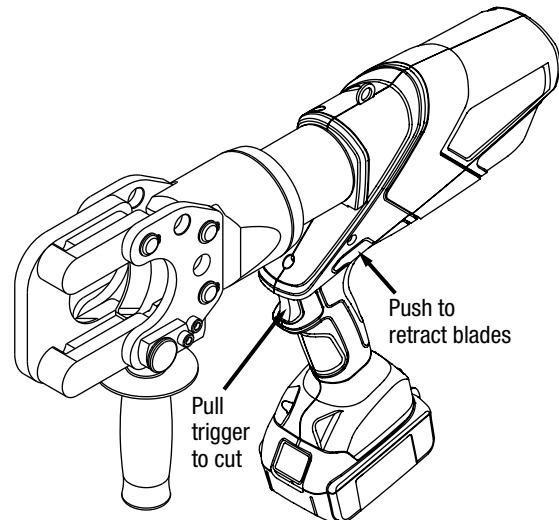
*Note: At any time during cutting, pushing the retract button will result in a complete return of the ram.*



### Cutting Cable—ESG55T/X and ESG105T/X

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.

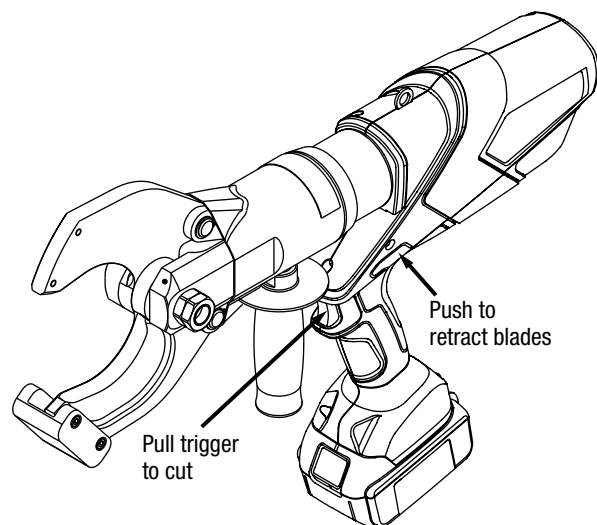
*Note: At any time during cutting, pushing the retract button will result in a complete return of the ram.*



### Cutting Cable—ESC85T/X and ESC105T/X

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.*





## LCD Screen

This tool has an LCD screen, which displays information about the tool. Turn on the screen by inserting the battery and jogging the tool. If there are any problems with the tool, an error code appears.


Error Code	Meaning
1	Overcurrent fuse
2	Overcurrent comparator
3	Overheated circuit board
4	Overheated battery
5	Battery empty; operation stops
6	Faulty cut; complete cycle
7	Faulty cut; incomplete cycle
8	Low battery
9	Battery empty; tool won't run
10	Real-time clock battery low
11	Tool deactivated
12	Service necessary
13	Real-time clock not found
14	Bluetooth® unit not found
15	Mobile unit not found
16	Pressure sensor not found
17	Burst pressure exceeded
18	Battery temperature too low

If there is no error code, cycle through the various displays using the left and right buttons on either side of the screen. There are seven displays in total.


Display	Information Shown
1	Bluetooth® status, battery charge, current pressure, max. pressure
2	Firmware, available firmware update, serial number
3	Current user. Press and hold both buttons to change user, select with right button, and confirm by jogging the tool.
4	GSM/CDMA signal strength
5	GPS signal status
6	Cycles until next service
7	Since manufacturing: operating hours, capacity, number of cycles


*Note: Tool data transmission starts with production of the tool, independent of registration on i-connect, but only for the T version of this tool.*

## 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>
<p>Relief valve adjustments must be done by an authorized service center.</p>

### 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, contact Greenlee customer service at 800-435-0786 for warranty service or repair.

*After use:*

1. Use a damp cloth and mild detergent to clean the housing. Allow the housing to dry.
2. Fully retract the ram. 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

Thoroughly clean all surfaces.

### Annually or After 10,000 Cuts

Contact Greenlee customer service at 800-435-0786 for warranty service or repair, and hydraulic oil replacement.

## 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.

<b>Problem</b>	<b>Possible Cause</b>	<b>Probable Remedy</b>
Tool is inoperative.	Battery charge low.	Charge or replace battery.
	Dirt, contaminants, etc., in ram area of tool.	Clean tool.
	Tool components worn or damaged.	Contact Greenlee customer service at 800-435-0786 for warranty service or repair.
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.	Contact Greenlee customer service at 800-435-0786 for warranty service or repair.
Motor runs but tool will not complete a cycle.	Oil level low.	Contact Greenlee customer service at 800-435-0786 for warranty service or repair.
	Air in hydraulic system.	Pull trigger and hold retract button simultaneously. Run for approximately 10 seconds, and then attempt to cut. If unsuccessful, contact Greenlee customer service at 800-435-0786 for warranty service or repair.
	Cold oil.	Pull trigger and hold retract button simultaneously to warm oil. Store tool in warm area.
Tool loses oil.	Damaged seal.	Contact Greenlee customer service at 800-435-0786 for warranty service or repair.



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